CFD-360/370

SERVICE MANUAL

AEP Model
UK Model

Photo : CFD-360

Model Name Using Similar Mechanism	CD Section	NEW
	Tape Section	NEW
Optical Pick-up Type		KSM-213BAN/S-N
Tape Transport Mechanism Type		MF-CFD360

SPECIFICATIONS

CD player section

System: Compact disc digital audio system
Laser diode properties: Material : GaAlAs
Wave length : 780nm
Emission duration : Continuous
Laser output : Less than 44.6μW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical Pick-up block with 7mm aperture.)
Spindle speed: 200 r / min (rpm) to 500 r / min (rpm) (CLV)
Number of channels: 2
Frequency response: 20 – 20,000 Hz +1 / –1 dB
Wow and flutter: Below measurable limit

Radio section

Frequency range: FM AEP, UK, German model : 87.6–107MHz
Italian model : 87.5–108MHz
AM 531–1,602kHz
IF: FM : 10.7MHz
AM : 450kHz
Aerials: FM : Telescopic aerial
AM : Built-in ferrite bar aerial

Cassette-corder section

Recording system: 4-track 2 channel stereo
Fast winding time: Approx. 120 s (sec.) with sony cassette C-60
Frequency response: TYPE I (normal) : 80–10,000Hz

General

Speaker: Full range : 10 cm (4 in) dia., 3.0 ohms, cone type (2)
Outputs: Headphones jack (stereo minijack)
For 16–68 ohms impedance headphones
Maximum power output: 4.5W + 4.5W

Power requirements

For CD radio cassette-corder
UK model :
230-240 V AC, 50Hz
AEP, Italian, German model :
220-230 V AC, 50Hz
For memory back-up :
6V DC, 4R6 (size AA) batteries
For remote commander :
3V DC, 2R6 (size AA) batteries (CFD-370)

Power consumption: AC 25 W

Battery life

For CD radio cassette-corder
FM recording
Sony R14P : approx. 6.5 h
Sony alkaline LR14 : approx. 12 h
Tape playback
Sony R14P : approx. 3 h
Sony alkaline LR14 : approx. 6 h
CD playback
Sony R14P : approx. 1.5 h
Sony alkaline LR14 : approx. 3 h

Dimensions: Approx. 400 x 175 x 240 mm (w/h/d) (15¾ x 7 x 9½ inches) (incl. projecting parts)
Mass: Approx. 3.9 kg (8 lb. 10oz) (incl. batteries)
Supplied accessories: AC power cord (1)
Remote control (1) (CFD-370)

Design and specifications are subject to change without notice.

MICROFILM

CD RADIO CASSETTE-CORDER

SONY®

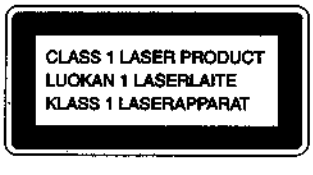
TABLE OF CONTENTS

CAUTION

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

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

For customers in Europe



This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

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.

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 NOTE

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.

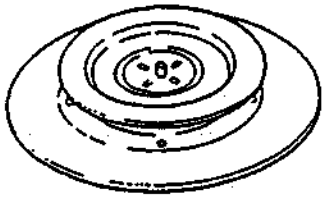
NOTES ON LASER DIODE EMISSION CHECK

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 30 cm away from the objective lens.

CHUCK PLATE JIG ON REPAIRING

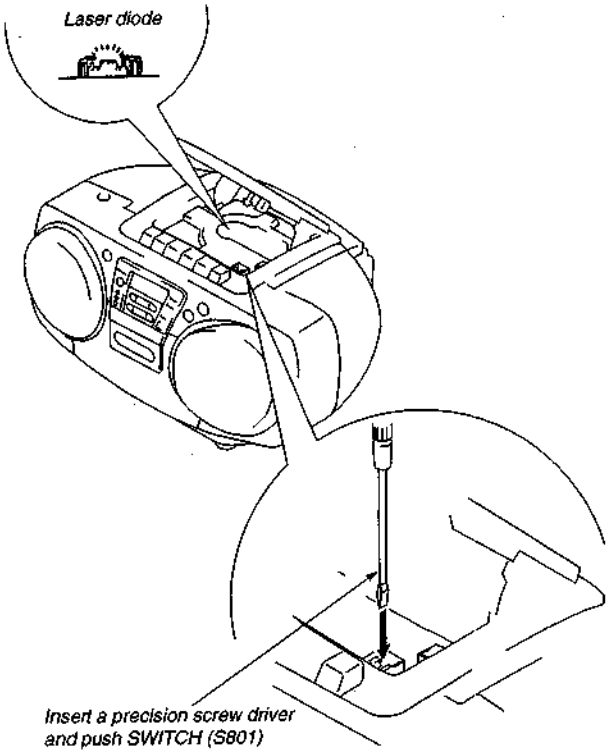
On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

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



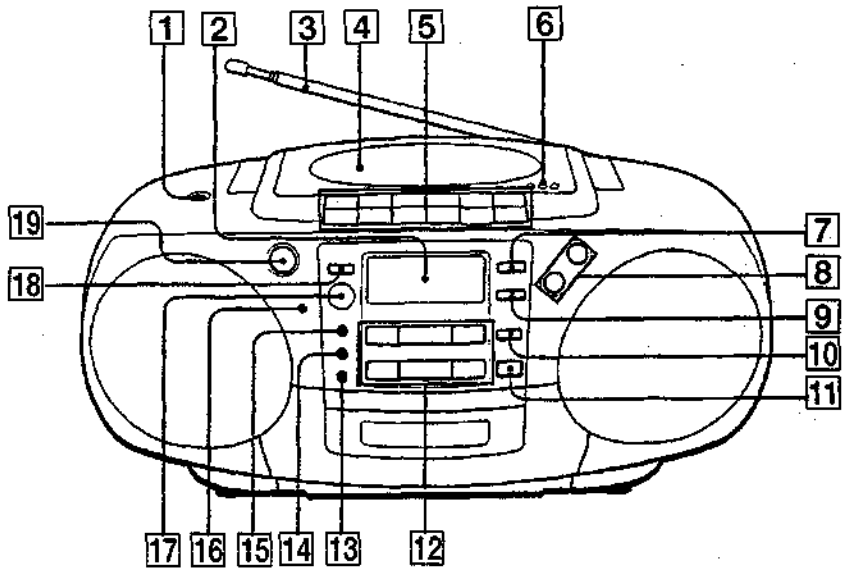
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Press CD open knob.
2. Open the lid for CD.
3. Push on SWITCH (S801) as following figure.
4. 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.



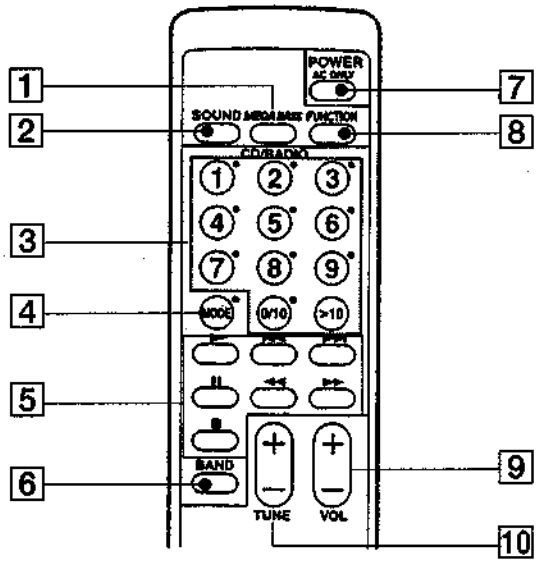
SECTION 2
GENERAL

LOCATION AND FUNCTION OF CONTROLS



1. ∩ (Headphone) jack
2. Display panel
3. FM telescopic antenna
4. CD lid
5. TAPE operation buttons
   - ⏸ PAUSE
   - ■ ⏏ STOP/EJECT
   - ◀◀ FF
   - ▶▶ REW
   - ◀ PLAY
   - ● REC
6. CD OPEN/CLOSE button
7. MEGA BASS button
8. VOLUME +/– buttons
9. SOUND button
10. MODE button
11. CD ■ (stop) button
12. CD•RADIO•CLOCK•TIMER operation buttons
    - CD : ▶⏸ (PLAY/PAUSE)
      ▶▶| (FF)
      |◀◀ (FR)
    - RADIO : RADIO BAND (RADIO FM/AM)
      ▶▶| (TUNING +)
      |◀◀ (TUNING –)
      + (PRESET TUNING +)
      – (PRESET TUNING –)
    - CLOCK•TIMER : ▶▶| (TIME SET +)
      |◀◀ (TIME SET –)
13. DISPLAY/ENTER button
14. STANDBY button
15. CLOCK/TIMER button
16. OPR/BATT lamp
17. Remote sensor (CFD-370 only)
18. SLEEP button
19. POWER switch

Remote (RMT-C370A) (CFD-370)

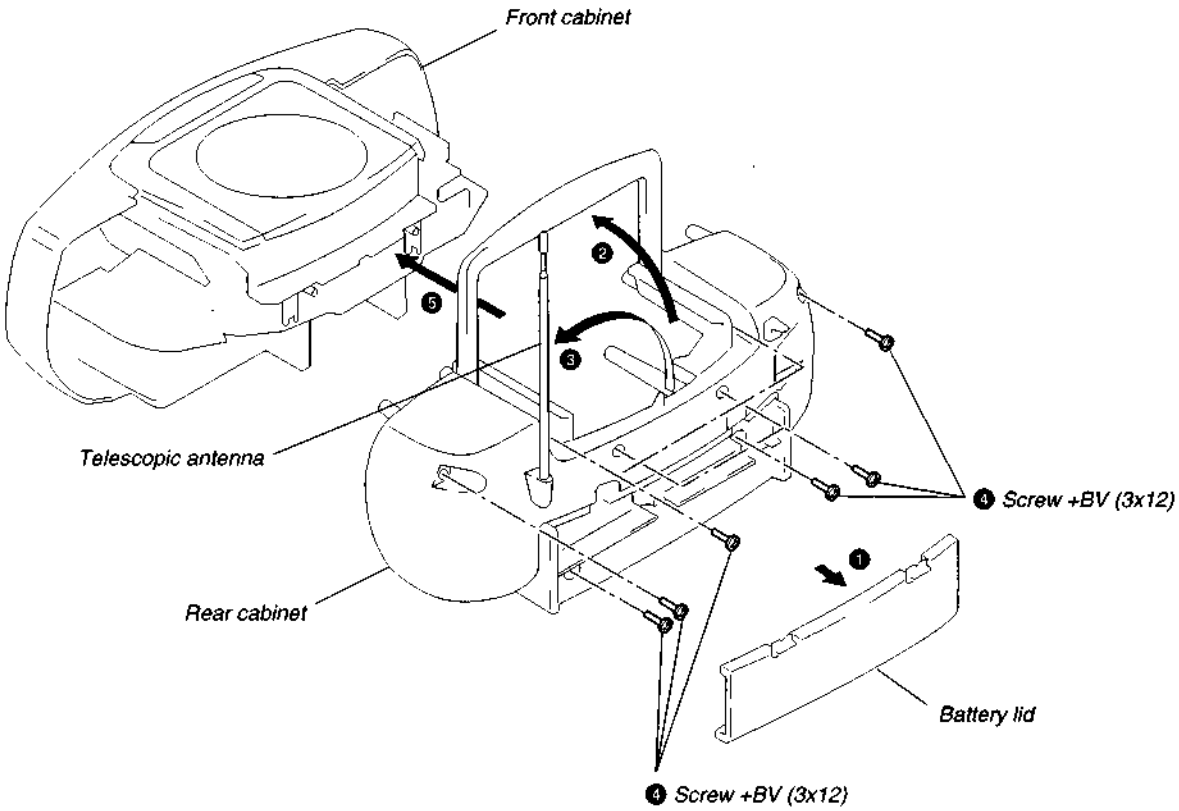


1 MEGA BASS button
2 SOUND button
3 Numeric buttons
4 MODE button
5 CD or TAPE operation buttons
6 BAND button
7 POWER (AC only) button
8 FUNCTION button
9 VOLUME +/– buttons
10 TUNE +/– buttons

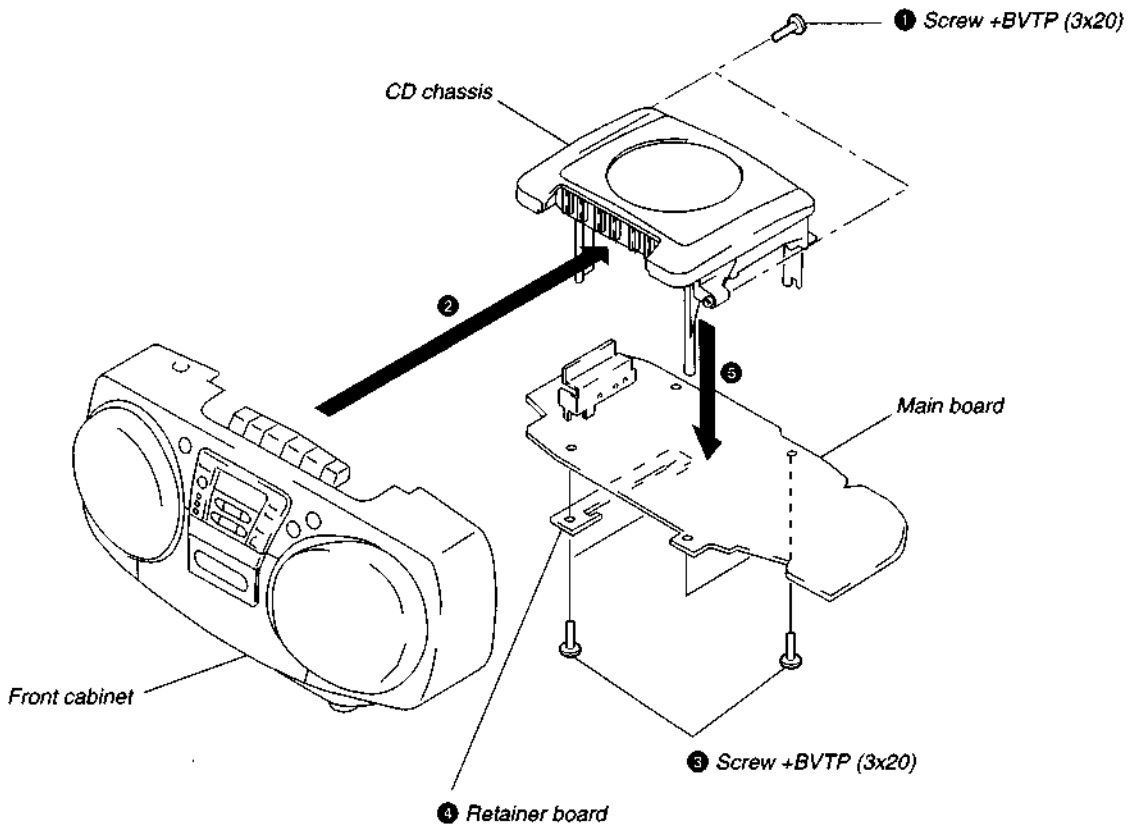
SECTION 3
DISASSEMBLY

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

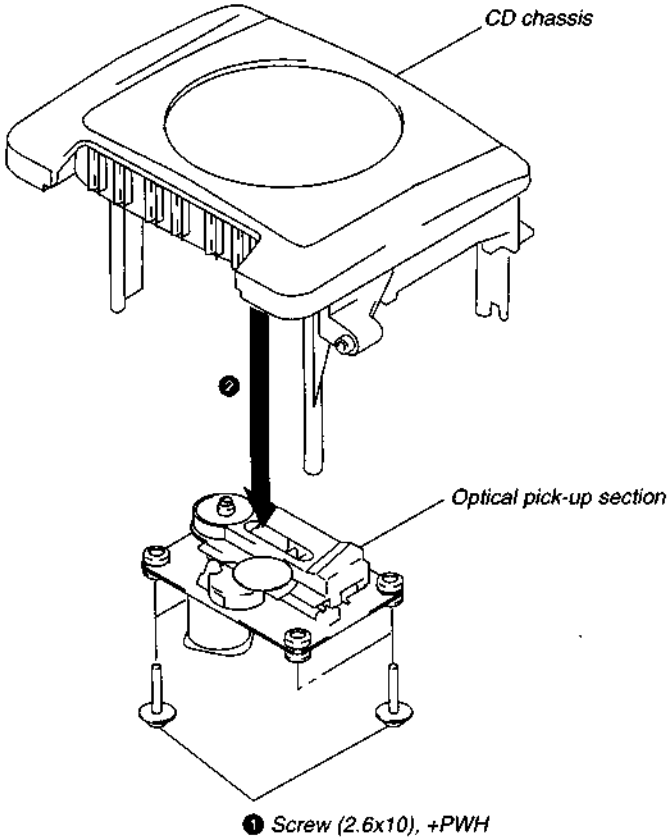
3-1. REAR CABINET REMOVAL



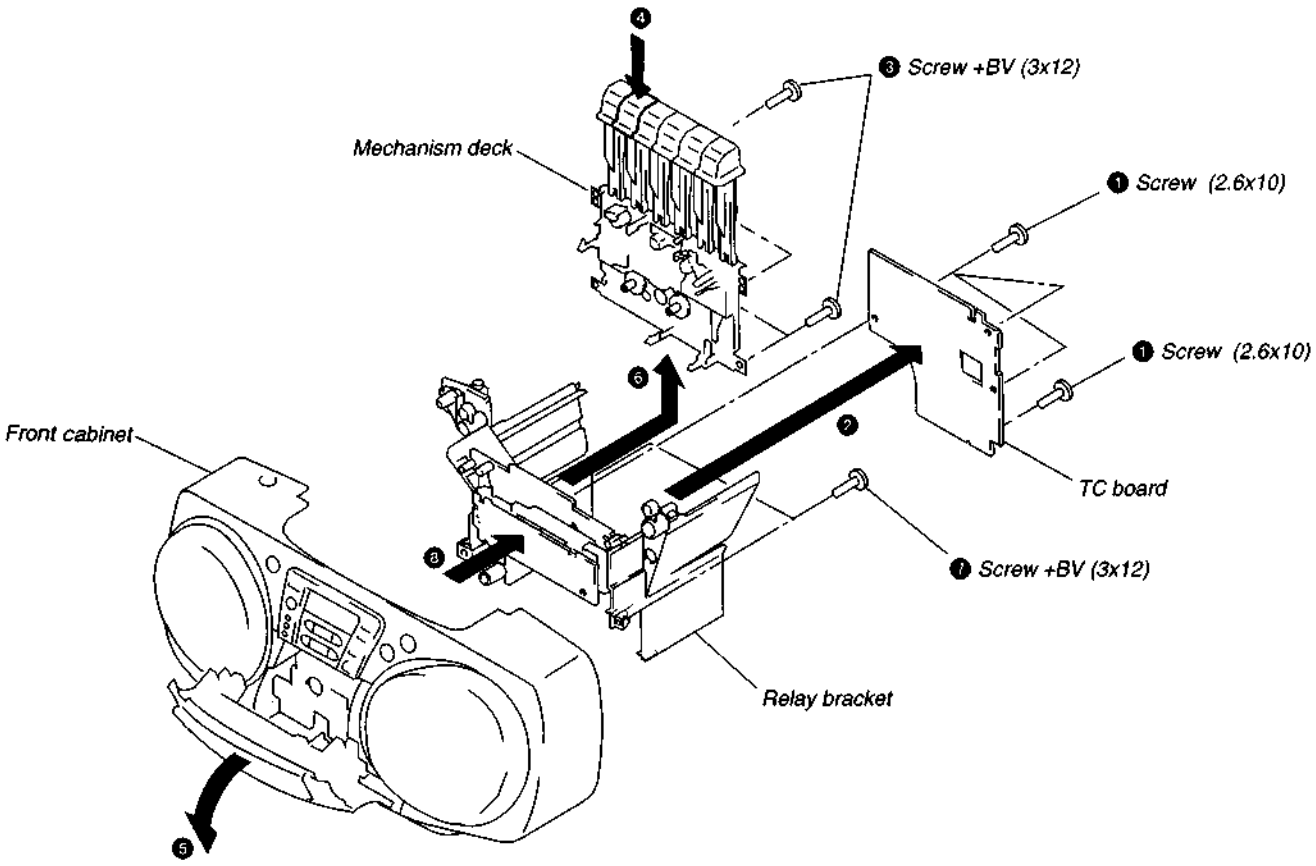
3-2. MAIN BOARD, RETAINER BOARD, CD CHASSIS REMOVAL



3-3. OPTICAL PICK-UP SECTION REMOVAL



3-4. TC BOARD, MECHANISM DECK, RELAY BRACKET REMOVAL



SECTION 4
ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moist ened swab :
   record/playback head, erase head, capstan, pinch roller, rubber belts
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.

Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	60g•cm (0.42 – 0.83 oz•inch)
Forward Back Tension	CQ-102C	1 – 5g•cm (0.014– 0.070 oz•inch)
Fast Forward	CQ-201B	more than 55g•cm (more than 0.77 oz•inch)
Rewind	CQ-201B	more than 55g•cm (more than 0.77 oz•inch)

Tape Tension Measurement

Tension Meter	Meter Reading
CQ-403A	more than 80g (more than 2.83 oz)

4-2. ELECTRICAL ADJUSTMENTS

TAPE RECORDER SECTION

Standard Output Level

Output terminal	HP OUT
load impedance	32Ω
output signal level	0.25V (-10dB)

Test Tape

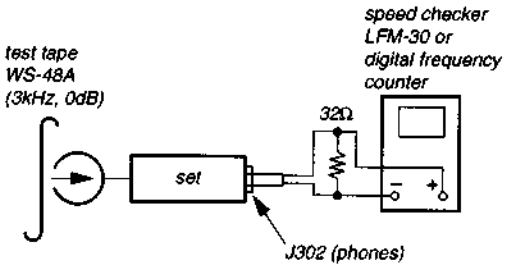
Type	Signal	Used for
WS-48A	3kHz, 0dB	Tape Speed Adjustment
P-4-A063	6.3kHz, –10dB	Head Azimuth Adjustment

0dB=0.775V

Tape Speed Adjustment

Procedure :

Mode : Playback

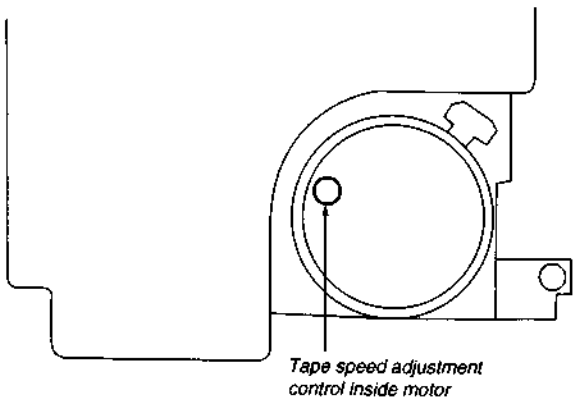


Adjustment Value :

Speed checker	Digital frequency counter
–2.5 to +2.5%	2,925–3,075Hz

Frequency difference between the beginning and the end of the tape should be within 3% (90Hz).

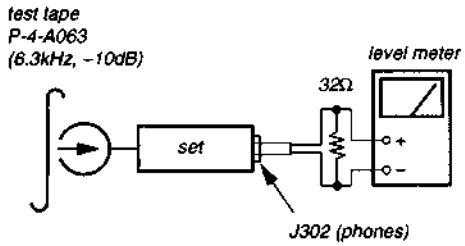
Adjustment Location :



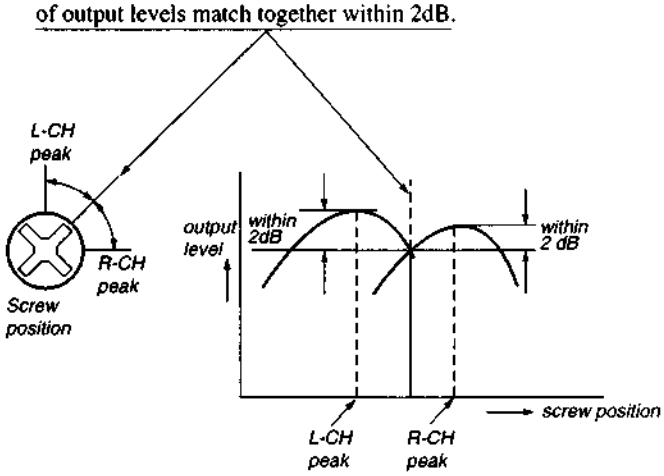
Record/Playback Head Azimuth Adjustment

Procedure :

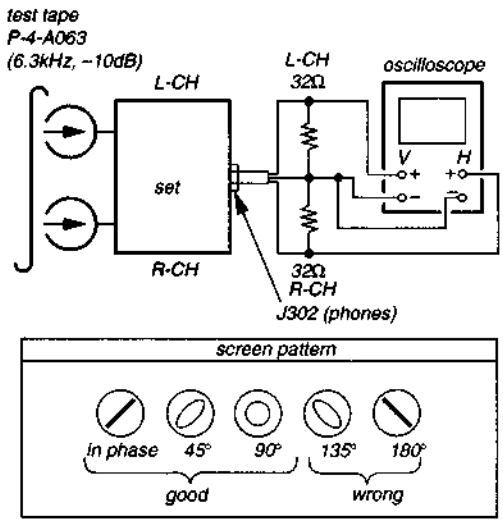
1. Mode : playback



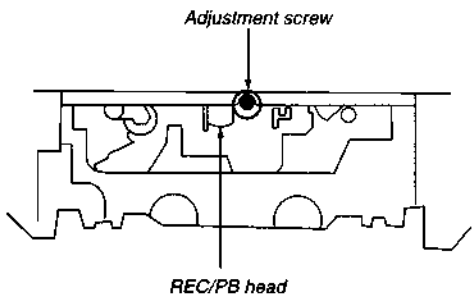
2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2dB.



3. Phase Check
   Mode : playback



Adjustment Location : – record / playback head –



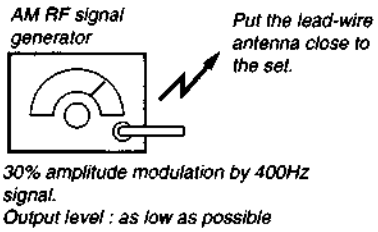
TUNER SECTION

- Switch Loation

VOLUME	: MAX
MEGA BASS	: OFF
SOUND	: FLAT

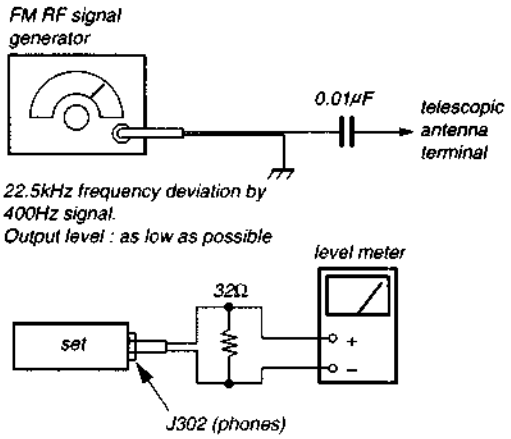
AM Section

BAND : AM



FM Section

BAND : FM



- 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 ALIGNMENT	
Adjust for a maximum reading on level meter.	
CFT1	455kHz

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	621kHz
CT2	1,404kHz

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment part	Frequency display	Reading on digital voltmemter
L4	531kHz	0.85±0.2V
Confirmation	1,611kHz	4.7±0.2V

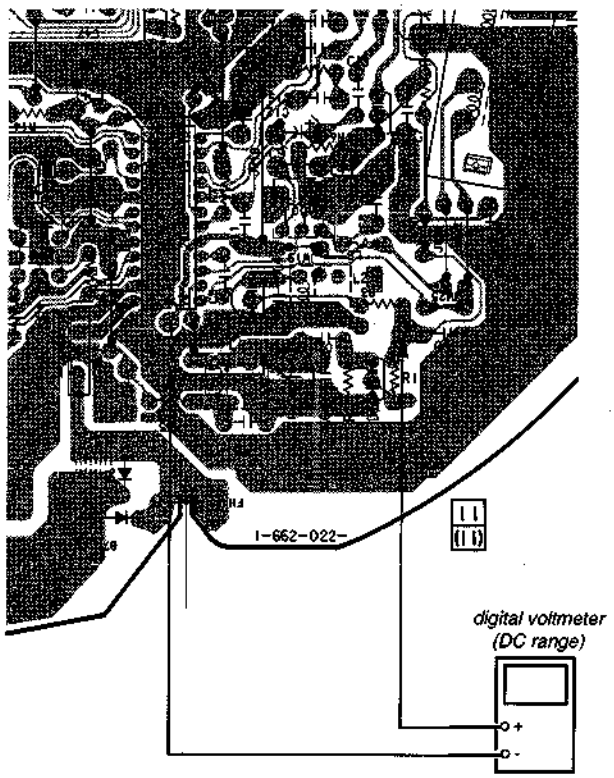
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	87.5MHz
CT1	108MHz

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment part	Frequency display	Reading on digital voltmemter
L2	87.5MHz	1.6±0.2V
Confirmation	108MHz	4.0±0.1V

Adjustment Location : MAIN board (see page13)

Frequency Coverage Adjustment
Procedure :

[MAIN BOARD] (Component side)



CD SECTION

Note on Adjustment

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

Before adjustment

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

- Sled Motor Check

1. Press ▶II button, then press OFF button.
2. Press ▶▶I, I◀◀ buttons and confirm that the Optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises. (Cancellation of BTL mute)
   ▶▶I : Optical pick-up moves to the outer circumference
   I◀◀ : Optical pick-up moves to the inner circumference

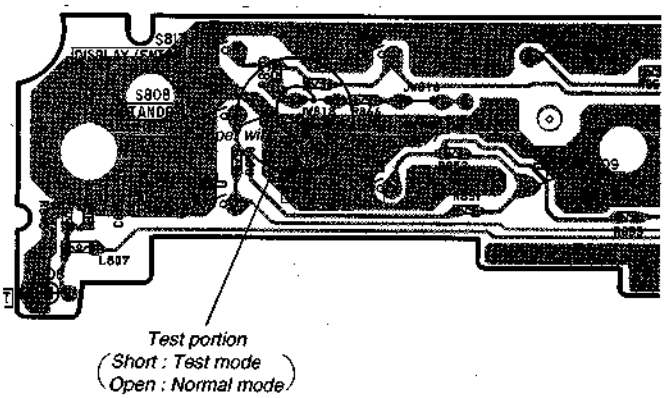
- Focus Search Check

1. Press ▶II button. (Focus search operation is performed continuously.)
2. Look at the Optical pick-up objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
3. Press ■ button.
   Confirm that focus search operation stops. If it does not , press ■ button again longer.
   Note : When the malfunction is occurred by mis-passing other buttons, turn off the power and check again from making the test mode.

How to put the Set into Test Mode

1. Short-circuit between JW818 and JW819 on the switch board.
2. Turn the POWER ON.

[SWITCH BOARD]



How to release Test Mode

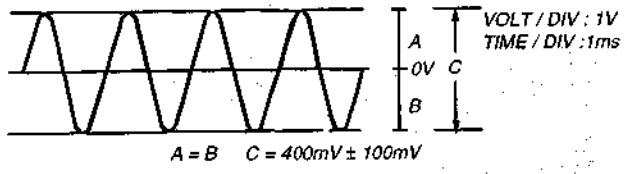
1. Turn the POWER OFF.
2. Open the short-circuit to release test mode.

E-F Balance Adjustment

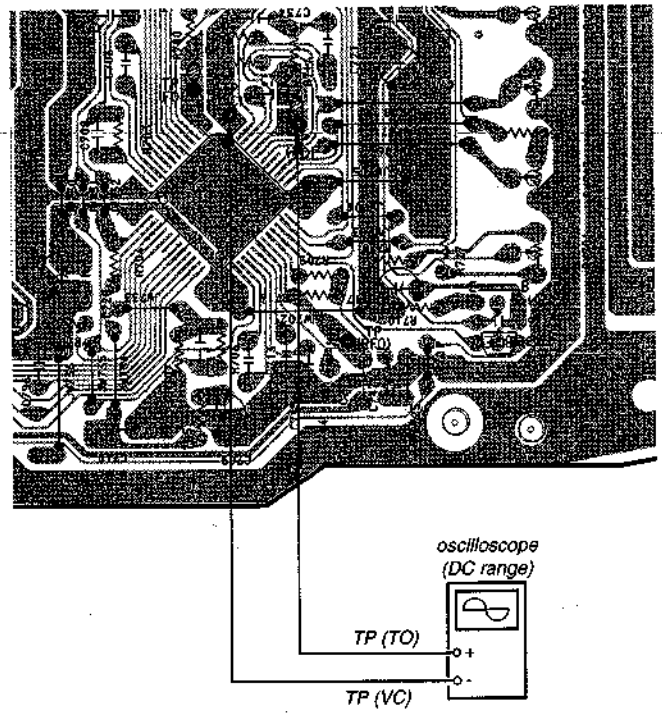
This adjustment is to be done when the optical pick-up block is replaced.

Adjustment Procedure :

1. Connect the oscilloscope between TP (VC) and TP (TO) on MAIN board.
2. Put the set into test mode.
3. optical pick-up setting to the center by ▶▶I or I◀◀ button pushing.
4. Insert disc (YEDS-18) and press ▶II button.
5. Adjust RV703 so that the oscilloscope traveres waveform is symmetrical, as shown in the figure below.
6. Release test mode after adjustment is completed.



[MAIN BOARD]



Adjustment Location : MAIN board (see page13)

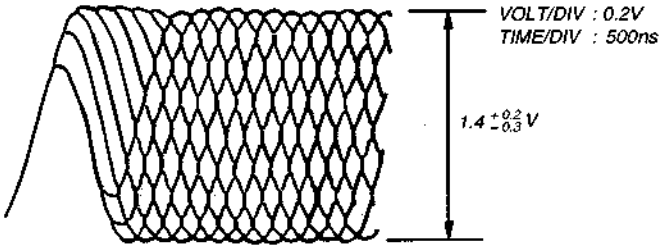
Focus Bias Adjustment

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

Adjustment procedure :

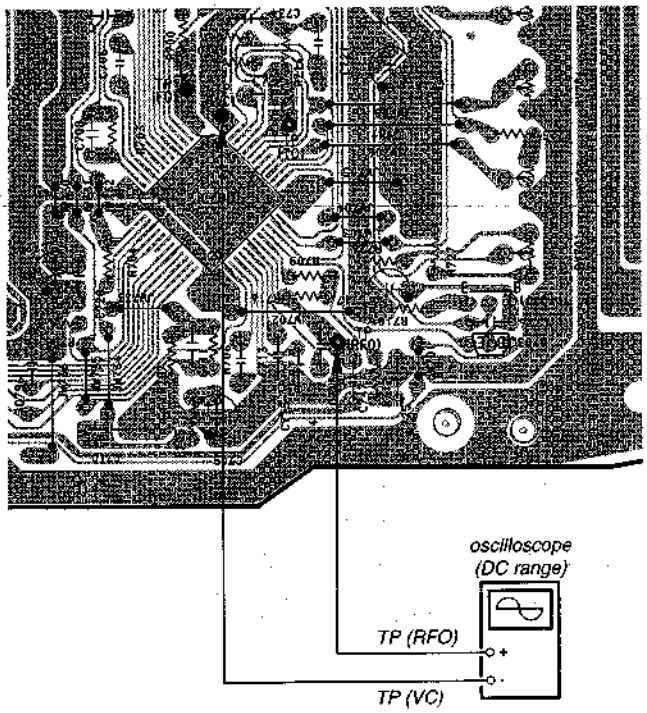
1. Connect oscilloscope to test point TP (VC) and TP (RFO) on MAIN board.
2. Put the set into test mode.
3. Optical pick-up setting to the center by ▶▶I or I◀◀ button pushing.
4. Insert disc (YEDS-18) and press ▶II button.
5. Press the ▶II button. (Tracking servo ON)
6. Adjust RV701 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◊) in the center of the waveform can be clearly distinguished.
7. Release test 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.

[MAIN BOARD]



Adjustment Location : MAIN board (see page 13)

Focus/Tracking Gain Adjustment

A frequency responce 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 pick-up 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, 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 → ▶II button or automatic selection. (I◀◀, ▶▶I buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
● Music does not start and disc continues to rotate for STOP → ▶II button or automatic selection. (I◀◀, ▶▶I buttons pressed.)	–	low
● Sound is interrupted during PLAY. Or time counter display stops progressing.	–	low
● More noise during 2-axis device operation.	high	high

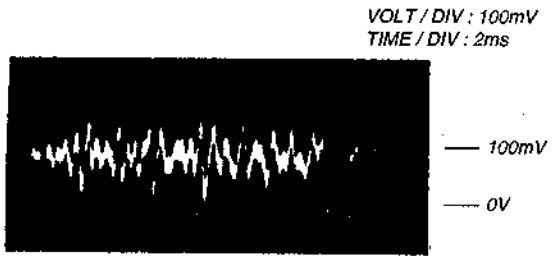
The following is a simple adjustment method.

– Primary Adjustment –

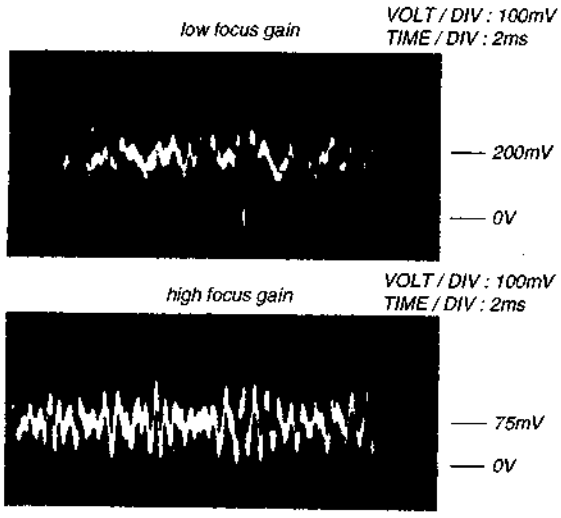
Note : Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment.If the positions after the primary adjustment are only a little different, return the controls to the original position.

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. Insert disc (YEDS-18) and press ▶II button.
3. Connect oscilloscope to TP(FO) and TP (VC) on MAIN board.
4. Adjustment RV702 on MAIN board so that the waveform is as shown in the figure below. (Focus gain adjustment)

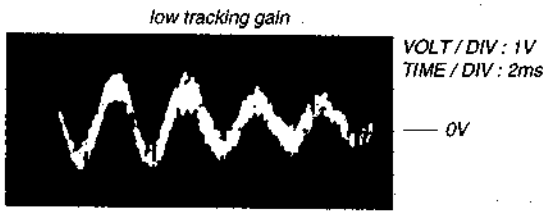


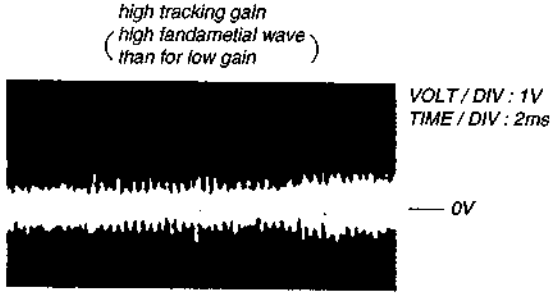
● Incorrect Examples (DC level changes more than on adjusted waveform)



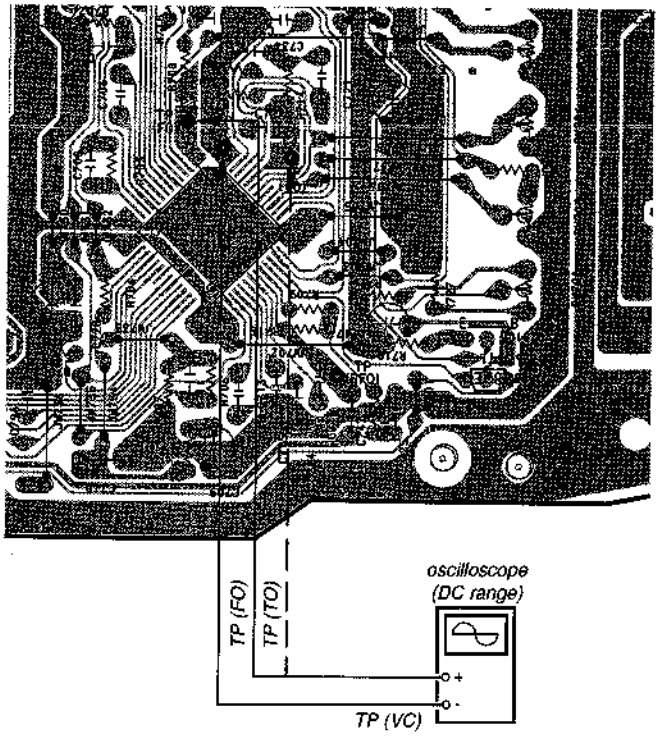
5. Connect oscilloscope to TP(TO) and TP(VC) on MAIN board.
6. Adjust RV704 on digital board so that the waveform is as shown in the figure below. (Tracking gain adjustment)
7. Release test mode after adjustment is completed.

● Incorrect Examples (fundamential wave appears)

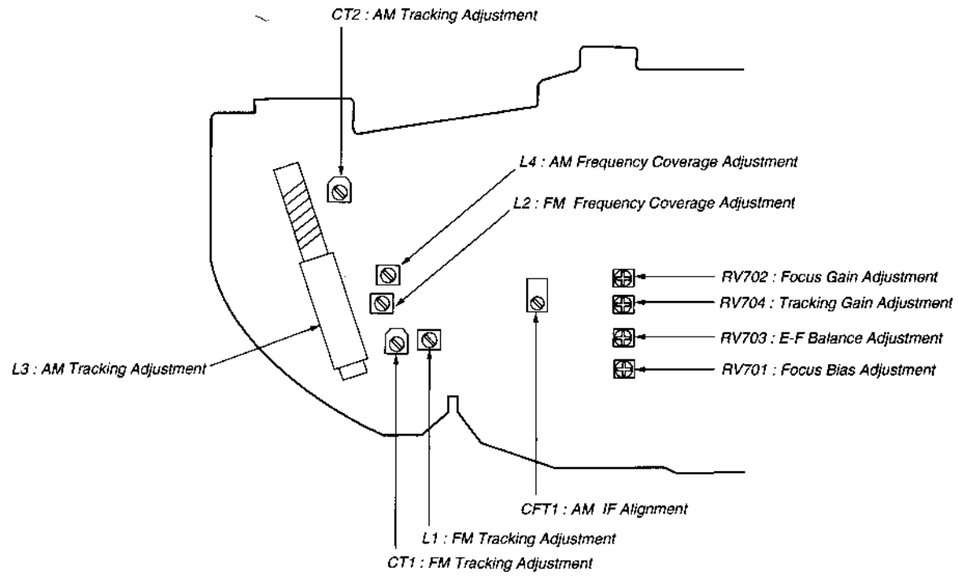




[MAIN BOARD]



Adjustment Location : MAIN board (Component side)



SECTION 5
EXPLANATION OF IC TERMINALS

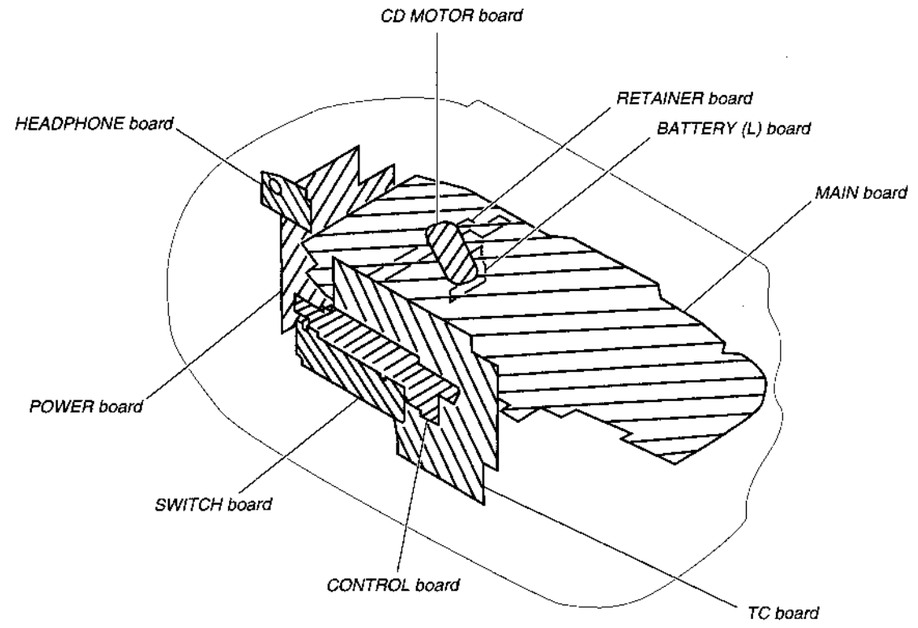
IC801 MSM65353A-827GS-BK4 (SYSTEM CONTROL)

Pin No.	Pin name	I/O	Description
1–4	COM 1–4	O	LCD common output.
5–30	SEG 0–25	O	LCD segment output.
31–36	NC	–	Not used (Open).
37	A GND	–	Analog ground.
38–41	KEY1–4	I	Key input.
42	9k/10k–12/24H	I	9k/10k,12H/24H select input.
43	NC	–	Not used ("L" level).
44	U/L/S	I	Radio destination band select input.
45	NC	–	Not used ("L" level).
46	VRH	–	AD reference voltage input.
47	AVDD	–	Analog power supply (+5V).
48	INI	O	Initial setting output (for destination).
49–51	NC	–	Not used (Open).
52	REG-CON	O	Regulator ON/OFF control output.
53	CD	O	Function CD output.
54	DBB	O	DBFB ON/OFF output.
55	TAPE	O	Function tape output.
56	REC	O	Function rec output.
57	V-I/O	I/O	Volume data input/output.
58	V-CLK	O	Volume clock output.
59	V-CE	O	Chip enable output to IC302.
60	NC	–	Not used (Open).
61	CD-OP/CL	I	CD open/close input.
62	C-CLK	O	Clock output for CD DSP command.
63	C-XLT	O	CD system latch output.
64	NC	–	Not used (Open).
65	C-SQSO	I	CD SUBQ input.
66	C-SQCK	O	Clock output for CD SUBQ.
67	RMC	I	Remote control signal input (CFD-370).
68	C-SENS	I	CD SENS input.
69	NC	–	Not used (Open).
70	B-MUTE	O	Mute signal output.
71	C-XRST	O	CD system reset output.
72	VDD	–	Digital power supply (+5V).
73	NC	–	Not used (Open).
74	C-DATA	O	CD DSP command data output.
75	NC	–	Not used (Open).

Pin No.	Pin name	I/O	Description
76	C-SCOR	I	CD-SCOR input.
77–79	NC	–	Not used (Open).
80	T-PLAY	I	TAPE play input.
81	OSC-OUT	O	Main clock output (4.19MHz).
82	OSC-IN	I	Main clock input (4.19MHz).
83	D-GND	–	Digital ground.
84	XT-IN	I	SUB clock input (32.768kHz).
85	XT-OUT	O	SUB clock output (32.768kHz).
86	NC	–	Not used (Open).
87	R-CE	O	Tuner PLL IC CE output.
88	A-MUTE	O	Audio mute output.
89	R-ST	I	R-STEREO input.
90	REGCHK	I	Regulator check input.
91	R-DATA	O	Tuner PLL IC data output.
92	R-CONT	O	Tuner PLL IC count output.
93	R-CLK	O	Tuner PLL IC clock output.
94	$\overline{RST}$	I	Reset terminal.
95	———	–	Not used (Open).
96	NC	–	Not used (Open).
97	VDDL	–	Bias power supply for LCD drive.
98–100	VDD 1–3	–	Bias power supply for LCD drive.

SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION



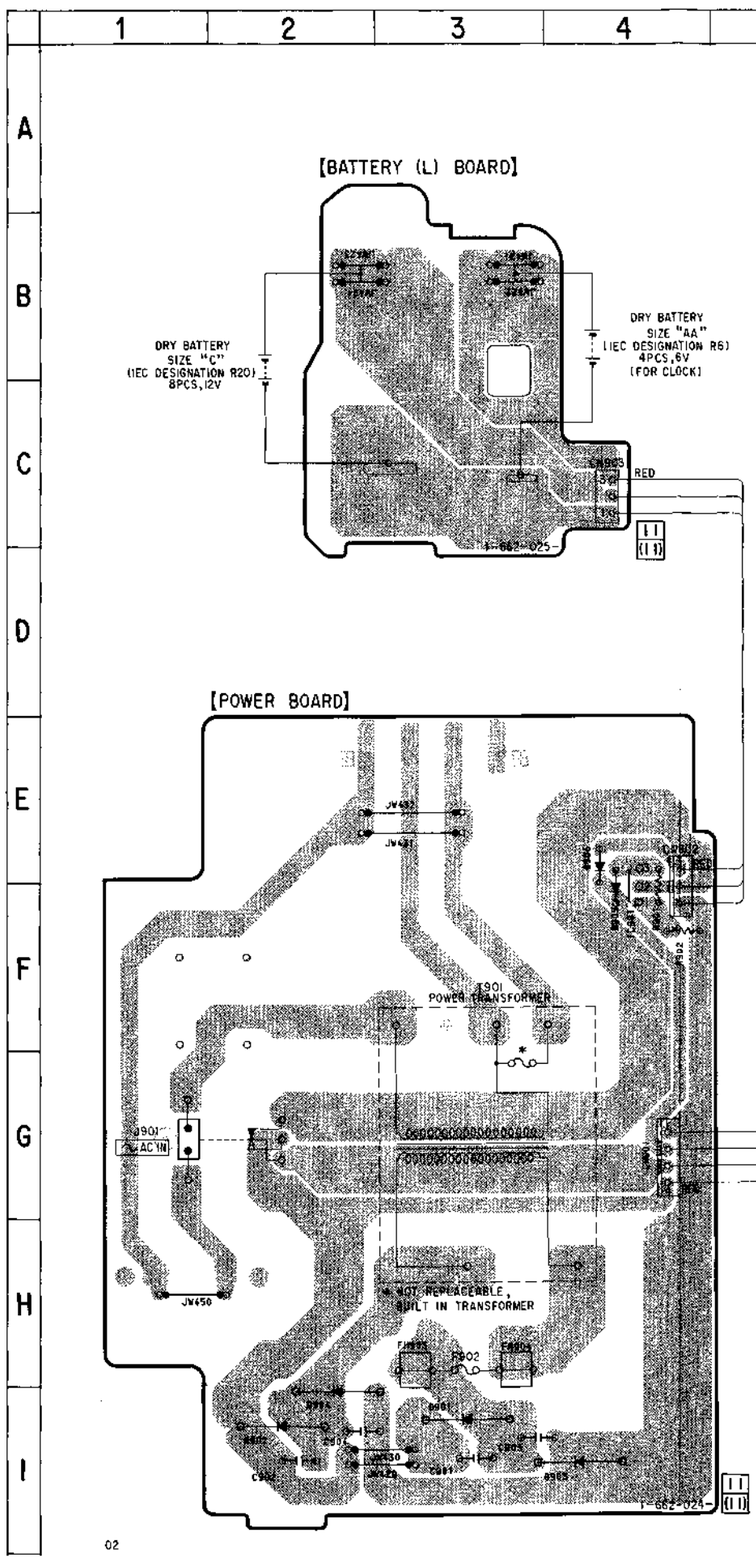
6-2. PRINTED WIRING BOARDS

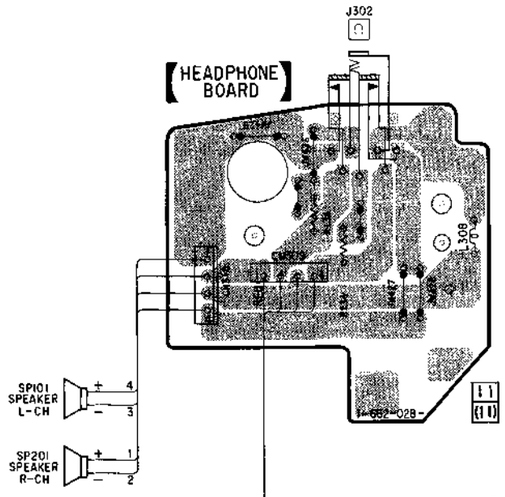
• SEMICONDUCTOR LOCATION

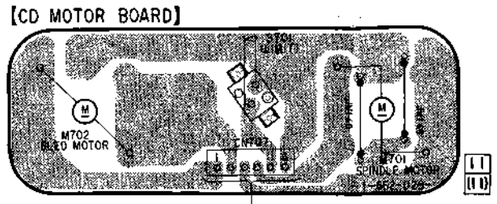
Ref. No.	Location	Ref. No.	Location
D1	H-17	Q1	F-17
D2	G-17	Q2	F-17
D3	G-17	Q3	F-17
D6	H-16	Q4	F-16
D7	H-16	Q10	E-14
D8	D-9	Q11	E-14
D306	E-7	Q15	F-15
D307	H-8	Q16	F-15
D308	H-7	Q18	H-15
D309	H-8	Q19	E-15
D310	I-8	Q101	F-24
D311	E-7	Q102	F-8
D313	E-7	Q201	G-24
D314	E-7	Q202	F-8
D315	F-8	Q301	G-20
D318	F-14	Q302	G-20
D319	F-14	Q303	E-20
D901	I-3	Q306	I-21
D902	I-2	Q307	I-21
D903	I-4	Q308	H-9
D904	I-2	Q309	H-9
D905	F-4	Q310	H-8
D906	E-4	Q311	H-8
D301	E-21	Q312	H-8
D302	E-22	Q315	D-9
D303	F-22	Q316	D-8
D316	H-22	Q317	H-9
D317	E-20	Q318	H-9
D808	C-13	Q319	E-20
		Q320	E-21
IC1	G-16	Q321	E-20
IC3	E-16	Q322	E-20
IC301	F-22	Q701	H-14
IC302	H-24	Q702	E-10
IC304	H-13	Q703	I14
IC309	E-8	Q706	F-12
IC701	H-13	Q760	F-11
IC702	H-11	Q770	F-11
IC703	F-13		
IC704	F-11		
IC901	F-4		
IC801	C-22		
IC802	B-20		
IC803	C-20		

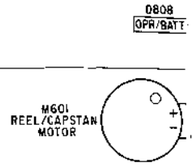
Note:

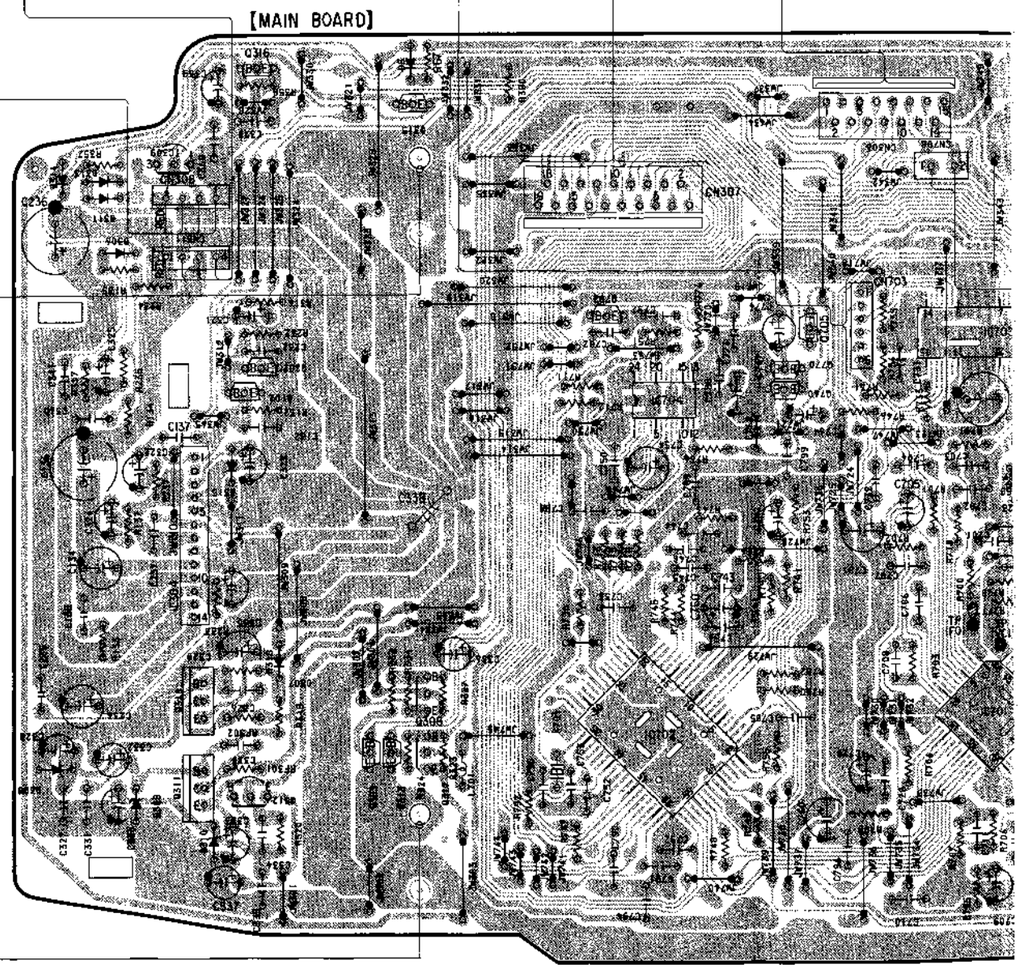
- ○— : parts extracted from the component side.
- ▒▒▒ : Pattern on the side which is seen.











【SWITCH BOARD】

S816 ⏮ S815 ⏭

TUNING/TIME SET

S807 DISPLAY/ENTER
S808 STANDBY
S809 RADIO BAND
S810 PRESET
S811 PRESET
S812 MODE
S807 CLOCK/TIMER

D808 OPR/BATT

1-662-021-

【CONTROL BOARD】

CN802
CN803
CN804
S803 SOUND
S804 MEGA-BASS
S805 VOLUME
S806
S801 SLEEP
S802 POWER
LCD801
CFO-370

1-662-020-

M601 REEL/CAPSTAN MOTOR

S601 MD POWER

S602 TAPE PLAY

S801 DOOR OPEN

OPTICAL PICK-UP BLOCK KSM-213BAN/S-N

L3 AM FERRITE-ROD ANTENNA

ANT1 FM TELESCPIC ANTENNA

1-662-022-

【TC BOARD】

HRP601 REC/PLAYBACK HEAD

CN301
R-CH
L-CH

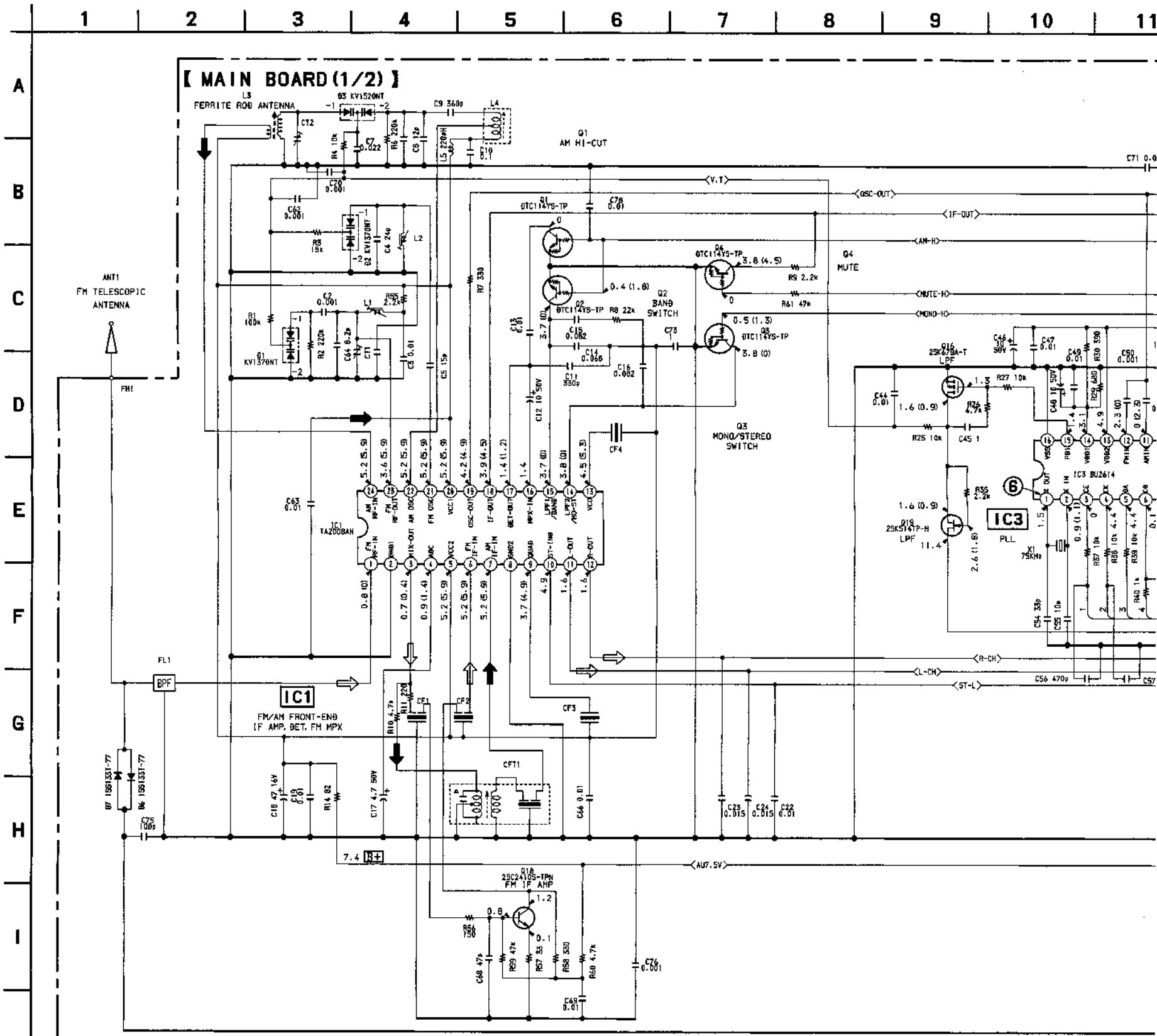
S302 REC ↑ PLAY

CN304
CN305
Q101

1-662-023-

6-3. SCHEMATIC DIAGRAM – MAIN SECTION (1/2) –

● Refer to page 31 for IC Block Diagrams.



02

Note :

- 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 ¼ W or less unless otherwise specified.
- △ : internal component.

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

- B+ : B+ Line
- ▭ : adjustment for repair.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack(J901).
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark :FM (Radio section), CD STOP (CD section)
  ( ) :AM
- Voltages are taken with a VOM (Input impedance 10MΩ). 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.
  ⇨ : FM
  ⇨ : CD
  ➡ : AM

● WAVEFORMS

① 1.4 +0.2 −0.3 Vp-p
IC701 (31) PLAY

② 5.5Vp-p, 136.5μ sec
IC702 (28)

③ 5.7Vp-p, 136.5μ sec
IC702 (31)

④ 16.9344MHz
IC702 (35)

⑤ 13.15msec
IC702 (43)

⑥ 75 kHz
IC3 (1)

C71 0.001

L7 100μH

C50 0.001

C51 0.001

C53 0.001

C74 100p

C27 4.7 50V

C26 4.7 50V

R17 1k

R16 1k

R44 10k

C60 10 50V

0.1 (0.4)

Q10 DTC114YS-TP MUTE

Q11 DTC114YS-TP MUTE

TUNE-R
TUNE-L
A-GND
AU7.5V
TU5V
R-ST
R-MUTE
R-CONT
R-CLK
R-DATA
R-CE
R+B
S-GND

L8 10μH

D8 1SS133T-77

R67 100

C72 0.01

C59 0.01

C58 0.01

C57 220p

R46 22k

Q15 DTA114ES-TP STEREO SWITCH

R66 47k

C96 0.01

C95 220 25V

<R-CH>
<L-CH>
<ST-L>
<AU7.5V>

A TO MAIN BOARD (2/2)

Q701, 703
LASER POWER CONTROL

Q701 2SB1013-TP-34

R710 10

C726 0.001

C717 47 10V

Q703 DTC144TS-TP

C716 10 50V

C727 0.01

R726 10k

C725 10

RV703 2.2k

R725 47k

E-F BALANCE

RV701 22k

FOCUS BIAS

R727 10k

TRACKING

R714 150k

C721 0.047 50V

C732 0.022

R720 330k

C723 0.1

C734 0.0068

FOCUS

RV704 22k

TRACKING GAIN

R777 10k

R700 10k

C701 0.0022

RV702 22k

VC

CN701 16P

VC
VCC
E
D
A
B
C
F
GND
LD
VR
PD
F+
T+
T-
F-

R756 82k
R757 68k
R758 68k
R759 68k
R722 68k
R723 82k

⚠ OPTICAL PICK-UP BLOCK (KSM-213 BAN/S-N)

CD MOTOR BOARD

M702 SLED MOTOR

M701 SPINDLE MOTOR

S701 (CD DET)

CN703 6P

SL-
SL+
SP+
SP-
SLED SW
PGND

R791 20k

C793 0.01

IC703
SLED/ SPINDLE MOTOR DRIVE

IC703 BA5930FP

GND F- F+ FIN T+ T- TIN NC NC VREF NC NC MUTE VCC GND VCC SPIN NC NC SLIN SL+ SL-

3.4Vp-p
4MHz
702 35

5.4Vp-p
02 43

1.1 Vp-p
5 kHz
C3 1

Q701, 703
LASER POWER CONTROL

Q701
2SB1013-TP-34

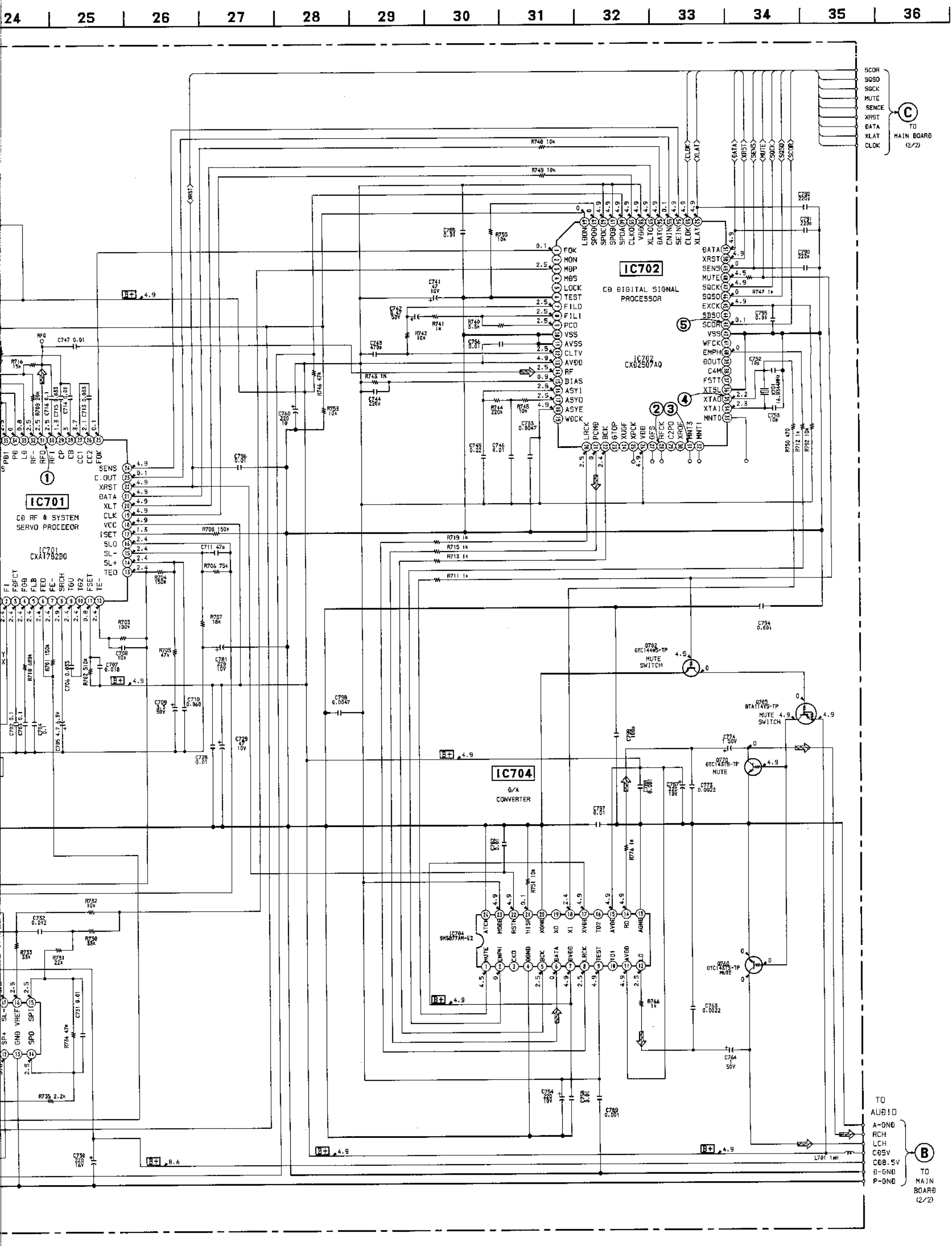
IC701
CD RF & SYSTEM
SERVO PROCEEOR
IC701
CXA1782BQ

IC703
SLED/
SPINDLE
MOTOR DRIVE
IC703
BA5930FP

E-F BALANCE
FOCUS BIAS
TRACKING
TRACKING GAIN
FOCUS
FOCUS GAIN

TO MAIN BOARD (2/2)

CD MOTOR BOARD
M702 SLED MOTOR
M701 SPINDLE MOTOR
S701 (CD SET)


24 25 26 27 28 29 30 31 32 33 34 35 36
IC702
CD DIGITAL SIGNAL PROCESSOR
IC701
CD RF & SYSTEM SERVO PROCEEOR
IC704
D/A CONVERTER
SCOR SQSO SQCK MUTE SENCE XRST DATA XLAT CLOK
TO MAIN BOARD (2/2)
TO AUDIO
A-GND RCH LCH C05V C08.5V B-GND P-GND
TO MAIN BOARD (2/2)

6-4. SCHEMATIC DIAGRAM – MAIN SECTION (1/2) –

Note :

- 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 ¼ W or less unless otherwise specified.
- ⚠ : fusible resistor.

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

- B+ : B+ Line
- Power voltage is dc 12V and fed with regulated dc power supply from external power voltage jack(J901).

- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark :FM (Radio Section), Playback (Tape section)
  ( ) :REC
- Voltages are taken with a VOM (Input impedance 10MΩ). 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.
  ⇨ : FM
  Σ : PB
  ⇨ : CD
  Σ» : REC

• WAVEFORMS

① 3.46 Vp-p, 4.19 MHz, IC801 (82)

② 1.2, 32 kHz, IC801 (85)

【CONTROL BOARD】

【SWITCH BOARD】

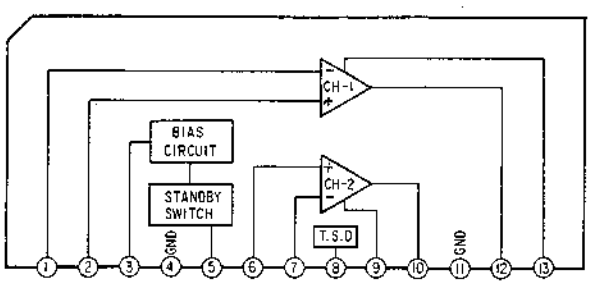
IC801
MSM65353A-827GS-BK4
SYSTEM CONTROL

IC803
S-806J-Z
RESET

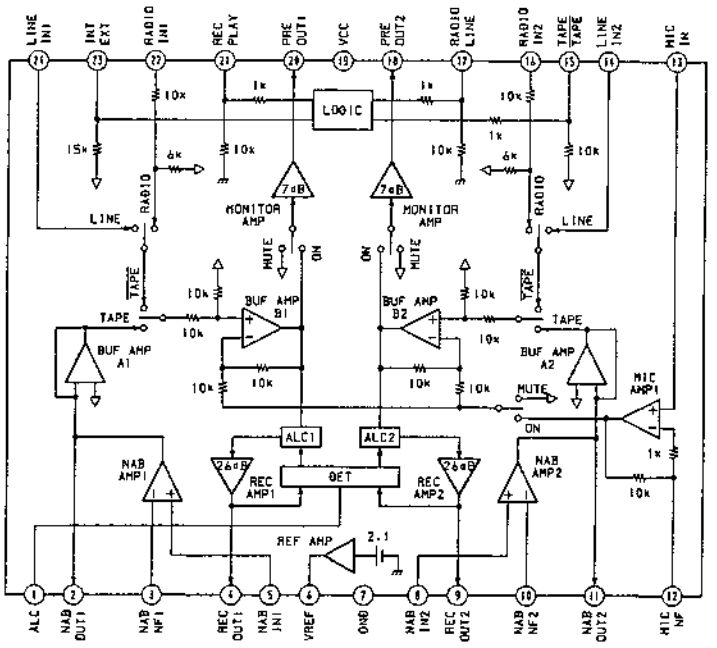
LC8801
LIQUID CRYSTAL DISPLAY

• IC BLOCK DIAGRAMS – MAIN SECTION (2/2) –

IC304 LA4597



IC301 TA2068N



【TC BOARD】

③

1.2Vp-p
32 kHz
IC801 (85)

62 Vp-p
83 MHz
T301

HRP601
REC/PLAYBACK HEAD
L-CH
R-CH
CN301 4P
HE601
ERASE HEAD

CF0-370
IC802
GP1U28X
REMOTE CONTROL RECEIVER

CN801 19P
Ð-GNÐ
BU+B
R-CLK
R-CONT
R-DATA
RMC/REG-CHK
R-ST
A-MUTE
R-CE
T-PLAY
C-SCOR
C-DATA
C-XRST
B-MUTE
C-SENSE
C-SQCK
C-SQSO
C-XLT
C-CLK

CN802 12P
DP/CL
V-CE
V-CLK
V-I/O
REC
TAPE
ÐBB
CÐ
REG-CON
9K/10K
ORP
GNÐ

IC302
ELECTRICAL VOLUME
BH3854AS
TONE
MATRIX SURROUND
CONTROL
VOLUME/SOUND

Q101, 201
MEGA BASS CONTROL
2SC2785TP-H

Q306, 307
SWITCH
DTA114YS-TP

IC301
TAPE EQ. REC AMP
FUNCTION SWITCH
IC301 TA2068N

Q319, 320
REC BIAS ON/OFF
2SB1015-TP-34
2SC2001TP-L

Q303
BIAS OSC
DTC114YS-TP

Q301, 302, 321, 322
REC SWITCH
DTC143TS-TP
DTC114YS-TP

REC
PLAY
S302

CN304 12P
GNÐ
ORP
9K/10K
REG-CON
CB
9K/10K INIT
TAPE
REC
V-I/O
V-CLK
V-CE
DP/CL

【MAIN BOARD (2/2)】

IC302
ELECTRICAL VOLUME

Q101, 201
MEGA BASS CONTROL

Q306, 307
SWITCH

IC301 TA2068N

IC301
TAPE EQ. REC AMP
FUNCTION SWITCH

Q303
BIAS OSC

Q319, 320
REC BIAS ON/OFF

Q312
B+ 5V REG

Q315, 316
REMOTE CONTROL B+ SWITCH

Q318
CB B+ ON/OFF

Q317
CB B+ 5V SWITCH

MUTE

CN305 15P
CN306 15P
CN304 12P
CN302 6P
CN708
CN307 19P

TC BLOCK
M601 REEL, CAPSTAN MOTOR
(DOOR OPEN)

MAIN BOARD (2/2)]

IC304
POWER AMP

HEADPHONE BOARD

SP101 SPEAKER L-CH

SP201 SPEAKER R-CH

Q312 B+ 5V REG

Q311 B+ 7.5V REG

Q310 B+ 8.5V REG

Q308 2SB1013-TP-34 POWER SWITCH

Q309 DTC114YS-TP POWER ON/OFF

Q315, 316 REMOTE CONTROL B+ SWITCH

IC309 B+ REG

【POWER BOARD】

*NOT REPLACEABLE; BUILT IN TRANSFORMER

IC901 REG

【BATTERY (L) BOARD】
DRY BATTERY
SIZE "C"
(IEC DESIGNATION R14)
8PCS. 12V

DRY BATTERY
SIZE "AA"
(IEC DESIGNATION R6)
4PCS. 6V
(FOR CLOCK)

TOTAL CURRENT	
FM	139mA
AM	127mA
PLAY	198mA
REC	259mA
FF/REW	202mA
CD	440mA

L-CH
R-CH
A-GND
AU7.5V
TU5V
R-ST
R-MUTE
R-CONT
R-CLK
R-DATA
R-CE
R+B
S-GND
(A) TO MAIN BOARD (1/2)

TC BLOCK
M601 REEL. CAPSTAN MOTOR
(DOOR OPEN)

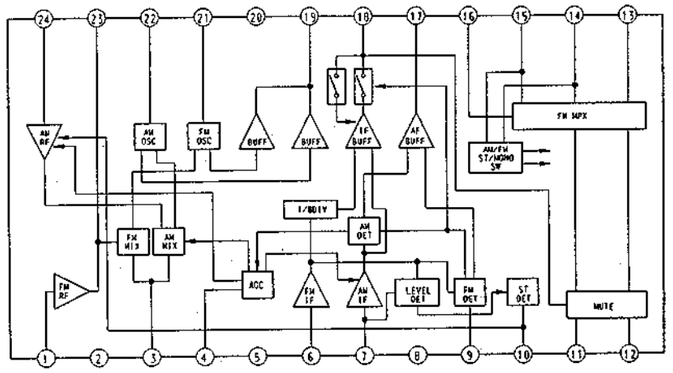
D-GND, BU+B, R-CLK, R-CONT, R-DATA, RMC/REG-CHK, R-ST, A-MUTE, R-CE, T-PLAY, C-SCOR, C-DATA, C-XRST, B-MUTE, C-SENSE, C-SOCK, C-SOSO, C-XLT, C-CLK

C-CLK, C-XLT, C-DATA, C-XRST, C-SENSE, B-MUTE, C-SOCK, C-SOSO, C-SCOR
(C) TO MAIN BOARD (1/2)

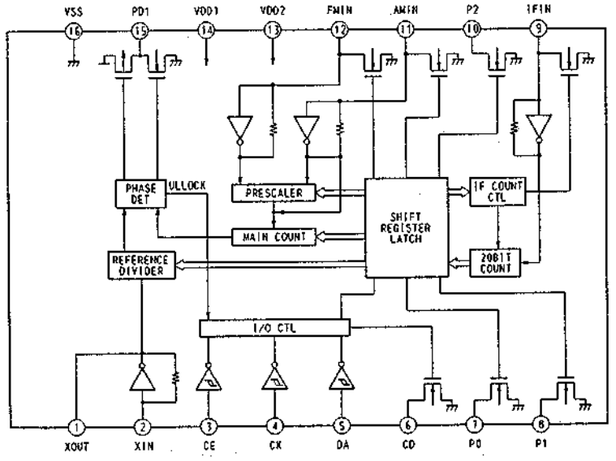
R-CH, AU/CD5V, A-GND, L-CH, CD8.5V, D-GND, P-GND
(B) TO MAIN BOARD (1/2)

• IC BLOCK DIAGRAMS – MAIN SECTION (1/2) –

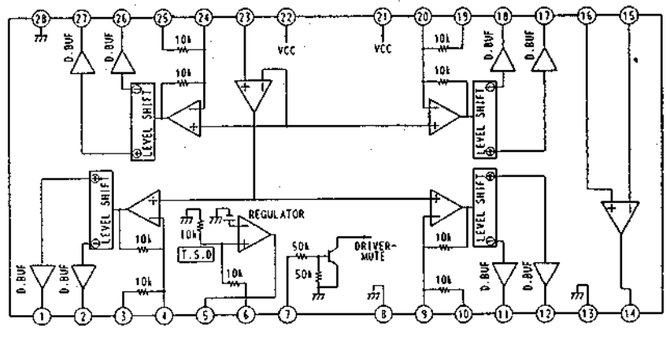
IC1 TA2008AN



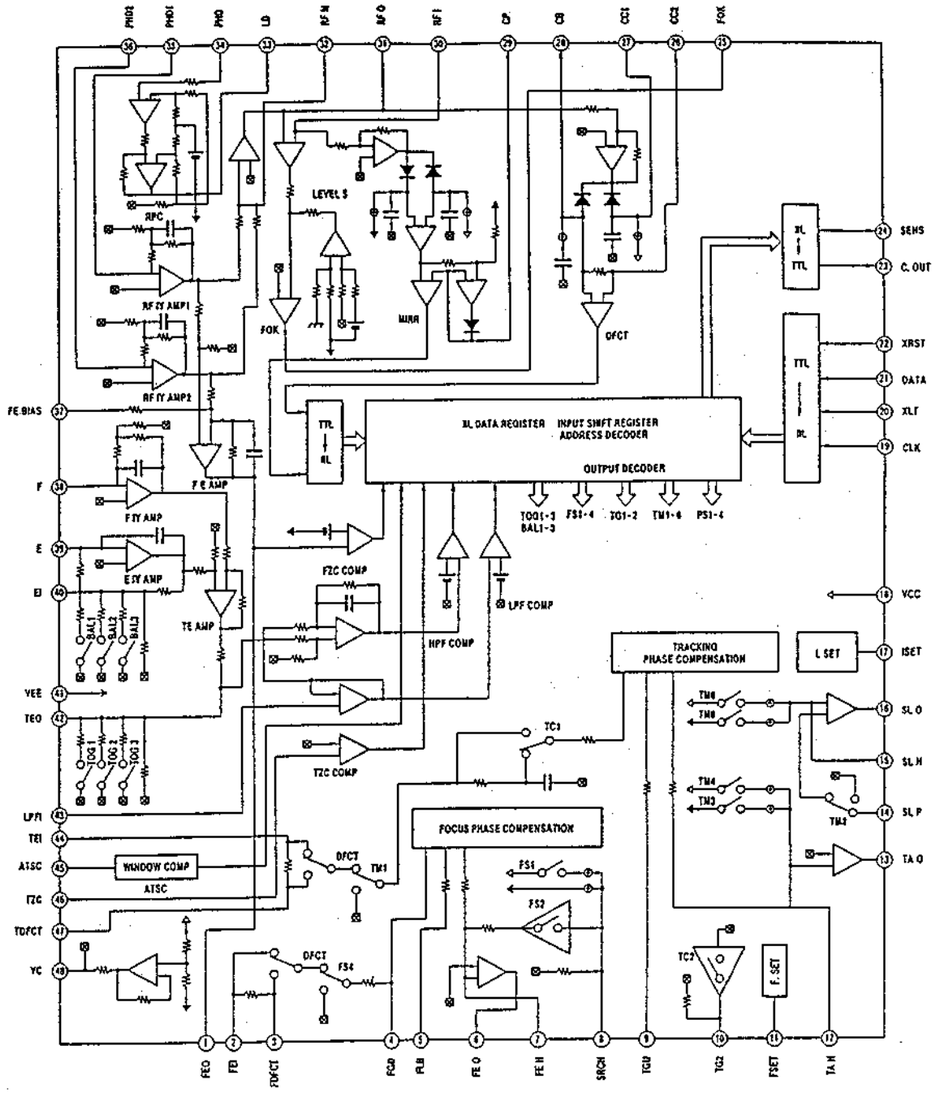
IC3 BU2614



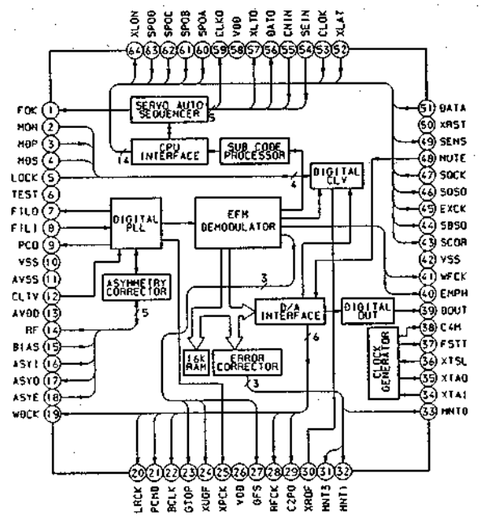
IC703 BA5930FP



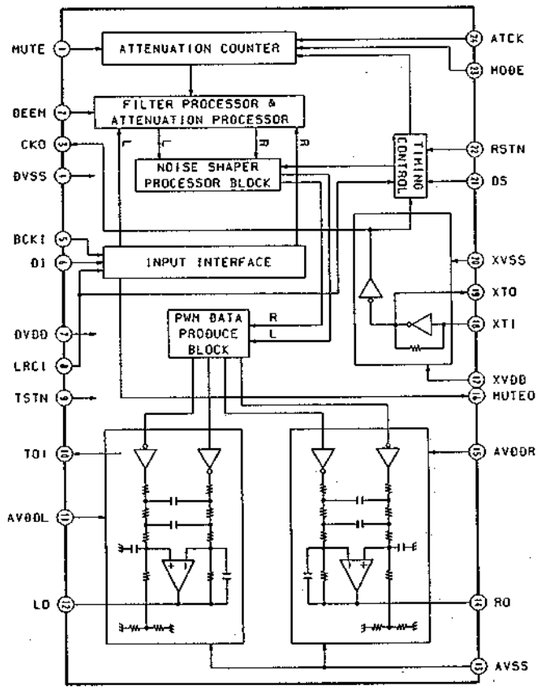
IC701 CXA1782BQ



IC702 CXD2507AQ



IC704 SM5877AM

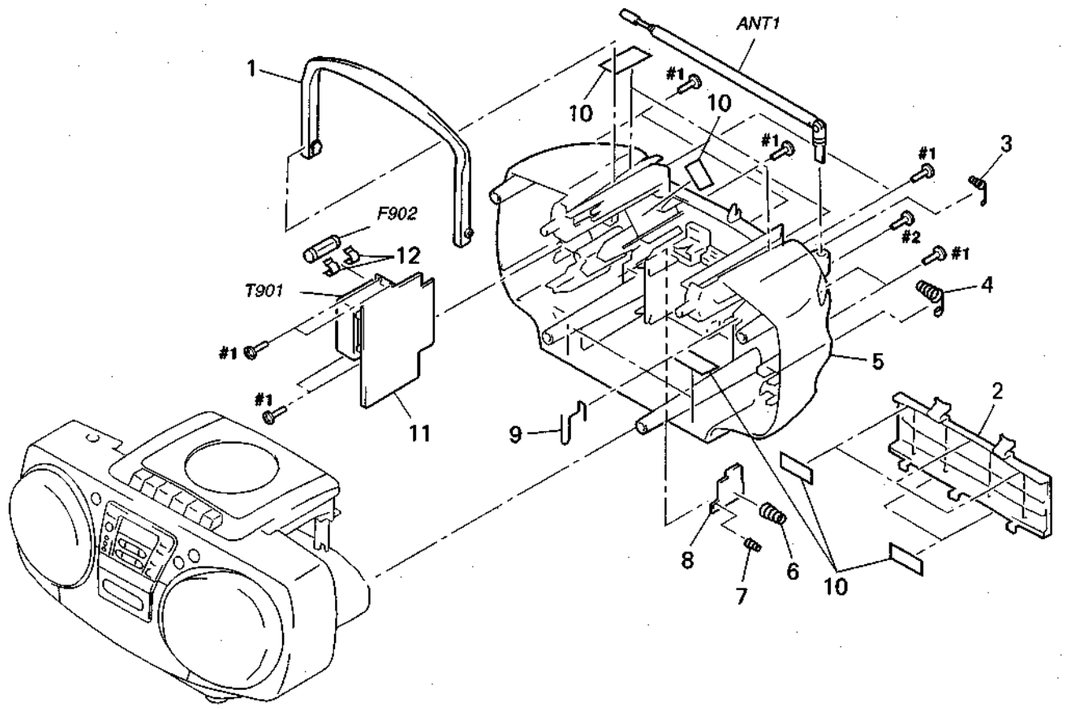


SECTION 7
EXPLODED VIEWS

NOTE :
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- 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 and accessories and packing materials are given in the last of this parts list.

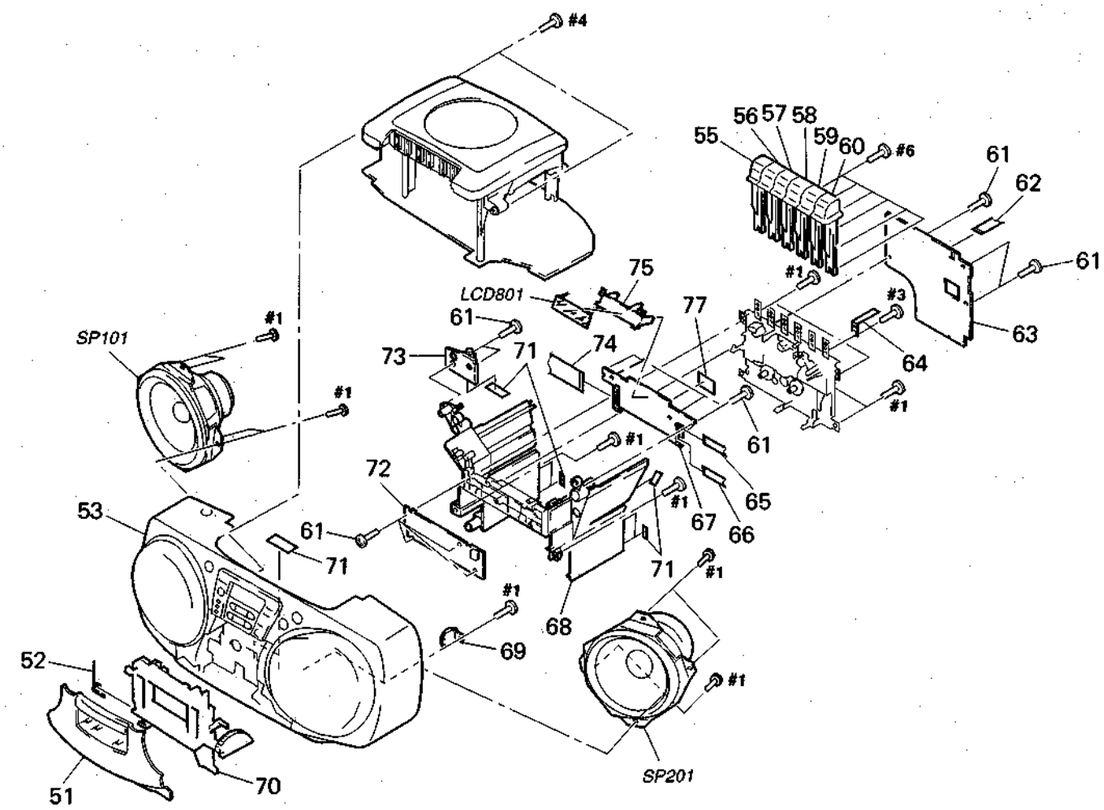
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. REAR CABINET SECTION



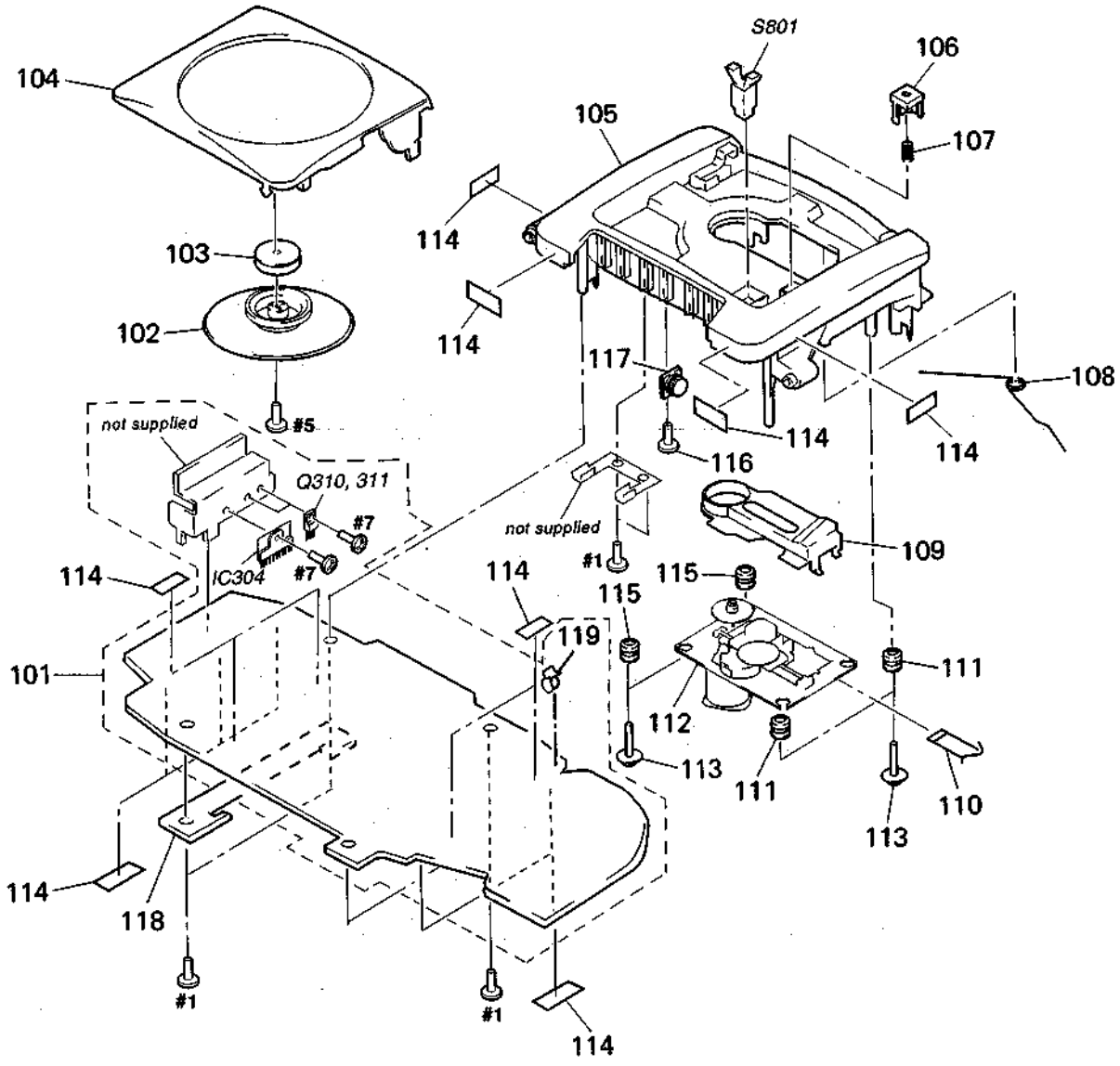
Ref. No.	Part No.	Description	Remark
1	3-938-851-01	HANDLE	
2	3-938-845-01	LID, BATTERY	
3	3-938-852-01	SPRING, BACK UP	
4	3-938-846-01	SPRING (+,–), BATT	
5	3-938-844-01	CABINET, REAR	
6	3-938-849-01	SPRING (–), BATT	
7	3-939-057-01	SPRING (–), BACK UP	
* 8	1-662-025-11	BATTERY (L) BOARD	
9	3-938-847-01	TERMINAL, ANT	
* 10	3-378-434-01	CUSHION, SARANET	
* 11	1-662-024-11	POWER BOARD	
12	1-533-233-21	HOLDER, FUSE	
ANT1	1-501-861-11	ANTENNA, TELESCOPIC	
⚠F902	1-532-505-31	FUSE, TIME LAG (5A/250V)	
⚠T901	1-429-758-11	TRANSFORMER, POWER	

7-2. FRONTCABINET SECTION



Ref. No.	Part No.	Description	Remark
51	3-938-833-01	HOLDER, CASSETTE	
52	3-938-832-01	SPRING, CASSETTE OPEN	
53	X-3372-645-1	CABINET (FRONT) SUB ASSY (CFD-360)	
53	X-3372-661-1	CABINET (FRONT) SUB ASSY (CFD-370)	
55	3-938-836-01	BUTTON (PAUSE), MD	
56	3-938-837-01	BUTTON (S/EJECT), MD	
57	3-938-838-01	BUTTON (FF), MD	
58	3-938-839-01	BUTTON (REW), MD	
59	3-938-840-01	BUTTON (PLAY), MD	
60	3-938-841-01	BUTTON (REC), MD	
61	4-931-757-41	SCREW (DIA.2.6X10) (IT3B)	
62	1-777-329-11	WIRE (FLAT TYPE) (FFC) (15 CORE)	
* 63	A-3306-065-A	TC BOARD, COMPLETE	
64	3-938-835-01	LEVER, REC	
65	1-777-331-11	WIRE (FLAT TYPE) (FFC) (4 CORE)	
66	1-777-328-11	WIRE (FLAT TYPE) (FFC) (12 CORE)	
* 67	A-3306-063-A	CONTROL BOARD, COMPLETE (CFD-360)	
* 67	A-3306-093-A	CONTROL BOARD, COMPLETE (CFD-370)	
68	3-938-857-01	BRACKET, RELAY	
69	3-351-377-11	DAMPER	
70	X-3372-646-1	LID ASSY, CASSETTE (CFD-360)	
70	X-3372-662-1	LID ASSY, CASSETTE (CFD-370)	
* 71	3-378-434-01	CUSHION, SARANET	
* 72	1-662-021-11	SWITCH BOARD	
* 73	1-662-028-11	HEADPHONE BOARD	
74	1-777-330-11	WIRE (FLAT TYPE) (FFC) (19 CORE)	
* 75	3-938-827-01	HOLDER, LCD	
77	3-008-119-01	SHEET (B), ADHESIVE	
LCD801	1-801-457-11	LIQUID CRYSTAL DISPLAY	
SP101	1-505-434-11	SPEAKER (10cm) (L-CH)	
SP201	1-505-434-11	SPEAKER (10cm) (R-CH)	

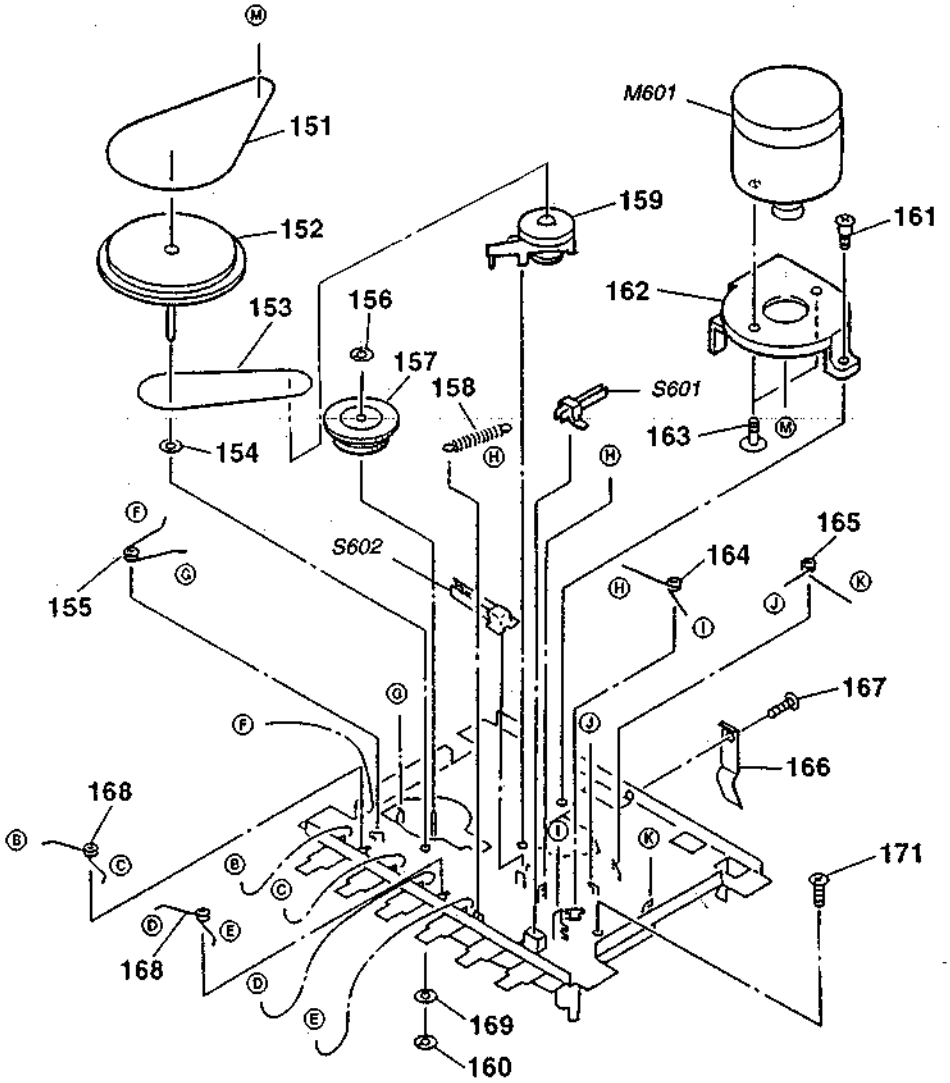
7-3. CD CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3306-067-A	MAIN BOARD, COMPLETE	
102	3-923-497-01	PLATE, CHUCK	
103	1-452-732-11	MAGNET	
104	3-938-854-01	LID, CD (CFD-360)	
104	3-938-854-11	LID, CD (CFD-370)	
105	3-938-853-01	CHASSIS, CD	
106	3-939-527-01	SLIDER, PUSH	
107	3-938-884-01	SPRING, CD COIL	
108	3-938-856-01	SPRING, CD OPEN	
109	3-910-116-01	COVER, CD	
110	1-777-332-11	WIRE (FLAT TYPE) (FFC) (16 CORE)	
111	3-910-095-01	RUBBER, VIBRATION PROOF	

Ref. No.	Part No.	Description	Remark
* 112	1-662-029-11	CD MOTOR BOARD	
113	3-921-725-01	SCREW (2.6X10), +PWH	
* 114	3-378-434-01	CUSHION, SARANET	
115	3-910-095-11	RUBBER, VIBRATION PROOF	
116	4-931-757-41	SCREW (DIA.2.6X10) (IT3B)	
117	3-351-377-01	DAMPER	
* 118	1-663-473-11	RETAINER BOARD	
119	1-533-233-21	HOLDER, FUSE	
IC304	8-759-820-22	IC LA4597	
Q310	8-729-209-15	TRANSISTOR 2SD2012	
Q311	8-729-209-15	TRANSISTOR 2SD2012	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (DOOR OPEN)	

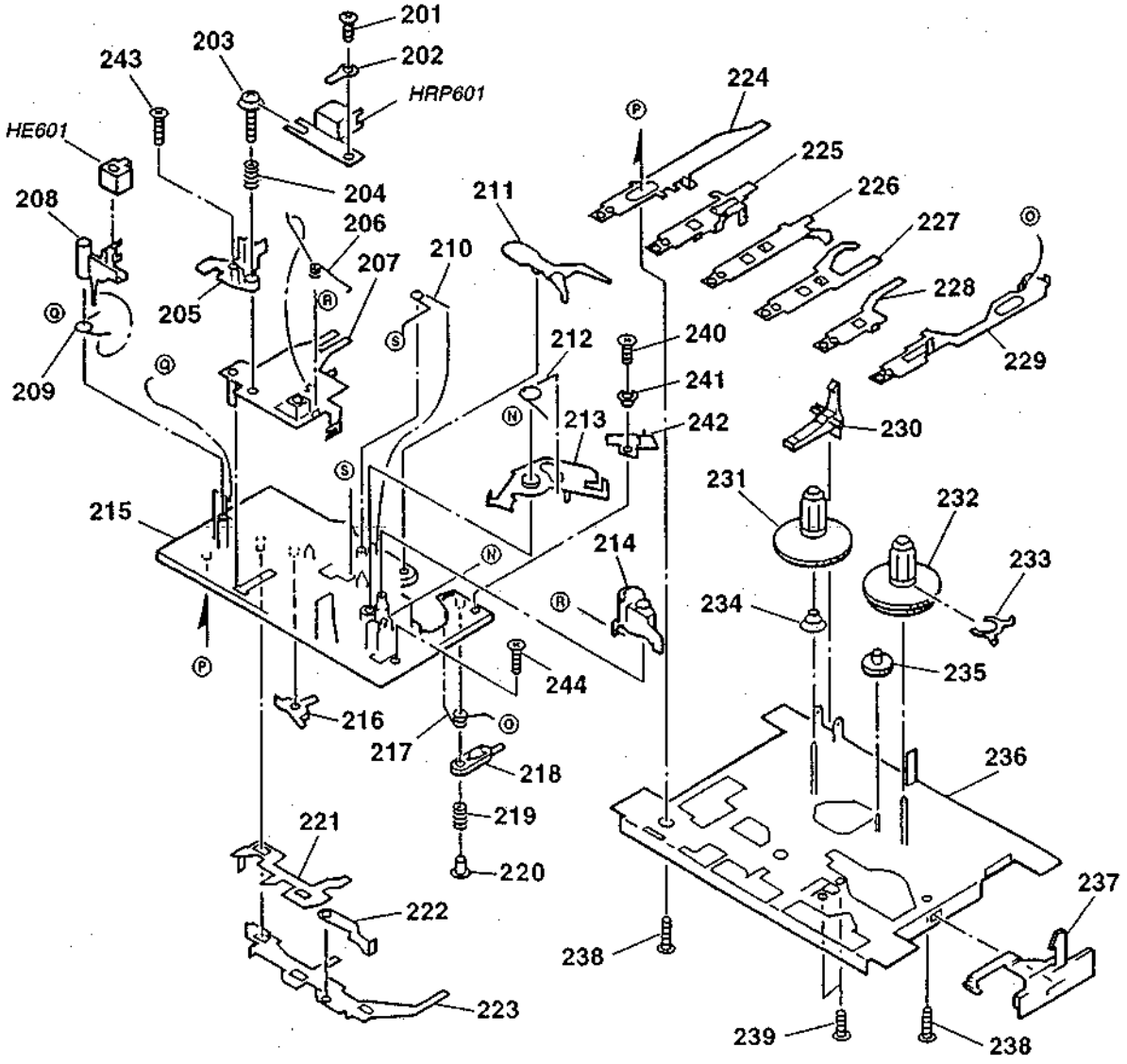
7-4. MECHANISM DECK SECTION-1
(MF-CFD360)



Ref. No.	Part No.	Description	Remark
151	3-933-843-01	BELT, MAIN	
152	3-933-834-01	FLYWHEEL ASSY	
153	3-933-833-01	BELT, RF	
154	3-933-858-01	WASHER, P	
155	3-933-811-01	SPRING, E ACTUATOR	
156	3-933-856-01	CUT, P WASHER	
157	3-933-831-01	GEAR, CAM	
* 158	3-933-817-01	SPRING (S), PLAY BUTTON LEVER	
159	3-933-832-01	CLUTCH ASSY, RF	
160	3-933-857-01	CUT, P WASHER	
161	3-933-844-01	SCREW, MB	
162	3-933-840-01	BRACKET, MOTOR	

Ref. No.	Part No.	Description	Remark
163	3-933-841-01	SCREW, MOTOR COLLER	
164	3-933-812-01	SPRING, P.S LEVER	
165	3-933-815-01	SPRING, REC BUTTON LEVER	
166	3-933-846-01	SPRING, PACK	
167	3-933-849-01	SCREW (2X3), DELTITE	
168	3-933-809-01	SPRING (A), BUTTON LEVER	
169	3-933-859-01	WASHER, P	
171	3-933-848-01	SCREW (M2X3), C TAPPING	
M601	X-3373-410-1	MOTOR ASSY	
S601	1-762-658-11	SWITCH, LEAF (MSW-1541T) (MD POWER)	
S602	1-762-819-11	SWITCH, LEAF (TAPE PLAY)	

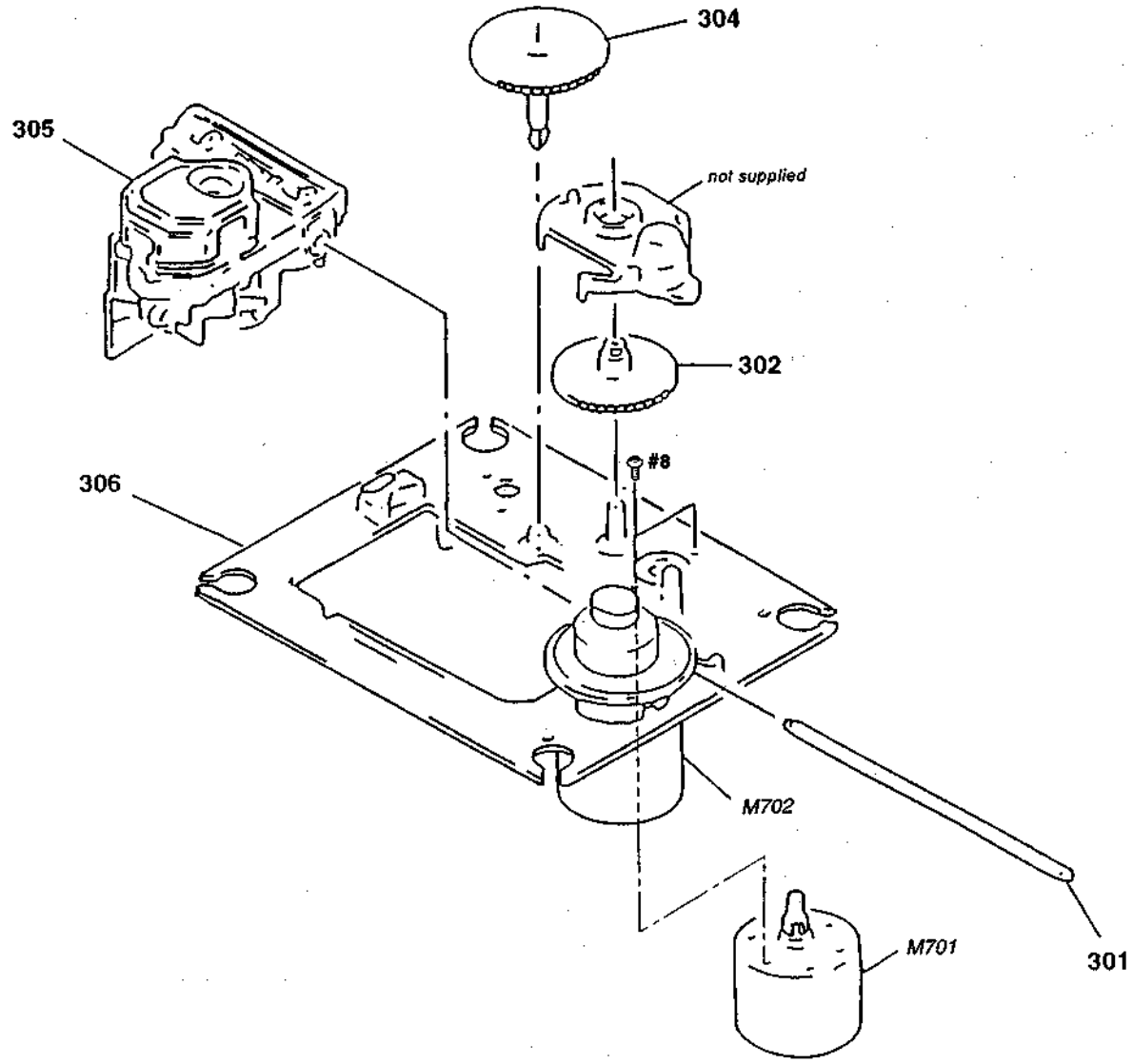
7-5. MECHANISM DECK SECTION-2
(MF-CFD360)



Ref. No.	Part No.	Description	Remark
201	3-933-852-01	SCREW (M2X3), + BIND	
202	3-933-860-01	PLATE, LUG	
203	3-933-854-01	SCREW (M2X7), AZIMUTH	
204	3-933-822-01	SPRING, AZIMUTH	
205	3-933-819-01	BASE, HEAD	
206	3-933-820-01	SPRING, PANEL (P)	
207	3-933-818-01	PANEL, HEAD	
208	3-933-821-01	ARM, MG	
209	3-933-816-01	SPRING, MG ARM	
210	3-933-823-01	SPRING, M CONTROL	
211	3-933-828-01	LEVER, SENSING	
212	3-933-829-01	SPRING, GEAR PLATE	
213	3-933-830-01	PLATE ASSY, GEAR	
214	3-933-825-01	ARM ASSY, PINCH ROLLER	
215	3-933-796-01	BASE ASSY	
216	3-933-814-01	STOPPER, PR	
217	3-933-805-01	SPRING, P CONTROL	
218	3-933-806-01	LEVER (E), PAUSE	
219	3-933-807-01	SPRING, PAUSE LEVER	
220	3-933-808-01	STOPPER, PAUSE	
221	3-933-797-01	ACTUATOR, SWITCH	
* 222	3-933-813-01	LEVER, E KICK	
223	3-933-798-01	ACTUATOR, PUSH BUTTON	
* 224	3-933-799-01	LEVER, REC BUTTON	

Ref. No.	Part No.	Description	Remark
225	3-933-800-01	LEVER, PLAY BUTTON	
226	3-933-801-01	LEVER, REW BUTTON	
227	3-933-802-01	LEVER, FF BUTTON	
* 228	3-933-803-01	LEVER, STOP BUTTON	
229	3-933-804-01	LEVER, PAUSE BUTTON	
230	3-933-847-01	LEVER, RECORD SAFETY	
231	3-933-837-01	REEL ASSY, SUPPLY	
232	3-933-838-01	REEL ASSY, TAKE UP	
233	3-933-839-01	SENSER	
234	3-933-836-01	SPRING, BACK TENSION	
235	3-933-835-01	GEAR, FF	
* 236	3-933-810-01	CHASSIS ASSY	
237	3-933-845-01	LEVER, EJECT SLIDE	
238	3-933-850-01	SCREW (M2X5), P TAPPING BIND	
239	3-933-851-01	SCREW (M2X4.5), TAPPING	
240	3-933-824-01	SCREW (2X3), PS TAPPING	
241	3-933-827-01	COLLER, P ARM	
* 242	3-933-826-01	ARM, P	
243	3-933-853-01	SCREW (M2X6)	
244	3-933-855-01	SCREW (M2X8), S TAPPING	
HE601	1-500-334-11	HEAD, E (TC-238)(ERASE)	
HRP601	1-500-333-11	HEAD, R-P (MS15R-AA2N1) (RECORD/PLAYBACK)	

7-6. OPTICAL PICK-UP SECTION (KSM-213BAN/S-N)



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
301	2-626-908-01	SHAFT, SLED	
302	2-627-003-01	GEAR(B) (RP)	
304	2-626-907-01	GEAR (A) (S)	
⚠305	8-848-376-01	OPTICAL PICK-UP KSS-213B/S-N	
306	X-2625-770-1	CHASSIS ASSY (MB) (RP), MOTOR (INCLUDING M702) (SPINDLE)	
M701	X-2625-769-1	GEAR ASSY (MB) (RP), MOTOR (SLED)	

SECTION 8
ELECTRICAL PARTS LIST

BATTERY (L) | CD MOTOR | CONTROL

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, -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
- Abbreviation
  G : German IT : Italian

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

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

Ref. No.	Part No.	Description				Remark
*	1-662-025-11	BATTERY (L) BOARD				
		**********				
	3-938-849-01	SPRING (-), BATT				
	3-939-057-01	SPRING (-), BACK UP				
**********						
*	1-662-029-11	CD MOTOR BOARD				
		**********				
		< SWITCH >				
S701	1-571-936-11	SWITCH, LEAF (LIMIT)				
**********						
*	A-3306-063-A	CONTROL BOARD, COMPLETE (CFD-360)				
*	A-3306-093-A	CONTROL BOARD, COMPLETE (CFD-370)				
		**********				
	3-008-119-01	SHEET (B), ADHESIVE				
*	3-938-827-01	HOLDER, LCD				
		< CAPACITOR >				
C801	1-124-589-11	ELECT	47uF	20%	16V	
C802	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C806	1-124-589-11	ELECT	47uF	20%	16V	
C807	1-124-589-11	ELECT	47uF	20%	16V	
C808	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C809	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C810	1-124-589-11	ELECT	47uF	20%	16V	
C811	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C812	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C813	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C814	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C815	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C816	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C817	1-124-589-11	ELECT	47uF	20%	16V	
C818	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C820	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C821	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	

Ref. No.	Part No.	Description				Remark
C864	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C865	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C880	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
		< CONNECTOR >				
CN801	1-691-078-41	HOUSING, CONNECTOR 19P				
CN802	1-691-071-31	HOUSING, CONNECTOR 12P				
CN803	1-691-063-21	HOUSING, CONNECTOR 4P				
		< IC >				
IC801	8-759-435-03	IC MSM65353A-827GS-BK4				
IC802	8-749-011-05	IC GP1U28X (CFD-370)				
IC803	8-759-249-81	IC S-806J				
		< COIL >				
L802	1-410-393-11	INDUCTOR CHIP	100uH			
L803	1-410-393-11	INDUCTOR CHIP	100uH			
L804	1-410-393-11	INDUCTOR CHIP	100uH			
L805	1-410-393-11	INDUCTOR CHIP	100uH			
L806	1-410-393-11	INDUCTOR CHIP	100uH			
		< LIQUID CRYSTAL DISPLAY >				
LCD801	1-801-457-11	LIQUID CRYSTAL DISPLAY				
		< RESISTOR >				
R801	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R802	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R803	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R804	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R805	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R806	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R807	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R808	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R809	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R810	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R811	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R812	1-216-049-91	METAL GLAZE	1K	5%	1/10W	

CONTROL **HEADPHONE** **MAIN**

Ref. No.	Part No.	Description			Remark
R813	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R815	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R816	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R817	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R818	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R819	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R820	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R821	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R822	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R823	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R824	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R825	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R826	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R827	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R828	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R829	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R830	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R831	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R832	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R833	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R834	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R835	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R836	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R837	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R838	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R840	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R842	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R843	1-216-041-00	METAL CHIP	470	5%	1/10W
R846	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R847	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R848	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R860	1-216-045-00	METAL CHIP	680	5%	1/10W
R861	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R862	1-216-045-00	METAL CHIP	680	5%	1/10W
R863	1-216-047-91	METAL GLAZE	820	5%	1/10W
R864	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R865	1-216-109-00	METAL CHIP	330K	5%	1/10W
R870	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R871	1-216-073-00	METAL CHIP	10K	5%	1/10W
R872	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S801	1-572-199-11	SWITCH, KEY BOARD (SLEEP)			
S802	1-572-199-11	SWITCH, KEY BOARD (POWER)			
S803	1-572-199-11	SWITCH, KEY BOARD (SOUND)			
S804	1-572-199-11	SWITCH, KEY BOARD (MEGA BASS)			
S805	1-572-199-11	SWITCH, KEY BOARD (VOLUME +)			
S806	1-572-199-11	SWITCH, KEY BOARD (VOLUME –)			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X801	1-767-322-11	OSCILLATOR, CERAMIC (4.19MHz)			
X802	1-567-098-41	VIBRATOR, CRYSTAL (32.768KHz)			
**********					
*	1-662-028-11	HEADPHONE BOARD			
		**********			
		< CONNECTOR >			
* CN309	1-564-519-11	PLUG, CONNECTOR 4P			
* CN310	1-564-519-11	PLUG, CONNECTOR 4P			
		< JACK >			
J302	1-568-267-11	JACK (🎧)			
		< COIL >			
L308	1-414-146-31	INDUCTOR	2.2uH		
		< RESISTOR >			
R136	1-249-404-00	CARBON	82	5%	1/4W
R236	1-249-404-00	CARBON	82	5%	1/4W
**********					
*	A-3306-067-A	MAIN BOARD, COMPLETE			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C2	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-102-960-00	CERAMIC	24PF	5%	50V
C5	1-162-203-31	CERAMIC	15PF	5%	50V
C7	1-161-055-00	CERAMIC	0.022uF	10%	50V
C8	1-162-201-31	CERAMIC	12PF	5%	50V
C9	1-102-821-00	CERAMIC	360PF	5%	50V
C10	1-162-851-11	CERAMIC	0.1uF		16V
C11	1-102-820-00	CERAMIC	330PF	5%	50V
C12	1-126-964-11	ELECT	10uF	20%	50V
C13	1-162-306-11	CERAMIC	0.01uF	30%	16V
C14	1-161-061-11	CERAMIC	0.068uF	10%	50V
C15	1-161-024-00	CERAMIC	0.082uF	10%	25V
C16	1-161-024-00	CERAMIC	0.082uF	10%	25V
C17	1-126-963-11	ELECT	4.7uF	20%	50V
C18	1-126-967-11	ELECT	47uF	20%	16V
C19	1-162-306-11	CERAMIC	0.01uF	30%	16V
C22	1-162-306-11	CERAMIC	0.01uF	30%	16V
C23	1-161-053-00	CERAMIC	0.015uF	10%	50V
C24	1-161-053-00	CERAMIC	0.015uF	10%	50V
C26	1-126-963-11	ELECT	4.7uF	20%	50V
C27	1-126-963-11	ELECT	4.7uF	20%	50V
C44	1-161-051-00	CERAMIC	0.01uF	10%	50V

Ref. No.	Part No.	Description			Remark
C45	1-136-177-00	FILM	1uF	5%	50V
C46	1-126-964-11	ELECT	10uF	20%	50V
C47	1-162-306-11	CERAMIC	0.01uF	30%	16V
C48	1-126-964-11	ELECT	10uF	20%	50V
C49	1-162-306-11	CERAMIC	0.01uF	30%	16V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-162-294-31	CERAMIC	0.001uF	10%	50V
C53	1-162-294-31	CERAMIC	0.001uF	10%	50V
C54	1-102-518-11	CERAMIC	33PF	5%	50V
C55	1-162-199-31	CERAMIC	10PF	5%	50V
C56	1-162-290-31	CERAMIC	470PF	10%	50V
C57	1-162-286-21	CERAMIC	220PF	10%	50V
C58	1-162-306-11	CERAMIC	0.01uF	30%	16V
C59	1-162-306-11	CERAMIC	0.01uF	30%	16V
C60	1-126-964-11	ELECT	10uF	20%	50V
C62	1-162-294-31	CERAMIC	0.001uF	10%	50V
C63	1-162-306-11	CERAMIC	0.01uF	30%	16V
C64	1-162-198-31	CERAMIC	8.2PF	10%	50V
C66	1-161-051-00	CERAMIC	0.01uF	10%	50V
C68	1-162-215-31	CERAMIC	47PF	5%	50V
C69	1-162-306-11	CERAMIC	0.01uF	30%	16V
C70	1-162-294-31	CERAMIC	0.001uF	10%	50V
C71	1-162-294-31	CERAMIC	0.001uF	10%	50V
C72	1-162-306-11	CERAMIC	0.01uF	30%	16V
C73	1-136-177-00	FILM	1uF	5%	50V
C74	1-162-282-31	CERAMIC	100PF	10%	50V
C75	1-162-282-31	CERAMIC	100PF	10%	50V
C76	1-162-294-31	CERAMIC	0.001uF	10%	50V
C78	1-162-306-11	CERAMIC	0.01uF	30%	16V
C95	1-104-666-11	ELECT	220uF	20%	25V
C96	1-162-306-11	CERAMIC	0.01uF	30%	16V
C132	1-162-290-31	CERAMIC	470PF	10%	50V
C134	1-126-933-11	ELECT	100uF	20%	16V
C135	1-136-165-00	FILM	0.1uF	5%	50V
C136	1-126-926-11	ELECT	1000uF	20%	10V
C137	1-162-282-31	CERAMIC	100PF	10%	50V
C232	1-162-290-31	CERAMIC	470PF	10%	50V
C234	1-126-933-11	ELECT	100uF	20%	16V
C235	1-136-165-00	FILM	0.1uF	5%	50V
C236	1-126-926-11	ELECT	1000uF	20%	10V
C237	1-162-282-31	CERAMIC	100PF	10%	50V
C321	1-126-966-11	ELECT	33uF	20%	16V
C322	1-126-967-11	ELECT	47uF	20%	16V
C323	1-104-666-11	ELECT	220uF	20%	25V
C324	1-126-967-11	ELECT	47uF	20%	16V
C325	1-124-902-00	ELECT	0.47uF	20%	50V
C326	1-161-055-00	CERAMIC	0.022uF	10%	50V
C327	1-161-055-00	CERAMIC	0.022uF	10%	50V
C328	1-126-967-11	ELECT	47uF	20%	16V
C329	1-126-923-11	ELECT	220uF	20%	10V
C330	1-161-055-00	CERAMIC	0.022uF	10%	50V
C331	1-161-055-00	CERAMIC	0.022uF	10%	50V

Ref. No.	Part No.	Description			Remark
C332	1-128-551-11	ELECT	22uF	20%	25V
C333	1-126-933-11	ELECT	100uF	20%	10V
C334	1-161-055-00	CERAMIC	0.022uF	10%	50V
C335	1-161-055-00	CERAMIC	0.022uF	10%	50V
C336	1-126-967-11	ELECT	47uF	20%	16V
C337	1-126-933-11	ELECT	100uF	20%	10V
C338	1-128-548-11	ELECT	4700uF	20%	25V
C339	1-126-964-11	ELECT	10uF	20%	50V
C340	1-162-851-11	CERAMIC	0.1uF		16V
C341	1-162-851-11	CERAMIC	0.1uF		16V
C365	1-104-664-11	ELECT	47uF	20%	25V
C366	1-126-967-11	ELECT	47uF	20%	16V
C369	1-162-851-11	CERAMIC	0.1uF	10%	16V
C370	1-162-851-11	CERAMIC	0.1uF	10%	16V
C701	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C702	1-162-851-11	CERAMIC	0.1uF	10%	16V
C703	1-162-851-11	CERAMIC	0.1uF	10%	16V
C704	1-162-851-11	CERAMIC	0.1uF	10%	16V
C705	1-126-963-11	ELECT	4.7uF	20%	50V
C706	1-130-489-00	MYLAR	0.033uF	5%	50V
C707	1-130-486-00	MYLAR	0.018uF	10%	50V
C708	1-162-199-31	CERAMIC	10PF	5%	50V
C709	1-126-962-11	ELECT	3.3uF	20%	50V
C710	1-130-493-00	MYLAR	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C713	1-130-489-00	MYLAR	0.033uF	5%	50V
C714	1-162-306-11	CERAMIC	0.01uF	30%	16V
C715	1-130-489-00	MYLAR	0.033uF	5%	50V
C716	1-130-495-00	MYLAR	0.1uF	5%	50V
C717	1-126-967-11	ELECT	47uF	20%	10V
C718	1-126-964-11	ELECT	10uF	20%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-101-005-00	CERAMIC	22000PF		50V
C723	1-162-851-11	CERAMIC	0.1uF	10%	16V
C725	1-162-199-31	CERAMIC	10PF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-162-306-11	CERAMIC	0.01uF	30%	16V
C728	1-162-306-11	CERAMIC	0.01uF	30%	16V
C729	1-126-967-11	ELECT	47uF	20%	10V
C730	1-126-934-11	ELECT	220uF	20%	16V
C731	1-162-306-31	CERAMIC	0.01uF	30%	16V
C732	1-130-484-00	MYLAR	0.012uF	5%	50V
C733	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C734	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C741	1-126-967-11	ELECT	47uF	20%	10V
C742	1-124-902-00	ELECT	0.47uF	20%	50V
C743	1-162-290-31	CERAMIC	470PF	10%	50V
C744	1-162-286-21	CERAMIC	220PF	10%	50V
C745	1-130-499-00	MYLAR	0.22uF	5%	50V
C746	1-162-306-11	CERAMIC	0.01uF	30%	16V
C747	1-130-483-00	MYLAR	0.01uF	5%	50V
C750	1-162-306-11	CERAMIC	0.01uF	30%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C752	1-162-199-31	CERAMIC	10PF	5%	50V
C753	1-162-199-31	CERAMIC	10PF	5%	50V
C754	1-126-923-11	ELECT	220uF	20%	10V
C755	1-162-306-11	CERAMIC	0.01uF	30%	16V
C756	1-162-306-11	CERAMIC	0.01uF	30%	16V
C760	1-126-923-11	ELECT	220uF	20%	10V
C763	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C764	1-124-903-11	ELECT	1uF	20%	50V
C773	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C774	1-124-903-11	ELECT	1uF	20%	50V
C781	1-126-923-11	ELECT	220uF	20%	10V
C782	1-162-306-11	CERAMIC	0.01uF	30%	16V
C787	1-126-923-11	ELECT	220uF	20%	10V
C788	1-162-294-31	CERAMIC	0.001uF	10%	50V
C789	1-162-294-31	CERAMIC	0.001uF	10%	50V
C790	1-162-286-21	CERAMIC	220PF	10%	50V
C791	1-162-286-21	CERAMIC	220PF	10%	50V
C792	1-162-286-21	CERAMIC	220PF	10%	50V
C793	1-162-306-11	CERAMIC	0.01uF	30%	16V
C794	1-162-294-31	CERAMIC	0.001uF	10%	50V
C795	1-162-306-11	CERAMIC	0.01uF	30%	16V
C796	1-162-306-11	CERAMIC	0.01uF	30%	16V
C797	1-162-306-11	CERAMIC	0.01uF	30%	16V
C798	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C799	1-162-282-31	CERAMIC	100PF	10%	50V
		< FILTER >			
CF1	1-760-468-11	FILTER, CERAMIC			
CF2	1-760-468-11	FILTER, CERAMIC			
CF3	1-760-468-11	FILTER, CERAMIC			
CF4	1-579-762-11	VIBRATOR, CERAMIC			
		< COMPOSITION CIRCUIT BLOCK >			
CFT1	1-239-173-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
* CN302	1-565-302-11	PIN, CONNECTOR (PC BOARD) 6P			
CN306	1-691-648-11	SOCKET, CONNECTOR 15P			
CN307	1-691-650-11	SOCKET, CONNECTOR 19P			
CN701	1-770-646-11	CONNECTOR, FFC/FPC 16P			
* CN703	1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P			
		< TRIMMER >			
CT1	1-141-411-11	CAP, ADJ 20PF			
CT2	1-141-411-11	CAP, ADJ 20PF			
		< DIODE >			
D1	8-719-050-72	DIODE KV1370NT			
D2	8-719-050-72	DIODE KV1370NT			
D3	8-719-050-69	DIODE KV1520N			
D6	8-719-991-33	DIODE 1SS133T-77			
D7	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description	Remark
D8	8-719-991-33	DIODE 1SS133T-77	
D306	8-719-991-33	DIODE 1SS133T-77	
D307	8-719-991-33	DIODE 1SS133T-77	
D308	8-719-110-14	DIODE RD9.1ES-B3	
D309	8-719-110-08	DIODE RD8.2ES-B2	
D310	8-719-109-89	DIODE RD5.6ESB2	
D311	8-719-991-33	DIODE 1SS133T-77	
D313	8-719-991-33	DIODE 1SS133T-77	
D314	8-719-991-33	DIODE 1SS133T-77	
D315	8-719-991-33	DIODE 1SS133T-77	
D318	8-719-991-33	DIODE 1SS133T-77	
D319	8-719-991-33	DIODE 1SS133T-77	
		< FILTER >	
FL1	1-236-022-11	FILTER, BAND PASS	
		< IC >	
IC1	8-759-386-02	IC TA2008AN	
IC3	8-759-333-33	IC BU2614	
IC304	8-759-820-22	IC LA4597	
IC309	8-759-095-60	IC S-81250PG	
IC701	8-752-069-56	IC CXA1782BQ	
IC702	8-752-372-94	IC CXD2507AQ	
IC703	8-759-336-75	IC BA5930FP	
IC704	8-759-364-34	IC SM5877AM	
		< COIL >	
L1	1-409-905-11	COIL, FM RF	
L2	1-409-905-11	COIL, FM RF	
L3	1-501-762-11	ANTENNA, FERRITE-ROD (MW)	
L4	1-411-234-11	COIL, AM OSC	
L5	1-410-336-11	INDUCTOR 220uH	
L7	1-410-521-11	INDUCTOR 100uH	
L8	1-410-509-11	INDUCTOR 10uH	
L701	1-414-142-11	INDUCTOR 1uH	
		< TRANSISTOR >	
Q1	8-729-904-36	TRANSISTOR DTC114YS	
Q2	8-729-904-36	TRANSISTOR DTC114YS	
Q3	8-729-904-36	TRANSISTOR DTC114YS	
Q4	8-729-904-36	TRANSISTOR DTC114YS	
Q10	8-729-904-36	TRANSISTOR DTC114YS	
Q11	8-729-904-36	TRANSISTOR DTC114YS	
Q15	8-729-422-57	TRANSISTOR UN4111	
Q16	8-729-012-83	TRANSISTOR 2SK679A	
Q18	8-729-922-66	TRANSISTOR 2SC2410SN	
Q19	8-729-106-07	TRANSISTOR 2SK514-H	
Q102	8-729-905-50	TRANSISTOR DTC343TS	
Q202	8-729-905-50	TRANSISTOR DTC343TS	
Q308	8-729-801-84	TRANSISTOR 2SB1013-4	
Q309	8-729-904-36	TRANSISTOR DTC114YS	
Q310	8-729-209-15	TRANSISTOR 2SD2012	

Ref. No.	Part No.	Description				Remark
Q311	8-729-209-15	TRANSISTOR	2SD2012			
Q312	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q315	8-729-902-80	TRANSISTOR	DTA114YS			
Q316	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q317	8-729-801-84	TRANSISTOR	2SB1013-4			
Q318	8-729-904-36	TRANSISTOR	DTC114YS			
Q701	8-729-801-84	TRANSISTOR	2SB1013-4			
Q702	8-729-900-85	TRANSISTOR	DTC144WS			
Q703	8-729-900-74	TRANSISTOR	DTC143TS			
Q705	8-729-902-80	TRANSISTOR	DTA114YS			
Q760	8-729-900-74	TRANSISTOR	DTC143TS			
Q770	8-729-900-74	TRANSISTOR	DTC143TS			
		< RESISTOR >				
R1	1-249-441-11	CARBON	100K	5%	1/4W	
R2	1-247-887-00	CARBON	220K	5%	1/4W	
R3	1-249-431-11	CARBON	15K	5%	1/4W	
R4	1-249-429-11	CARBON	10K	5%	1/4W	
R6	1-247-887-00	CARBON	220K	5%	1/4W	
R7	1-249-411-11	CARBON	330	5%	1/4W	
R8	1-247-863-91	CARBON	22K	5%	1/4W	
R9	1-249-421-11	CARBON	2.2K	5%	1/4W	
R10	1-249-425-11	CARBON	4.7K	5%	1/4W	
R11	1-247-815-91	CARBON	220	5%	1/4W	
R14	1-249-404-00	CARBON	82	5%	1/4W	
R16	1-249-417-11	CARBON	1K	5%	1/4W	
R17	1-249-417-11	CARBON	1K	5%	1/4W	
R25	1-249-429-11	CARBON	10K	5%	1/4W	
R26	1-249-425-11	CARBON	4.7K	5%	1/4W	
R27	1-249-429-11	CARBON	10K	5%	1/4W	
R28	1-249-429-11	CARBON	10K	5%	1/4W	
R29	1-249-415-11	CARBON	680	5%	1/4W	
R30	1-249-412-11	CARBON	390	5%	1/4W	
R35	1-249-421-11	CARBON	2.2K	5%	1/4W	
R37	1-249-429-11	CARBON	10K	5%	1/4W	
R38	1-249-429-11	CARBON	10K	5%	1/4W	
R39	1-249-429-11	CARBON	10K	5%	1/4W	
R40	1-249-417-11	CARBON	1K	5%	1/4W	
R41	1-249-417-11	CARBON	1K	5%	1/4W	
R42	1-249-425-11	CARBON	4.7K	5%	1/4W	
R43	1-249-437-11	CARBON	47K	5%	1/4W	
R44	1-249-429-11	CARBON	10K	5%	1/4W	
R46	1-247-863-91	CARBON	22K	5%	1/4W	
R55	1-249-421-11	CARBON	2.2K	5%	1/4W	
R56	1-249-407-11	CARBON	150	5%	1/4W	
R57	1-249-399-11	CARBON	33	5%	1/4W	
R58	1-249-411-11	CARBON	330	5%	1/4W	
R59	1-249-437-11	CARBON	47K	5%	1/4W	
R60	1-249-425-11	CARBON	4.7K	5%	1/4W	
R61	1-249-437-11	CARBON	47K	5%	1/4W	
R66	1-249-437-11	CARBON	47K	5%	1/4W	
R67	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description			Remark
R132	1-249-410-11	CARBON	270	5%	1/4W
R133	1-249-387-11	CARBON	3.3	5%	1/4W
R134	1-249-417-11	CARBON	1K	5%	1/4W
R135	1-249-414-11	CARBON	560	5%	1/4W
R137	1-249-401-11	CARBON	47	5%	1/4W
R232	1-249-410-11	CARBON	270	5%	1/4W
R233	1-249-387-11	CARBON	3.3	5%	1/4W
R234	1-249-417-11	CARBON	1K	5%	1/4W
R235	1-249-429-11	CARBON	10K	5%	1/4W
R237	1-249-401-11	CARBON	47	5%	1/4W
R316	1-249-437-11	CARBON	47K	5%	1/4W
R317	1-247-903-00	CARBON	1M	5%	1/4W
R318	1-249-411-11	CARBON	330	5%	1/4W
R319	1-249-414-11	CARBON	560	5%	1/4W
R320	1-249-407-11	CARBON	150	5%	1/4W
R323	1-249-441-11	CARBON	100K	5%	1/4W
R324	1-249-425-11	CARBON	4.7K	5%	1/4W
R327	1-249-418-11	CARBON	1.2K	5%	1/4W
R333	1-249-417-11	CARBON	1K	5%	1/4W
R334	1-249-441-11	CARBON	100K	5%	1/4W
R357	1-249-437-11	CARBON	47K	5%	1/4W
R358	1-249-429-11	CARBON	10K	5%	1/4W
R390	1-247-895-91	CARBON	470K	5%	1/4W
R700	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-247-883-00	CARBON	150K	5%	1/4W
R702	1-247-896-11	CARBON	510K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-247-883-00	CARBON	150K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-247-876-11	CARBON	75K	5%	1/4W
R707	1-249-432-11	CARBON	18K	5%	1/4W
R708	1-247-883-00	CARBON	150K	5%	1/4W
R709	1-247-862-11	CARBON	20K	5%	1/4W
R710	1-249-393-11	CARBON	10	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-417-11	CARBON	1K	5%	1/4W
R713	1-249-417-11	CARBON	1K	5%	1/4W
R714	1-247-883-00	CARBON	150K	5%	1/4W
R715	1-249-417-11	CARBON	1K	5%	1/4W
R716	1-249-431-11	CARBON	15K	5%	1/4W
R717	1-249-429-11	CARBON	10K	5%	1/4W
R718	1-247-899-11	CARBON	680K	5%	1/4W
R719	1-249-417-11	CARBON	1K	5%	1/4W
R720	1-247-891-00	CARBON	330K	5%	1/4W
R722	1-249-439-11	CARBON	68K	5%	1/4W
R723	1-249-440-11	CARBON	82K	5%	1/4W
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-435-11	CARBON	33K	5%	1/4W
R731	1-247-863-91	CARBON	22K	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W

MAIN POWER RETAINER SWITCH

Ref. No.	Part No.	Description			Remark
R733	1-249-435-11	CARBON	33K	5%	1/4W
R734	1-249-437-11	CARBON	47K	5%	1/4W
R735	1-249-421-11	CARBON	2.2K	5%	1/4W
R740	1-247-843-11	CARBON	3.3K	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-247-903-00	CARBON	1M	5%	1/4W
R744	1-247-887-00	CARBON	220K	5%	1/4W
R745	1-249-429-11	CARBON	10K	5%	1/4W
R746	1-249-437-11	CARBON	47K	5%	1/4W
R747	1-249-417-11	CARBON	1K	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750	1-249-413-11	CARBON	470	5%	1/4W
R751	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R755	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-249-440-11	CARBON	82K	5%	1/4W
R757	1-249-439-11	CARBON	68K	5%	1/4W
R758	1-249-439-11	CARBON	68K	5%	1/4W
R759	1-249-439-11	CARBON	68K	5%	1/4W
R766	1-249-417-11	CARBON	1K	5%	1/4W
R776	1-249-417-11	CARBON	1K	5%	1/4W
R777	1-249-429-11	CARBON	10K	5%	1/4W
R791	1-247-862-11	CARBON	20K	5%	1/4W
R792	1-249-429-11	CARBON	10K	5%	1/4W
⚠RF301	1-211-757-11	FUSIBLE	1	5%	1/2W F
⚠RF302	1-211-757-11	FUSIBLE	1	5%	1/2W F
		< VARIABLE RESISTOR >			
RV701	1-241-765-11	RES, ADJ, CARBON 22K (FOCUS BIAS)			
RV702	1-241-765-11	RES, ADJ, CARBON 22K (FOCUS GAIN)			
RV703	1-241-762-11	RES, ADJ, CERMET 2.2K (E-F BALANCE)			
RV704	1-241-765-11	RES, ADJ, CARBON 22K (TRACKING GAIN)			
		< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75KHz)			
X701	1-579-345-11	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
*	1-662-024-11	POWER BOARD **********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-101-005-00	CERAMIC	0.022uF		50V
C902	1-101-005-00	CERAMIC	0.022uF		50V
C903	1-101-005-00	CERAMIC	0.022uF		50V
C904	1-101-005-00	CERAMIC	0.022uF		50V
		< CONNECTOR >			
* CN901	1-564-519-11	PLUG, CONNECTOR 4P			

Ref. No.	Part No.	Description			Remark
* CN902	1-564-518-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D901	8-719-046-07	DIODE 2A02M			
D902	8-719-046-07	DIODE 2A02M			
D903	8-719-046-07	DIODE 2A02M			
D904	8-719-046-07	DIODE 2A02M			
D905	8-719-991-33	DIODE 1SS133T-77			
D906	8-719-991-33	DIODE 1SS133T-77			
		< FUSE >			
⚠F902	1-532-505-31	FUSE, TIME LAG(5A/250V)			
		< IC >			
IC901	8-759-095-60	IC S-81250PG			
		< JACK >			
⚠J901	1-526-838-11	INLET, AC 2P (~AC IN)			
		< RESISTOR >			
R901	1-247-895-91	CARBON	470K	5%	1/4W
R902	1-247-887-00	CARBON	220K	5%	1/4W
		< TRANSFORMER >			
⚠T901	1-429-758-11	TRANSFORMER, POWER			
**********					
*	1-663-473-11	RETAINER BOARD **********			
**********					
*	1-662-021-11	SWITCH BOARD **********			
		< CAPACITOR >			
C819	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN804	1-568-847-11	CONNECTOR, FFC/FPC 4P			
		< DIODE >			
D808	8-719-061-52	LED L-974HD-TNR5/3.9 (OPR/BATT)			
		< COIL >			
L807	1-410-393-11	INDUCTOR CHIP 100uH			
		< RESISTOR >			
R845	1-216-035-00	METAL CHIP	270	5%	1/10W

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
R850	1-216-045-00	METAL CHIP	680	5%	1/10W
R851	1-216-047-91	METAL GLAZE	820	5%	1/10W
R852	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R853	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R854	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R855	1-216-045-00	METAL CHIP	680	5%	1/10W
R856	1-216-047-91	METAL GLAZE	820	5%	1/10W
R857	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R858	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R859	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R866	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
		< SWITCH >			
S807	1-572-199-11	SWITCH, KEY BOARD (CLOCK/TIMER)			
S808	1-572-199-11	SWITCH, KEY BOARD (STANDBY)			
S809	1-572-199-11	SWITCH, KEY BOARD (RADIO BAND)			
S810	1-572-199-11	SWITCH, KEY BOARD (PRESET –)			
S811	1-572-199-11	SWITCH, KEY BOARD (PRESET +)			
S812	1-572-199-11	SWITCH, KEY BOARD (MODE)			
S813	1-572-199-11	SWITCH, KEY BOARD (■)			
S814	1-572-199-11	SWITCH, KEY BOARD (►IICD)			
S815	1-572-199-11	SWITCH, KEY BOARD (►►ITUNING/TIME SET)			
S816	1-572-199-11	SWITCH, KEY BOARD (I◄◄TUNING/TIME SET)			
S817	1-572-199-11	SWITCH, KEY BOARD (DISPLAY/ENTER)			
**********					
*	A-3306-065-A	TC BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-162-292-31	CERAMIC	680PF	10%	50V
C102	1-126-967-11	ELECT	47uF	20%	16V
C103	1-161-020-11	CERAMIC	0.039uF	10%	25V
C104	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C106	1-124-902-00	ELECT	0.47uF	20%	50V
C108	1-126-963-11	ELECT	4.7uF	20%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C110	1-124-903-11	ELECT	1uF	20%	50V
C111	1-161-060-00	CERAMIC	0.056uF	10%	25V
C112	1-161-060-00	CERAMIC	0.056uF	10%	25V
C113	1-162-837-11	CERAMIC	0.0068uF	10%	16V
C114	1-126-964-11	ELECT	10uF	20%	50V
C115	1-162-852-11	CERAMIC	0.15uF	10%	16V
C116	1-126-933-11	ELECT	100uF	20%	10V
C201	1-162-292-31	CERAMIC	680PF	10%	50V
C202	1-126-967-11	ELECT	47uF	20%	16V
C203	1-161-020-11	CERAMIC	0.039uF	10%	25V
C204	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C206	1-124-902-00	ELECT	0.47uF	20%	50V
C208	1-126-963-11	ELECT	4.7uF	20%	50V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-124-903-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remark
C211	1-161-060-00	CERAMIC	0.056uF	10%	25V
C212	1-161-060-00	CERAMIC	0.056uF	10%	25V
C213	1-162-837-11	CERAMIC	0.0068uF	10%	16V
C214	1-126-964-11	ELECT	10uF	20%	50V
C215	1-162-852-11	CERAMIC	0.15uF	10%	16V
C216	1-126-933-11	ELECT	100uF	20%	10V
C301	1-130-472-00	MYLAR	0.0012uF	5%	50V
C302	1-130-467-00	MYLAR	470PF	5%	50V
C303	1-130-478-00	MYLAR	0.0039uF	5%	50V
C304	1-126-967-11	ELECT	47uF	20%	16V
C305	1-130-473-00	MYLAR	0.0015uF	5%	50V
C307	1-126-967-11	ELECT	47uF	20%	16V
C308	1-126-923-11	ELECT	220uF	20%	10V
C309	1-104-664-11	ELECT	47uF	20%	25V
C310	1-161-020-11	CERAMIC	0.039uF	10%	25V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-933-11	ELECT	100uF	20%	10V
C313	1-126-964-11	ELECT	10uF	20%	50V
C343	1-126-923-11	ELECT	220uF	20%	10V
C350	1-162-294-31	CERAMIC	0.001uF	10%	50V
C351	1-126-933-11	ELECT	100uF	20%	10V
C353	1-161-055-00	CERAMIC	0.022uF	10%	50V
C355	1-126-966-11	ELECT	33uF	20%	16V
C357	1-126-933-11	ELECT	100uF	20%	10V
C358	1-128-551-11	ELECT	22uF	20%	25V
C359	1-128-551-11	ELECT	22uF	20%	25V
C360	1-136-165-00	FILM	0.1uF	5%	50V
C362	1-126-963-11	ELECT	4.7uF	20%	50V
C363	1-162-851-11	CERAMIC	0.1uF	10%	16V
C364	1-126-967-11	ELECT	47uF	20%	50V
C367	1-162-294-31	CERAMIC	0.001uF	10%	50V
C368	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
* CN301	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CN304	1-691-044-11	HOUSING, CONNECTOR 12P			
CN305	1-691-047-21	HOUSING, CONNECTOR 15P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D303	8-719-991-33	DIODE 1SS133T-77			
D316	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC301	8-759-264-71	IC TA2068N			
IC302	8-759-432-41	IC BH3854AS			
		< COIL >			
L301	1-414-142-11	INDUCTOR	1uH		
L302	1-414-142-11	INDUCTOR	1uH		

TC

Ref. No.	Part No.	Description				Remark
L303	1-414-142-11	INDUCTOR	1uH			
L304	1-414-142-11	INDUCTOR	1uH			
L305	1-410-509-11	INDUCTOR	10uH			
L306	1-410-509-11	INDUCTOR	10uH			
		< TRANSISTOR >				
Q101	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q201	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q301	8-729-900-74	TRANSISTOR	DTC143TS			
Q302	8-729-900-74	TRANSISTOR	DTC143TS			
Q303	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q306	8-729-902-80	TRANSISTOR	DTA114YS			
Q307	8-729-902-80	TRANSISTOR	DTA114YS			
Q319	8-729-801-84	TRANSISTOR	2SB1013-4			
Q320	8-729-904-36	TRANSISTOR	DTC114YS			
Q321	8-729-904-36	TRANSISTOR	DTC114YS			
Q322	8-729-904-36	TRANSISTOR	DTC114YS			
		< RESISTOR >				
R101	1-247-860-11	CARBON	16K	5%	1/4W	
R102	1-249-403-11	CARBON	68	5%	1/4W	
R103	1-249-440-11	CARBON	82K	5%	1/4W	
R104	1-247-843-11	CARBON	3.3K	5%	1/4W	
R105	1-249-417-11	CARBON	1K	5%	1/4W	
R108	1-249-429-11	CARBON	10K	5%	1/4W	
R112	1-249-417-11	CARBON	1K	5%	1/4W	
R113	1-249-417-11	CARBON	1K	5%	1/4W	
R114	1-249-428-11	CARBON	8.2K	5%	1/4W	
R115	1-249-421-11	CARBON	2.2K	5%	1/4W	
R116	1-249-441-11	CARBON	100K	5%	1/4W	
R118	1-247-843-11	CARBON	3.3K	5%	1/4W	
R131	1-249-417-11	CARBON	1K	5%	1/4W	
R201	1-247-860-11	CARBON	16K	5%	1/4W	
R202	1-249-403-11	CARBON	68	5%	1/4W	
R203	1-249-440-11	CARBON	82K	5%	1/4W	
R204	1-247-843-11	CARBON	3.3K	5%	1/4W	
R205	1-249-417-11	CARBON	1K	5%	1/4W	
R208	1-249-429-11	CARBON	10K	5%	1/4W	
R212	1-249-417-11	CARBON	1K	5%	1/4W	
R213	1-249-417-11	CARBON	1K	5%	1/4W	
R214	1-249-428-11	CARBON	8.2K	5%	1/4W	
R215	1-249-421-11	CARBON	2.2K	5%	1/4W	
R216	1-249-441-11	CARBON	100K	5%	1/4W	
R218	1-247-843-11	CARBON	3.3K	5%	1/4W	
R231	1-249-417-11	CARBON	1K	5%	1/4W	
R301	1-249-393-11	CARBON	10	5%	1/4W	
R302	1-249-435-11	CARBON	33K	5%	1/4W	
R303	1-249-389-11	CARBON	4.7	5%	1/4W	
R307	1-247-791-91	CARBON	22	5%	1/4W	
R308	1-247-903-00	CARBON	1M	5%	1/4W	
R309	1-249-429-11	CARBON	10K	5%	1/4W	
R310	1-247-843-11	CARBON	3.3K	5%	1/4W	
R338	1-249-429-11	CARBON	10K	5%	1/4W	
R339	1-247-903-00	CARBON	1M	5%	1/4W	
R340	1-249-429-11	CARBON	10K	5%	1/4W	
R343	1-247-807-31	CARBON	100	5%	1/4W	
R346	1-249-441-11	CARBON	100K	5%	1/4W	
R347	1-249-441-11	CARBON	100K	5%	1/4W	
R348	1-249-429-11	CARBON	10K	5%	1/4W	
R349	1-249-425-11	CARBON	4.7K	5%	1/4W	
R350	1-249-421-11	CARBON	2.2K	5%	1/4W	
R351	1-249-417-11	CARBON	1K	5%	1/4W	
R352	1-249-430-11	CARBON	12K	5%	1/4W	
R353	1-249-441-11	CARBON	100K	5%	1/4W	
R354	1-247-903-00	CARBON	1M	5%	1/4W	
R355	1-247-903-00	CARBON	1M	5%	1/4W	
R356	1-247-903-00	CARBON	1M	5%	1/4W	
R359	1-249-429-11	CARBON	10K	5%	1/4W	
R360	1-247-887-00	CARBON	220K	5%	1/4W	
R361	1-247-895-91	CARBON	470K	5%	1/4W	
		< SWITCH >				
S302	1-571-043-11	SWITCH, PUSH (1 KEY) (PLAY/REC)				
		< TRANSFORMER >				
T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR				

****

MISCELLANEOUS
****

12	1-533-233-21	HOLDER, FUSE
62	1-777-329-11	WIRE (FLAT TYPE) (FFC) (15 CORE)
65	1-777-331-11	WIRE (FLAT TYPE) (FFC) (4 CORE)
66	1-777-328-11	WIRE (FLAT TYPE) (FFC) (12 CORE)
74	1-777-330-11	WIRE (FLAT TYPE) (FFC) (19 CORE)
103	1-452-732-11	MAGNET
110	1-777-332-11	WIRE (FLAT TYPE) (FFC) (16 CORE)
⚠305	8-848-376-01	OPTICAL PICK-UP KSS-213B/S-N
306	X-2625-770-1	CHASSIS ASSY (MB) (RP), MOTOR (INCLUDING M702) (SPINDLE)
ANT1	1-501-861-11	ANTENNA, TELESCOPIC
⚠F902	1-532-505-31	FUSE, TIME LAG (5A/250V)
HE601	1-500-334-11	HEAD, E (TC-238) (ERASE)
HRP601	1-500-333-11	HEAD, R-P (MS15R-AA2N1) (RECORD/PLAYBACK)
LCD801	1-801-457-11	LIQUID CRYSTAL DISPLAY
M601	1-698-727-11	MOTOR (EG-530AD-9B) (REEL/CAPSTAN)
M701	X-2625-769-1	GEAR ASSY (MB) (RP), MOTOR (SLED)
S601	1-762-658-11	SWITCH, LEAF (MSW-1541T) (MD POWRE)
S602	1-762-819-11	SWITCH, LEAF (TAPE PLAY)
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (DOOR OPEN)
SP101	1-505-434-11	SPEAKER (10cm) (L-CH)

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
SP201	1-505-434-11	SPEAKER (10cm) (R-CH)	
⚠T901	1-429-758-11	TRANSFORMER, POWER	

****

ACCESSORIES & PACKING MATERIALS
****

⚠	1-751-214-11	CORD, POWER (UK)	
⚠	1-769-412-11	CORD, POWER (AEP,G,IT)	
*	3-007-163-01	INDIVIDUAL CARTON (CFD-360)	
*	3-007-167-01	INDIVIDUAL CARTON (CFD-370)	
	3-858-521-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN)	(CFD-360:AEP,UK,G)
	3-858-521-21	MANUAL, INSTRUCTION (FRENCH,SPANISH)	(CFD-360:AEP)
	3-858-521-31	MANUAL, INSTRUCTION (DUTCH,SWEDISH, PORTUGUESE)	(CFD-360:AEP)
	3-858-521-41	MANUAL, INSTRUCTION (ITALIAN)	(CFD-360:IT)
	3-858-522-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN)	(CFD-370:AEP,UK,G)
	3-858-522-21	MANUAL, INSTRUCTION (FRENCH,SPANISH)	(CFD-370:AEP)
	3-858-522-31	MANUAL, INSTRUCTION (DUTCH,SWEDISH, PORTUGUESE)	(CFD-370:AEP)
	3-858-522-41	MANUAL, INSTRUCTION (ITALIAN)	(CFD-370:IT)
	4-973-399-01	COVER, BATTERY (FOR RMT-C370A) (CFD-370)	
	8-917-578-90	REMOTE COMMANDER, RMT-C370A (CFD-370)	

****

****
HARDWARE LIST
****

#1	7-685-648-79	SCREW, TAPPING +BV 3X12
#2	7-682-549-04	SCREW +BVTT 3X10 (S)
#3	7-685-780-01	SCREW +PTT 2X3 (S)
#4	7-685-651-79	SCREW +BVTP 3X20 TYPE2
#5	7-621-773-95	SCREW +PTT 2.6X6 (S)
#6	7-621-255-25	SCREW +BVTT 2X4 (S)
#7	7-685-646-79	SCREW, TAPPING +BV 3X8
#8	7-621-255-15	SCREW +P 2X3

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

CFD-360/370

SONY

AEP Model
UK Model

SERVICE MANUAL

CORRECTION - 1

Correct your Service Manual as shown below.

Subject :
• EXPLODED VIEWS PARTS LIST

(SPM-99003)

• EXPLODED VIEWS PARTS LIST (Service Manual See page 34)

	INCORRECT			CORRECT		
Ref. No.	Part No.	Description	remark	Part No.	Description	remark
51	3-938-833-01	HOLDER, CASSETTE		X-3372-646-1	LID ASSY, CASSETTE (CFD-360)	
				X-3372-662-1	LID ASSY, CASSETTE (CFD-370)	
70	X-3372-646-1	LID ASSY, CASSETTE (CFD-360)		3-938-833-01	HOLDER, CASSETTE	
70	X-3372-662-1	LID ASSY, CASSETTE (CFD-370)				

9-923-094-91

Sony Corporation
Personal A&V Products Company

9900251-1
Printed in Japan © 1999.3
Published by Quality Engineering Dept.
(Shinagawa)