



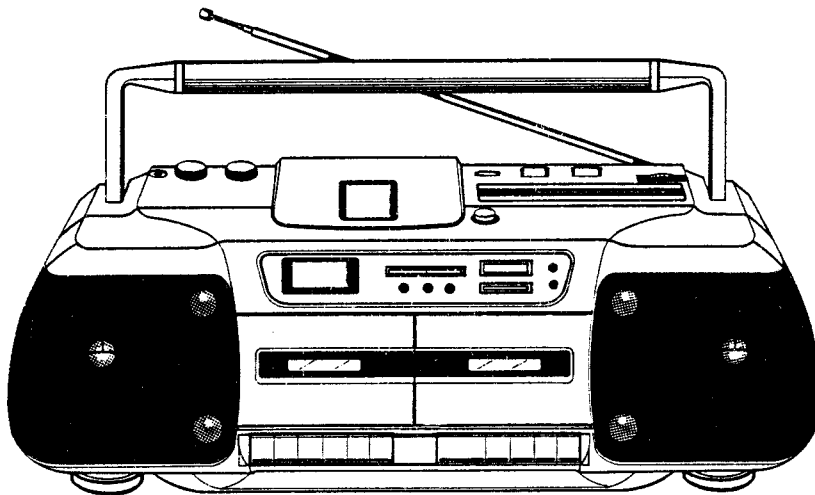
SAMSUNG

SERVICE MANUAL

RCD - 1250

FM/AM

**RADIO CASSETTE RECORDER
COMPACT DISC PLAYER**



CONTENTS

	PAGE
1 SPECIFICATIONS	1
2 CAUTION FOR ELECTROSTATIC BREAKDOWN	2
3 LOCATION AND FUNCTION OF CONTROLS	3
4 DISASSEMBLY INSTRUCTIONS	5
5 ALIGNMENT INSTRUCTIONS	8
6 IC'S BLOCK DIAGRAM	18
7 CIRCUIT BLOCK DIAGRAM	22
8 SCHEMATIC DIAGRAM	24
9 PATTERN & MARKING DIAGRAM	26
10 WIRING DIAGRAM	28
11 EXPLODED VIEW	30
12 DECK EXPLODED VIEW	31
13 PARTS LIST	32

1. SPECIFICATIONS

GENERAL

Dimension	605mm(W) x 223mm(D) x 195mm(H)
Weight.	4.2Kg (Without batteries)
Power supply	AC: See label rating on the back cabinet DC: 12V ("UM-1", "D", "DM", "R20" size x 8)
Max output power.	4W x 2 (at DC)
Power consumption	16W
Speakers	102mm WOOFER x 2
Headphones	3.5MM Jack
Microphone	3.5MM Jack

RADIO SECTION

Receiving frequency.	FM: 88MHz-108MHz MW(AM): 530KHz-1605KHz SW: 6MHz-18MHz (With SW BAND) LW: 150KHz-285KHz (With LW BAND)
Antenna	FM, SW: Rod antenna MW(AM), LW: built-in ferrite bar antenna

CASSETTE TAPE RECORDER SECTION

Track system	4-track, 2-channel
Tape speed.	4.75cm/sec. 9.5cm/sec.
Recording system	AC bias
Erasing system	Multipolar magnet erasing

COMPACT DISC PLAYER SECTION

Channel number	two channel
Frequency range	20Hz-20KHz
Dynamic range	78dB
Channel separation	60dB
Wow and flutter	unmeasurable
D/A conversion	14 bit
Error correction system	Cross Interleave Reed solomon Code (CIRC)
Used laser	Semiconductor AlGaAs
Wave length of the laser	780nm
Sampling frequency	44.1KHz
Usable disc.	120/80 mm (diameter) 1.2 mm (thickness)
Scanning velocity	1.2-1.4m/s
Rotation speed	200-500 rpm

2. CAUTION FOR ELECTROSTATIC BREAKDOWN

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the electrostatic load which is being charged on clothing and the human body.

During repair, use the procedure described in the printed matter.

The flexible board is easily damaged and should be handled with care.

The following method is an example for reference purposes.

1. Place a conductive sheet on the workbench. (The black sheet used for wrapping repair parts.)
2. Place the set on the conductive sheet so that the chassis touches the sheet. (This makes it the same potential as the conductive sheet).
3. Place your hands on the conductive sheet. (This makes them the same potential as the sheet).
4. Remove the optical pick-up block.
5. Perform work on top of the conductive sheet. Be careful that clothing does not touch the optical pick-up block.

When opening or repairing the unit, the procedure for grounding as follows is required to prevent damage caused by static electricity.

1. Grounding for the human body (HAND)

Be sure to put on a wrist-strap for grounding (with impedance lower than $10^8 \Omega$) whose other end is grounded. The strap works to drain away the static electricity build-up on the human body.

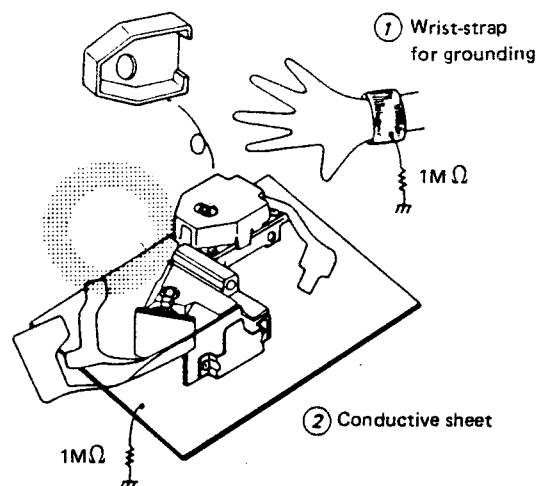
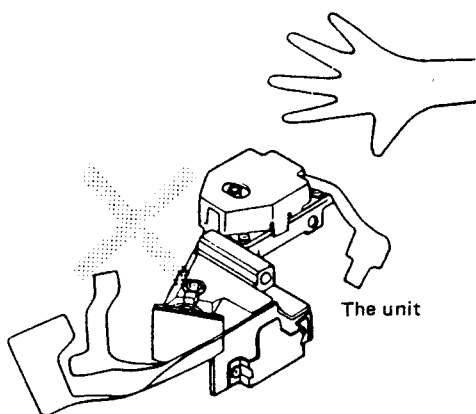
2. Grounding for the work table

Be sure to lay on the table a conductive sheet (with impedance lower than $10^9 \Omega$) such as sheet of copper, which is grounded.

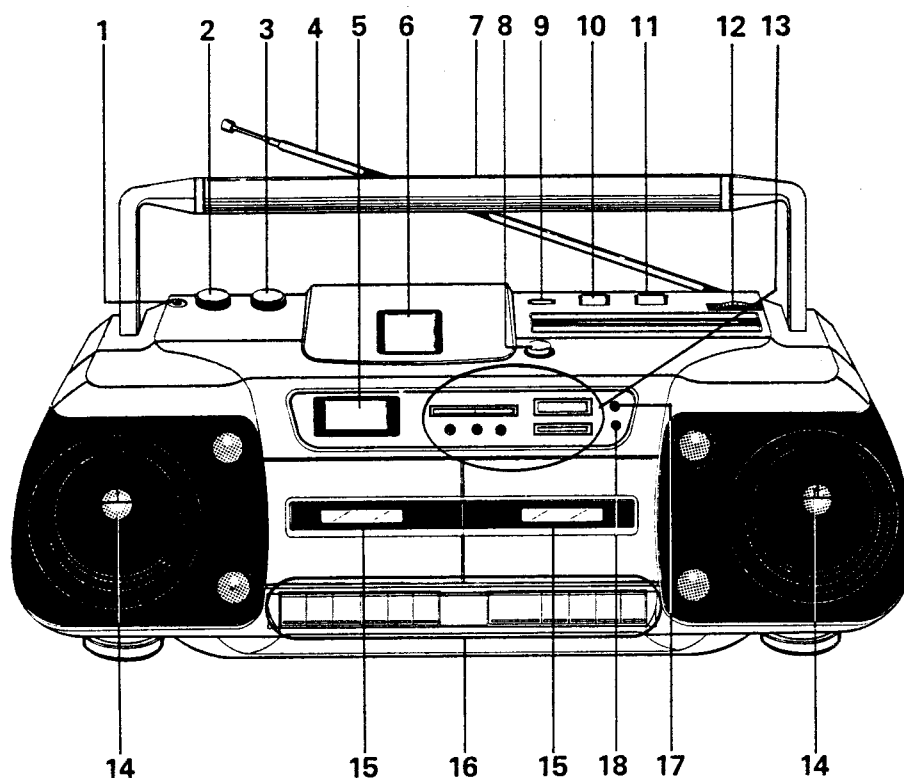
3. As static electricity build-up on clothes is not drained away, be careful not to let your clothes touch the unit.

4. Handling the flexible board

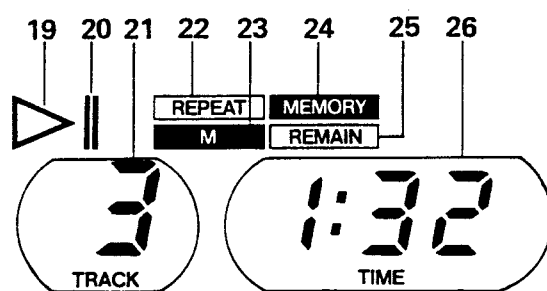
The flexible board is easily damaged and should be handled with care.



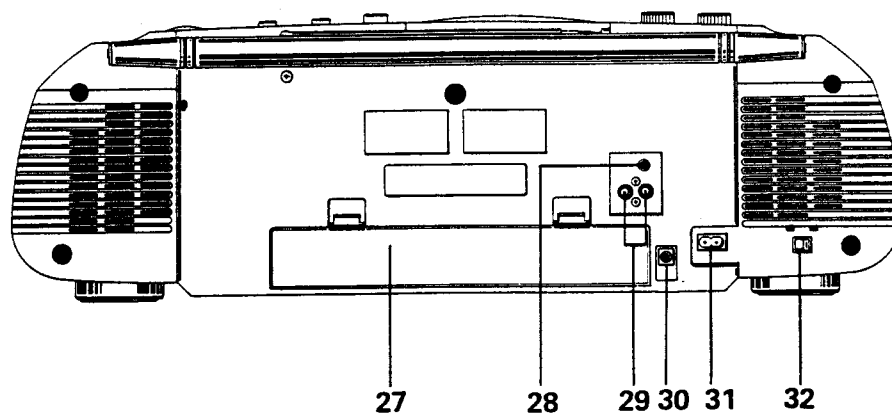
3. LOCATION AND FUNCTION OF CONTROLS



CD MULTI FUNCTION
DISPLAY window



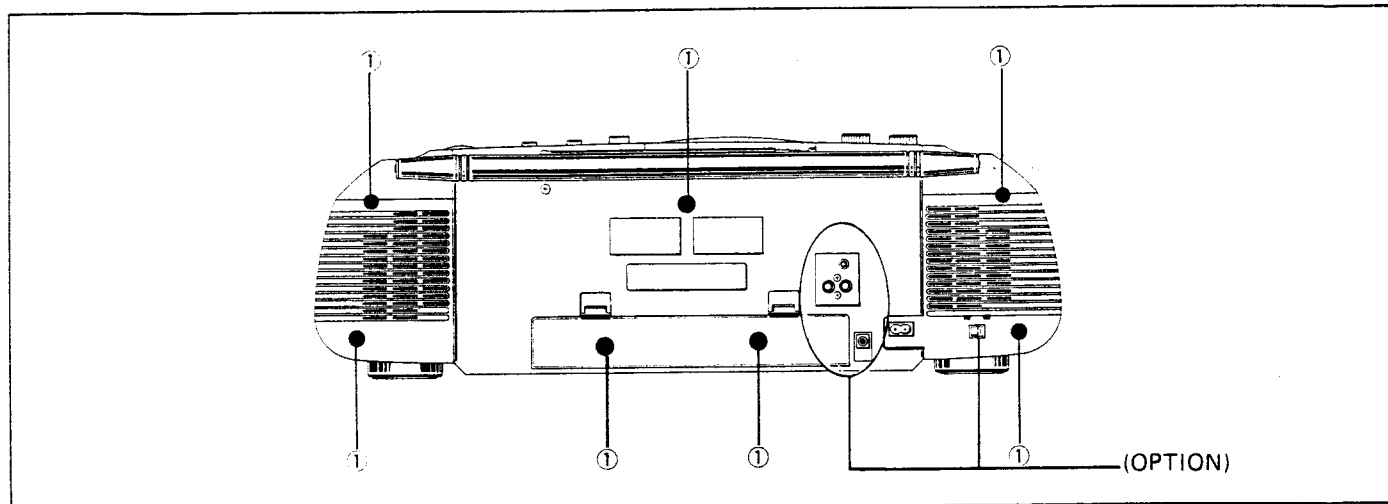
Rear panel



1. PHONES (headphone) jack (stereo minijack)
2. VOLUME control
3. TONE control
4. Telescopic rod antenna
5. Compact Disc display
6. Disc holder
7. Handle
8. CD DOOR EJECT button
9. TAPE SELECTOR (normal/CrO₂ PB)/
FM-MODE (stereo/mono)/BEAT CUT
10. DUBBING SPEED (HIGH/NORMAL)
FUNCTION selector (TAPE, RADIO OFF/
CD/RADIO)
11. BAND selector
12. TUNING knob
13. Compact disc operation buttons
 - PLAY/PAUSE button (►■)
 - SKIP button (■◀◀ , ▶▶■)
 - STOP button (■)
 - MEMORY button
 - REPEAT button
 - DISPLAY button
14. SPEAKER L, R
15. Cassette holder A, B
16. Tape operation buttons
 - PAUSE button (■■)
 - STOP/EJECT button (■▲)
- FAST FORWARD button (►►)
- REWIND button (◀◀)
- PLAY button (►)
- RECORD button (●)
17. POWER indicator
18. FM STEREO indicator
19. PLAY indicator (►)
20. PAUSE indicator (■■)
21. TRACK indicator
22. REPEAT indicator
23. M indicator
Displays " **M** " when CDP plays the memorized tracks.
24. MEMORY indicator
Displays " **MEMORY** " when a track or tracks are memorized.
25. REMAIN indicator
When the [DISPLAY] button is pressed, the track and time remaining are displayed.
26. TIEM indicator
 - a. Displays the amount of time a track has been played.
 - b. Displays the amount of time remaining to be played when [DISPLAY] button is pressed.
27. Battery compartment
28. MIC MIXING jack (option)
29. CD OUT L & R (compact disc output) (option)
30. DC INPUT jack (option)
31. AC IN (AC power input) socket
32. Voltage selector (option)

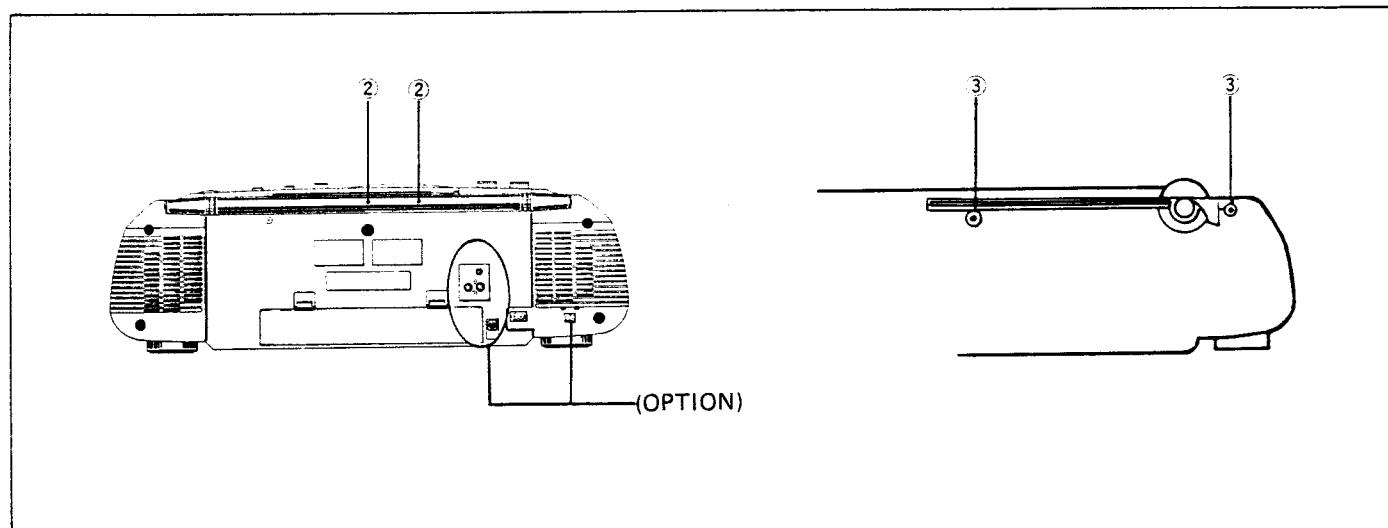
4. DISASSEMBLY INSTRUCTIONS

1. TO REMOVE FRONT CABINET



- 1) Unfasten seven screws (①) on the back cabinet with "+" driver.
- 2) Disconnect connector wires. Front cabinet will be separated from the back cabinet by pulling it forward.

2. TO REMOVE CD DECK and TUNING SYSTEM

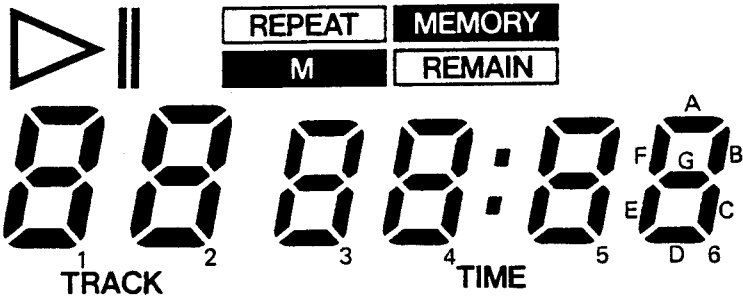


- 1) Unfasten two screws (②) to remove CD DECK MECHANISM.
- 2) Unfasten two screws (③) to remove TUNING SYSTEM.

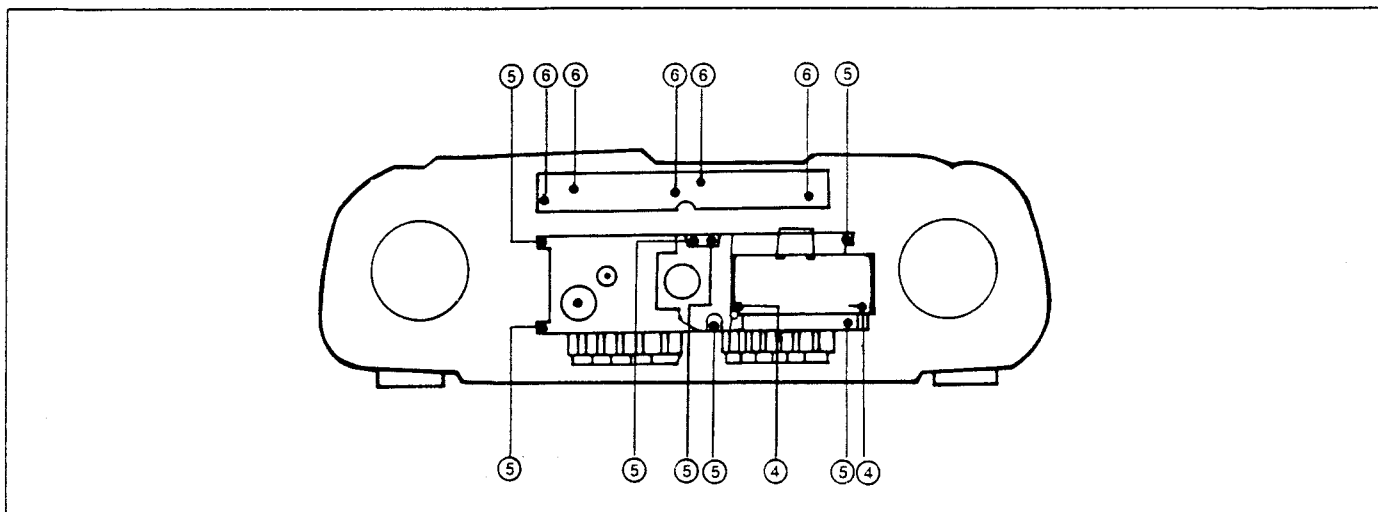
LCD SEGMENT DESCRIPTION

When the LCD segment disappears or misoperates partially, check the connection of IC1701 and LCD referring to the following segment chart.

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
COM.1 GROUP	F1	A1	B1	F2	A2	B2	F3	A3	B3	F4	A4	B4	B6	A6	F6	B5
COM.2 GROUP	E1	G1	C1	E2	G2	C2	E3	G3	C3	E4	G4	C4	C6	G6	E6	C5
COM.3 GROUP	M	D1	TR- ACK	/	D2	RE- MAIN	/	D3	/	/	D4	TIME COLON	/	D6	/	/
PIN NO.	17	18	19	20	21	22	23	24	25							
COM.1 GROUP	A5	F5	/	/	/	/	/	/	COM 1							
COM.2 GROUP	G5	E5	/	/	/	/	/	COM 2	/							
COM.3 GROUP	D5	/	ME- MORY	RE- PEAT	□□	▷	COM 3	/	/							

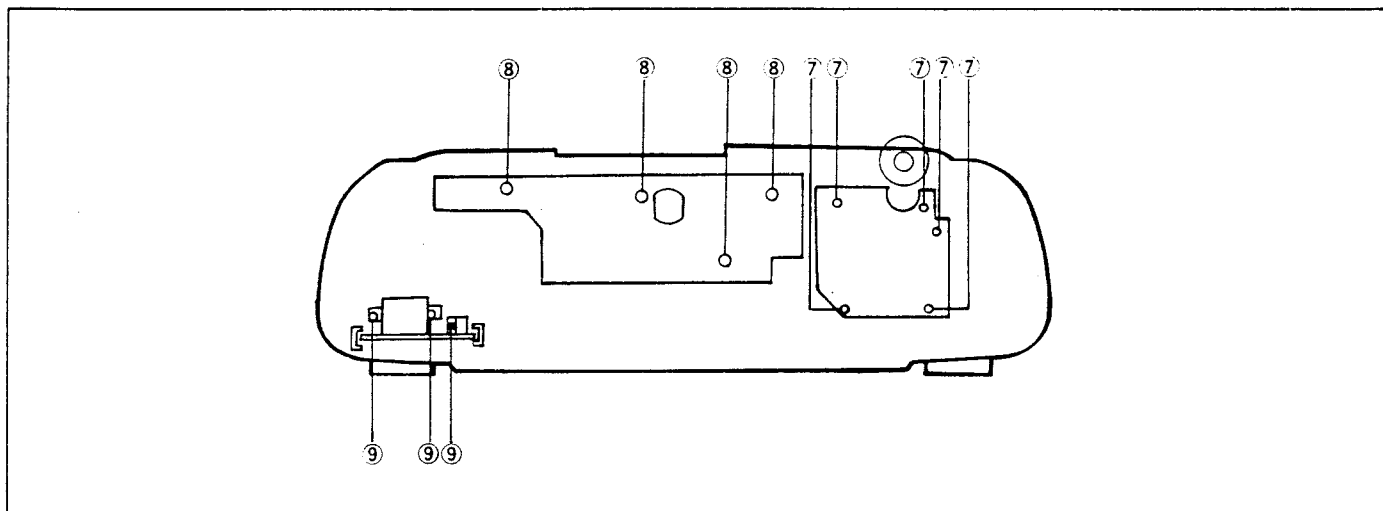


3. TO REMOVE TAPE EQ, CASSETTE DECK and FRONT PCB



- 1) After unfastening two screws (④), disconnect head wires and remove the TAPE EQ PCB.
- 2) After unfastening seven screws (⑤), open the cassette door.
Remove the CASSETTE DECK.
- 3) Unfasten five screws (⑥), remove the FRONT PCB.

4. TO REMOVE TUNER, MAIN and POWER PCB



- 1) Unfasten five screws (⑦), disconnect connector wires.
Remove the TUNER PCB.
- 2) Unfasten four screws (⑧), remove the MAIN PCB.
- 3) Unfasten three screws (⑨), remove the POWER PCB.

5. ALIGNMENT INSTRUCTIONS

ALIGNMENT PROCEDURE

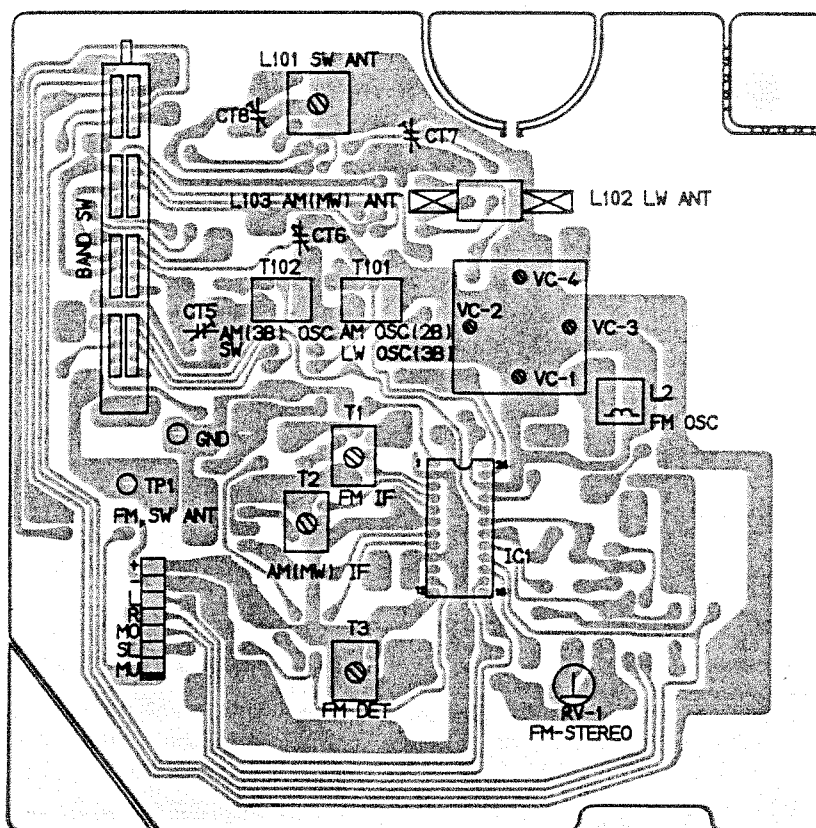
INSTRUMENTS AND TOOLS

1. AM STANDARD SIGNAL GENERATOR
2. FM STANDARD SIGNAL GENERATOR
3. FM/AM IF GENERATOR: 10.7MHZ, 455KHZ (465KHZ).
4. OSCILLOSCOPE
5. OUTPUT METER: LEVEL METER OR AC VOLTMETER.
6. LOOP ANTENNA
7. DUMMY LOAD (4 ohm)
8. SW DUMMY ANT.
9. FREQUENCY COUNTER
10. FM STEREO MODULATOR

IMPORTANTS

1. Check the power source voltage.
2. Set the "FUNCTION" switch and BAND selector to a band to be aligned.
3. The "TONE" control should be set all the way to the MAX (unless otherwise noted).
4. The standard modulation is the 30% amplitude with 400Hz signal for AM and the 22.5KHz deviation with 400Hz signal for FM.
5. The standard output is 50mW (4 ohm).

- LOCATION OF ADJUSTMENT POINT (AUDIO SECTION)
TUNER PCB (PARTS SIDE)



1. FM ADJUSTMENT

Adjustment Item	Condition	Step	S.S.G. Frequency	Radio Dial Setting	Adjustment Point	Adjust for
IF	Fig. 1	1	10.7 MHz	Tuning gang fully closed. (LOW end)	T1 (ORG) FM IFT T3 (BLU or BLK) FM DET	Max gain and symmetrical "S" curve.
		2	Repeat step 1 until no further improvement can be made.			
Frequency coverage	Fig. 2	3	87.3 MHz	Tuning gang fully closed (LOW end)	L2 FM OSC COIL	Best resonating point of SSG.
		4	108.3MHz	Tuning agnd fully open. (High end)	VC1 OSC TRIMMER	Best resonating point of SSG.
		5	Repeat steps 3 and 4 several times.			
Tracking	Fig. 2	6	90MHz	90MHz	Not required	
		7	106MHz	106MHz	VC2 ANT TRIMMER	Maximum Output
		8	Repeat steps 6 and 7 to obtain suitable sensitivity at 90MHz and 106MHz.			
Stereo separation	Connect Stereo Generator to S.S.G additionally in Fig. 2	9	98MHz	98MHz	RV1	Best separation

FM IF OUTPUT: IC1 (TA8167N) PIN NO. 19

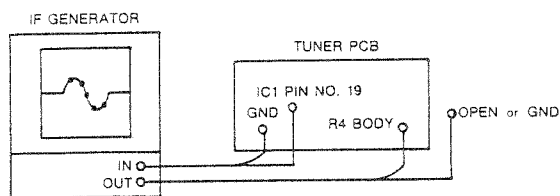


Fig. 1

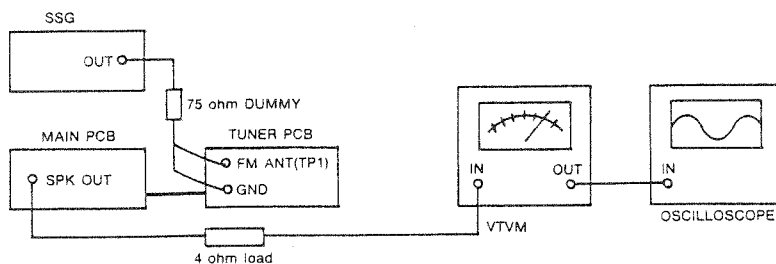


Fig. 2

2. 2BAND (FM/AM) AM ADJUSTMENT

Circuit to be Adjusted	Measuring Instrument Arrangement	Step	S.S.G Frequency	Radio Dial Setting	Adjust	Adjust For
IF	Connect FM/AM IF generator to loop ANT. Couple the AM ANT coil colse to loop ANT and take out the signal from AM IF out point (IC1 pin No 19) (See Fig. 3)	1	455KHz (465KHz)	Tuning gang fully closed (LOW END)	AM IFT T2 (WHT)	Maximum output and best "V" curve
		2	Repeat 1 until no futher improvement can be made.			
AM frequency coverage	Connect AM signal generator to loop antenna, VTVM and oscilloscope as Fig. 4.	3	510KHz	Tuning gang fully closed (LOW END)	AM OSC COIL (RED) T101	Best resonating point of SSG
		4	1650KHz	Tuning gang fully open (HIGH END)	AM OSC TRIMMER (VC3)	Best resonating point of SSG.
		5	Repeat steps 3 and 4 several times			
AM tracking	See Fig. 4	6	600KHz	Tune to signal (600KHz)	AM ANT COIL L103	Maximum output
		7	1400KHz	Tune to signal (1400KHz)	AM ANT TRIMMER (VC4)	Maximum output
		8	Repeat steps 6 and 7 to obtain suitable sensitivity at 600KHz and 1400KHz.			

AM IF OUTPUT: IC 1 (TA8167N) PIN NO. 19.

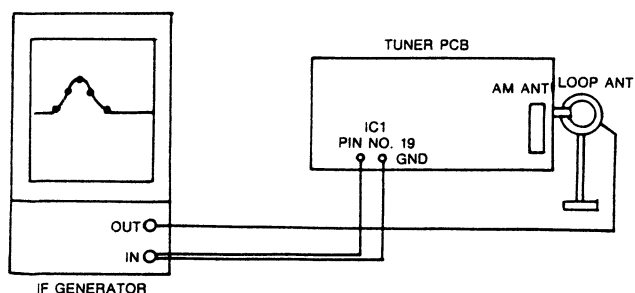


FIG. 3

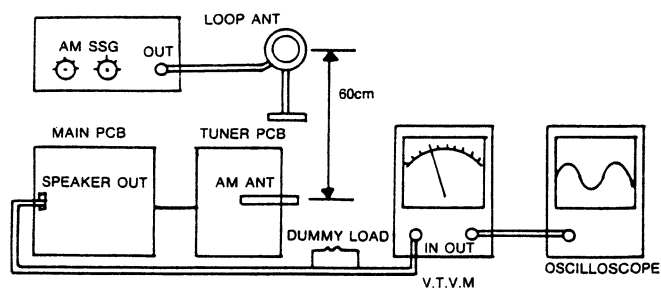


FIG. 4

3. 3 BAND (FM/SW/AM) AM/SW ADJUSTMENTS

Circuit to be Adjusted	Measuring Instrument Arrangement	Step	S.S.G Frequency	Radio Dial Setting	Adjust	Adjust for
IF	IF is the same as 2 band's					
AM frequency coverage	Connect as Fig. 4	1	510KHz	Tuning gang fully closed (LOW END)	AM OSC COIL (RED) T101	Best resonating point of SSG
		2	1650KHz	Tuning gang fully open (HIGH END)	AM OSC TRIMMER VC3	Best resonating point of SSG.
		3	Repeat steps 1 and 2 several times			
AM tracking	Connect as Fig. 4	4	600KHz	Tune to signal (600KHz)	AM ANT COIL L103	Maximum output
		5	1400KHz	Tune to signal (1400KHz)	AM ANT TRIMMER (VC4)	Maximum output
		6	Repeat steps 4 and 5 to obtain suitable sensitivity at 600KHz and 1400KHz.			
SW frequency coverage	Connect AM(SW) signal generator to SW ANT terminal (TP1) thru SW dummy ANT and speaker output to VTVM across 4 ohm load. (see Fig. 5 Fig. 6)	7	5.7MHz	Tuning gang fully closed (LOW END)	SW OSC COIL T102	Best resonating point of SSG.
		8	18.5MHz	Tuning gang fully open (HIGH END)	SW OSC TRIMMER CT5	Best resonating point of SSG.
		9	Repeat steps 7 and 8 several times			
SW tracking	See Fig. 5, Fig. 6	10	7MHz	Tune to signal (7MHz)	SW ANT COIL L101	Maximum output
		11	15MHz	Tune to signal (15MHz)	SW ANT TRIMMER CT 8	Maximum output
		12	Repeat steps 10 and 11 to obtain suitable sensitivity at 7MHz and 15MHz.			

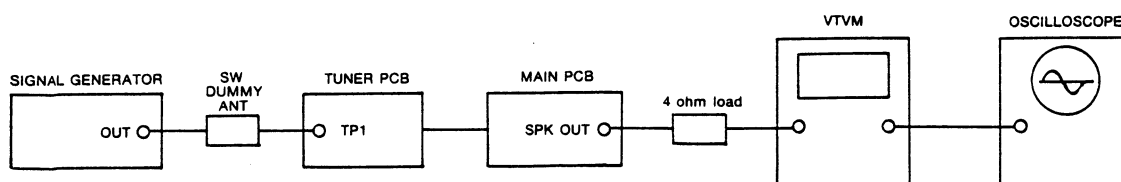


FIG. 5 SW FREQUENCY COVERAGE, TRACKING

4. 3BAND (FM/MW/LW) MW(AM)/LW ADJUSTMENTS

Circuit to be Adjusted	Measuring Instrument Arrangement	Step	S.S.G Frequency	Radio Dial Setting	Adjust	Adjust for
IF	IF is the same as 2 band's					
MW (AM) frequency coverage	Same as 2 band's (see Fig. 4)	1	510KHz	Tuning gang fully closed (LOW END)	MW OSC COIL T102(RED)	Best resonating point of SSG
		2	1650KHz	Tuning gang fully open (HIGH END)	MW OSC TRIMMER VC3	Best resonating point of SSG
		3	Repeat steps 1 and 2 several times.			
MW (AM) tracking	Same as 2 band's (see Fig. 4)	4	600KHz	Tune to signal (600KHz)	MW ANT COIL L103	Maximum output
		5	1400KHz	Tune to signal (1400KHz)	MW ANT TRIMMER VC4	Maximum output
		6	Repeat steps 4 and 5 to obtain suitable sensitivity at 600KHz and 1400KHz			
LW frequency coverage	See Fig. 4	7	145KHz	Tuning gang fully closed (LOW END)	LW OSC COIL T101 (BRN)	Best resonating point of SSG
		8	295KHz	Tuning gang fully open (HIGH END)	LW OSC TRIMMER CT 6	Best resonating point of SSG
		9	Repeat steps 7 and 8 several times			
LW tracking	See Fig. 4	10	160KHz	Tune to signal (160KHz)	LW ANT COIL L102	Maximum output
		11	240KHz	Tune to signal (240KHz)	LW ANT TRIMMER CT 7	Maximum output
		12	Repeat steps 10 and 11 to obtain suitable sensitivity at 160KHz and 240KHz.			

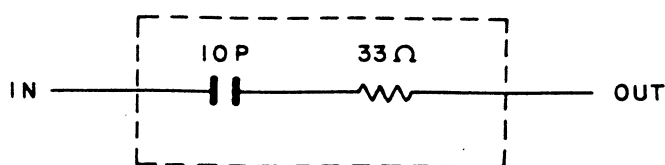


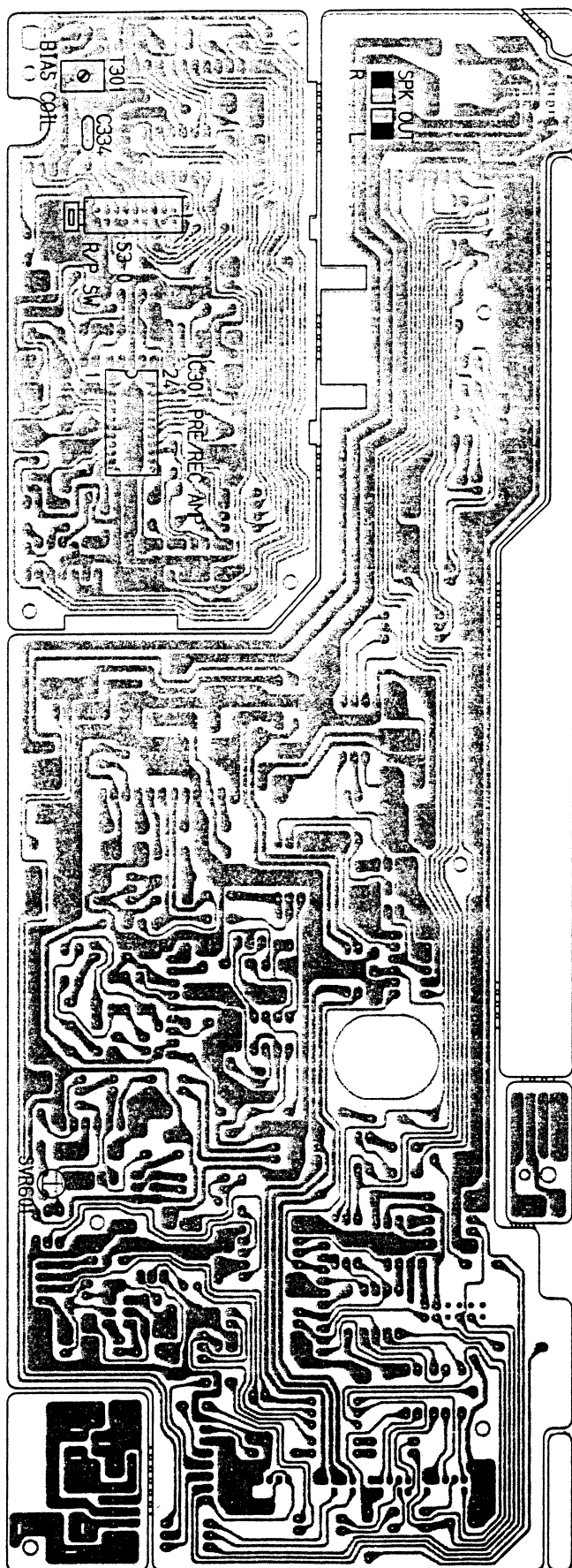
FIG. 6 SW DUMMY ANT

MAIN PCB & PRE/REC PCB (PARTS SIDE)

T301: RECORD BIAS COIL
SVR601: TAPE SPEED CONTROL
S3-0: RECORD/PLAY SWITCH

PRE/REC PCB

MAIN PCB



5. TAPE SECTION

1. RECORDING BIAS ADJUSTMENT

- Connect frequency counter to C334 (see Fig. 7) and set R/P switch (S3-0) to record position.
- Adjust T301 (BIAS OSC COIL) until frequency counter reads 50KHz at STEREO position of FM MODE/BEAT CUT switch.

2. TAPE AZIMUTH ADJUSTMENT

- Connect the equipments as per Fig. 8 to adjust the tape azimuth with test tape (recorded at 8KHz MTT-113CN).
- Play the test tape after inserting in DECK A, set VOLUME at standard output level (50mW 4 ohm).
- Adjust the azimuth adjustment screw of left side of record/play head for maximum output and for the same channel phase. (see Fig. 9).
- Repeat steps a – c at DECK B position.
- After adjustment, be sure to lock the adjusting screws.

3. TAPE SPEED ADJUSTMENT

- Connect the equipments as Fig. 8 to adjust the tape speed with test tape [recorded at 3KHz, MTT-111N].
- Normal speed
 - Set the FUNCTION selector to "NORMAL" position and press the PLAY (►) button.
 - Adjust the semi-fixed register (SVR601) so that the frequency counter reads 3KHz.
- High speed
 - Insert a test tape into DECK B and set the FUNCTION selector to "HIGH" position.
 - Press the RECORD (●) button of DECK A and press the PLAY (►) button of DECK B.
 - Then the speed of "HIGH" position is fixed approximately 5400Hz-6600Hz.

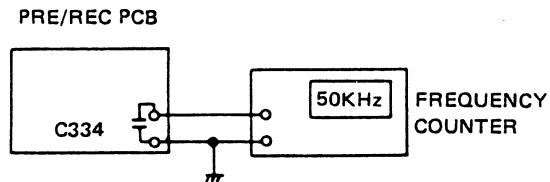


FIG. 7. RECORDING BIAS ADJUSTMENT

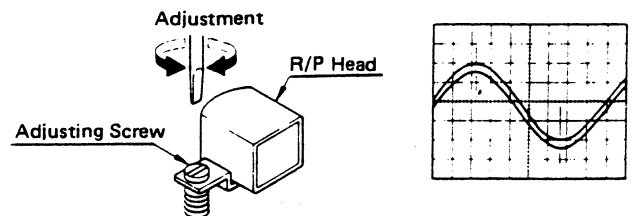


FIG. 9. AZIMUTH ADJUSTMENT

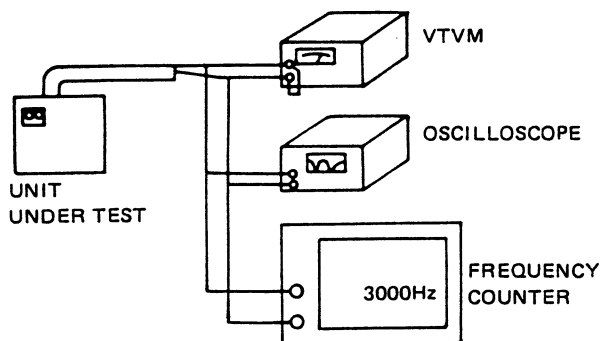
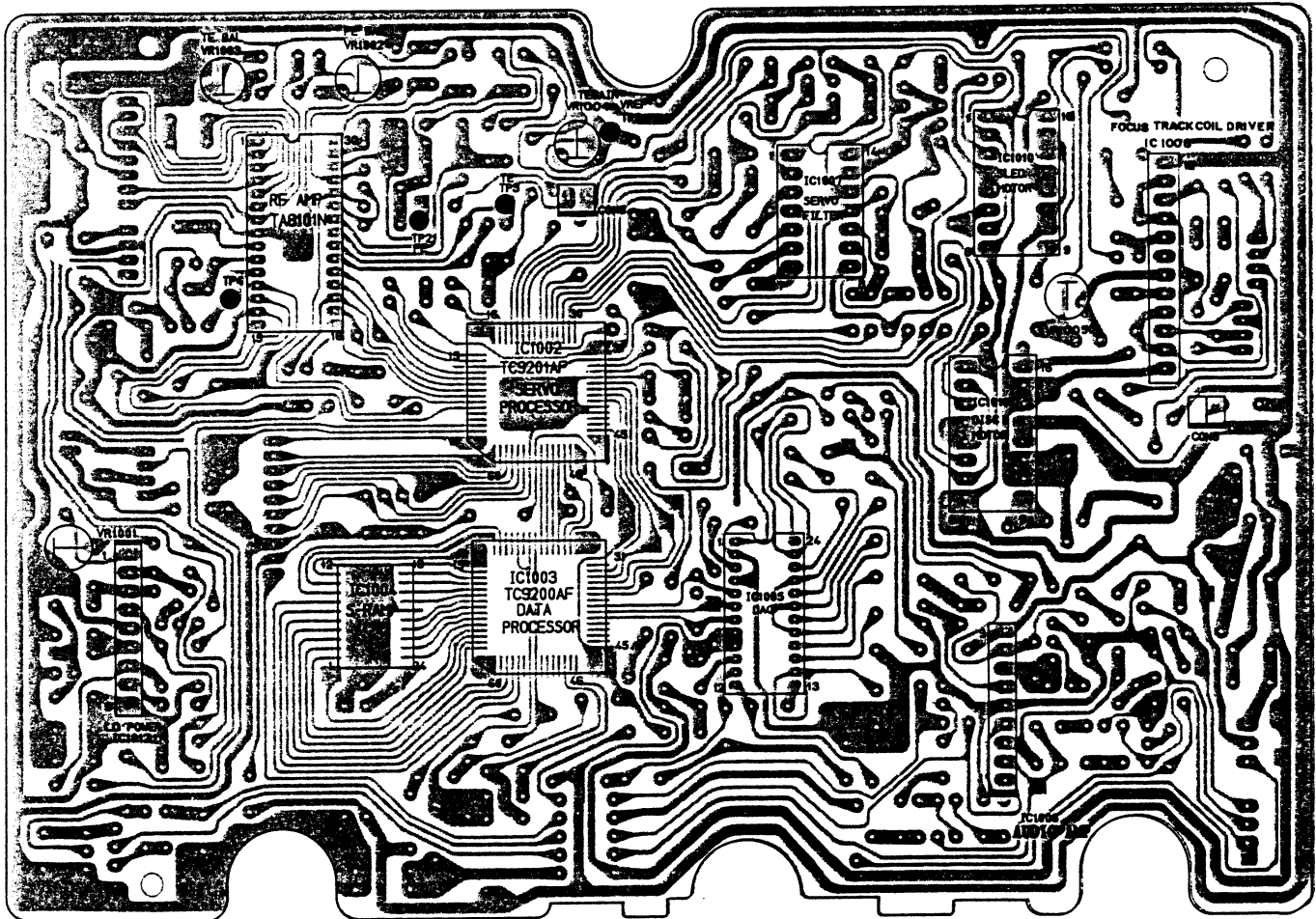


FIG. 8. AZIMUTH. SPEED

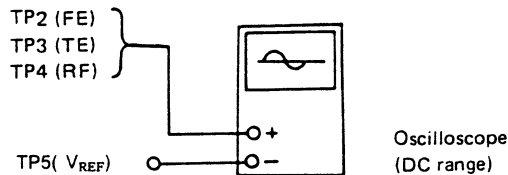
6. LOCATION OF ADJUSTMENT POINT (COMPACT DISC PLAYER SECTION)

CD PACK PCB (PARTS SIDE)



WARNING!!

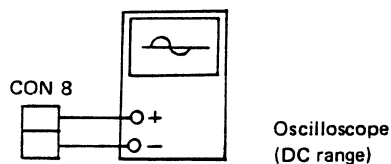
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE(THAN 30cm) FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



1. Focus bias adjustment

- 1) Connect oscilloscope to test points TP2 (FE) and TP5 (V_{REF}).
- 2) Insert disc YEDS-18 (YEDS-1) and connect power source, then the unit will read the data of read-in region.
- 3) When the disc STOPS spinning, adjust VR1002 to 0 volt.

2. Tracking offset voltage adjustment.



- 1) Connect oscilloscope to CON 8 as shown in figure.
- 2) Adjust VR1005 to 0 volt at stop mode.

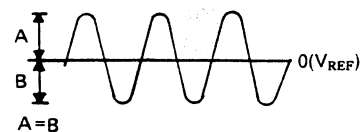
3. Laser power adjustment

- 1) Connect oscilloscope to test points TP4 (RF) and TP5 (V_{REF}).
- 2) Insert disc YEDS-18 (YEDS-1) and push PLAY (▶■) button.
- 3) Adjust VR1001 to 1.2V p-p amplitude.



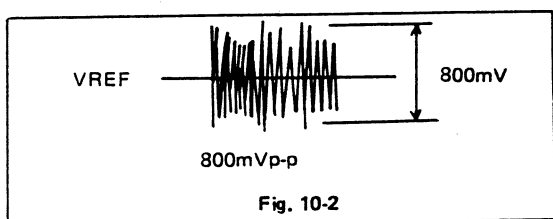
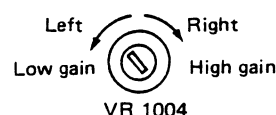
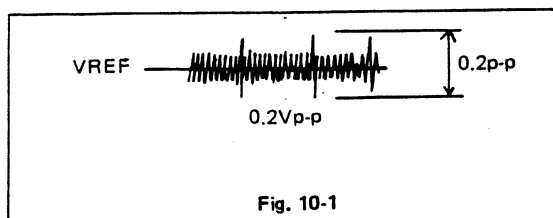
4. Tracking (EF) balance adjustment.

- 1) Connect oscilloscope to test points TP3 (TE) and TP5 (V_{REF}).
- 2) Insert disc YEDS-18 (YEDS-1) and push PLAY (▶■) button.
- 3) Push REPEAT button to set to REPEAT mode.
- 4) Push and hold SKIP (▶▶■) button.
- 5) Adjust VR1003 to symmetrize traverse waveform to (V_{REF}).



5. Tracking gain adjustment

- 1) Connect oscilloscope to test points TP3 (TE) and TP5 (V_{REF}).
- 2) Insert disc YEDS-18 (YEDS-1) and push PLAY button then the waveform shown in Fig. 10-1 appears.
- 3) Push REPEAT button. And push SKIP (▶■) button continuously, then the unit searches track and waveform shown in Fig. 10-2 will appear on the oscilloscope.
- 4) Then adjust VR 1004 to 800mVp-p amplitude while it is being operated.



[Tracking gain and sound skip]

If the tracking gain has been set too high, the performance against mechanical vibration will be greatly improved.

However it will be prone to jumping if a defect is found on the disc.

If the tracking gain is set too low, the complete opposite. Therefore it is important to try to set the gain at a "compromise" level for all conditions.

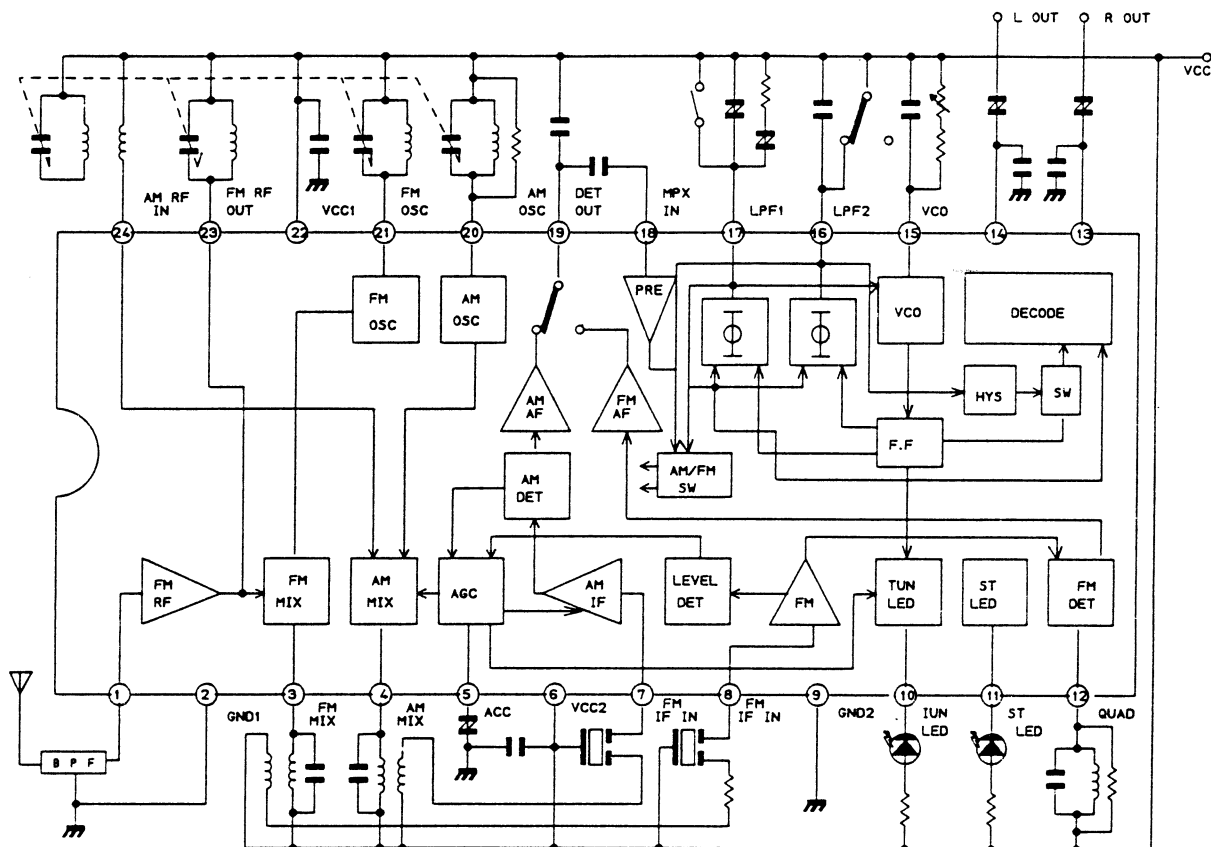
Adjust VR1004	Tracking Gain	sound skip due to mechanical vibration	sound skip due to crack on disc
	too high	reinforce	enfeeble
	too low	enfeeble	reinforce

NOTE: No adjustments are possible for the CLV (Constant Linear Velocity) or the focus gain.

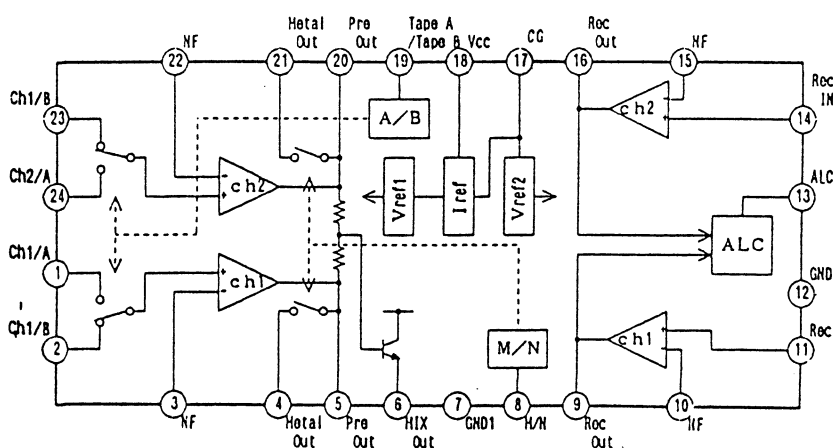
6. IC'S BLOCK DIAGRAM

AUDIO SECTION

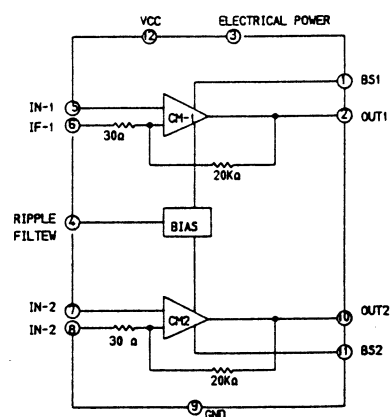
TA8167N: IC1 (TUNER)



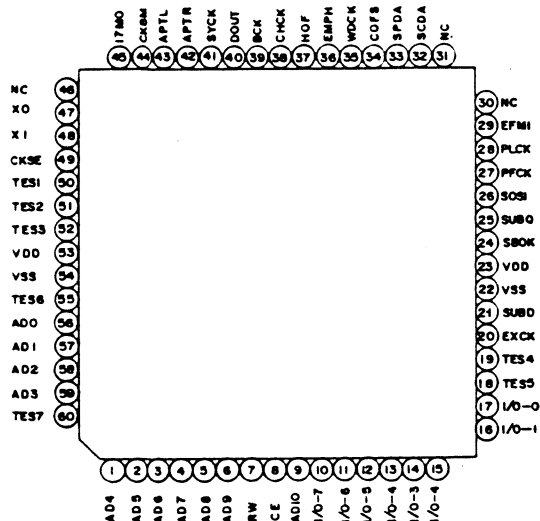
TA8189N: IC301 (PRE/REC AMP)



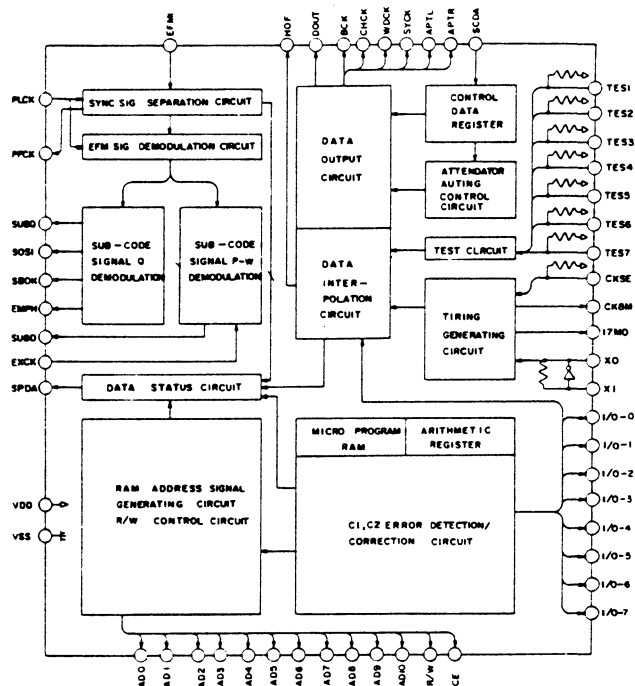
TA8207K: IC601 (POWER AMP)



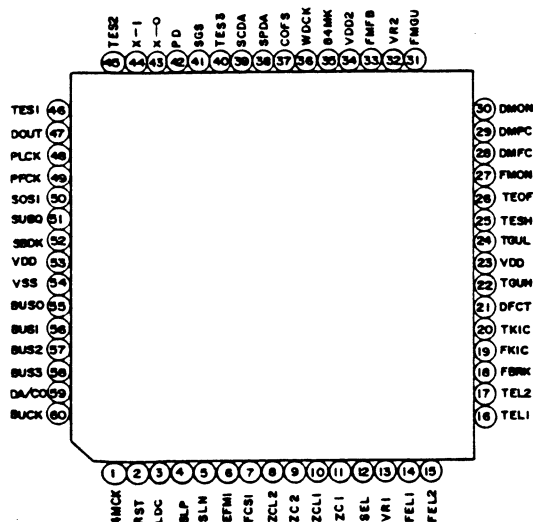
TC9200 BF: IC 1003 (DATA PROCESSOR)



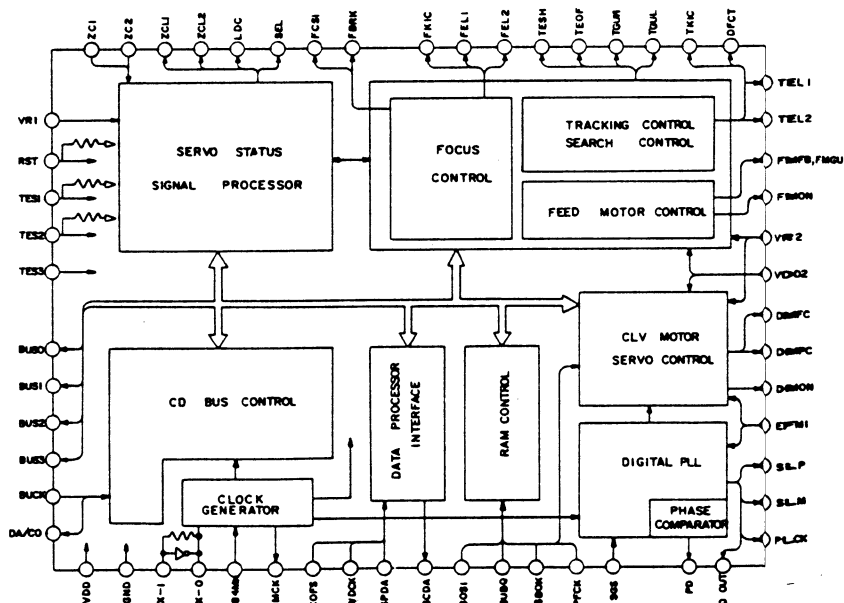
TC9200 BF



TC9201BF: IC1002 (SERVO PROCESSOR)

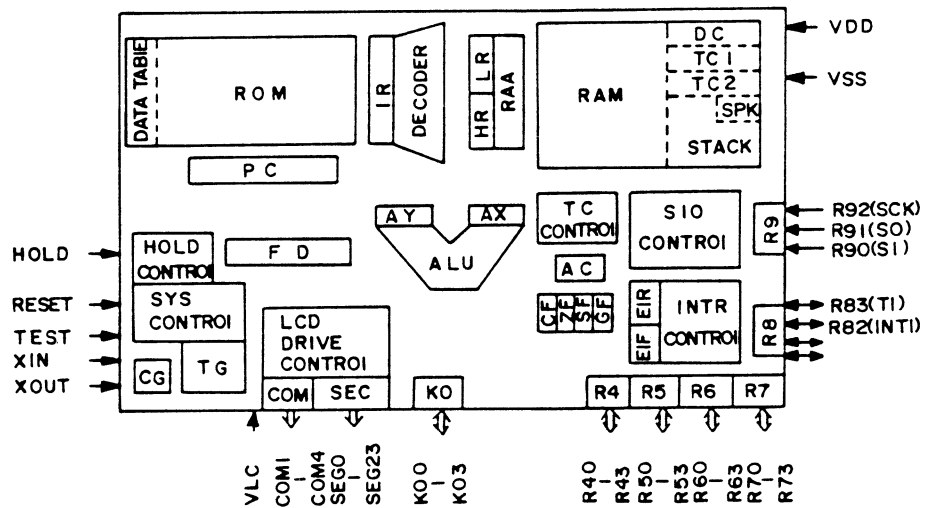
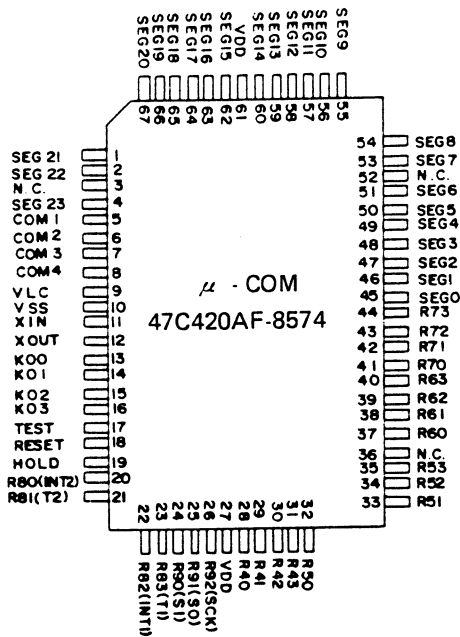


TC9201BF

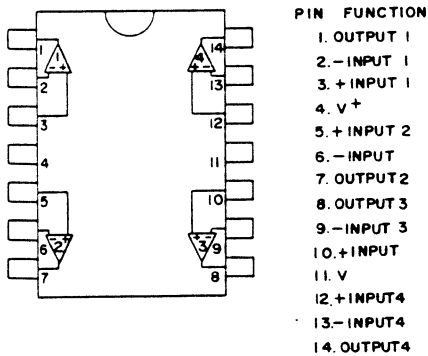


47C420AF-8574: IC1701 (μ -COM)

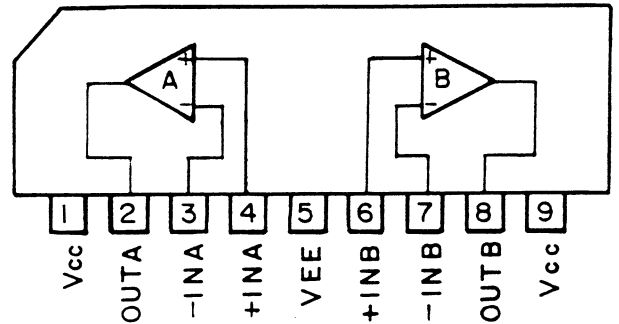
47C420AF-8574



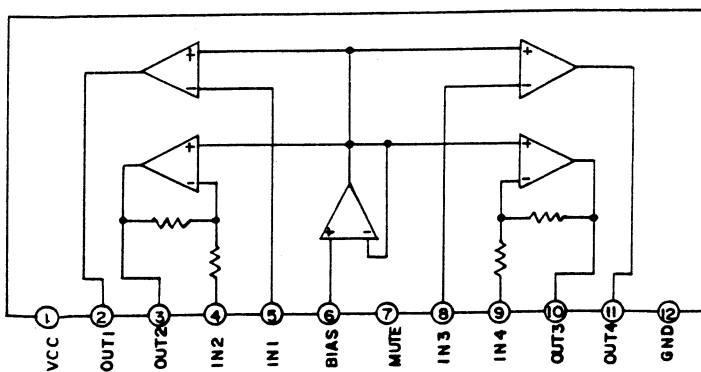
NJM3403AD: IC1007(OP AMP)



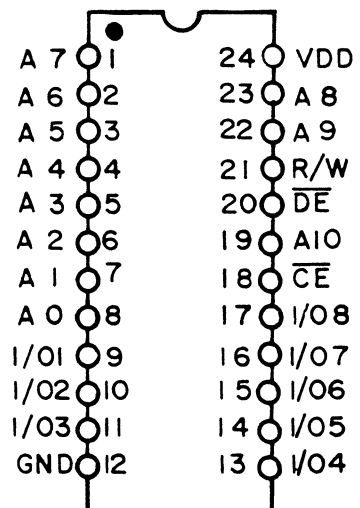
MC4558S: IC1006 (OP AMP)



BA6290A: IC1008 (BTL DRIVER)



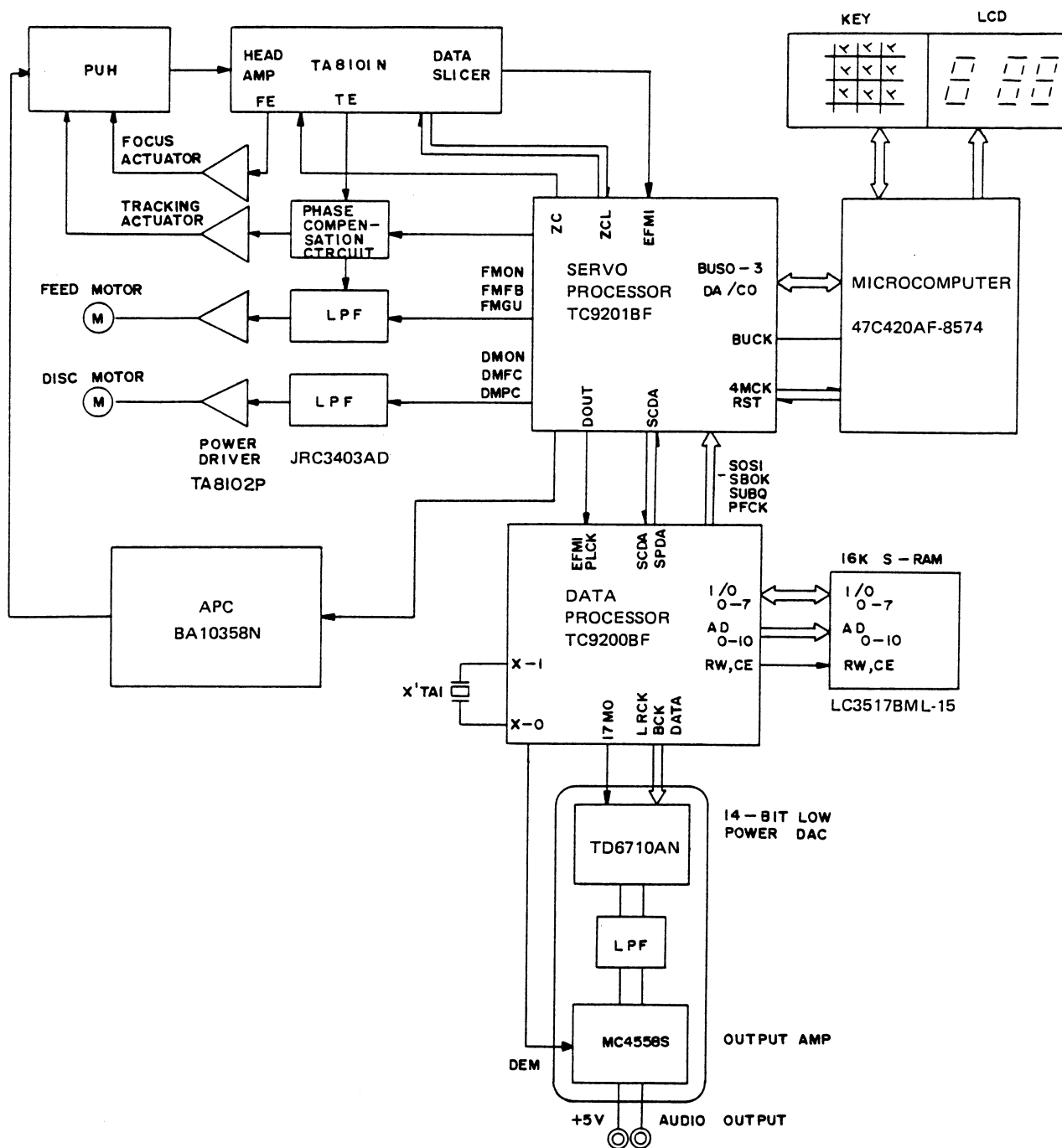
CXK5816-M15L/HM6116-120: IC1004(S-RAM)



AUDIO SECTION

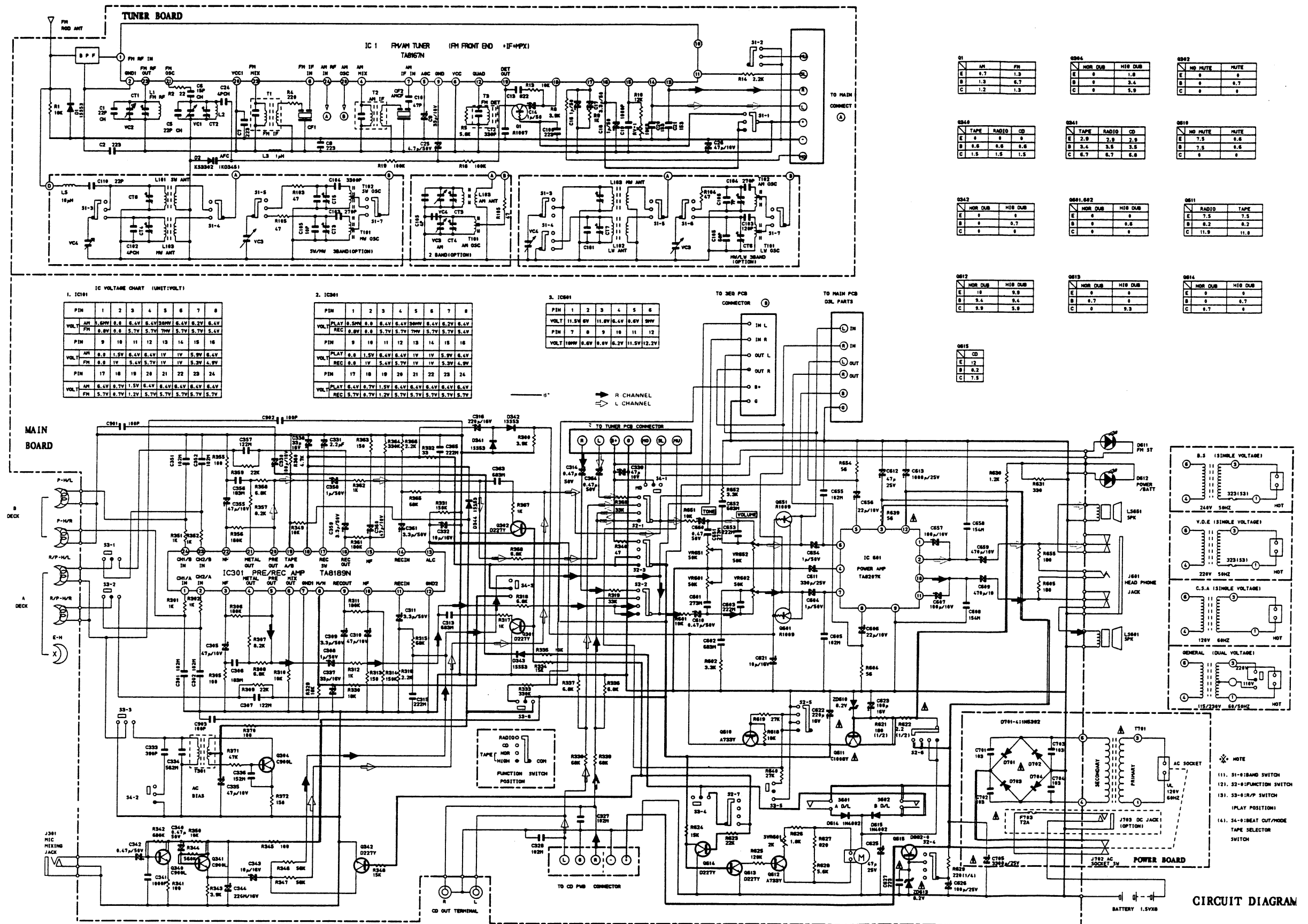


COMPACT DISC PLAYER SECTION



8. SCHEMATIC DIAGRAM

RADIO CASSETTE SECTION



G3TMS

The schematic diagram illustrates the internal circuitry of a laser disc player, organized into several functional blocks:

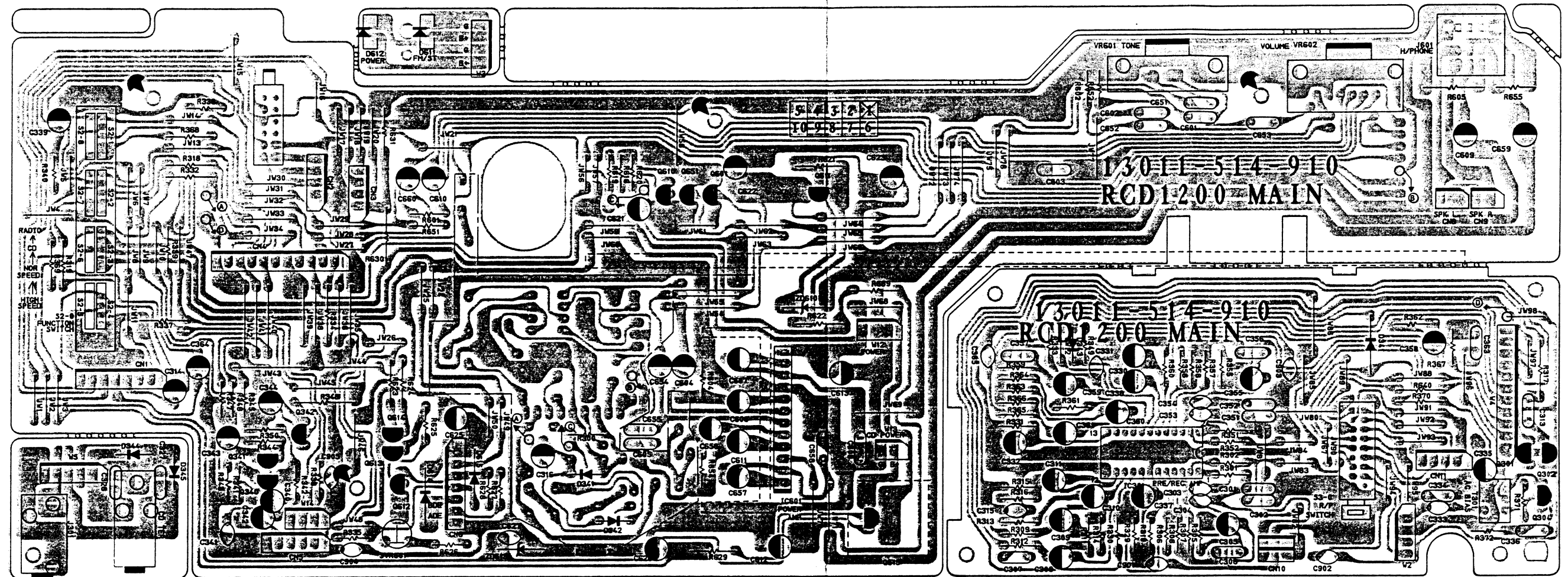
- Motor Drivers:** Located at the top left, these include the **IC1010 TAB102P SLED MOTOR DRIVER**, **IC1011 MOTOR DRIVER TAB102P**, and **IC1007 JRC 3403AD SERVO FILTER**. They control the sled, focus, and tracking motors.
- Servo Processor:** The **IC1002 TC9200BF SERVO PROCESSOR** is the central unit for tracking and focus control, receiving signals from the servo filter and outputting control signals to the motor drivers.
- Data Processor:** The **IC1003 TC9200BF DATA PROCESSOR** handles the data from the disc, including error detection and correction.
- Laser Diode Driver:** The bottom left section includes the **IC1008 25066A 1W LASER DRIVER** and **IC1012 BA13358M(1/2) APC** for precise laser power control.
- Tracking Servo:** The **IC1001 NP AMP FOCUS TAB1010M TRACKING SERVO** provides feedback for the tracking servo.
- Power and Timing:** Various capacitors (C1001-C1099) and resistors (R1001-R1099) provide power regulation, timing, and signal conditioning throughout the circuit.
- Connectors:** The diagram shows connections for **CON1-CON4**, including a **CON4 L-CH R-CH** for audio output.
- Legend:** At the bottom right, a legend identifies the signal types: **AUDIO(IEPH)**, **TRACKING SERVO**, and **FOCUS SERVO**.

9. PATTERN & MARKING DIAGRAM (BOTTOM VIEW)

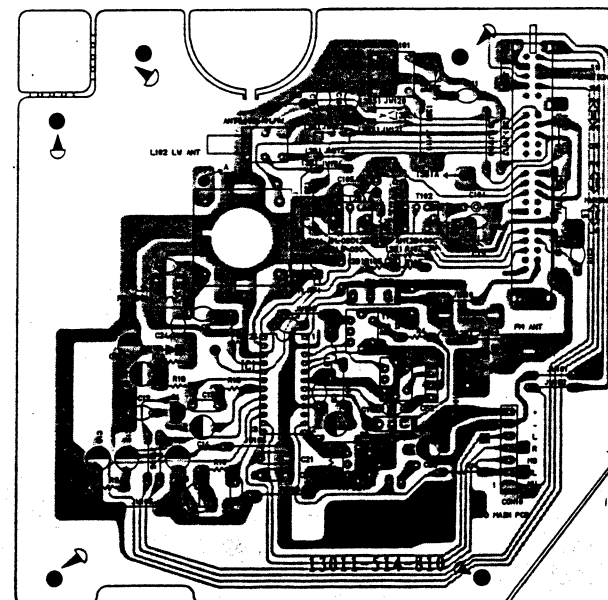
AUDIO SECTION

LED PCB

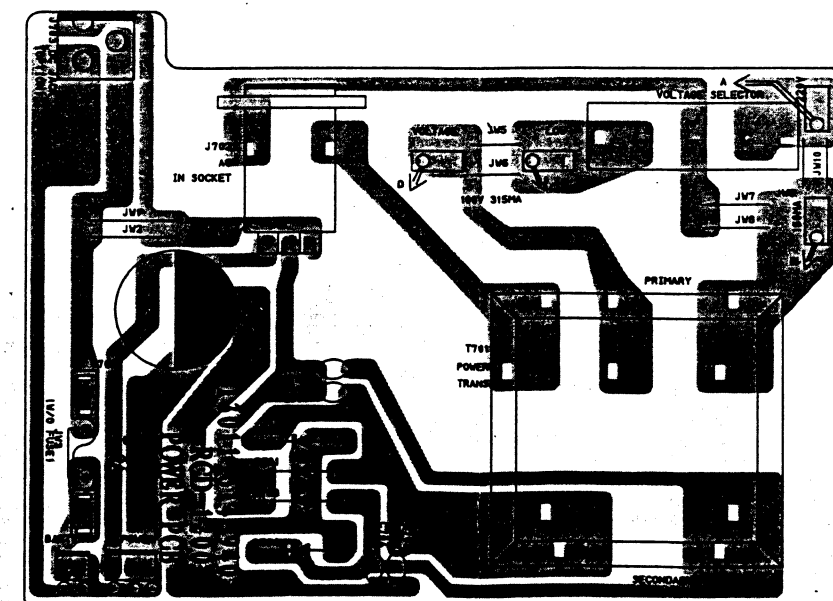
MAIN PCB



PRE/REC PCB



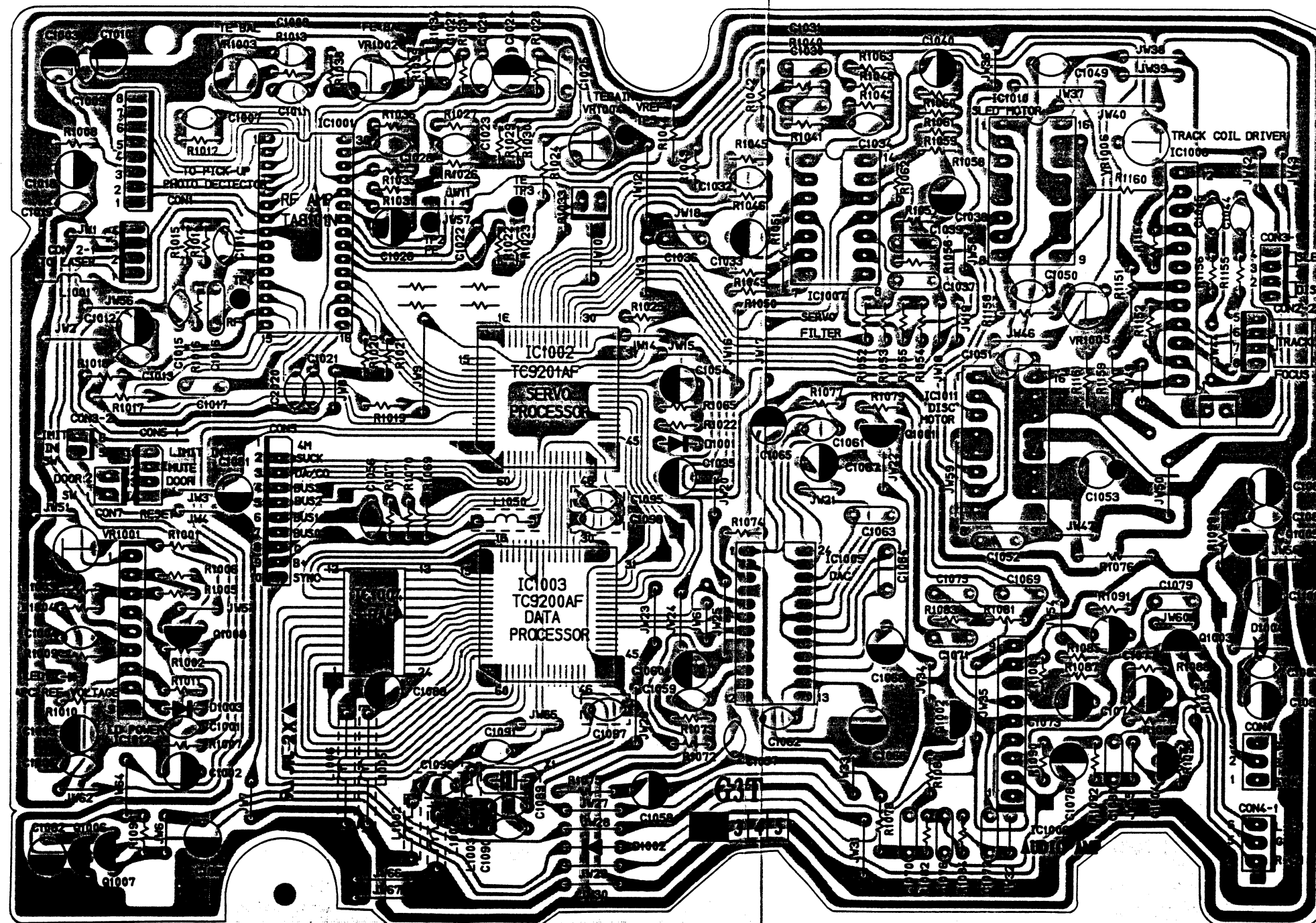
TUNER PCB



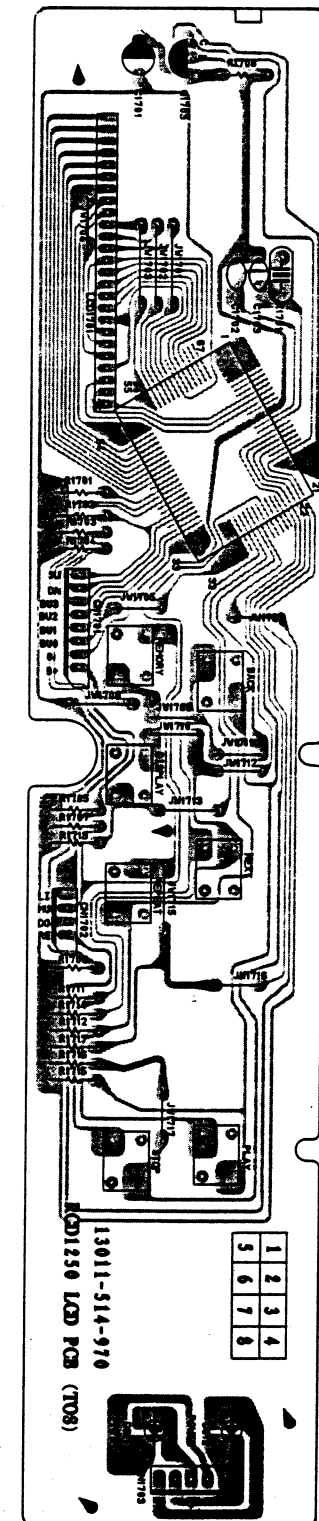
POWER PCB

COMPACT DISC PLAYER SECTION

G3T MAIN PCB (PARTS SIDE)

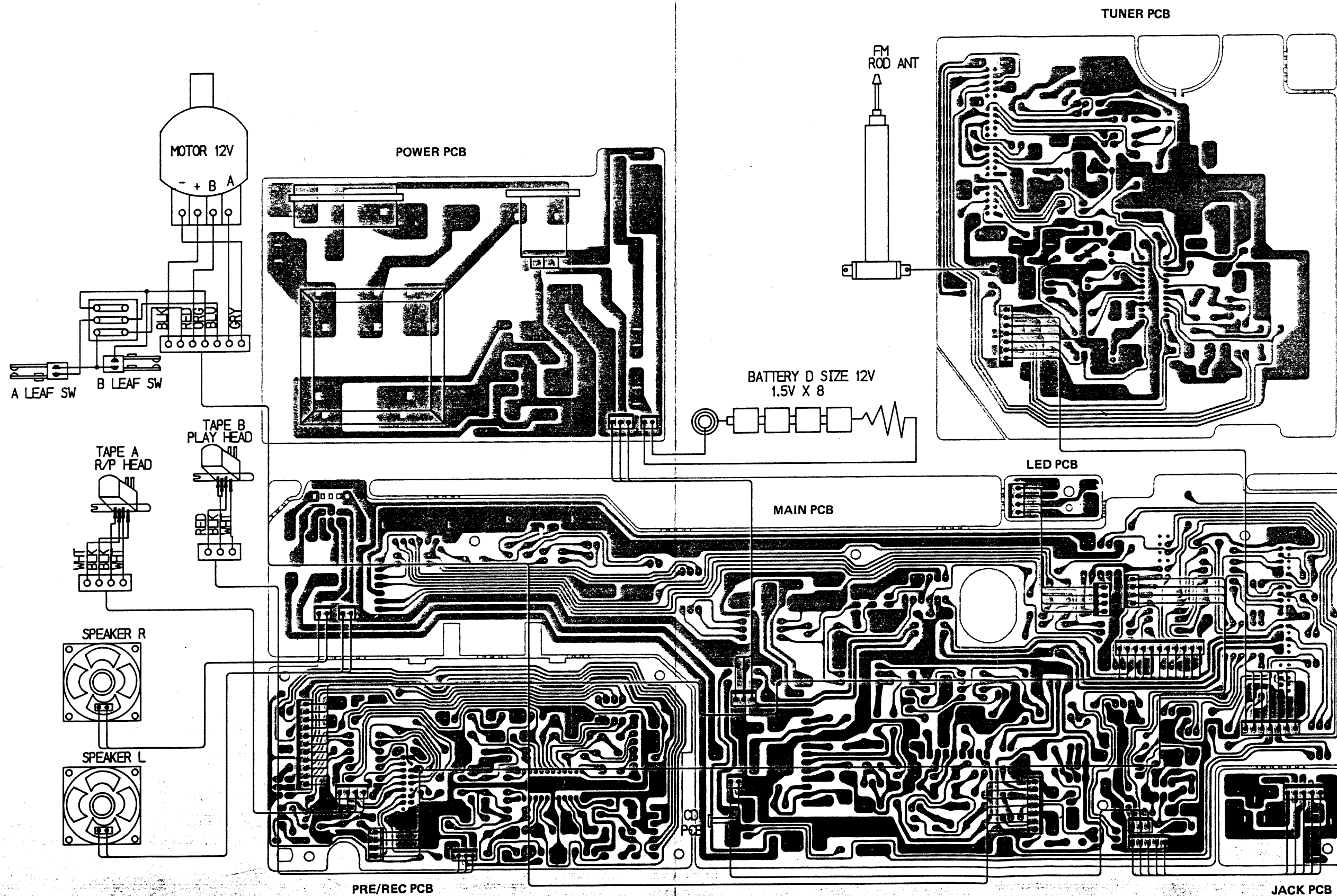


LCD PCB (PATTERN SIDE)

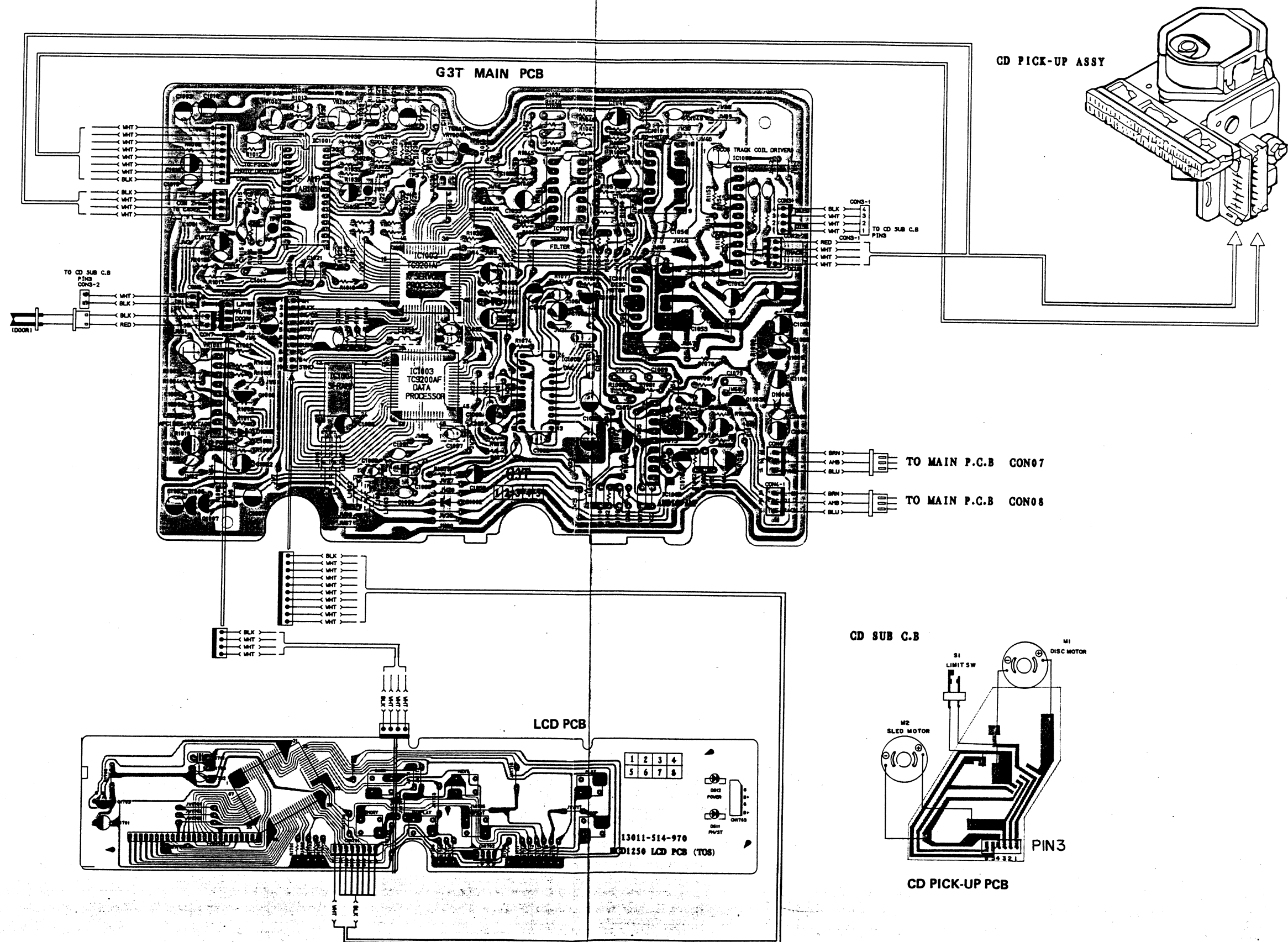


10. WIRING-DIAGRAM

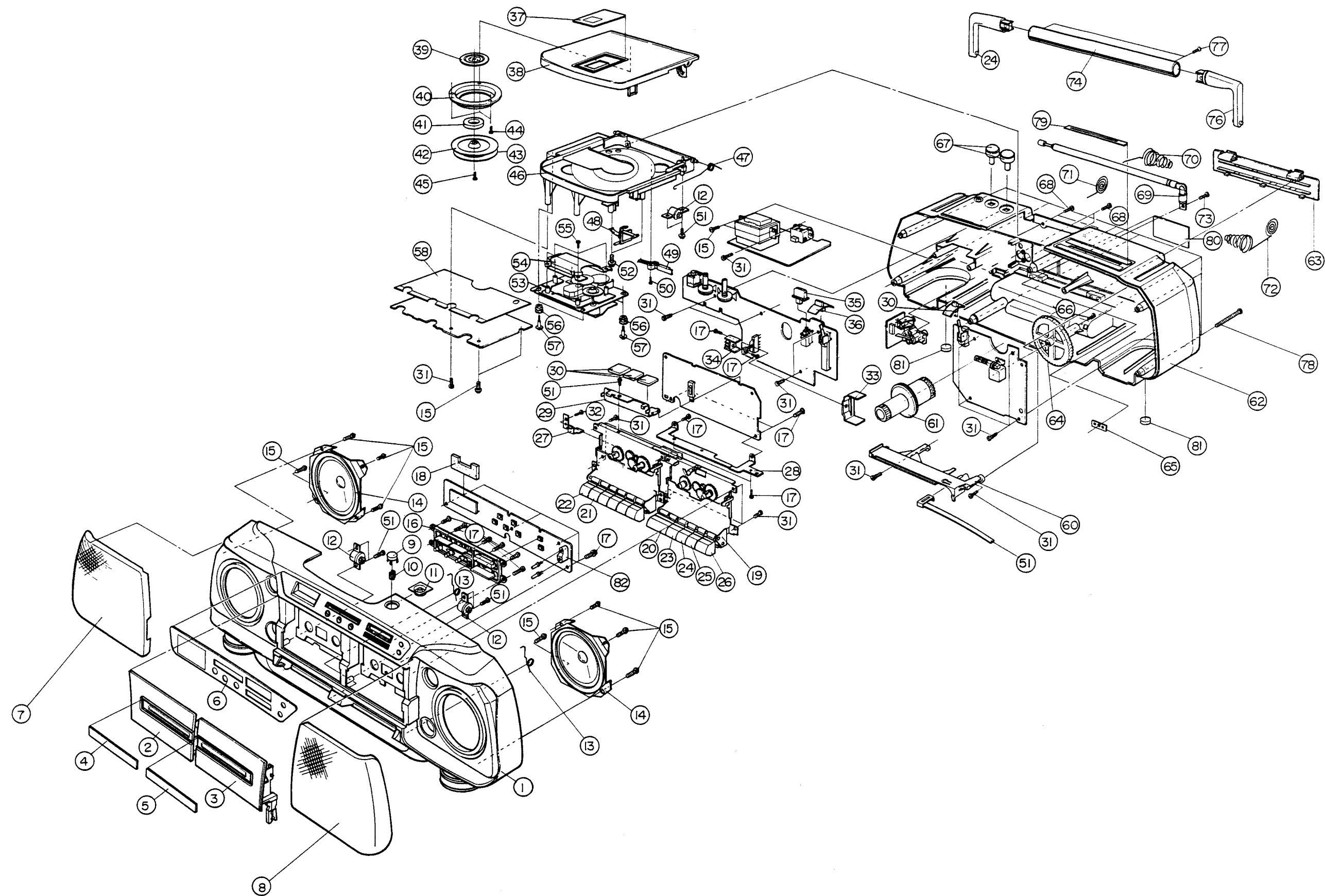
AUDIO SECTION (PARTS SIDE)



COMPACT DISC PLAYER SECTION (PARTS SIDE)

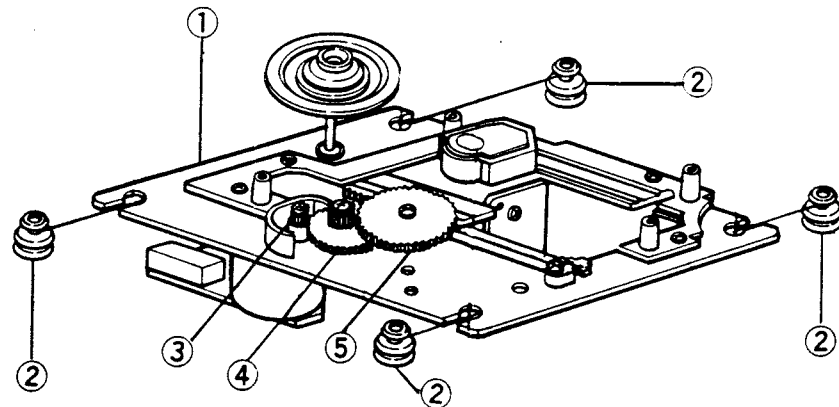


11. EXPLODED VIEW



12. DECK EXPLODED VIEW

CD DECK; CMS-V10

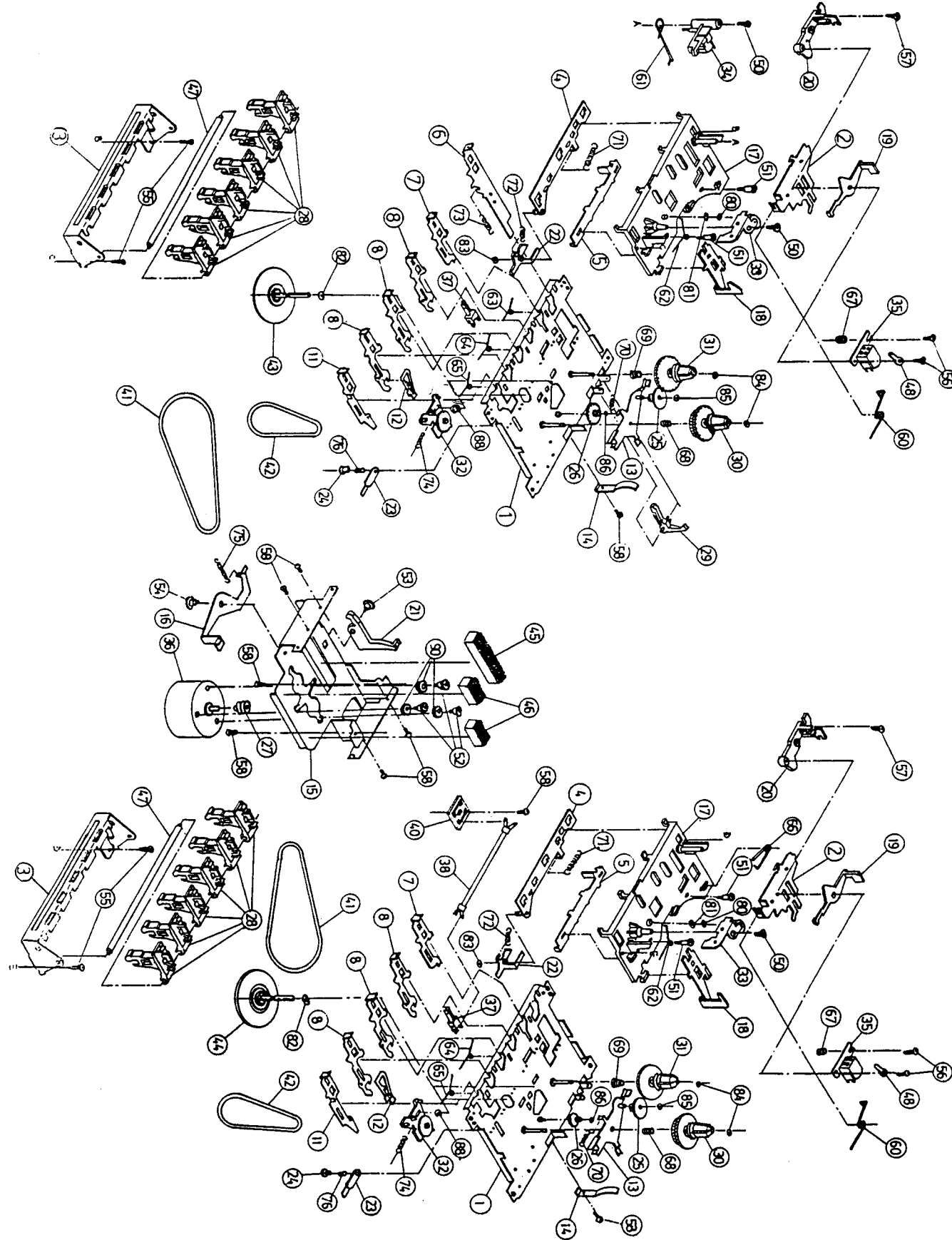


* CD PACK ASS'Y CODE NO (MECHANICAL PARTS + ELECTRICAL PARTS): 19580-000-110

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q.TY	NEW
1	19840-000-010	DECK-CD	CMS-V10	1	★
2	16174-503-410	RUBBER-CD	SIRICON RUBBER	4	★
3	10000-257-030	GEAR-C G3PACK	RCD1000	1	
4	10000-257-020	GEAR-B G3PACK	RCD1000	1	
5	10000-257-010	GEAR-A G3PACK	RCD1000	1	

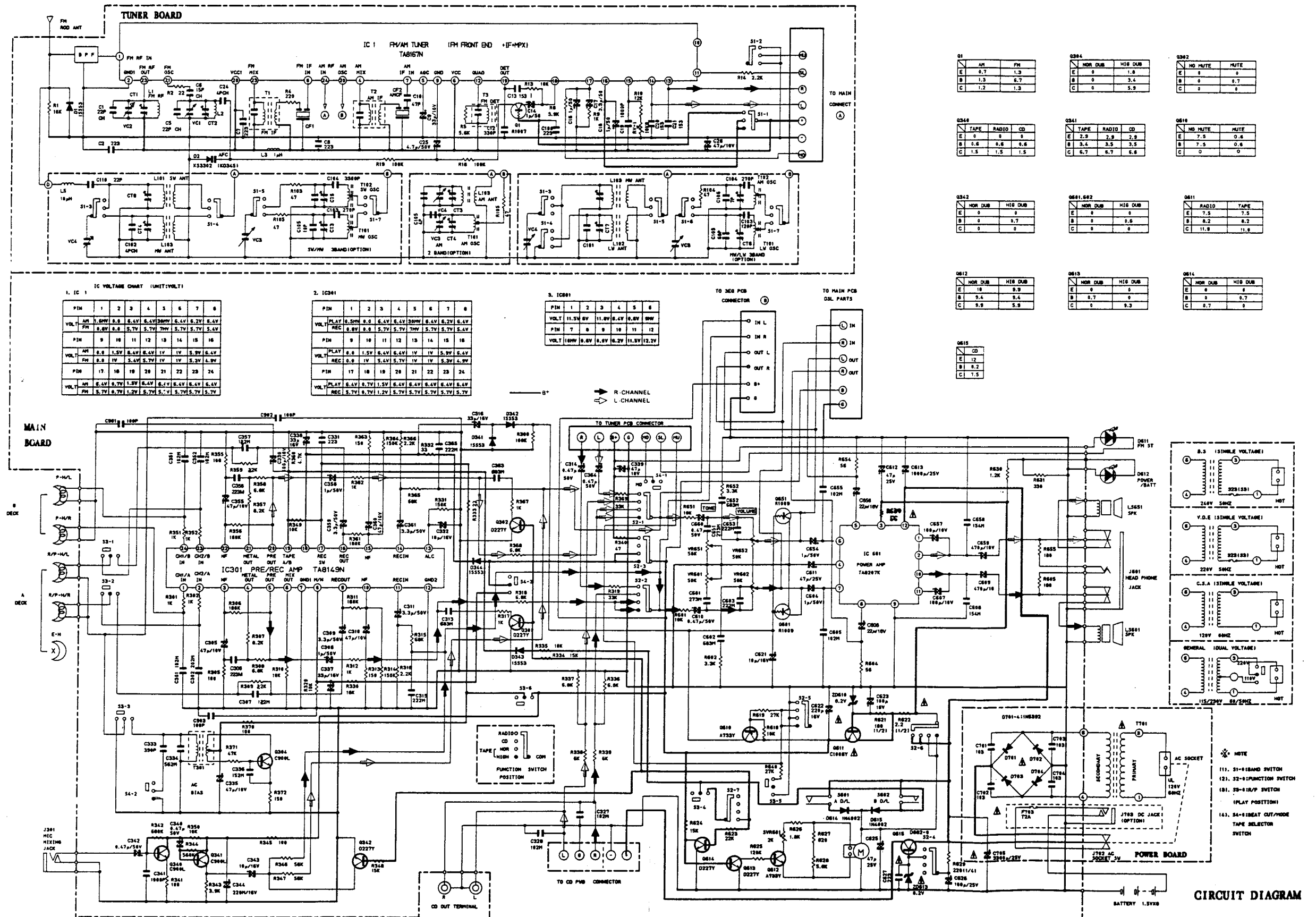
* IT IS IMPOSSIBLE TO SERVICE EXCEPT BEING REPLACED BY ONLY ABOVE ITEMS.

CASSETTE DECK; ADR 1131FW



RADIO CASSETTE SECTION

(IC301 TA8149)



13. PARTS -LIST

CAUTION

The Δ mark in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

- PARTS ARE SUBJECT TO CHANGE WITHOUT NOTICES FOR IMPROVEMENT.
- THE LIST BELOW SHOWS PARTS OF CASSETTE DECK AND CD DECK WE CAN GIVE OUR SERVICES. THEREFORE, EXCEPT FOR THOSE SHOWN IN THE LIST, YOU CAN'T BE PROVIDED OUR SERVICES.
- IT MAY TAKE MORE THAN 3 MONTHS TO DEMAND AND SUPPLY THE CD , CASSETTE DECK AND ASS'Y PARTS.

DECK ASSEMBLY

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	NEW	REMARK
	14929-104-920	DECK ASSY	ADR1131FW	1		
14	10000-252-029	PACK SPRING	51299-02506XC	2		
18	10000-252-033	EJECT LEVER-F	11134-00340AA	2		
25	10000-252-009	T.ROLLER GEAR	11128-00050AA	2		
26	10000-252-015	F.F GEAR	11128-00080AA	2		
27	10000-252-034	MOTOR PULLEY-Y	11145-00450AA	1		
28	10000-252-039	BUTTON KNOB BASE	11133-00010AA	12		
29	10000-252-028	REC SAFETY LEVER	11134-01000AA	1		
30	10000-252-011	TAKE UP REEL ASSY	ADR28-001	2		
31	10000-252-012	SUPPLY REEL ASSY	ADR28-002	2		
32	10000-252-007	RF LEVER ASSY	ADR22-001	2		
33	10000-252-016	PINCH ROLLER ASSY	ADR26-001	2		
34	10000-542-002	E-HEAD	PHK380-MS16A	1		
35	10000-521-010	R/P HEAD	HY424520K	2		
36	10000-502-020	MOTOR	EG530YD2B	1		
37	10000-252-030	LEAF SW	MSW17770M	2		
41	10000-252-037	MAIN BELT	51424-05910BA	2		
42	10000-252-024	SUB BELT	51424-03510BA	2		
43	10000-252-006	FLY WHEEL ASSY-A	ADR15-002	1		
44	10000-252-038	FLY WHEEL ASSY-B	ADR15-003	1		

R/CASSETTE SECTION

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
VR602	11209-804-020	VR-DOUBLE	K162J0012-50KB x 2	★	VOLUME
VR601	11219-149-010	VR-DOUBLE RND	RK16K12L0-50KA x 2		TOE
SVR601	11249-502-040	VR-SEMIMOLD	RVW6 2KB		SPEED
RV-1	11249-502-070	VR-SEMIMOLD	RVW6 10KB		STEREO
IC301	12109-401-840	IC-PRE/REC	TA8189N		
IC601	12119-101-290	IC-POWER AMP	TA8207K		
IC1	12119-101-360	IC-TUNER	TA8167N		
Q615 △	12149-401-900	TRANSISTOR	KSD882-0		
Q610, 612	12149-101-520	TRANSISTOR	KSA733-Y		
Q304, 340, 341	12149-301-840	TRANSISTOR	KSC900-L		
Q611 △	12149-301-930	TRANSISTOR	KSC1008-Y		
Q301, 302, 342, 613, 614	12149-401-160	TRANSISTOR	KSD227-Y		
Q601, 651	12159-301-790	TR-DIGITAL	KSR1009/DTC143TS		
Q1	12159-301-800	TR-DIGITAL	KSR1007		
D1, 343, 344, 345	12169-301-290	DIODE-SW	1SS53/1N4148 CT: 6PF		
D2	12169-501-160	DIODE-AFC	KS3302		
D614, 615	12169-201-090	DIODE-RECTIFIER	1N4002		
D701, 702, 703, 704 △	12169-201-140	DIODE-RECT	IN5392: 1.5A 100V		
ZD610, 613 △	12169-403-600	DIODE-ZENER	UZF-8.2B		
D611, 612	12309-104-430	LED-LAMP	SLV-31 VC3		
L3	12429-411-109	COIL-CHOKE	BAL 03 ST 1ROM		
L2	12601-051-216	COIL-H, SPRING	4T R7P3R5D CW CLS N-ADJ		
L1	12609-132-430	COIL-H, SPRING	4T R8P4D CCW CLS N-ADJ		
T301	12619-012-811	COIL-SEVEN CAN	1R65HH I-BIAS		BIAS
T3	12619-135-066	COIL-SEVEN CAN	90M M-BASE BLU FFM		FM DET
T1	12739-202-010	TRANS-IF FM1	7M/M CAN		
T2	12749-202-130	TRANS-IF AM, A	7M/M CAN		
J301	13333-510-110	JACK-EARPHONE	3.5PI (SHQ9508-01-020)		OPTION
J601	13339-101-502	JACK-HEADPHONE	SHQ9085-01-142 (GRN)		
CD JACK	13339-544-040	JACK-RCA	ABS & BST2 2P (S-348)		OPTION
S3-0	13519-201-101	SWITCH-SLIDE	T00620599 6C-2P (B, D SHORT)		R/P
S4-0	13529-920-210	SWITCH-PUSH	R2320658		MODE
S2-0	13549-801-300	SWITCH-LEVER	T0084005 8C-4P H-SHORTING		FUNCTION
CF1	14529-301-750	FILTER-CERAMIC	SFE 10.7 MS3G-A (RED)		
CF2	14529-315-010	FILTER-CERAMIC	SFU 455B		
CF2	14529-302-130	FILTER-CERAMIC	SFU 465B		OPTION
B.P.F	14529-403-010	FILTER-L, C	PFW-B4		
LS601, 651	14029-114-220	SPK-GENERAL	D900 10CM 4 OHM 5W		
ANT	14509-316-050	ANT-ROD	5.2PI 728M/M 4S		
J702 △	13354-501-320	SOCKET-2P, SW	HSC1466-01-0101 (PIN)		OPTION

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
J702 Δ	13354-501-310	SOCKET-2P (EP)	HSC1463-01-0101 (PIN)		OPTION
T701 Δ	12869-215-010	TRANS-POWER	EI48 x 18 110V/220V 60/50HZ		OPTION
T701 Δ	12869-215-020	TRANS-POWER	EI48 x 18 115V/230V 60/50HZ		OPTION
T701 Δ	12869-215-210	TRANS-POWER	EI48 x 18 220V 50HZ VDE		OPTION
T701 Δ	12869-215-310	TRANS-POWER	EI48 x 18 240V 50HZ BS		OPTION
T701 Δ	12869-215-110	TRANS-POWER	EI48 x 18 120V 60HZ UL		OPTION
IC601-H	15684-507-840	HEAT SINK	ALP T1 8C-6/9C-5		
Q615-H	15684-566-410	HEAT SINK	EXTR WHT 17M RCD-900		
DC JACK Δ	13333-501-410	DC POWER JACK	DCP-20, 6.3PI		OPTION
R622 Δ	11018-327-229	R-CARBON	1/2P 2.2-J		
FUSE Δ	14709-033-250	FUSE	51S 250V 2A		OPTION

FM/AM BAND

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
L103	12514-273-460	COIL-ANT ASSY AM	590 μ H M-BASE P18 x 60 (MW-ANT)		BAND
T101	12619-058-603	COIL-AM OSC	290 μ H		
S1-0	13549-801-210	SWITCH-LEVER	00221013S 2C-2P		
V. C	11819-309-120	VARICON-POLY	P2S-22BGJT (A/C)		

FM/AM/SW BAND

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
L103	12514-273-470	COIL-ANT ASSY AM	310 μ H M-BASE 8PI x 60 (MW-ANT)		BAND
T101	12619-050-703	COIL-AM OSC	200 μ H FMW (TA8167)		
T102	12619-173-126	COIL 7 CAN	2-73NH AQ FSW GREEN		
S1-0	13549-801-310	SWITCH-LEVER	T0083002 8C-3P A-SHORTING		
V. C	11819-309-340	VARICON-POLY	P2S-22BMT A/C-H		
L101	12509-805-020	COIL-ANT SW	9.5M/M		
L5	12429-508-100	COIL-CHOKE	10 μ H		
CT5,	11829-512-030	C-TRIMMER	TZ03R 20PF		

FM/MW/LW BAND

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
L102, 103	12514-273-480	COIL-ANT ASSY MW/LW	360 μ H/3.5MH M-BASE		LW OSC MW OSC BAND
T101	12619-177-902	COIL-SEVEN CAN	AQ 560 μ H FLW BRN		
T102	12619-050-703	COIL-SEVEN CAN	AQ 200 μ H FMW		
S1-0	13549-801-310	SWITCH-LEVER	T0083002 8C-3P A-SHORTING		
V. C	11819-309-340	VARICON-POLY	P2S-22BMT A/C-H		
CT6, CT7	11829-512-030	C-TRIMMER	TZ03R 20PF		

CD SECTION

LOCATION NO.	CODE NO.	DESCRIPTION	SPECIFICATION	NEW	REMARK
IC1001	12119-101-620	IC-ACTUATOR SERVO	TA8101N		
IC1002	12119-101-810	IC-SERVO PROCESSOR	TC9201BF		
IC1003	12119-101-800	IC DATA PROCESSOR	TC9200BF (BS)		
IC1004	12109-323-800	IC-SRAM	CXK5816-M15L/HM6116-120		
IC1005	12119-101-930	IC-D/A CONVERTER	TD6710AN		
IC1006	12119-401-630	IC-OP DUAL AMP	MC4558S		
IC1007	12119-401-210	IC-OP AMP	NJM3403AD		
IC1008	12119-102-190	IC-BTL DRIVER	BA6290A		
IC1010, 1011	12119-101-630	IC-MOTOR DRIVER	TA8102P		
IC1012	12119-401-400	IC-OP AMP	BA10358N		
IC1701	12119-101-960	IC-MICOM	TMP 47C420AF-8574Z		
Q1005	12119-601-770	IC-REGURATOR	MC7805		
Q1007	12159-301-810	TR DIGITAL	KSR2007/DTA124XS		
Q1008	12149-202-050	TRANSISTOR	KSB564A-Y		
Q1003, 1004, 1006, 1703	12149-301-890	TRANSISTOR	KSC945-L		
Q1002, 1701	12159-301-800	TR DIGITAL	KSR1007		
VR1001	11249-002-050	VR-SEMI FIXED	VZ066L 2KB		
VR1002	11249-002-030	VR-SEMI FIXED	VZ066L 22KB		
VR1003	11249-902-020	VR-SEMI FIXED	VZ066L 100KB		
VR1004	11249-002-070	VR-SEMI FIXED	VZ066L 30KB		
VR1005	11249-902-010	VR-SEMI FIXED	VZ066L 10KB		
R1076 	11058-327-229	R-FUSIBLE	RF 1/2P 2.2J		
D1001, 1002, 1003, 1701	12169-301-290	DIODE-SW	1SS53/1N4148 CT: 6PF		
X1	14539-503-080	CERAMIC RESONATOR	CSA 16.93M		
X1701	14534-504-040	CERAMIC RESONATOR	CSA 4.00MG		
LCD	12339-104-600	LCD-CDP	SLA-0625A/ LE0604AP 47 x 25 25 PIN		
L1001	12429-411-100	COIL-CHOKE	LA02NA 100K (10 μ H)		
L1002, 1003, 1004, 1005	12429-411-109	COIL-CHOKE, LEAD	BAL 03ST 109K (1 μ H)		
L1006	12429-411-109	COIL-CHOKE	BAL 03ST 1ROM		
SW1701, 1702, 1703, 1704	13529-301-140	SW-TACT	KPT-1105A		
SW1705, 1706, 1707	13529-301-140	SW-TACT	KPT-1105A		
PICK UP	19840-000-010	DECK-CD	CMS-V10		

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	NEW	REMARK
41	14014-500-230	MAGNET CORE	SR FERRITE	1		
42	16133-502-630	CHUCK-PLATE	SUS 304 CP0.3T	1		
43	16854-515-920	SHEET-HYMERON	THICK 0.5	1		
44	17158-120-052	SCREW TAP BH	2-2 x 5 FZW	3		
45	17098-120-032	SCREW BH	+M2 x 3 FE ZW	1		
46	16021-505-110	CHASSIS-CD	ABS BLK	1	★	
47	16674-560-410	SPRING-CD DOOR	SUS #27 PI1.0	1		
48	17623-565-210	GUIDE-EJECT	POM BLK	1	★	
49	13564-601-060	LEAF-S/W	MSW-0080CNBKP	1		
50	17158-220-103	SCREW-TAP, BH	2-2 x 10 FE FZB	1		
51	17154-100-670	SCREW TAP RH SPEC	2S-3 x 12 FE FZY	1		
52	17154-100-670	SCREW TAP RH SPEC	2S-3 x 12 FE FZY	1		
53	19840-000-010	DECK-CD	CMS-V10	1		
54	16133-503-610	PICK-UP/COVER	ALS0.4 BLK RCD-900	1		
55	17108-520-063	SCREW TAP PH	2S-2 x 6 FE FZB	4		
56	16174-503-410	RUBBER-CD	SILICON RUBBER	4		
57	15104-531-710	SHAFT-CD	FE FZY 2.6 x 10.5	4		
59	18004-512-510	POINTER	PE WHT	1		
60	16023-508-210	CHASSIS TUNING	ABS BLK	1		
61	17624-618-910	KNOB-TUNING	ABS BLK	1		
62	16000-528-610	CABINET-BACK	ABS BLK	1		
63	17643-522-910	LID-BATTERY	ABS BLK	1		
64	15214-510-410	WHEEL-DRUM	ABS BLK	1		
65	16624-513-310	BRKT-ANT	SPTE t0.3	1		
66	17048-126-051	SCREW RH	+ M2.6 x 5 FE FZY	1		
67	17624-661-210	KNOB-VOLUME	ABS BLK	2		
68	17118-530-123	SCREW-TAP FH	2S-3 x 12 FZB	2		
69	14509-316-050	ANT-ROD	5.2PI 728M/M 4S	1		
70	16674-531-610	SPRING-BATTERY D	SWP PI1.0	1		
71	16674-548-410	SPRING BATT	HSW PI1.0	1		
72	16674-531-820	SPRING BATTERY	-810 -25MM	1		
73	17008-130-105	SCREW-PH	+ M3 x 10 FN	1		
74	17663-506-710	HANDLE	ABS BLK	1		
75	17664-505-410	HANDLE BAR	ABS BLK	1		
76	17664-505-510	HANDLE BAR, R	ABS BLK	1		
77	17118-530-123	SCREW-TAP, FH	2S-3 x 12 FZB	2		
78	17458-130-251	SCREW TAP TITE BH	B-3 x 25 FE FZY	7		
79	17654-555-610	WINDOW SCALE	PVC0.5T	1		
80	18154-592-210	LABEL-RATING	PE T0.15	1	★	
81	16174-502-310	RUBBER-FOOT	RDC-1000	2		
82	16834-510-910	LED-STOPPER	CR BLK	1	★	

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	NEW	REMARK
1	16000-531-910	CABINET-FRONT	HIPS BLK	1	★	
2	17642-540-610	LID-CASSETTE, L	ABS BLK	1	★	
3	17642-540-710	LID-CASSETTE, R	ABS BLK	1	★	
4	17654-564-510	WINDOW-CASSETTE, L	PVC t0.5	1	★	
5	17654-564-610	WINDOW-CASSETTE, R	PVC t0.5	1	★	
6	17653-536-810	WINDOW-FUNCTION	PVC t0.5	1	★	
7	17713-510-810	GRILLE-SPEAKER, L	SPC-1 t0.6	1	★	
8	17713-510-910	GRILLE-SPEAKER, R	SPC-1 t0.6	1	★	
9	17624-628-010	KNOB-CD EJECT	ABS BLK	1	★	
10	16674-573-310	SPRING-DOOR	PWR PI1.0	1	★	
11	16604-539-610	HOLDER-CHUCK	ABS BLK	1	★	
12	15214-506-011	DAMPER ASSY	ACETAL	3		
13	16674-573-310	SPRING-DOOR	PWR ø 1.0	2	★	
14	14029-114-220	GENERAL-SPK	D900 10CM 4 OHM 5W	2		
15	17154-100-670	SCREW-TAP, RH SPEC	2S-3 x 12 FZY	16		
16	17623-581-710	KNOB-CD CONTROL	ABS BLK	1	★	
17	17458-130-081	SCREW-TAP TITE, BH	2S-3 x 6 FZY	11		
18	16834-513-010	CUSHION-LCD	EVA t8.0	1	★	
19	14929-104-920	DECK-TAPE	ADR1131FW	1		
20	17623-581-810	KNOB-DECK, PLAY, A	ABS BLK	1	★	
21	17623-581-910	KNOB-DECK, PLAY	ABS BLK	1	★	
22	17623-582-010	KNOB-DECK, REC	ABS BLK	1	★	
23	17623-582-110	KNOB-DECK, FF	ABS BLK	2	★	
24	17623-582-210	KNOB-DECK, REW	ABS BLK	2	★	
25	17623-582-310	KNOB-DECK, STOP	ABS BLK	2	★	
26	17623-582-410	KNOB-DECK, PAUSE	ABS BLK	2	★	
27	16674-557-910	BRKT-REC	SUS 27 t0.5	1		
28	16623-610-210	BRKT-BECK A	EGI 0.8T	1		
29	16624-570-010	BRKT-DECK B	EGI 0.8T	1		
30	16804-508-510	CUSHION-PWR	RUBBER CUSHION	1		
31	17458-130-121	SCREW TAP TITE BH	B-3 x 12 FZY	17		
32	17098-120-032	SCREW BH	+ M2 x 3 FZW	1		
33	15684-507-840	HEAT SINK	ALPT1 8C-6/9C-5	1		
34	15684-566-410	HEAT SINK	EXTR WHT 17M RCD-900	1		
35	17624-619-110	KNOB-PUSH	ABS BLK	1		
36	17624-619-010	KNOB-LEVER	ABS BLK	2		
37	17654-564-710	WINDOW-CD	PVC SHEET t1.0	1	★	
38	17642-540-810	DOOR-CD	ABS BLK	1	★	
39	16623-504-420	BRKT-CHUCK	SBHG-1 t0.5	1		
40	16604-539-610	HOLDER-CHUCK	ABS BLK	1	★	