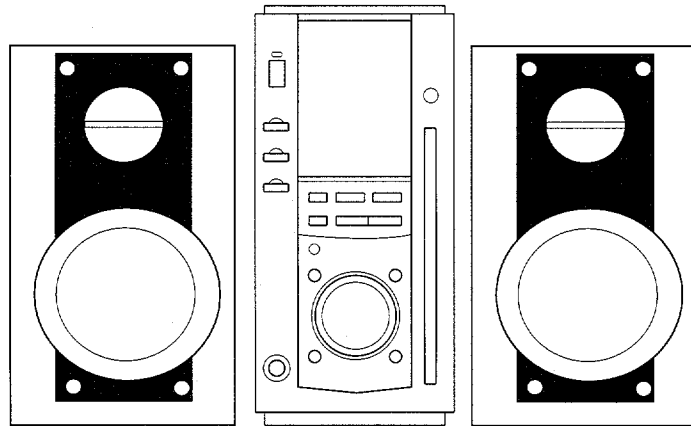


XR-MDS7 EZ



SERVICE MANUAL

MD/CD STEREO SYSTEM

BASIC CD MECHANISM : TN-CCD1001-902M
BASIC MD MECHANISM : AZG-5 YA

SYSTEM	REMOTE CONTROLLER
XR-MDS7	RC-AAT10

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" XR-MDS7 (EZ), (S/M Code No. 09-99C-421-3T2).
- If requiring information about the MD mechanism, see Service Manual of AZG-5 (YA), (S/M Code No. 09-99C-338-1N2).
- This Service Manual does not include "CD ELECTRICAL SECTION". These items will be issued in the next supplement.

aiwa

S/M Code No. 09-002-421-3R2

REVISION

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SPECIFICATIONS

<FM tuner section>

Tuning range 87.5 MHz to 108 MHz
Usable sensitivity (IHF) 16.8 dBf
Antenna terminals 75 ohms (unbalanced)

<MW tuner section>

Tuning range 530 kHz to 1710 kHz (10 kHz step)
 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity 350 μ V/m
Antenna Loop antenna

<LW tuner section>

Tuning range 144 kHz to 290 kHz
Usable sensitivity 1400 μ V/m
Antenna Loop antenna

<Amplifier section>

Power output Rated: 12 W + 12 W (6 ohms,
 T.H.D. 1 %, 1 kHz/DIN 45500)
 Reference: 15 W + 15 W (6 ohms,
 T.H.D. 10 %, 1 kHz/DIN 45324)
 DIN MUSIC POWER
 20 W + 20 W

Inputs

VIDEO/AUX: 700 mV
 DIGITAL IN (OPTICAL)
 Sampling frequency: 48 kHz/32 kHz
 Optical input level: more than -21dBm

Outputs

SUPER WOOFER: 0.8 W
 SPEAKERS: accept speakers of 6
 ohms or more
 PHONES (stereo mini jack): accepts
 headphones of 32 ohms or more

<Compact disc player section>

Laser Semiconductor laser ($\lambda = 780$ nm)
D-A converter 1 bit dual
Signal-to-noise ratio 85 dB (1 kHz, 0 dB)
Harmonic distortion 0.05 % (1 kHz, 0 dB)
Wow and flutter Unmeasurable

<MD recorder section>

Scanning method Non-contact optical scanner
 (Semiconductor laser application)
Recording system Magnetic polarity modulation
 overwrite system
Rotation speed Approx. 400 to 900 rpm (CLV)
Sampling frequency 44.1 kHz
No. of channels Stereo: 2 channels
 Monaural: 1 channels
A-D, D-A converter 1-bit
Frequency 20 to 20000 Hz +0.5 -- -1.5 dB
Wow and flutter Unmeasurable

<General>

Power requirements 230 V AC, 50 Hz
Power consumption 55 W
Standby power consumption 1.7 W (power-economizing mode
 set to ON)

Dimensions of main unit
 (W x H x D) 100 x 210.2 x 271.5 mm

Weight of main unit 3.6 kg

<Speaker system>

Cabinet type 2 way, bass reflex (magnetic
 shielded type)

Speakers

Woofer :
 85 mm
 Tweeter:
 22 mm dome type

Impedance

6 ohms

Output sound pressure level

86 dB/W/m

Dimensions (W x H x D)

100 x 206 x 188 mm

Weight

1.5 kg

• Design and specifications are subject to change without notice.

• The word "BBE" and the "BBE symbol" are trademarks of BBE
 Sound, Inc.

Under license from BBE Sound, Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

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.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainituilla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

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

ATTENTION

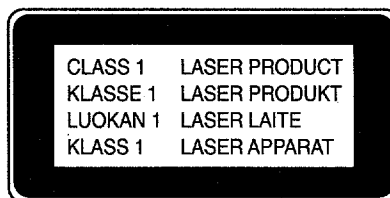
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

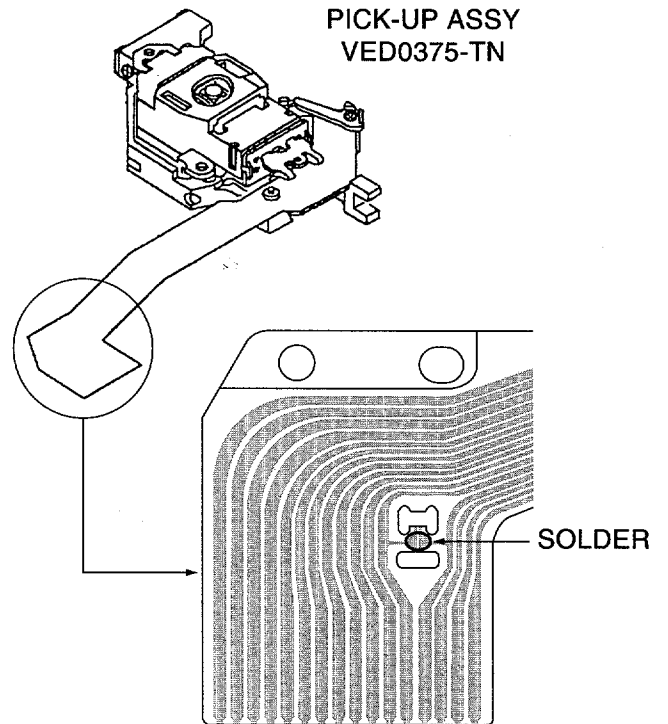


Precaution to replace Optical block

(VED0375-TN)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in right figure.

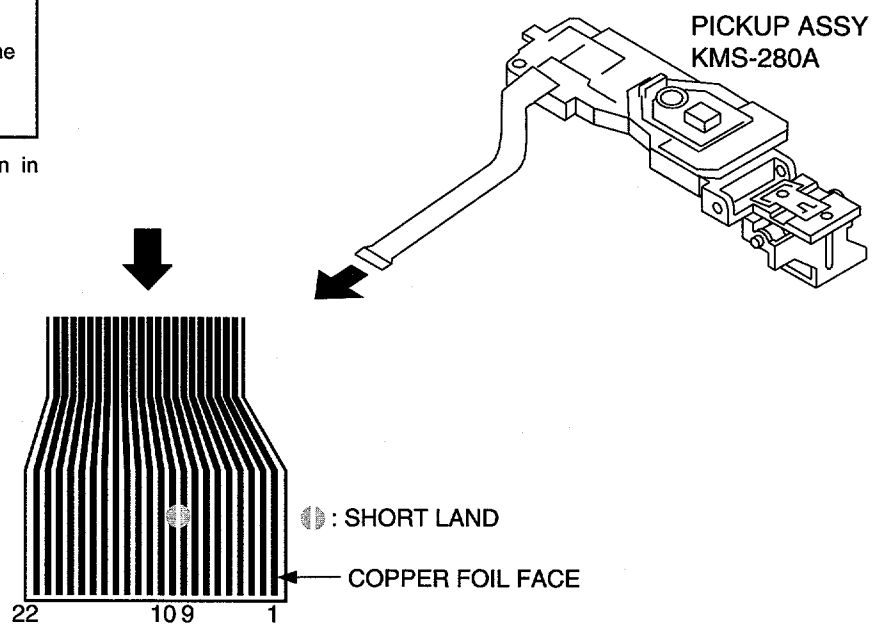


Precaution to replace Optical block

(KMS-280A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in right figure.



SERVICE JIG AND TOOLS

The distance between the FRONT C.B and the MAIN C.B may be extended with the jig when repairing the FRONT C.B.

Name: JIG, EXT 18P
No.: SV-J00-071-010

1 Assemble Method

- 1) Remove the solders on the pattern side of JIG C.B.
- 2) Remove the covers by pushing the picks of sockets (as shown by Figure 1).
- 3) Insert and solder the parts into JIG C.B (as shown by Figure 2).
- 4) Insert FFC cable into each connector to connect a socket part and a plug part (Figure 2).

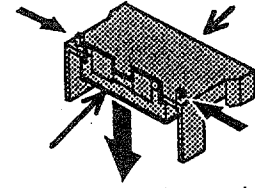


Figure 1

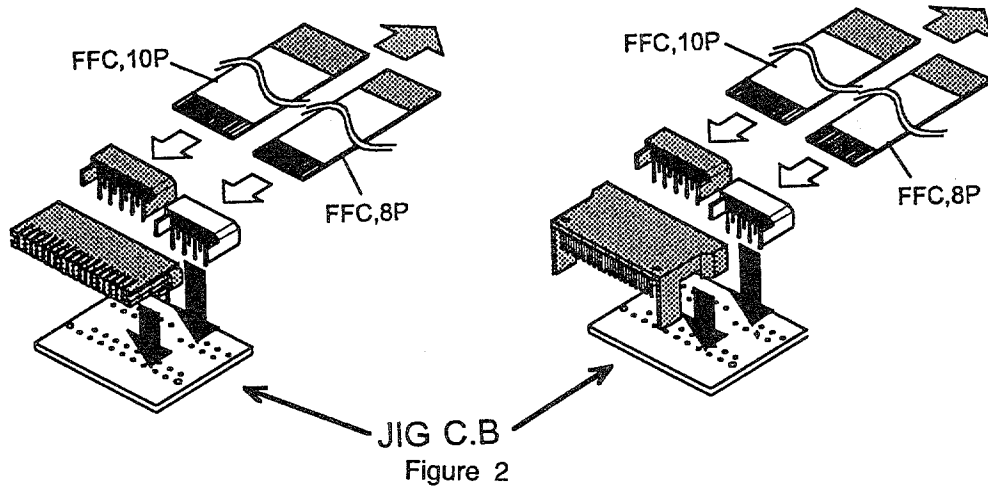
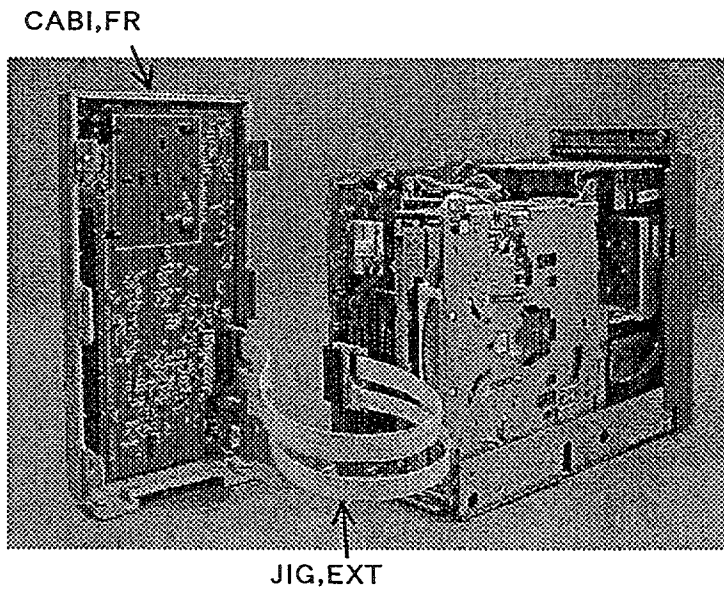


Figure 2

2 Connection

As shown in the figure below, connect the plug side to the FRONT C.B and the socket side to the MAIN C.B.

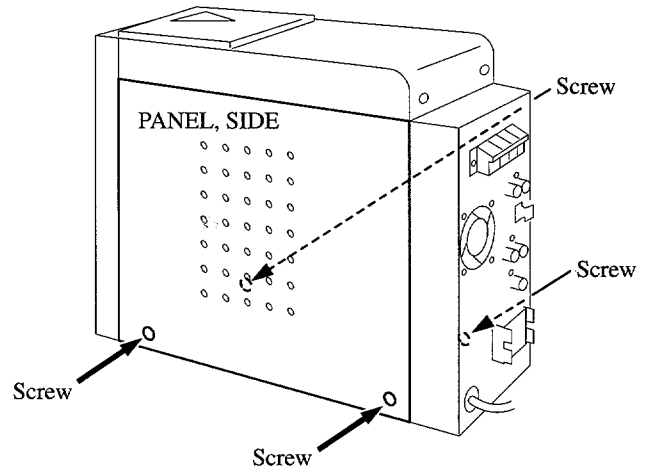
- Beware of short circuit on the pattern side of the JIG C.B, and FFC coming off.



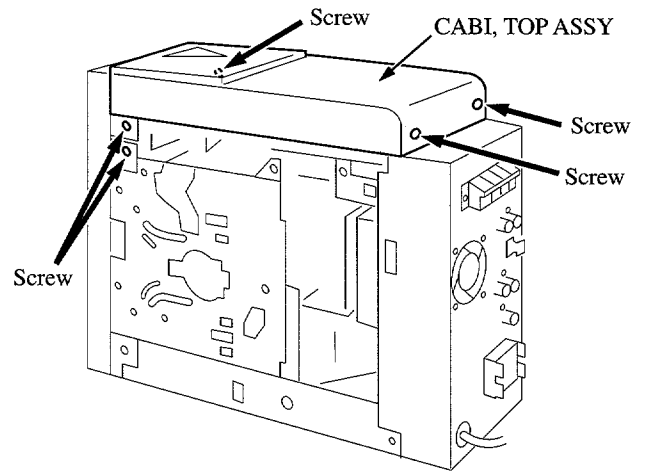
DISASSEMBLY INSTRUCTIONS

1. CD Block

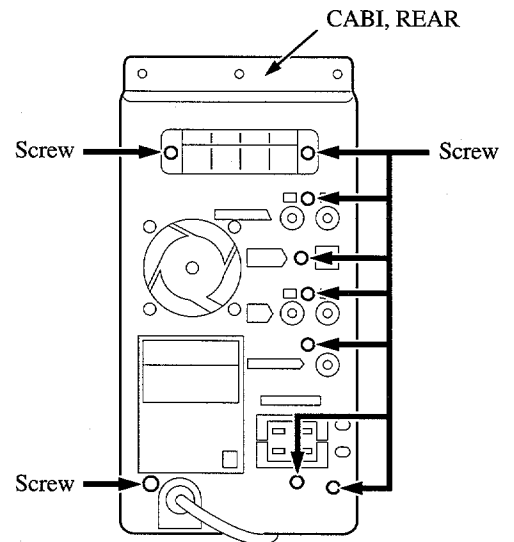
- 1) Remove the PANEL, SIDE.
Remove the four screws indicated by the arrows and remove the PANEL, SIDEs (right and left).



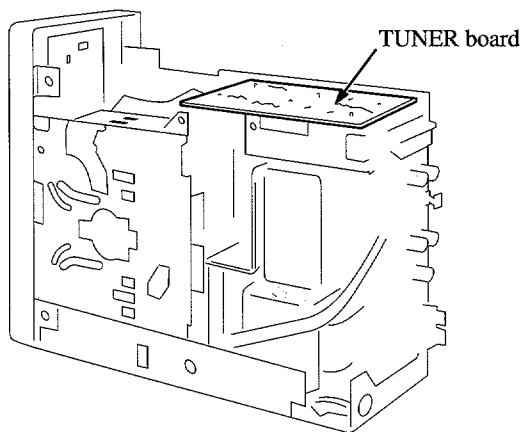
- 2) Remove the CABI, TOP ASSY.
Remove the five screws indicated by the arrows and remove the CABI, TOP ASSY.



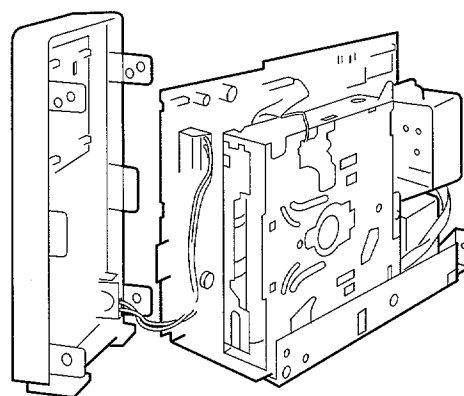
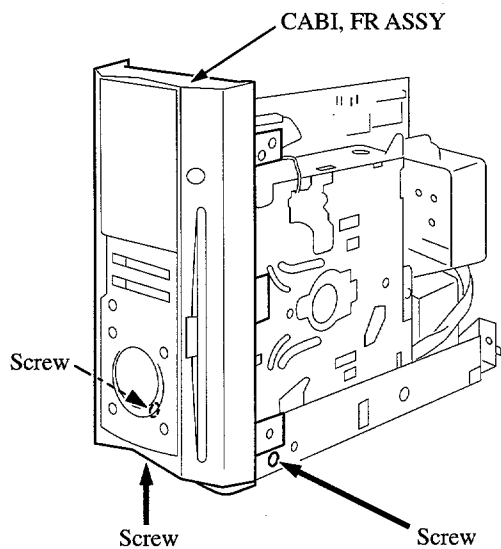
- 3) Remove the CABI, REAR.
Remove the nine screws indicated by the arrows and remove the CABI, REAR.



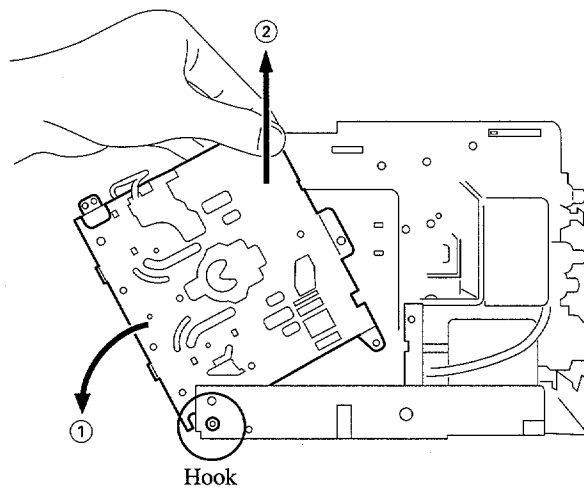
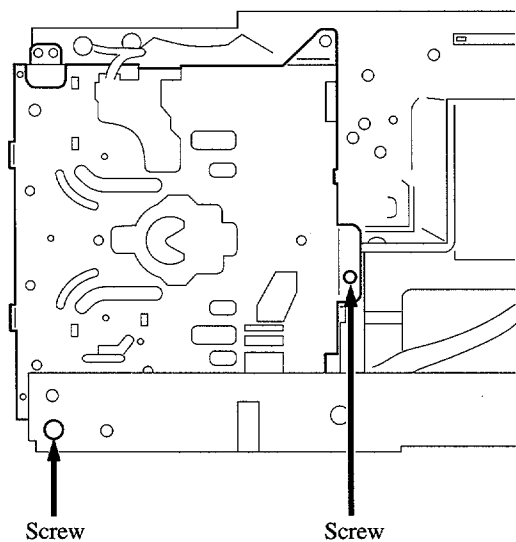
- 4) Remove the TUNER board.
Remove the TUNER board connected to the connector.



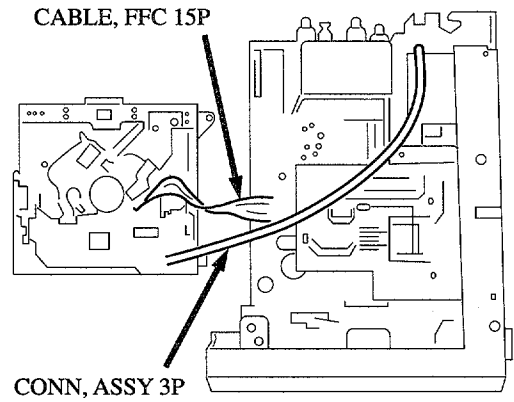
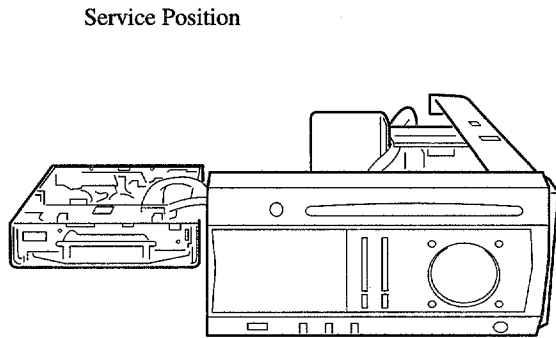
- 5) Remove the CABI, FR ASSY.
Remove the three screws indicated by the arrows and remove the CABI, FR ASSY.



- 6) Remove the CD MECHA.
(1) Remove the two screws indicated by the arrows.
(2) Lift up the CD MECHA in the direction of the arrow ① and release the hook indicated in the circle.
(3) Remove the CD MECHA in the direction of the arrow ②.



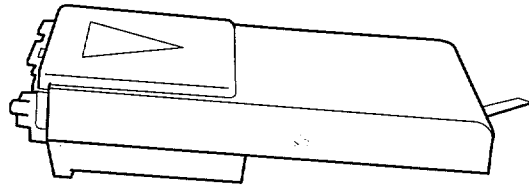
- 7) Lay the XR-MDS7 in its Service Position.
- (1) Attach the CABI, FR ASSY.
 - (2) Place the main unit and the CD unit as shown below.
 - (3) Connect the CABLE, FFC 15P and CONN, ASSY 3P to the CD MECHA and turn on the main power.



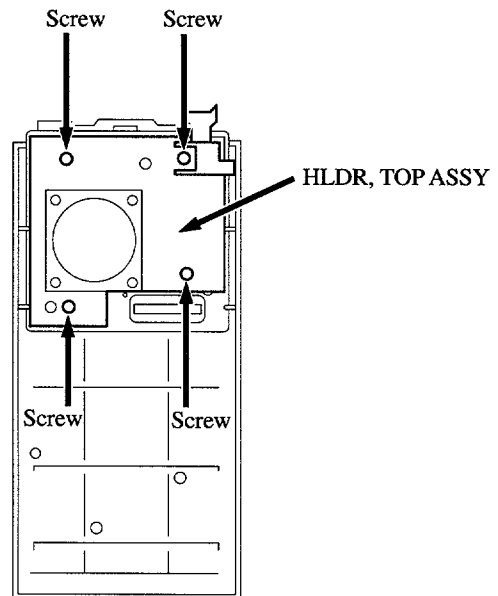
2. MD Block

- 1)
- 2) Remove the CABI, TOP ASSY in the same procedure as for CD block.
- 3)

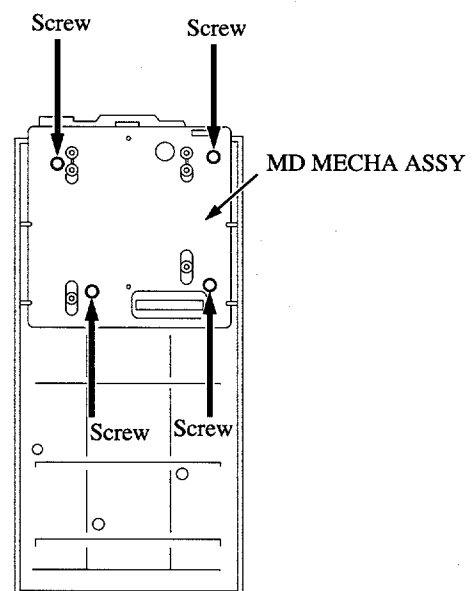
CABI, TOP ASSY



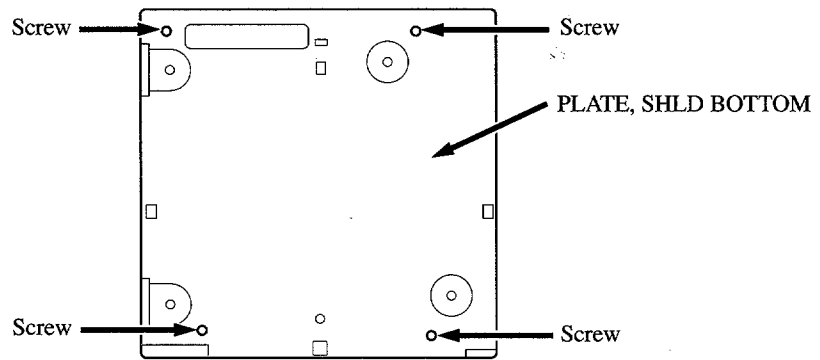
- 4) Remove the HLDR, TOP ASSY.
Remove the four screws indicated by the arrows and remove the HLDR, TOP ASSY.



- 5) Remove the MD MECHA ASSY.
Remove the four screws indicated by the arrows and remove the MD MECHA ASSY.

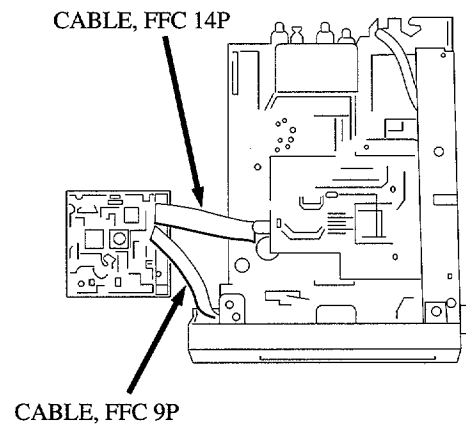
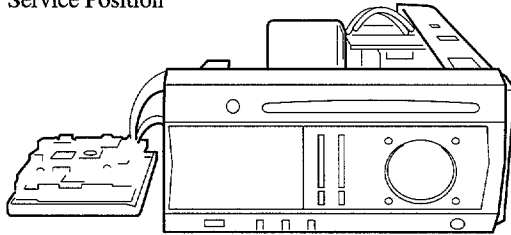


- 6) Remove the PLATE, SHLD BOTTOM from the MD MECHA ASSY.
Remove the four screws indicated by the arrows and remove the PLATE, SHLD BOTTOM.



- 7) Lay the XR-MDS7 in its Service Position.
(1) Place the main unit and the MD unit as shown below.
(2) Connect the CABLE, FFC 14P and the CABLE, FFC 9P to the MD MECHA and turn on the power.

Service Position



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C9	87-A12-033-090		CAP, E 6800-25 SMG
	8A-CJ5-601-010	C-IC,	LC876580W-5N98	C10	87-010-409-080		CAP, E 220-50
	87-070-246-010	IC,	GP1U271X	C11	87-010-553-080		CAP, ELECT 47-16V
	87-A21-552-010	IC,	LA4663A	C13	87-010-247-080		CAP, E 100-50
	87-017-888-080	IC,	NJM4558MD	C14	87-010-235-080		CAP, E 470-16 M
	87-017-915-080	C-IC,	BU4094BCF	C15	87-010-387-080		CAP, E 470-25 SME
	87-A21-022-040	C-IC,	BA3880FS	C24	87-016-251-080		CAP, E 220-16 M SMG
	87-A21-103-040	C-IC,	MM1454XFBE	C27	87-012-140-080		CAP 470P
	87-A21-111-040	C-IC,	M62495FP	C29	87-010-247-080		CAP, ELECT 100-50V
	87-A20-971-040	C-IC,	SN74LV14APW	C30	87-016-044-080		CAP, ELECT 100-16V
	87-A20-870-010	IC,	GP1F37R	C31	87-010-235-080		CAP, E 470-16 SME
	87-070-127-110	IC,	LC72131D	C61	87-010-260-080		CAP, E 47-25 SME
	87-A20-913-010	IC,	LA1837NL	C62	87-010-496-080		CAP, ELECT 3.3-50V
	87-A20-440-040	C-IC,	BU1920FS	C91	87-010-401-080		CAP, ELECT 1-50V
	87-017-585-080	C-IC,	NJM4580E	C92	87-010-263-080		CAP, ELECT 100-10V
TRANSISTOR				C93	87-010-553-040		CAP, ELECT 47-16V
	87-026-245-080	TR,	DTC114ES	C101	87-A11-242-040		CAP, E 220-10 M 5L SRM
	89-213-702-010	TR,	2SB1370E	C102	87-A11-242-040		CAP, E 220-10 M 5L SRM
	87-A30-076-080	C-TR,	2SC3052F	C103	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-198-080	TR,	KTC3199GR	C104	87-010-198-080		CAP, CHIP 0.022
	87-026-610-080	TR,	KTC3198GR	C105	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-075-080	C-TR,	2SA1235F	C106	87-010-493-040		CAP, E 0.47-50 GAS
	87-A30-234-080	TR,	CSC4115BC	C108	87-010-157-080		C-CAP, S 18P-50 SL
	89-505-434-540	C-FET,	2SK543 (4/5)	C109	87-012-156-080		C-CAP, 220P-50 CH
	87-026-609-080	TR,	KTA1266GR	C110	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-026-210-080	C-TR,	DTC144EK	C111	87-010-079-040		CAP, E 100-6.3 5L
	87-A30-087-080	C-FET,	2SK2158	C112	87-010-194-080		CAP, CHIP 0.047
	87-A30-073-080	C-TR,	RT1N 141C	C114	87-010-194-080		CAP, CHIP 0.047
	87-A30-273-040	C-TR,	DTC124EKA	C115	87-010-498-040		CAP, E 10-16 GAS
	87-A30-086-070	C-TR,	CSD1306E	C116	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-026-211-080	C-TR,	DTA144EK	C117	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-072-080	C-TR,	RT1P 144C	C118	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-026-297-080	C-TR,	DTA144TK	C119	87-010-322-080		C-CAP, S 100P-50 CH
	87-A30-074-080	C-TR,	RT1P 141C	C120	87-010-322-080		C-CAP, S 100P-50 CH
	87-A30-071-080	C-TR,	RT1N 144C	C121	87-010-322-080		C-CAP, S 100P-50 CH
	89-327-143-080	C-TR,	2SC2714 (0.1W)	C129	87-010-316-080		C-CAP, S 33P-50 CH
	89-418-580-080	TR,	2SD1858TV2	C130	87-012-349-080		C-CAP, S 1000P-50 J CH
DIODE				C201	87-010-491-040		CAP, ELECT 0.22-50V
	87-020-465-080	DIODE,	1SS133 (110MA)	C202	87-010-491-040		CAP, ELECT 0.22-50V
	87-017-654-060	DIODE,	GBU6J	C203	87-010-178-080		CHIP CAP 1000P
	87-A40-313-080	C-DIODE,	MC 2840	C204	87-010-492-040		CAP, ELECT 0.33-50V
	87-A40-346-080	ZENER,	MTZJ8.2C	C206	87-010-492-040		CAP, ELECT 0.33-50V
	87-A40-345-080	ZENER,	MTZJ10C	C211	87-010-560-040		CAP, ELECT 10-50V
	87-070-274-080	DIODE,	1N4003 SEM	C212	87-010-260-080		CAP, ELECT 47-25V
	87-A40-336-080	ZENER,	MTZJ27D T-72	C215	87-010-405-080		CAP, ELECT 10-50V
	87-A40-341-080	ZENER,	MTZJ 36 A	C216	87-010-405-080		CAP, ELECT 10-50V
	87-A40-270-080	C-DIODE,	MC2838	C217	87-012-368-080		C-CAP, S 0.1-50 F
	87-A40-004-080	ZENER,	MTZJ16A	C218	87-012-368-080		C-CAP, S 0.1-50 F
	87-070-136-080	ZENER,	MTZJ5.1B	C219	87-012-368-080		C-CAP, S 0.1-50 F
	87-A40-509-080	ZENER,	MTZJ6.8C	C220	87-012-368-080		C-CAP, S 0.1-50 F
	87-A40-269-080	C-DIODE,	MC2836	C221	87-010-405-080		CAP, ELECT 10-50V
	87-A40-293-080	ZENER,	DZ2.7M	C223	87-012-368-080		C-CAP, S 0.1-50 F
	87-001-731-080	ZENER,	HZS6C2L	C224	87-012-368-080		C-CAP, S 0.1-50 F
	87-A40-299-080	ZENER,	DZ5.1M	C303	87-016-044-040		CAP, ELECT 100-16V
	87-017-149-080	ZENER,	HZS6A2L	C304	87-016-044-040		CAP, ELECT 100-16V
MAIN C.B				C305	87-010-494-040		CAP, ELECT 1-50V
C1	87-012-369-080	C-CAP, S	0.047-50F	C306	87-010-494-040		CAP, ELECT 1-50V
C3	87-012-368-080	C-CAP, S	0.1-50 F	C307	87-010-553-040		CAP, ELECT 47-16V
C4	87-012-368-080	C-CAP, S	0.1-50 F	C308	87-016-044-040		CAP, ELECT 100-16V
C5	87-012-368-080	C-CAP, S	0.1-50 F	C401	87-010-196-080		CHIP CAPACITOR, 0.1-25
C6	87-012-368-080	C-CAP, S	0.1-50 F	C402	87-010-260-080		CAP, ELECT 47-25V
C7	87-012-369-080	C-CAP, S	0.047-50F	C403	87-010-404-080		CAP, ELECT 4.7-50V
C8	87-012-368-080	C-CAP, S	0.1-50 F	C404	87-010-404-080		CAP, ELECT 4.7-50V
				C405	87-010-404-080		CAP, ELECT 4.7-50V
				C406	87-010-404-080		CAP, ELECT 4.7-50V
				C407	87-010-188-080		CAP, CHIP 6800P
				C408	87-010-188-080		CAP, CHIP 6800P
				C409	87-012-140-080		CAP 470P
				C410	87-012-140-080		CAP 470P

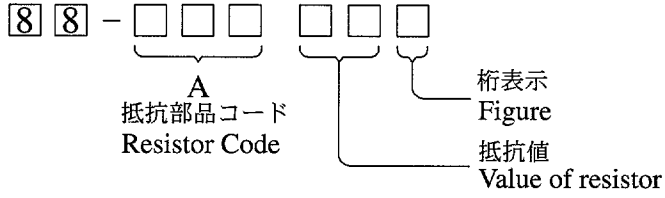
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C411	87-010-404-080		CAP, ELECT 4.7-50V	J201	87-A60-238-010		TERMINAL, SP 4P (MSC)
C412	87-010-404-080		CAP, ELECT 4.7-50V	J202	87-099-801-010		JACK, PIN 1P BLK
C413	87-010-404-080		CAP, ELECT 4.7-50V	J601	87-A60-881-010		JACK, PIN 2P MSP 242V05 PBSN
C414	87-010-404-080		CAP, ELECT 4.7-50V	J602	87-A60-881-010		JACK, PIN 2P MSP 242V05 PBSN
C415	87-010-197-080		CAP, CHIP 0.01 DM	JW002	87-008-372-080		FLTR, EMI BL01RN1
C416	87-010-197-080		CAP, CHIP 0.01 DM	L101	87-A50-333-010		COIL, OSC 9.43MHZ
C417	87-010-956-080		CHIP-CAP, S 0.068-25B	△ PR1	87-A90-393-080		PROTECTOR, 0.5A 60V 49I
C418	87-010-956-080		CHIP-CAP, S 0.068-25B	△ PR2	87-026-689-080		PROTECTOR, 1A 60V 49I
C419	87-010-260-080		CAP, ELECT 47-25V	△ PR3	87-A90-195-080		PROTECTOR 7A 125V 49
C421	87-012-140-080		CAP 470P	△ PR4	87-A90-195-080		PROTECTOR 7A 125V 49
C422	87-012-140-080		CAP 470P	△ PR5	87-026-689-080		PROTECTOR 1A 60V 49I
C552	87-010-112-080		CAP, ELECT 100-16V				
C553	87-010-260-080		CAP, ELECT 47-25V				
C554	87-010-197-080		CAP, CHIP 0.01 DM				
C555	87-010-197-080		CAP, CHIP 0.01 DM				
				FRONT C.B			
C557	87-010-405-080		CAP, ELECT 10-50V	C102	87-010-415-040		CAP, E 10-50
C573	87-010-405-080		CAP, ELECT 10-50V	C103	87-012-157-080		C-CAP, S 330P-50 CH
C574	87-010-405-080		CAP, ELECT 10-50V	C104	87-010-421-040		CAP, E 4.7-50 5L
C575	87-010-322-080		C-CAP, S 100P-50 CH	C105	87-010-421-040		CAP, E 4.7-50 5L
C605	87-010-182-080		C-CAP, S 2200P-50 B	C106	87-010-408-040		CAP, E 47-50 SME
C606	87-010-182-080		C-CAP, S 2200P-50 B	C107	87-012-369-080		C-CAP, S 0.047-50F
C607	87-010-213-080		C-CAP, S 0.015-25 B	C108	87-010-197-080		CHIP CAPACITOR, 0.01-25
C608	87-010-213-080		C-CAP, S 0.015-25 B	C109	87-010-197-080		CHIP CAPACITOR, 0.01-25
C609	87-010-491-080		CAP, ELECT 0.22-50V	C110	87-010-196-080		CHIP CAPACITOR, 0.1-25
C610	87-010-491-080		CAP, ELECT 0.22-50V	C111	87-012-368-080		C-CAP, S 0.1-50 ZF
C611	87-010-491-080		CAP, ELECT 0.22-50V	C301	87-010-196-080		CHIP CAPACITOR, 0.1-25
C612	87-010-491-080		CAP, ELECT 0.22-50V	CN101	87-A60-778-010		CONN, 18P B TMC-D(P)
C613	87-010-553-080		CAP, ELECT 47-16V	CN102	87-A60-114-010		CONN, 4P H S2M-4WR
C614	87-010-553-080		CAP, ELECT 47-16V	FL101	8A-CJ5-608-010		FL, 9-ST-18GONK
C615	87-010-154-080		CAP CHIP 10P	LED101	87-A40-317-080		LED, SLR-342VCT31 RED
C620	87-010-407-080		CAP, ELECT 33-50V	LED301	87-A40-786-080		LED, SMLS1BE16WTP4 BLU/UMB
C621	87-010-407-080		CAP, ELECT 33-50V	LED302	87-A40-786-080		LED, SMLS1BE16WTP4 BLU/UMB
C622	87-010-402-080		CAP, ELECT 2.2-50V	LED303	87-A40-786-080		LED, SMLS1BE16WTP4 BLU/UMB
C623	87-010-402-080		CAP, ELECT 2.2-50V	R102	87-022-355-080		C-RES, S10K-1/10W F
C631	87-010-401-080		CAP, ELECT 1-50V	R103	87-022-355-080		C-RES, S10K-1/10W F
C632	87-010-401-080		CAP, ELECT 1-50V	S102	87-A91-426-010		SW, RTRY 3-2-1 RE01311-2-12PCE
C633	87-010-197-080		CAP, CHIP 0.01 DM	S201	87-A90-095-080		SW, TACT EVQ11G04M
C634	87-010-197-080		CAP, CHIP 0.01 DM	S202	87-A90-095-080		SW, TACT EVQ11G04M
C635	87-012-154-080		C-CAP, S 150P-50 CH	S203	87-A90-095-080		SW, TACT EVQ11G04M
C636	87-012-154-080		C-CAP, S 150P-50 CH	S204	87-A90-095-080		SW, TACT EVQ11G04M
C637	87-012-154-080		C-CAP, S 150P-50 CH	S205	87-A90-095-080		SW, TACT EVQ11G04M
C638	87-012-154-080		C-CAP, S 150P-50 CH	S206	87-A90-095-080		SW, TACT EVQ11G04M
C639	87-010-404-080		CAP, ELECT 4.7-50V	S207	87-A90-095-080		SW, TACT EVQ11G04M
C640	87-010-404-080		CAP, ELECT 4.7-50V	S208	87-A90-095-080		SW, TACT EVQ11G04M
C641	87-010-196-080		CHIP CAPACITOR, 0.1-25	S209	87-A90-095-080		SW, TACT EVQ11G04M
C642	87-010-381-080		CAP, ELECT 330-16V	S210	87-A90-095-080		SW, TACT EVQ11G04M
C643	87-010-805-080		C-CAP, S 1-16 ZF	S211	87-A90-095-080		SW, TACT EVQ11G04M
C644	87-010-196-080		C-CAP, S 0.1-25 ZF	S212	87-A90-095-080		SW, TACT EVQ11G04M
C677	87-010-319-080		C-CAP, S 56P-50 J CH	S213	87-A90-095-080		SW, TACT EVQ11G04M
C701	87-010-196-080		C-CAP, S 0.1-25 ZF	S214	87-A90-095-080		SW, TACT EVQ11G04M
C702	87-010-196-080		C-CAP, S 0.1-25 ZF	S215	87-A90-095-080		SW, TACT EVQ11G04M
C703	87-010-196-080		C-CAP, S 0.1-25 ZF	S216	87-A90-095-080		SW, TACT EVQ11G04M
C704	87-012-140-080		C-CAP, S 470P-50 J CH				
C705	87-012-349-080		C-CAP, S 1000P-50 J CH				
C706	87-012-349-080		C-CAP, S 1000P-50 J CH				
				AC C.B			
C902	87-012-156-080		C-CAP, S 220P-50 CH	△ C1	87-A10-479-080		CAP, CER 2200P-250 M E KH
C903	87-010-322-080		C-CAP, S 100P-50 CH	C14	87-010-388-080		CAP, E 1000-25 11L SME
CN1	87-A61-142-010		CONN, 7P V THL-P07-A1	C16	87-010-496-080		CAP, E 3.3-50 5L
CN91	87-A60-619-010		CONN, 2P V 2MM JMT	△ CN1	87-A60-645-010		CONN, 3P V VH
CN601	87-A60-902-010		CONN, 14P V BLK FMN-BTRK	CN2	87-A60-620-010		CONN, 3P V 2MM JMT
CN701	87-A60-619-010		CONN, 2P V 2MM JMT	△ PT1	8Z-NF8-659-010		PT, SUB ZNF-8 (E) TAM
CN901	87-A60-770-010		CONN, 18P B TMC-D(X)	△ RY1	87-A90-977-010		RELAY, AC12V DG12D1-0(M)
CN902	87-A60-957-010		CONN, 9P V TOC-B	△ T1	87-A60-317-010		TERMINAL, 1P MSC
CN903	87-A60-189-010		CONN, 16P V TUC-P16P-B1	△ T2	87-A60-317-010		TERMINAL, 1P MSC
CN905	87-A61-258-010		CONN, 15P V 52806-1510				
				HP JACK C.B			
CNA701	8A-CJ5-634-010		CONN ASSY, 2P SHLD				
FB701	87-A50-189-080		C-COIL, S BLM21B272S	J101	87-A60-420-010		JACK, 3.5 ST (MSC)
FC601	8A-CJ5-633-010		CABLE, FFC 14P-1.0-10				
FC902	8A-CJ5-632-010		CABLE, FFC 9P-1.0-20				
FC905	8A-CJ5-630-010		CABLE, FFC 15P-1.0-20				
				TUNER C.B			

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C701	87-010-381-080		CAP,ELECT 330-16V	C823	87-012-286-080		CAP,U 0.01-25
C702	87-010-404-080		CAP,ELECT 4.7-50V	C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C703	87-012-286-080		CAP,U 0.01-25	C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C704	87-012-286-080		CAP,U 0.01-25	C859	87-012-286-080		C-CAP,U 0.01-25 KB
C709	87-012-195-080		C-CAP,U 100P-50CH	C861	87-012-199-080		C-CAP,U 220P-50 J CH
C711	87-010-260-080		CAP,ELECT 47-25V	C862	87-012-199-080		C-CAP,U 220P-50 J CH
C712	87-010-831-080		C-CAP,U,0.1-16F	C863	87-012-270-080		C-CAP,U 470P-50 KB
C713	87-012-286-080		CAP,U 0.01-25	C864	87-010-405-080		CAP,E 10-50 M 11L SME
C714	87-012-286-080		CAP,U 0.01-25	C865	87-010-196-080		C-CAP,S 0.1-25 ZF
C715	87-012-195-080		C-CAP,U 100P-50CH	C866	87-010-405-080		CAP,E 10-50 M 11L SME
C717	87-012-286-080		CAP,U 0.01-25	C867	87-012-286-080		C-CAP,U 0.01-25 KB
C719	87-012-286-080		CAP,U 0.01-25	C868	87-012-184-080		C-CAP,U 33P-50 J CH
C720	87-012-195-080		C-CAP,U 100P-50CH	C869	87-012-180-080		C-CAP,U 22P-50 J CH
C721	87-012-176-080		CAP,15P	C940	87-012-286-080		C-CAP,U 0.01-25 KB
C722	87-012-176-080		CAP,15P	C942	87-012-168-080		C-CAP,U 6P-50 D CH
C723	87-012-274-080		CHIP CAP,U 1000P-50B	C947	87-012-286-080		C-CAP,U 0.01-25 KB
C725	87-018-131-080		CAP,TC U 1000P-50 KB	C949	87-A10-039-080		C-CAP,U 470P-50 J CH
C727	87-010-196-080		CHIP CAPACITOR,0.1-25	C952	87-012-286-080		C-CAP,U 0.01-25 KB
C728	87-010-248-080		CAP,ELECT 220-10V	C958	87-010-197-080		C-CAP,S 0.01-25 KB
C729	87-012-274-080		CHIP CAP,U 1000P-50B	C959	87-010-831-080		C-CAP,U 0.1-16 ZF
C731	87-012-286-080		CAP,U 0.01-25	C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C733	87-012-280-080		C-CAP,U 3300P-50 KB	C962	87-010-401-080		CAP,E 1-50 M 11L SME
C734	87-012-280-080		C-CAP,U 3300P-50 KB	CF801	87-008-423-010		FLTR,CF SFE10.7MS3G-A
C752	87-012-282-080		C-CAP,U 4700P-50 KB	CF802	82-785-747-010		CF,MS2 GHY R
C753	87-012-195-080		C-CAP,U 100P-50 J CH	CN701	87-A60-650-010		CONN,16P H GRY TUC-P16X-C1
C755	87-012-286-080		CAP,U 0.01-25	FFE801	A8-6ZA-191-130		6ZA-1 FEENM
C756	87-012-286-080		CAP,U 0.01-25	J801	87-033-241-010		TERMINAL,ANT 2P AJ-2039
C757	87-012-188-080		C-CAP,U 47P-50 CH	L771	87-A50-266-010		COIL, FM DET-2N(TOK)
C758	87-012-167-080		C-CAP,U 5P-50 CH	L772	87-A91-110-010		FLTR,PCFUZH-450(TOK)
C761	87-010-196-080		C-CAP,S 0.1-25 ZF	L781	87-005-847-010		COIL,2.2UH K CECS
C762	87-012-286-080		CAP,U 0.01-25	L791	87-A50-027-010		COIL,1 POLE MPX(TOK)
C763	87-010-829-080		CAP,U 0.047-16	L792	87-A50-027-010		COIL,1 POLE MPX(TOK)
C765	87-012-286-080		CAP,U 0.01-25	L832	87-005-847-080		COIL,2.2UH K CECS
C766	87-010-197-080		C-CAP,S 0.01-25 KB	L851	87-005-847-080		COIL,2.2UH K CECS
C768	87-012-286-080		CAP,U 0.01-25	L941	87-A50-020-010		COIL,ANT LW(COI)252KHZ
C769	87-010-260-080		CAP,ELECT 47-25V	L942	87-A50-019-010		COIL,OSC LW(COI) 856KHZ
C770	87-010-829-080		CAP,U 0.047-16	L981	8Z-ZA1-665-010		COIL,AM PACK 2(TOK)
C771	87-010-383-080		CAP,ELECT 33-25V	TC942	87-011-164-010		TRIMMER,CER 30P 4.5X3.9 VCT31
C772	87-010-829-080		CAP,U 0.047-16	X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C773	87-010-196-080		CHIP CAPACITOR,0.1-25	X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309
C774	87-010-263-080		CAP,ELECT 100-10V				
C775	87-010-404-080		CAP,ELECT 4.7-50V				
C776	87-012-286-080		CAP,U 0.01-25				
C777	87-010-493-080		CAP,E 0.47-50 M 5L SRE				
C778	87-010-401-080		CAP,ELECT 1-50V				
C779	87-010-401-080		CAP,ELECT 1-50V				
C780	87-010-196-080		CHIP CAPACITOR,0.1-25				
C781	87-010-405-080		CAP,ELECT 10-50V				
C782	87-010-405-080		CAP,ELECT 10-50V				
C783	87-012-286-080		CAP,U 0.01-25				
C784	87-012-286-080		CAP,U 0.01-25				
C785	87-010-402-080		CAP,ELECT 2.2-50V				
C786	87-010-402-080		CAP,ELECT 2.2-50V				
C787	87-012-275-080		C-CAP,U 1200P-50 B				
C788	87-012-275-080		C-CAP,U 1200P-50 B				
C789	87-012-275-080		C-CAP,U 1200P-50 B				
C790	87-012-275-080		C-CAP,U 1200P-50 B				
C791	87-010-405-080		CAP,ELECT 10-50V				
C793	87-012-273-080		C-CAP,U 820P-50 B				
C794	87-010-406-080		CAP,ELECT 22-50				
C795	87-010-596-080		CAP,S 0.047-16				
C796	87-010-403-080		CAP,ELECT 3.3-50V				
C797	87-012-276-080		C-CAP,U 1500P-50 KB				
C798	87-012-276-080		C-CAP,U 1500P-50 KB				
C799	87-010-829-080		CAP,U 0.047-16				
C812	87-012-286-080		CAP,U 0.01-25				
C814	87-012-286-080		CAP,U 0.01-25				
C820	87-010-260-080		CAP,ELECT 47-25V				
C821	87-012-286-080		CAP,U 0.01-25				
C822	87-012-286-080		CAP,U 0.01-25				

チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



ECB

CSC4115
KTA1266
KTC3198



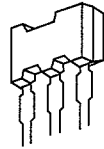
ECB

DTC114ES
KTC3199



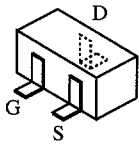
BCE

2SB1370

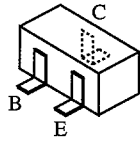


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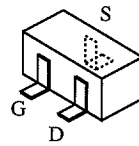
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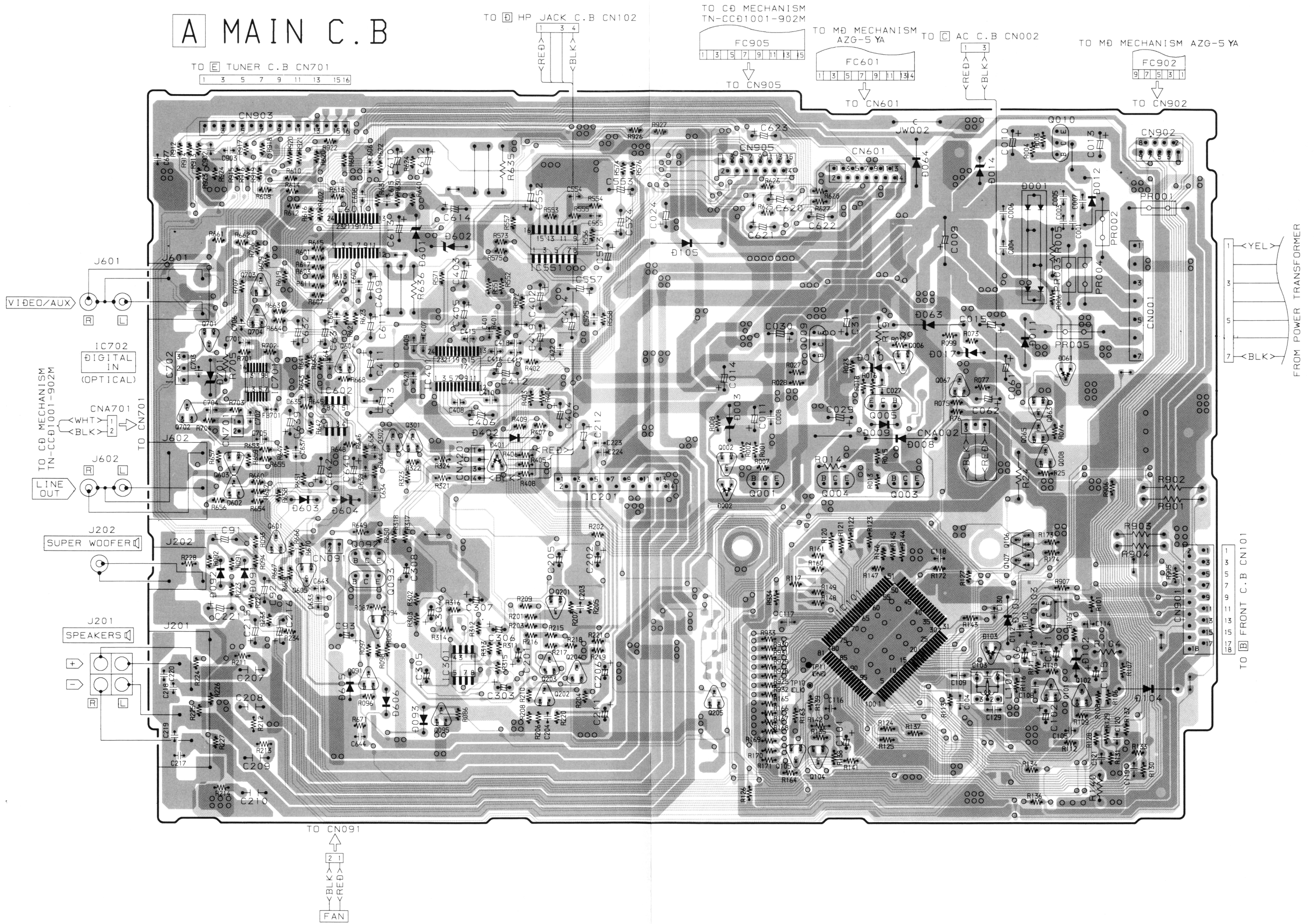


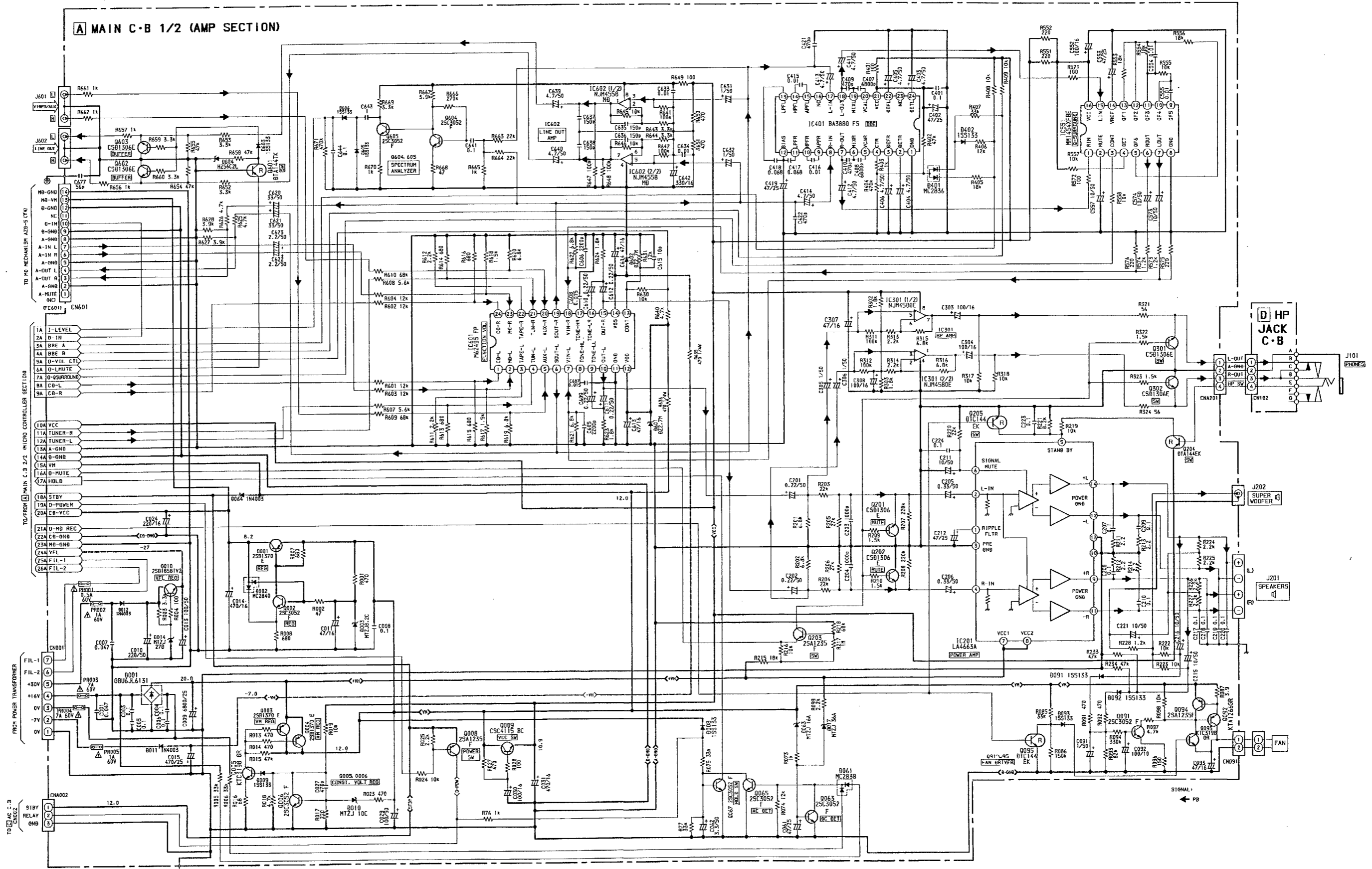
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2SC3052 RT1N144C
CSD1306 RT1P141C
DTC144EK RT1P144C
DTC124EK RT1N141C



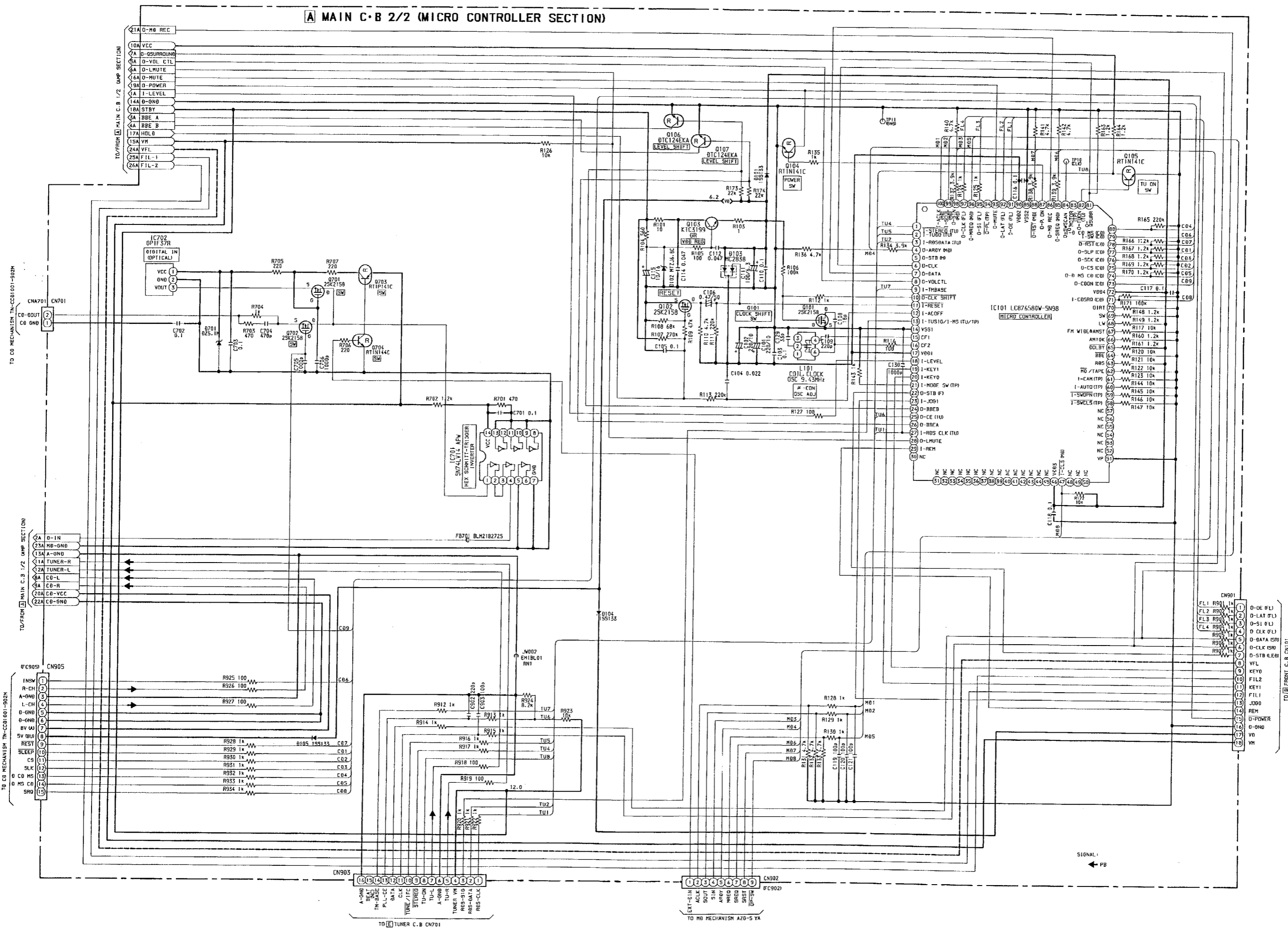
2SK543(4/5)

A MAIN C.B



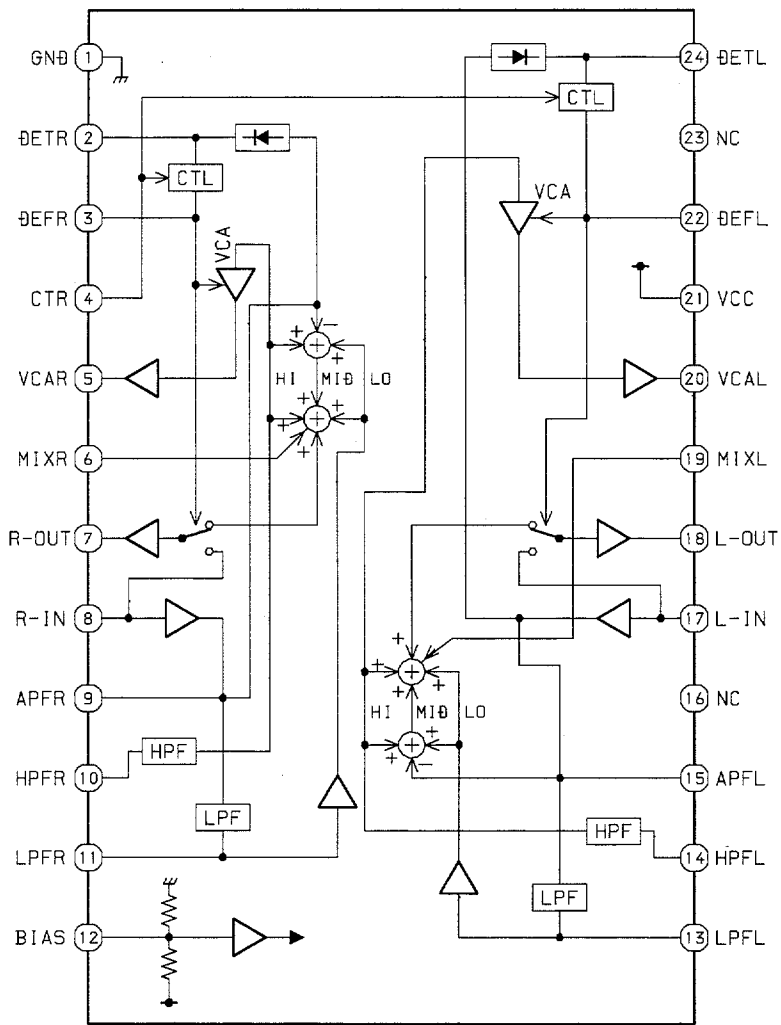


A MAIN C-B 2/2 (MICRO CONTROLLER SECTION)

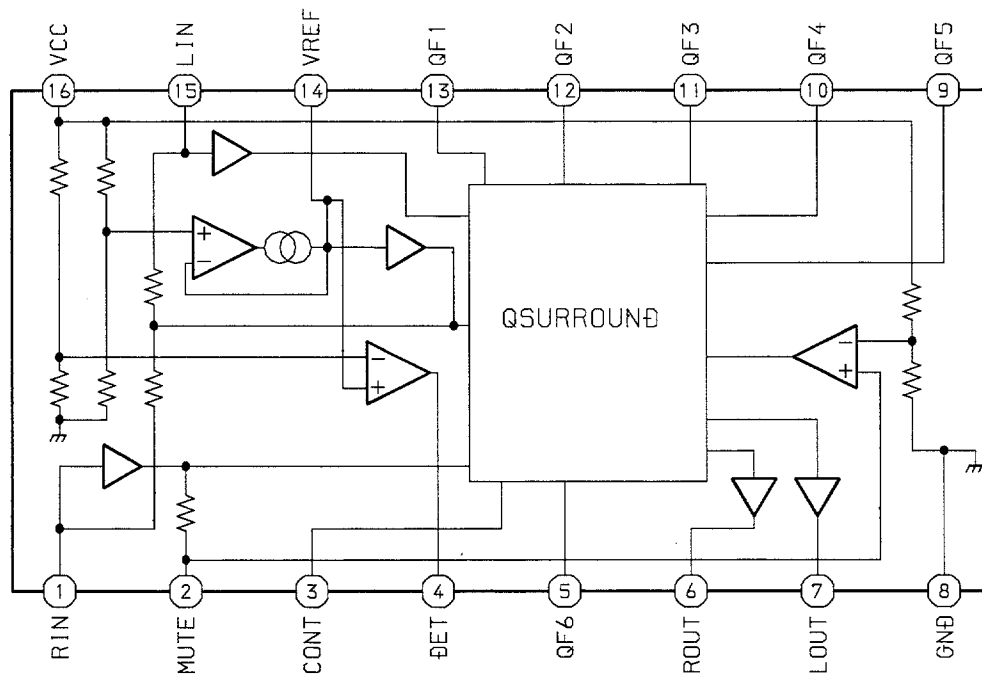


IC BLOCK DIAGRAM - 1

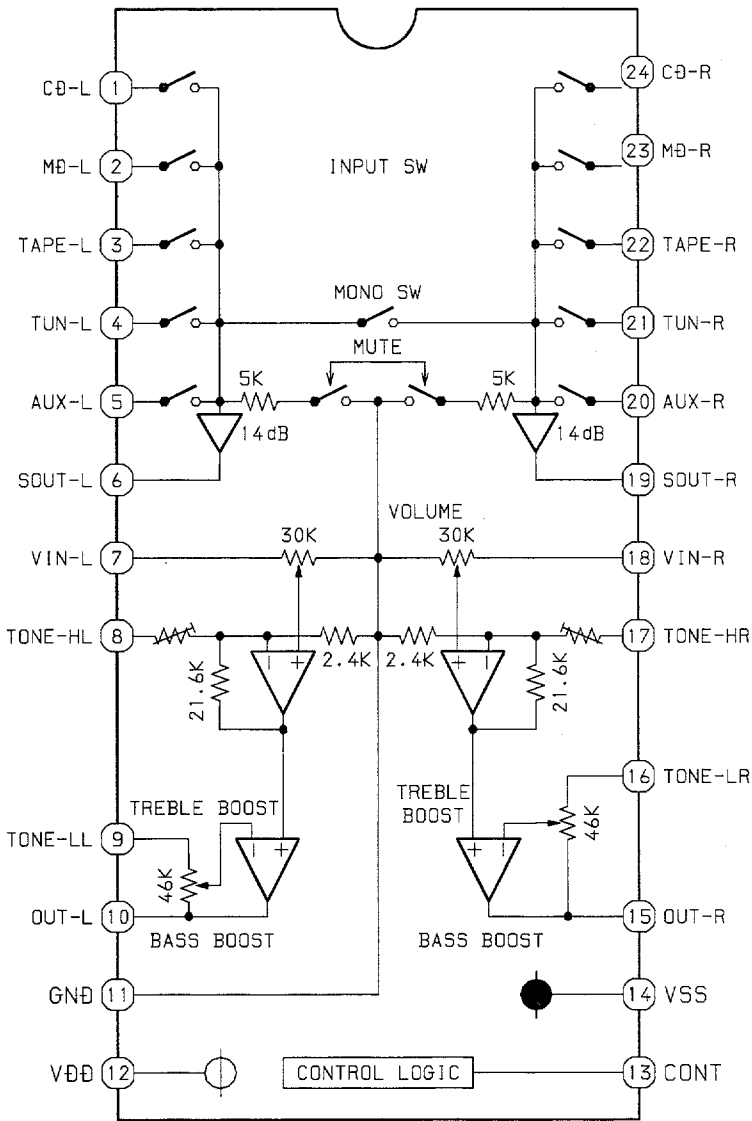
IC, BA3880FS



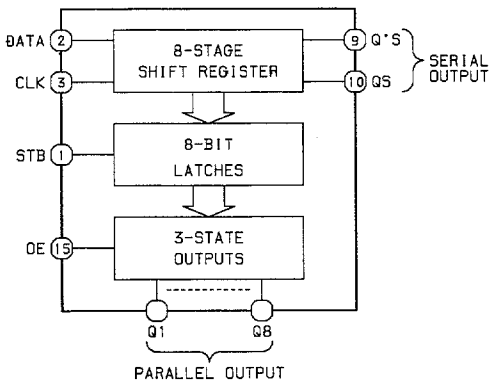
IC, MM1454XFBE



IC, M62495FP



IC, BU4094BCF



TRUTH TABLE

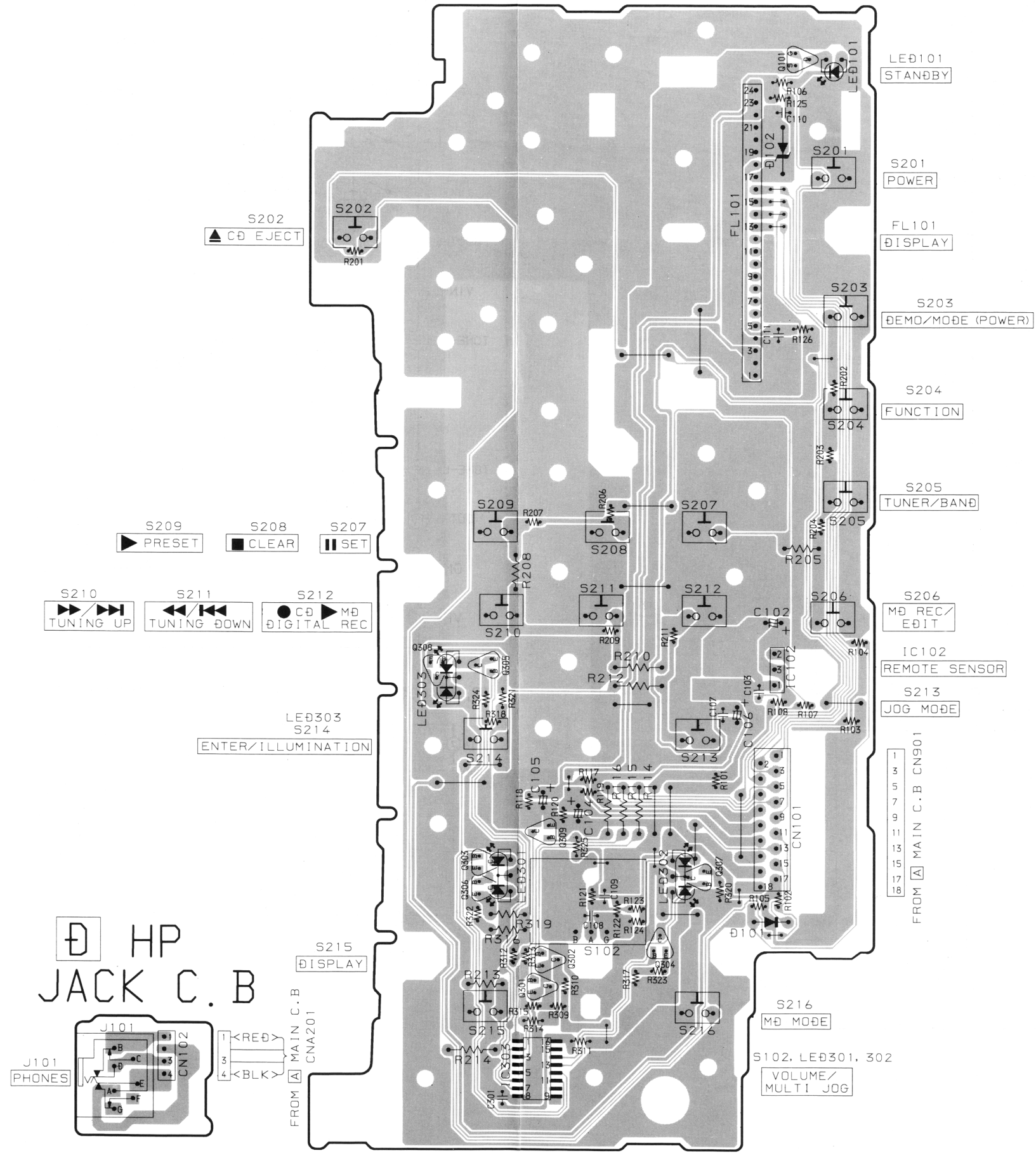
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Q5	Q'S
\bar{f}	L	x	x	Z	Z	Q7	NO CHG.
\bar{f}	L	x	x	Z	Z	NO CHG.	Q5
\bar{f}	H	L	x	NO CHG.	NO CHG.	Q7	NO CHG.
\bar{f}	H	H	L	L	Qn-1	Q7	NO CHG.
\bar{f}	H	H	H	H	Qn-1	Q7	NO CHG.
\bar{f}	H	x	x	NO CHG.	NO CHG.	NO CHG.	Q5

Z = HIGH IMPEDANCE
 x = DON'T CARE

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A
B
C
D
E
F
G
H
I
J

B FRONT C.B



WIRING - 3 (TUNER)

1 2 3 4 5 6 7

A

B

C

E TUNER C.B

CN903
16 15 13 11 9 7 5 3 1
TO [A] MAIN C.B CN903

D

E

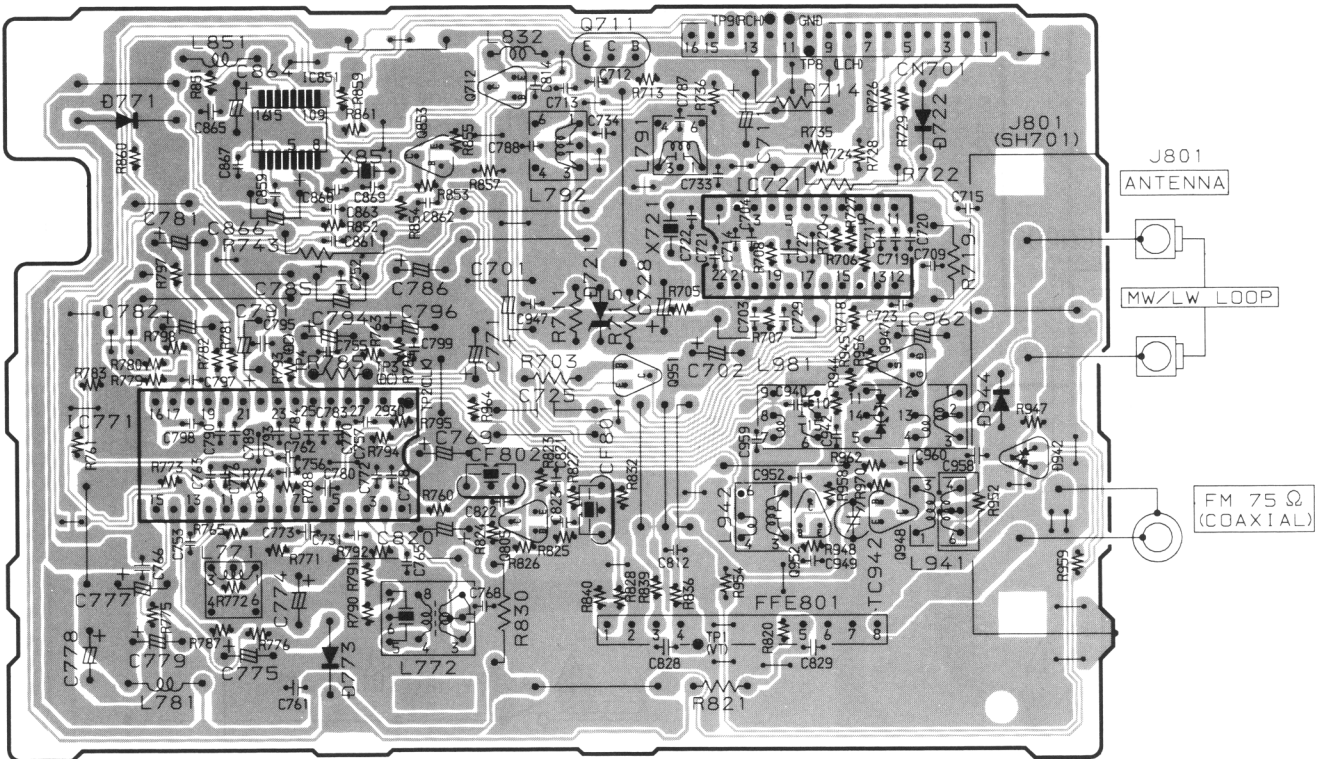
F

G

H

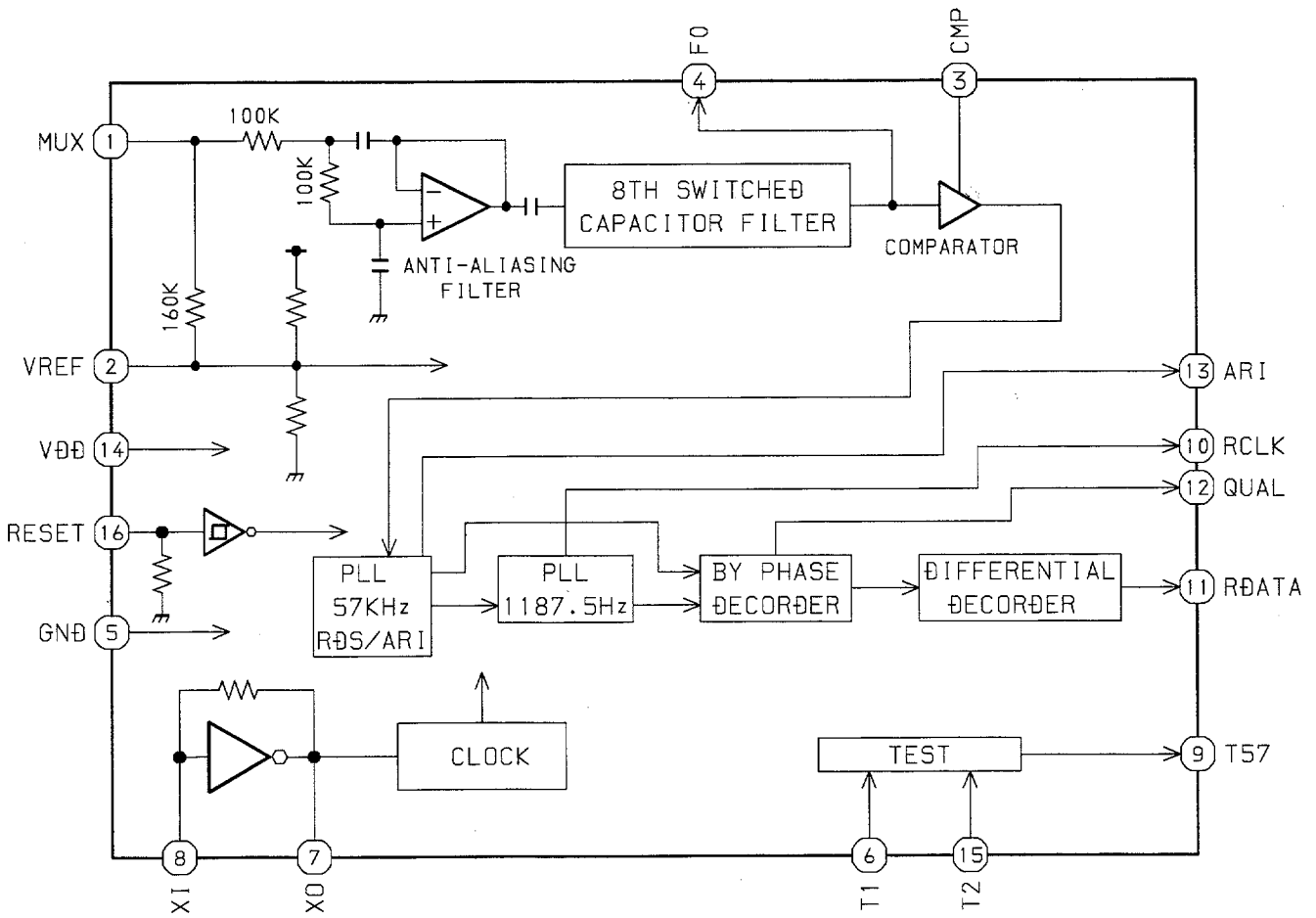
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J

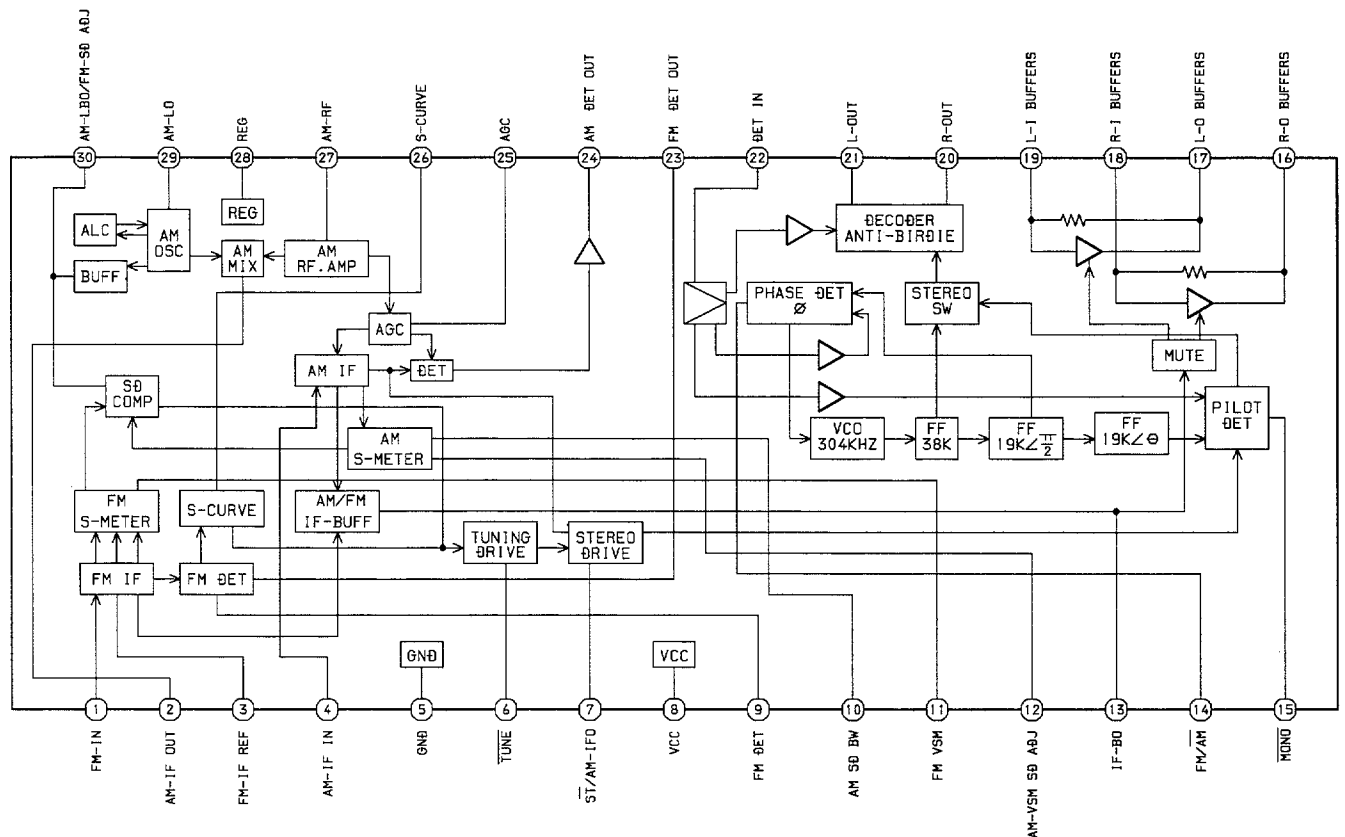


IC BLOCK DIAGRAM - 2

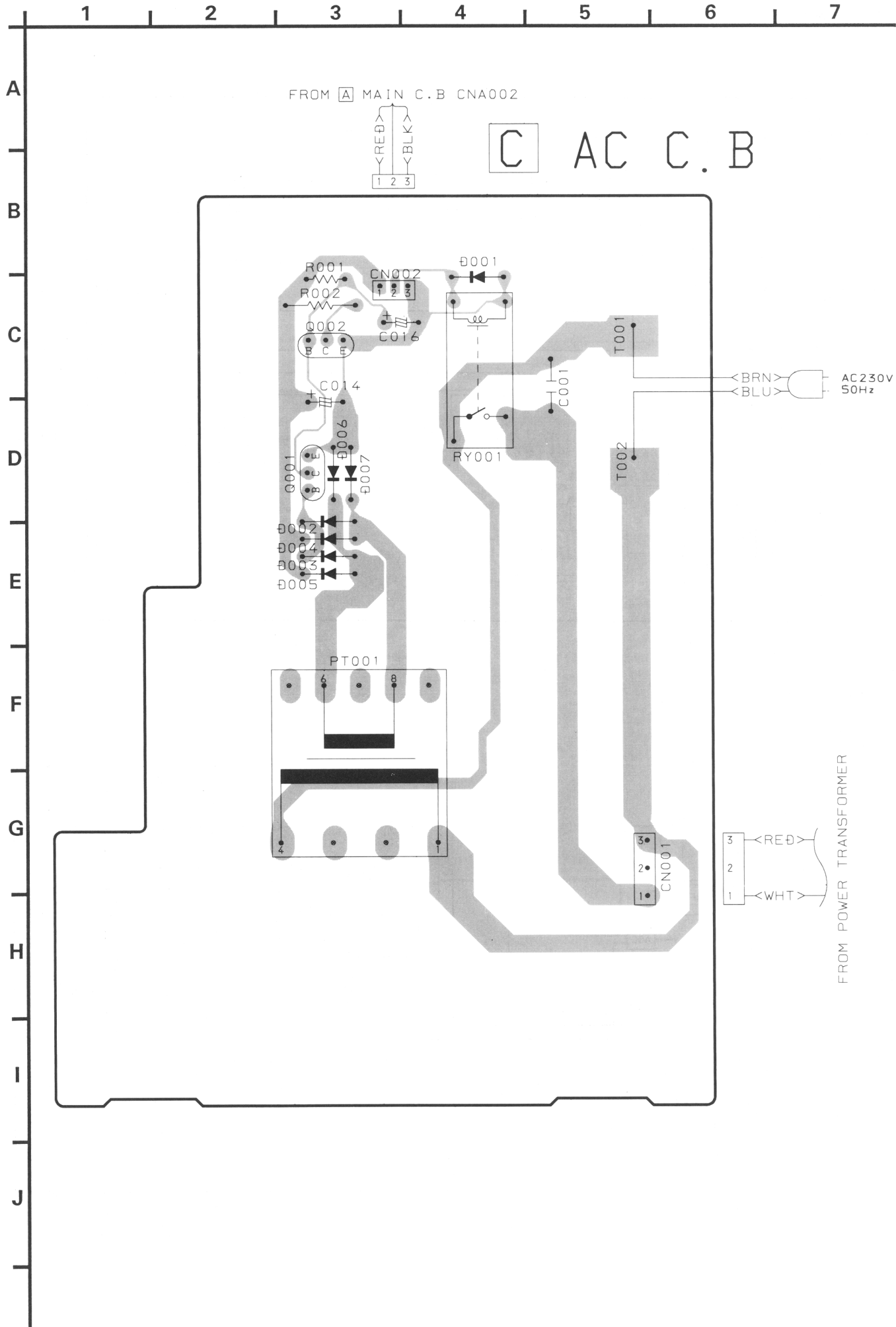
IC, BU1920FS



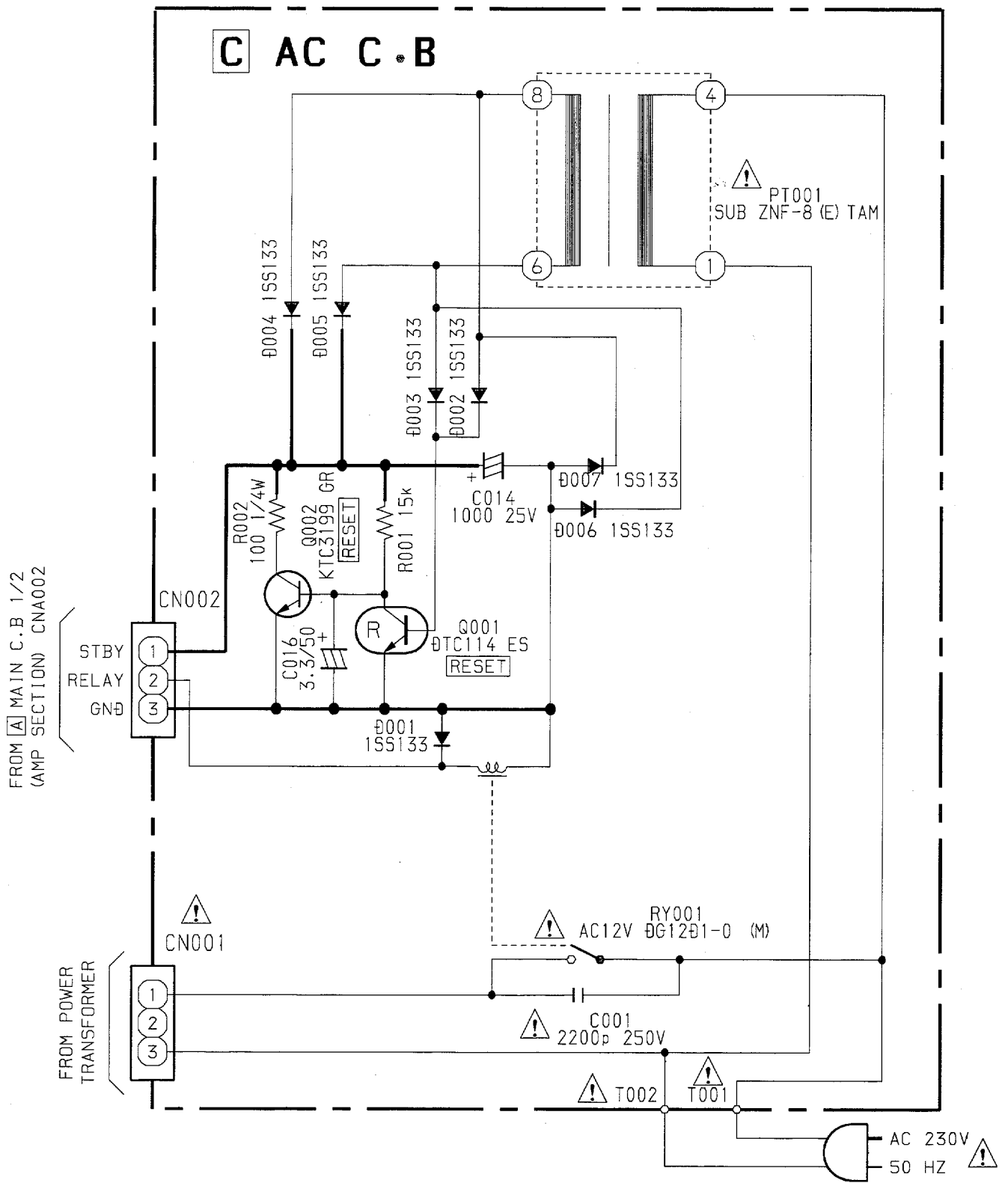
IC, LA1837NL



WIRING - 4 (AC)



SCHEMATIC DIAGRAM - 5 (AC)



IC DESCRIPTION

IC, LC876580W-5N98

Pin No.	Pin Name	I/O	Description
1	I-STEREO (TU)	I	Tuner stereo detection.
2	I-TUDO (TU)	I	Connect to tuner PLL IC, LC72131D Pin6 (DO).
3	I-RDS DATA (TU)	I	RDS data input.
4	O-ARDY (MD)	O	Serial data for MD unit control reception / transmission ready output.
5	O-STB (M)	O	Main shift register: latch output (Not used).
6	O-CLK	O	Front shift register BU4094BCF (reversal) and tuner PLL IC, LC72131D combination clock output.
7	O-DATA	O	Front shift register BU4094BCF (reversal) and tuner PLL IC, LC72131D combination data output.
8	O-VOLCTL	O	Connect to Function VOL IC, M62495FP pin13 (CONT).
9	I-TMBASE	I	Reference clock input. Connect to LC72131D Pin 7 (T-BASE).
10	O-CLK SHIFT	O	Clock shift control output.
11	I-RESET	I	MICON reset.
12	I-ACOFF	I	Hold status detection.
13	I-TU SIG / I-MS (TU / TP)	I	AD for RDS signal level input / Tape music sensor input (Not used).
14	VSS 1	-	GND.
15	CF 1	-	Connect to 9.43MHz crystal oscillation.
16	CF 2	-	Connect to 9.43MHz crystal oscillation.
17	VDD 1	-	MICON power supply (+5V).
18	I-LEVEL	I	Level meter input (AD).
19	I-KEY1	I	Key 1: AD input.
20	I-KEY0	I	Key 0: AD input.
21	I-MODE SW (TP)	I	Deck mechanical status detection input (AD).
22	O-STB (F)	O	Front shift register BU4094BCF's latch reversal output.
23	I-JOG1	I	AD input from multi jog rotary encoder output A/B.
24	O-BBEB	O	BBE control reversal output (B).
25	O-CE (TU)	O	Tuner PLL IC, LC72131D chip enable output.
26	O-BBEA	O	BBE control reversal output (A).
27	I-RDS CLK (TU)	I	RDS clock input.
28	O-LMUTE	O	Line mute output.
29	I-REM	I	Remote controller input.
30	NC	-	Not connected.
31	NC	-	Not connected.
32	NC	-	Not connected.
33	NC	-	Not connected.
34	NC	-	Not connected.
35	NC	-	Not connected.
36	NC	-	Not connected.
37	NC	-	Not connected.


Pin No.	Pin Name	I/O	Description
38	NC	-	Not connected.
39	NC	-	Not connected.
40	NC	-	Not connected.
41	NC	-	Not connected.
42	NC	-	Not connected.
43	NC	-	Not connected.
44	NC	-	Not connected.
45	NC	-	Not connected.
46	VDD3	-	MICON power supply (+5V).
47	I-CLS (MD)	I	MD unit close detection SW input / Close at L.
48	NC	-	Not connected.
49	NC	-	Not connected.
50	NC	-	Not connected.
51	VP	-	GND.
52	NC	-	Not connected.
53	NC	-	Not connected.
54	NC	-	Not connected.
55	NC	-	Not connected.
56	NC	-	Not connected.
57	NC	-	Not connected.
58	$\overline{\text{I-SWCLS}}$ (TP)	I	Connect to GND through a resistor.
59	$\overline{\text{I-SWOPN}}$ (TP)	I	Connect to GND through a resistor.
60	I-AUTO (TP)	I	Deck mechanical status detection input (AUTO). Connect to GND through a resistor.
61	I-CAM (TP)	I	Deck mechanical status detection input (CAM). Connect to GND through a resistor.
62	$\overline{\text{MD / TAPE}}$	I	Initial matrix input (L: MD / H: TAPE). Connect to GND through a resistor.
63	RDS	I	Initial matrix input (H: RDS). Connect to VDD3 through a resistor.
64	$\overline{\text{BBE}}$	I	Initial matrix input (L: BBE). Connect to GND through a resistor.
65	$\overline{\text{DOLBY}}$	I	Initial matrix input (L: DOLBY). Connect to VDD3 through a resistor.
66	AM10K	I	Initial matrix input (H: 10K STEP / L: 9K STEP). Connect to GND through a resistor.
67	FM WIDE&AMST	I	Initial matrix input (H: FM WIDE & AM STEREO). Connect to GND through a resistor.
68	LW	I	Initial matrix input (H: LW). Connect to VDD3 through a resistor.
69	SW	I	Initial matrix input (H: SW). Connect to GND through a resistor.
70	OIRT	I	Initial matrix input (H: OIRT). Connect to GND through a resistor.
71	I-CDSRQ (CD)	I	CD data transmission request signal input.
72	VDD4	-	MICON power supply (+5V).
73	O-CDON (CD)	O	CD power supply control output.
74	O-D MS CD (CD)	O	Transmission output to CD MICON.
75	O-CS CD (CD)	O	Data transmission request output to CD MICON.
76	O-SCK (CD)	O	Data reception and transmission clock output to CD MICON.

Pin No.	Pin Name	I/O	Description
77	O-SLP (CD)	O	Sleep output to CD MICON.
78	$\overline{\text{O-RST}}$ (CD)	O	Reset output to CD MICON.
79	I-SWCD	I	CD disc detection switch / H active.
80	I-D CD MS (CD)	I	Transmission data from CD MICON.
81	O-QSURR	O	Q-surround IC control output.
82	O-TUON (TU)	O	Tuner power supply switch output.
83	O-MOTOR (TP)	O	Deck mechanical motor control output (Not used).
84	O-SWSCAN	O	Tuner test mode TP (Used for coil adjustment point).
85	O-SREQ (MD)	O	Serial data for MD unit control transmission request.
86	O-MD REC	O	Output H at MD REC.
87	O-P.ON	O	Power on output.
88	$\overline{\text{O-RST}}$ (MD)	O	MD unit reset signal output.
89	VSS2	-	GND.
90	VDD2	-	MICON power supply (+5V).
91	O-OE (FL)	O	Output function output to FL driver.
92	O-LAT (FL)	O	Latch output to FL driver.
93	O-MUTE	O	Main mute output.
94	$\overline{\text{O-PL}}$ (TP)	O	Deck mechanical plunger control output (Not used).
95	O-SI (FL)	O	Serial data output to FL driver.
96	O-MrEQ (MD)	O	Serial data for MD unit control transmission request.
97	O-CLK (FL)	O	Clock output to FL driver.
98	O-SIN (MD)	O	Serial data for MD unit control output.
99	I-SOUL (MD)	I	Serial data for MD unit control input.
100	I-ACLK (MD)	I	Serial data for MD unit control input.

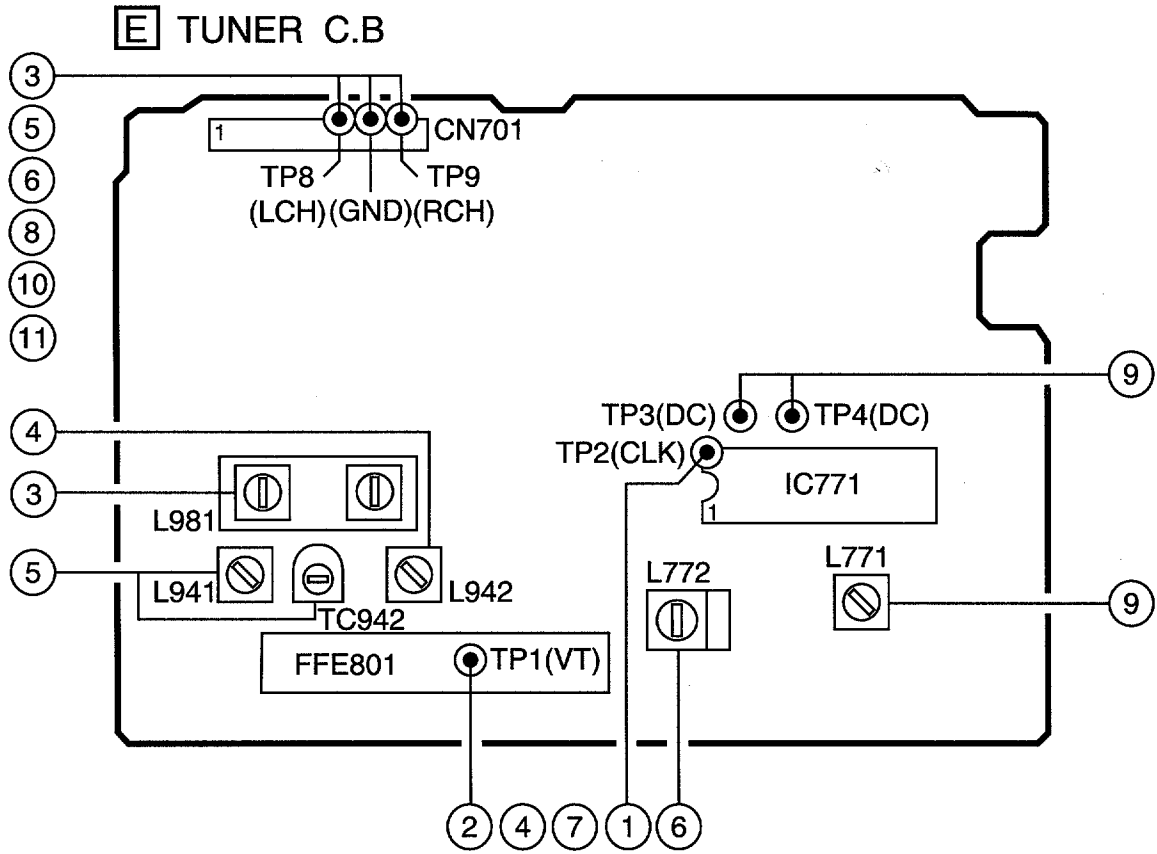
IC, LC72131D

Pin No.	Pin Name	I/O	Description																								
1	XIN	I/O	A crystal oscillator (4.5MHz) is connected between these pins.																								
22	XOUT																										
2	NC	-	Not connected.																								
3	CE	I	To enable the IC. Active "H".																								
4	DI	I	Digital data input from CPU when relevant key is operated. Active "H".																								
5	CL	I	To clock in the data DI.																								
6	DO	O	Digital data output to CPU.																								
7	T-BASE	O	Outputs a reference clock signal (8Hz) for the clock.																								
8	MONO / BEAT	O	Outputs "H" when BEAT is switched.																								
9	$\overline{\text{FM}} / \overline{\text{SW}}$	O	Outputs "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	H	L	H	H	L	H	L	L
2 BAND		3 BAND			3 BAND																						
AM	FM	LW	MW	FM	MW	SW	FM																				
H	L	H	H	L	H	L	L																				
10	$\overline{\text{MW}}/\text{SW}$	O	Outputs "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	L	L	H	L	L	L	H	L
2 BAND		3 BAND			3 BAND																						
AM	FM	LW	MW	FM	MW	SW	FM																				
L	L	H	L	L	L	H	L																				
11	IF-MUTE	O	To control internal counter.																								
12	IF-IN	I	General purpose counter input.																								
13	$\overline{\text{TUNE}}$	I	Receives "L" when station is tuned.																								
14	NC	-	Not connected.																								
15	AM IN	I	Receives the AM local oscillator frequency signal.																								
16	FM IN	I	Receives the FM local oscillator frequency signal.																								
17	VDD	-	Supply power to IC (+5V).																								
18	PD	O	PLL charge pump output.																								
19	AIN	I	The MOS transistor for PLL active low pass filter.																								
20	AOUT	O																									
21	VSS	-	Ground.																								

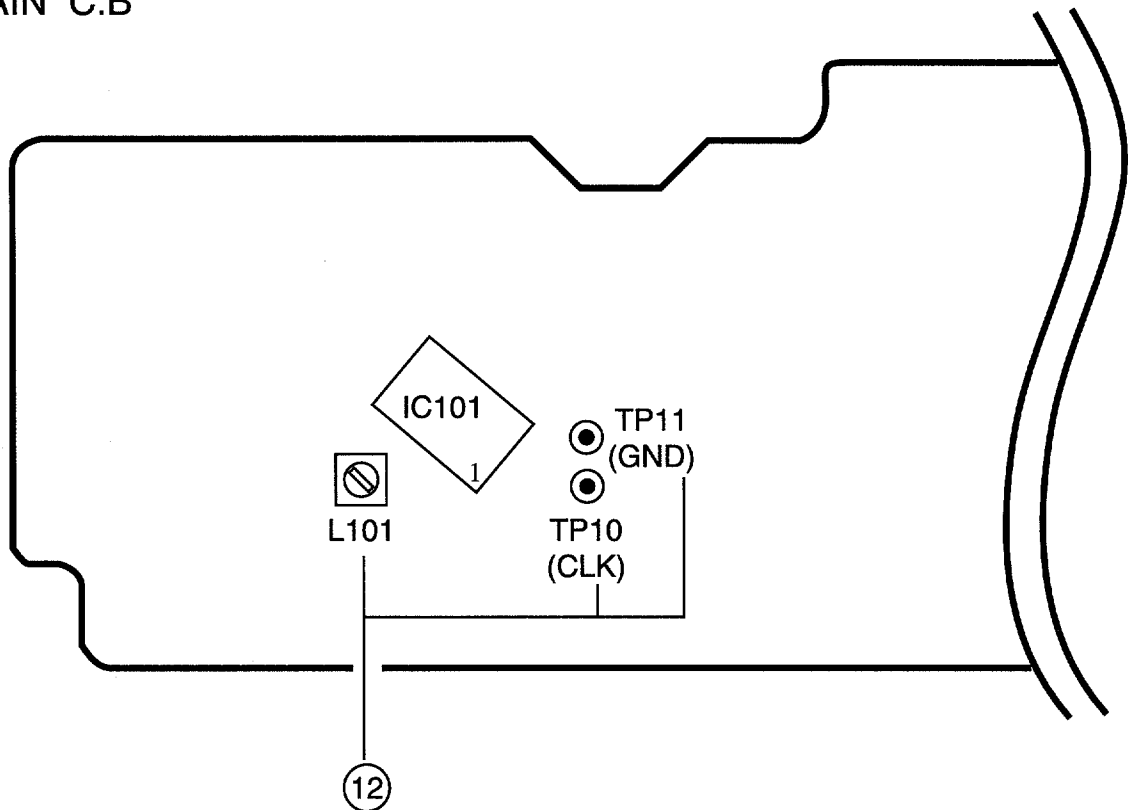
ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G (A~E)
P1	-	-	-	1-1A	1-1A	1-1A	1-1A	1-1A	ROCK
P2	-	-	-	2-1A	2-1A	2-1A	2-1A	2-1A	POP
P3	-	-	-	3-1A	3-1A	3-1A	3-1A	3-1A	JAZZ
P4	-	-	-	4-1A	4-1A	4-1A	4-1A	4-1A	1
P5	-	-	-	5-1A	5-1A	5-1A	5-1A	5-1A	11
P6	-	-	-	1-2A	1-2A	1-2A	1-2A	1-2A	2
P7	-	-	-	2-2A	2-2A	2-2A	2-2A	2-2A	12
P8	-	-	-	3-2A	3-2A	3-2A	3-2A	3-2A	3
P9	-	-	-	4-2A	4-2A	4-2A	4-2A	4-2A	13
P10	-	-	-	5-2A	5-2A	5-2A	5-2A	5-2A	4
P11	-	-	-	1-3A	1-3A	1-3A	1-3A	1-3A	14
P12	-	-	-	2-3A	2-3A	2-3A	2-3A	2-3A	5
P13	-	-	-	3-3A	3-3A	3-3A	3-3A	3-3A	15
P14	-	-	-	4-3A	4-3A	4-3A	4-3A	4-3A	S13
P15	-	-	-	5-3A	5-3A	5-3A	5-3A	5-3A	6
P16	-	-	-	1-4A	1-4A	1-4A	1-4A	1-4A	16
P17	-	-	-	2-4A	2-4A	2-4A	2-4A	2-4A	7
P18	-	-	-	3-4A	3-4A	3-4A	3-4A	3-4A	17
P19	-	-	-	4-4A	4-4A	4-4A	4-4A	4-4A	8
P20	-	-	-	5-4A	5-4A	5-4A	5-4A	5-4A	18
P21	-	-	-	1-5A	1-5A	1-5A	1-5A	1-5A	9
P22	-	-	-	2-5A	2-5A	2-5A	2-5A	2-5A	19
P23	-	-	-	3-5A	3-5A	3-5A	3-5A	3-5A	10
P24	-	-	-	4-5A	4-5A	4-5A	4-5A	4-5A	20
P25	-	-	-	5-5A	5-5A	5-5A	5-5A	5-5A	RANDOM
P26	-	-	-	1-6A	1-6A	1-6A	1-6A	1-6A	
P27	-	-	-	2-6A	2-6A	2-6A	2-6A	2-6A	1
P28	-	-	-	3-6A	3-6A	3-6A	3-6A	3-6A	PRGM
P29	-	-	-	4-6A	4-6A	4-6A	4-6A	4-6A	T-BASS
P30	-	-	-	5-6A	5-6A	5-6A	5-6A	5-6A	B1
P31	-	-	-	1-7A	1-7A	1-7A	1-7A	1-7A	B2
P32	-	-	-	2-7A	2-7A	2-7A	2-7A	2-7A	B3
P33	-	-	-	3-7A	3-7A	3-7A	3-7A	3-7A	BBE
P34	-	-	-	4-7A	4-7A	4-7A	4-7A	4-7A	B4
P35	-	-	-	5-7A	5-7A	5-7A	5-7A	5-7A	B5

	1G	2G	3G	4G	5G	6G	7G	8G	9G (A~E)
P36	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	B6
P37	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	S14
P38	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	QSURROUND
P39	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	AI
P40	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	EDIT
P41	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	TIME MARK
P42	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	AUTO MARK
P43	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	MONO
P44	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	(∞∞)
P45	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	RDS
P46	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	AG
P47	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	EON
P48	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	RT
P49	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	Ⓜ
P50	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	SLEEP
P51	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	REC
P52	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	TAPE REC
P53	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	MD REC
P54	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	S1
P55	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	S7
P56	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	S2
P57	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	S8
P58	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	S3
P59	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	S9
P60	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	S4
P61	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	S10
P62	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	S5
P63	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	S11
P64	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	S6
P65	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	S12
P66	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	CD
P67	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	MD
P68	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	-
P69	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	-
P70	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	-



A MAIN C.B



< TUNER SECTION >

1. Clock Frequency Check
 Settings : • Test point : TP2 (CLK)
 Method : Set to MW 1602kHz and check that the test point is 2052kHz \pm 45Hz.

2. MW VT Check
 Settings : • Test point : TP1 (VT)
 Method : Set to MW 1602kHz and check that the test point is less than 8.0V. Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW Tracking Adjustment
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Adjustment location : L981 (1/3)
 Method : Set to MW 999kHz and adjust L981 (1/3) so that the test point becomes maximum.

4. LW VT Adjustment
 Settings : • Test point : TP1 (VT)
 • Adjustment location : L942
 Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V \pm 0.05V.
 Then set to LW 290kHz and check that the test point is less than 8.0V.

5. LW Tracking Adjustment
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Adjustment location :
 L941 144kHz
 TC942 290kHz
 Method : Set up TC942 to center before adjustment.
 The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

6. AM IF Adjustment
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Adjustment location :
 L772 450kHz

7. FM VT Check
 Settings : • Test point : TP1 (VT)
 Method : Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

8. FM Tracking Check
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 Method : Set to FM 98.0MHz and check that the test point is less than 13dB μ V.

9. DC Balance / Mono Distortion Adjustment
 Settings : • Test point : TP3,TP4 (DC balance)
 • Adjustment location : L771
 • Input level : 60dB μ V
 Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V \pm 0.04V.
 Next, check that the distortion is less than 1.3%.

10. Output Level Check
 <MW>
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Input level : 74dB μ V
 Method : Set to MW 999kHz and check that the test point is 130mV \pm 3dB.

 <FM>
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Input level : 60dB μ V
 Method : Set to FM 98.0MHz and check that the test point is 520mV \pm 3dB.

11. FM Separation Check
 Settings : • Test point : TP8 (Lch), TP9 (Rch)
 • Input level : 60dB μ V
 Method : Set to FM 98.0MHz and check that the test point is more than 12dB.

< MAIN SECTION >

12. μ -CON OSC Adjustment
 Settings : • Test point : TP10 (CLK), TP11 (GND)
 • Adjustment location : L101
 Method : Insert AC plug while pressing TUNER function key. Adjust L101 so that the frequency at the test point is 97.258Hz \pm 0.098Hz.

CD TEST MODE

1. How to activate CD Test Mode

Insert the AC plug while pressing the “Enter” button. FL display is fully illuminated and test mode will be activated. Insert the test disc and operate the test mode following the control method as shown below.
 Note: If no CD was inserted, it displays “No Disc” and cannot be operated.

2. How to cancel CD Test Mode

Either one of the following operations will cancel the CD test mode.

- Disconnect the AC plug.
- Press “Function” button.
- Press “Power” button.
- Press “Band” button.

3. CD Test Mode functions

When test mode is activated, the following mode functions can be used by pressing the operation keys.

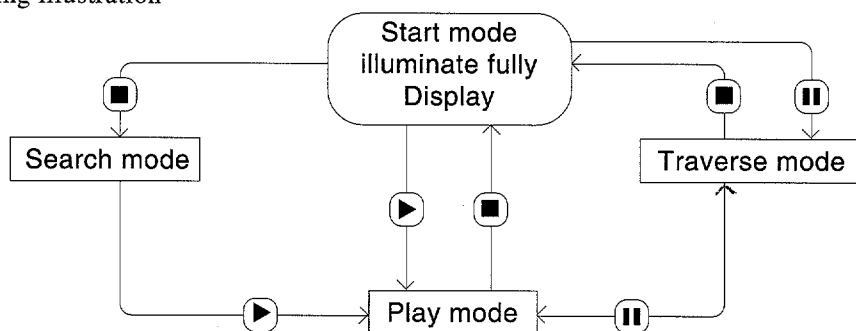
Mode	Function Button	FL Display	Operation	Content
Start Mode		Fully illuminate	<ul style="list-style-type: none"> • Initialization 	
Sled Mode	◀◀ ▶▶	CD TEST	<ul style="list-style-type: none"> • Shift to the external circumference of Pick-Up. * Note 1 • Shift to the internal circumference of Pick-Up. (Normal operation during CD PLAY) 	<ul style="list-style-type: none"> • SLED SERVO • SLED Operation Check
Search Mode	■	CD	<ul style="list-style-type: none"> • LASER DIODE illuminated all the time (CD block power ON) • Continuous Focus Search *Note 2 (Pickup lense repeat full swing) 	<ul style="list-style-type: none"> • APC circuit check • Laser current measurement • Focus search waveform check • Focus error waveform check (In Search Mode, FOK/FZC is not checked)
Play Mode	▶	1Tr.0:01	<ul style="list-style-type: none"> • Normal Playback • When TOC READ is unavailable Continue focus search *Note 2 • Continue spindle motor kick spin 	<ul style="list-style-type: none"> • FOCUS SERVO/TRACKING SERVO • CLV SERVO/SLED SERVO • FOK check • RF waveform check
Traverse Mode		1Tr.0:01	<ul style="list-style-type: none"> • Tracking servo OFF/ON • Repeat OFF/ON every time [] button is pressed 	<ul style="list-style-type: none"> • TRACKING SERVO OFF • Tracking Balance Check

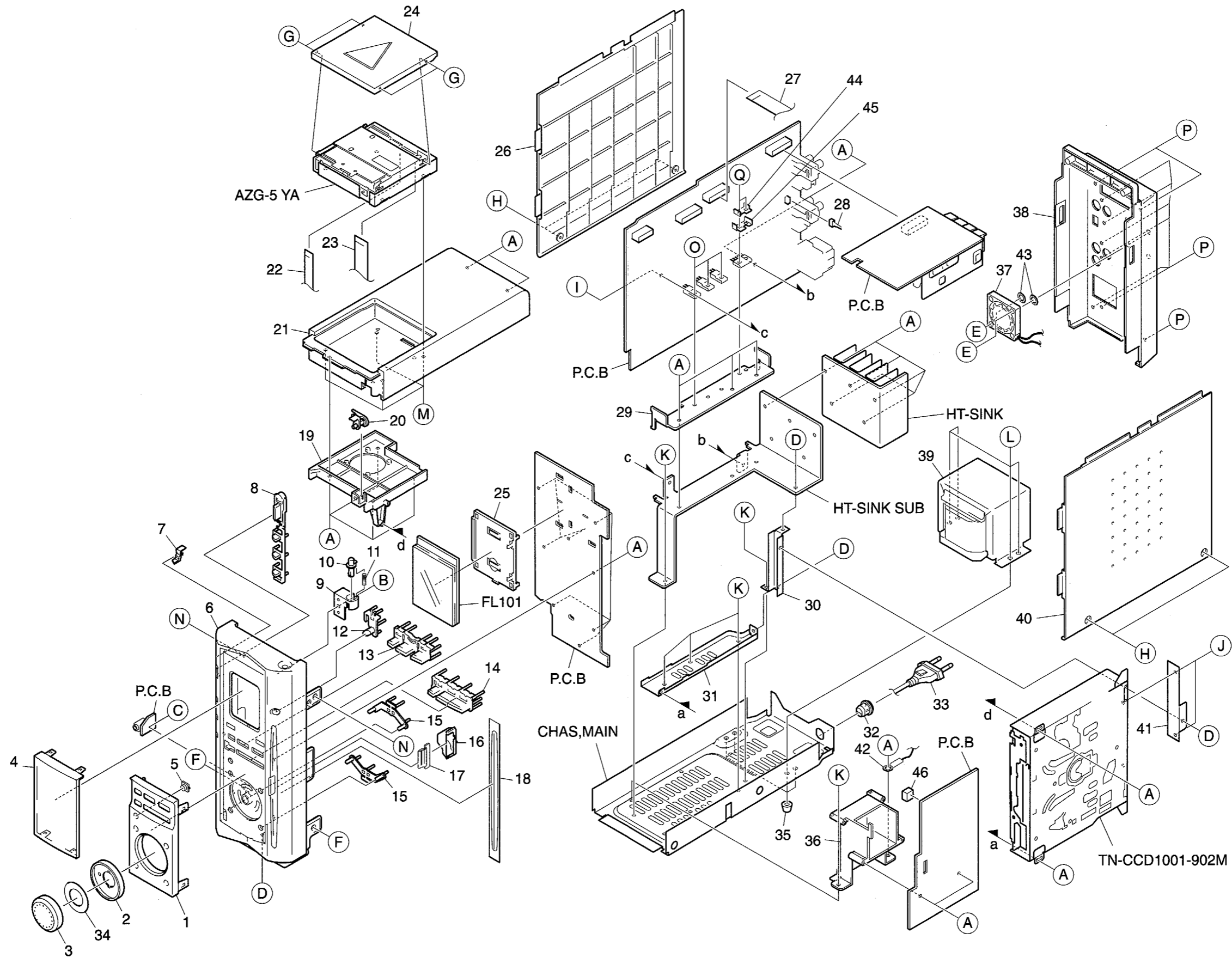
* Note 1 : When pressing the ◀◀ or ▶▶ keys, take care to avoid damage to the gears. Because the sled motor is activated when the ◀◀ or ▶▶ keys are pressed, even when the pick-up is at outermost or innermost track. The sled operation is not as normal and moves outermost track with ◀◀ button and innermost track with ▶▶ button

* Note 2 : There are cases when the tracking servo cannot be locked owing to the protection circuit being operated when heat builds up in the driver IC if the focus search is operated continually for more than 10 minutes. In these case, the power supply should be switched off for an hour until heat has been reduced and then re-start.

4. The Operation Outline

This operation of each mode is carried out in the direction of the arrows from the start mode as indicated in the following illustration





MECHANICAL PARTS LIST 1 / 1

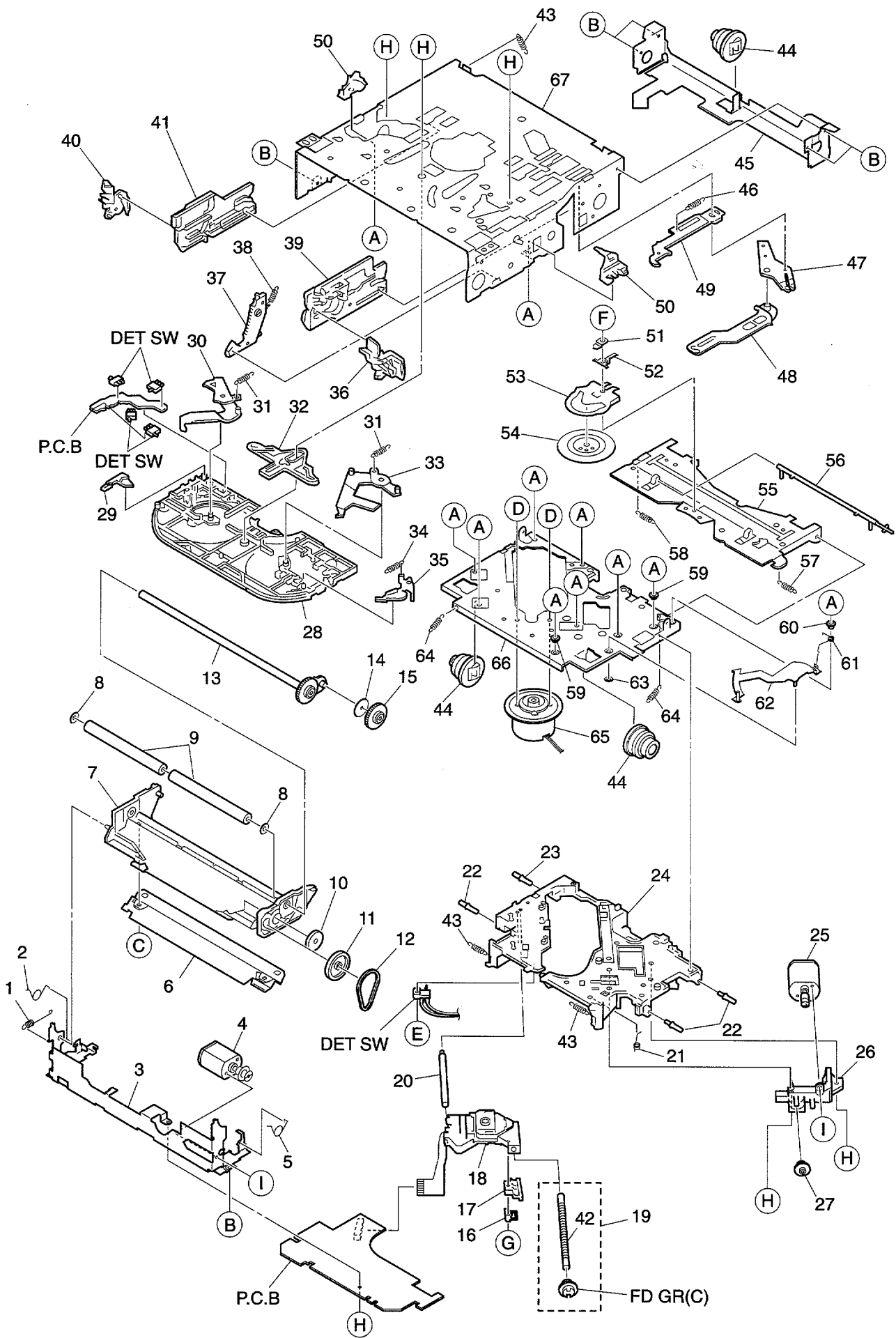
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CJ5-008-010		PANEL,FR CD	36	8A-CJ5-204-010		HLDR,ECO
2	8A-CJ5-017-010		REFLECTOR, JOG	37	8Z-CL1-663-010		FAN, MF40D-12-200MM
3	8A-CJ5-016-010		KNOB, RTRY JOG	38	8A-CJ5-026-010		CABI, REAR EZ
4	8A-CJ5-033-010		WINDOW, DISPLAY EZ	39	8A-CJ5-622-010		PT, ACJ-5 EZ
5	8A-CJ5-019-010		LENS, SENSOR	40	8A-CJ5-005-010		PANEL, SIDE R
6	8A-CJ5-024-010		CABI, FR EZ	41	8A-CJ5-213-010		HLDR, MECHA CD
7	8A-CJ5-015-010		REFLECTOR, POWER	42	87-064-185-010		HLDR, WIRE
8	8A-CJ5-009-010		KEY, POWER	43	87-ZG9-207-010		SH, S-SCREW
9	8A-CJ5-203-010		HLDR, BTN	44	8A-CJ5-221-010		HT-SINK, IC A
10	8A-CJ5-014-010		BTN, OPEN	45	8A-CJ5-222-010		HT-SINK, IC B
11	8A-CJ5-208-010		SPR-C, OPEN	46	8A-CJ5-228-010		CUSH-R, 13-13-10
12	8A-CJ5-013-010		KEY, EJECT CD	A	87-067-579-010		TAPPING SCREW, BVT2+3-8
13	8A-CJ5-011-010		KEY, PLAY	B	87-B10-294-010		BVT2+2.6-8
14	8A-CJ5-010-010		KEY, SKIP	C	88-AR1-217-010		S-SCREW, BFT2+3-8
15	8A-CJ5-012-010		KEY, ENTER	D	87-067-688-010		BVTT+3-6
16	8A-CJ5-215-010		GUIDE, LED CD	E	87-751-096-410		VT2+3-10 GLD
17	8A-CJ5-018-010		REFLECTOR, CD	F	87-591-094-010		QIT+3-6 GOLD
18	8A-CJ5-023-010		DUST COVER, CD FELT	G	87-078-153-010		SCRW, 1.4-2.5 CR
19	8A-CJ5-202-010		HLDR, TOP	H	87-067-641-010		UTT2+3-8(W/O SLOT)BL
20	8A-CJ5-207-010		LEVER, OPEN	I	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
21	8A-CJ5-002-010		CABI, TOP	J	87-067-421-010		VTT+2-4
22	8A-CJ5-632-010		CABLE, FFC9P-1.0-20	K	87-067-584-010		BVT2+3-6 W/O SLOT
23	8A-CJ5-633-010		CABLE, FFC14P-1.0-10	L	87-078-191-010		S-SCREW, IT+4-10
24	8A-CJ5-006-010		LID, MD	M	87-067-684-010		BVT2+2.6-6 W/O SLOT
25	8A-CJ5-209-010		GUIDE, FL	N	87-721-096-410		QT2+3-10 GLD
26	8A-CJ5-004-010		PANEL, SIDE L	O	87-067-703-010		TAPPING SCREW, BVT2+3-10
27	8A-CJ5-630-010		CABLE, FFC15P-1.0-20	P	87-067-660-010		TAPPING SCREW, BVT2+3-8
28	8A-CJ5-634-010		CONN ASSY, 2P SHLD	Q	87-067-581-010		BVT2+3-15 W/O SLOT
29	8A-CJ5-214-010		HLDR, TR				
30	8A-CJ5-206-010		HLDR, CD B				
31	8A-CJ5-205-010		HLDR, CD A				
32	87-085-185-010		BUSHING, AC CORD (E)				
33	87-A80-092-010		AC CORD ASSY, E BLK SUN FAI				
34	8A-CJ5-217-010		PLATE, JOG				
35	8Z-NB8-240-010		COVER, PL				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow				

CD MECHNISM EXPLODED VIEW 1 / 1

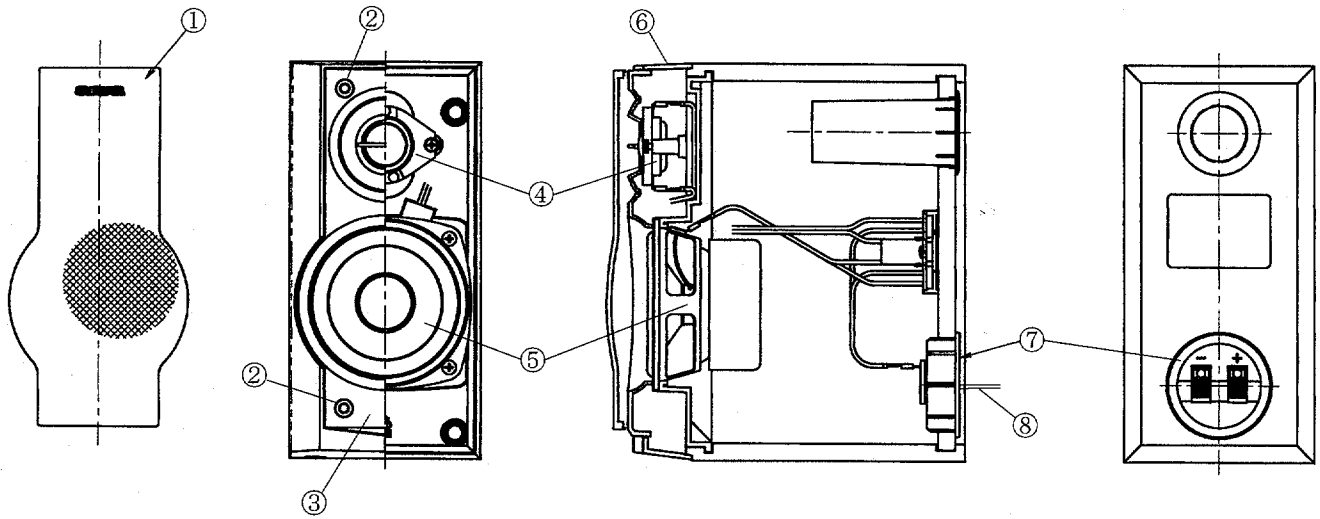


CD MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S3-031-110-030		EARTH SPR	41	S3-031-010-500		FIX PL(L)Z
2	S3-031-110-180		L.P SPRING(L)	42	S3-031-050-310		FD SCREW(M)
3	S3-031-110-010		FRONT BRKT	43	S3-031-010-520		HUNG UP SPRING(A)
4	S3-031-113-010		LDG MOTOR ASSY	44	S3-031-050-240		DAMPER(J)
5	S3-031-110-190		L.P SPRING(R)	45	S3-031-010-020		REAR D BRKT
6	S3-031-110-050		SUPPORT PL	46	S3-031-010-150		TRIG PL SPRING
7	S3-031-110-080		GR MT BLK	47	S3-031-010-160		TRIG ARM
8	S9-W03-302-760		NW BLUE 2.9-5-0.3	48	S3-031-010-120		TRIG LVR
9	S3-031-110-360		LDG ROLLER(P)	49	S3-031-010-140		TRIG PL
10	S3-031-110-100		LDG GR(3)	50	S3-031-010-030		DAMPER PIN
11	S3-031-110-090		LDG GR(2)	51	S3-031-050-360		STOPPER SPR
12	S3-031-110-290		LDG BELT	52	S3-031-050-190		8CM STOPPER SPR PL
13	S3-031-113-020		LDG RLR SFT ASSY	53	S3-031-050-230		CLAMPER PLATE
14	S9-W07-250-300		LUMIL AR W 2.3-9.8-0.25	54	S3-031-050-150		CLAMPER
15	S3-031-110-120		LDG GR(5)	55	S3-031-050-740		CLP ARM(A)
16	S3-031-050-300		NUT PUSH SPR PL(M)	56	S3-031-050-410		8CM STOPPER(M)
17	S3-031-050-290		PU M NUI(M)	57	S3-031-050-140		CLP ARM SPRING
18	S6-904-160-010		PICK-UP VED0375-TN	58	S3-031-050-250		CLP ARM SPR(L)
19	S3-031-053-040		FEED SCREW(M)ASSY	59	S3-031-050-700		D.S ARM COLLAR
20	S3-031-050-320		PU SHAFT(M)	60	S3-031-050-720		SP COLLAR
21	S3-031-050-330		THRUST SPR(M)	61	S3-031-050-710		D.S ARM SPR
22	S3-031-050-210		LOCK PIN	62	S3-031-055-010		DISC SUPPORT ARM ASSY
23	S3-031-050-220		LOCK PIN BL	63	S9-W02-500-900		PW CUT 2.1-4-0.5
24	S3-031-050-760		F.M. BASE(A)	64	S3-031-010-530		HUNG DOWN SPRING(A)
25	S3-031-053-010		FEED MOTOR ASSY	65	S3-031-053-050		SPINDLE MOTOR(M)ASSY
26	S3-031-050-280		FD GR BLK(M)	66	S3-031-050-730		T.T.BASE(A)
27	S3-030-050-100		PU GEAR(B)	67	S3-031-010-010		FRAME
28	S3-031-010-570		UPPER PL(A)	A	87-841-034-410		CAMERA B TAPPING SCREW M2-5
29	S3-031-110-240		SW ACTR	B	87-741-033-410		CAMERA SCREW TS.G M2-4
30	S3-031-010-090		SEL ARM (L)	C	S9-C04-205-030		CAMERA S TAPPING SCREW M2-5
31	S3-031-010-110		S ARM SPRING	D	87-267-525-310		CAMERA SCREW M1.7-2.2
32	S3-031-010-080		SEL STOP PL	E	87-263-036-010		CAMERA TAPPING SCREW B 3 M2-8
33	S3-031-010-100		SEL ARM (R)	F	S9-C42-202-010		CAMERA TAPPING SCREW S 3 M2-2
34	S3-031-010-250		S.L ARM SPRING	G	S9-C45-175-030		CAMERA TAPPING SCREW P3 M1.7-5
35	S3-031-010-240		S.L ARM	H	87-351-549-310		CAMERA TAPPING SCREW B 3 M2-4
36	S3-031-010-580		FIX ARM(R)A	I	S9-P02-200-310		TAMS SCREW M2-3
37	S3-031-010-380		LDG GR(6)B				
38	S3-031-010-220		LDG GR(6)SPRING				
39	S3-031-010-370		FIX PL(R)B				
40	S3-031-010-340		FIX ARM(L)B				

SPEAKER PARTS LAYOUT 1 / 1



SPEAKER PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CJ5-422-010		GRILLE, FRAME ASSY Y
2	8A-CJ5-409-010		FASTENER,
3	8A-CJ5-405-010		PANEL, SP
4	8A-CJ5-417-010		SPKR, TW 25
5	8A-CJ5-411-010		SPKR, W 87S
6	8A-CJ5-403-010		PANEL, FR
7	8A-CJ5-415-010		TERMINAL,
8	8Z-CL5-543-010		CORD, SP

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CJ5-906-010		IB, EZ (9L)M
2	8A-CJ5-955-010		RC UNIT, RC-AAT10
3	87-006-225-010		ANT, LOOP ANT NC2
4	87-A90-118-010		ANT, WIRE FM(Z)

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