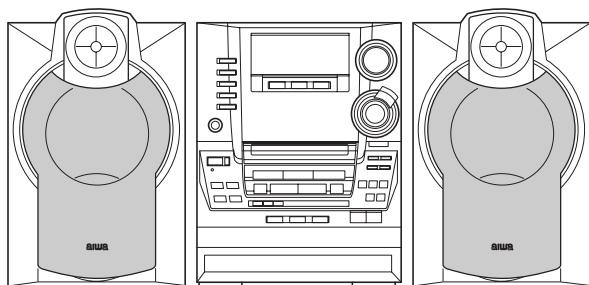




XR-H560MD EZ,K



SERVICE MANUAL

MD / CD STEREO SYSTEM

BASIC TAPE MECHANISM : 6ZM-1 AR3

BASIC CD MECHANISM : 4ZG-1 Z3RNSMDJM

BASIC MD MECHANISM : ZZG-6 D

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
(S/M Code No. 09-993-412-1T2).

SYSTEM	CD-CASSEIVER	SPEAKER
XR-H560MD	CX-NH560MD	SX-WNH898

If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No.09-992-325-4N2.

aiwa
S/M Code No. 09-993-412-1R2

REVISION
DATA

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SPECIFICATIONS

Main unit CX-NH560MD

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	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 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

Mid-high frequency amplifier

Power output*	Rated: 15 W + 15 W (6 ohms, T.H.D. 1%, 200 Hz to 20 kHz/DIN 45500) Reference: 18 W + 18 W (6 ohms, T.H.D. 10%, 200 Hz to 20 kHz/DIN 45324) EZ MODEL: DIN MUSIC POWER: 35 W + 35 W 0.06 % (8 W, 1 kHz, 6 ohms, DIN AUDIO)
---------------	---

Total harmonic distortion

Low frequency amplifier	Rated: 50 W + 50 W (6 ohms, T.H.D. 1%, 50 Hz to 200 Hz/DIN 45500) Reference: 62 W + 62 W (6 ohms, T.H.D. 10%, 50 Hz to 200 Hz/DIN 45324) EZ MODEL: DIN MUSIC POWER: 92 W + 92 W 0.06 % (20 W, 135 Hz, 6 ohms, DIN AUDIO)
-------------------------	---

* without connecting to the SURROUND SPEAKERS

Inputs

VIDEO/AUX: 316 mV

DIGITAL IN

SPEAKERS:

LOW FREQ: accept speakers of 6 ohms

HIGH FREQ: accept speakers of 6 ohms

SURROUND SPEAKERS: accept speakers of 8 to 16 ohms

PHONES (stereo jack): accepts headphones of 32 ohms or more

CD DIGITAL OUT (OPTICAL) jack

Outputs

LOW FREQ: accept speakers of 6 ohms

HIGH FREQ: accept speakers of 6 ohms

SURROUND SPEAKERS: accept speakers of 8 to 16 ohms

PHONES (stereo jack): accepts headphones of 32 ohms or more

CD DIGITAL OUT (OPTICAL) jack

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)

Magnetic polarity modulation
overwrite system

Approx. 400 - 900 rpm (CLV)

44.1 kHz

Stereo: 2 channels

Monaural: 1 channel

1-bit

20 to 20000 Hz +0.5 - -1.5 dB

Unmeasurable

Recording system

Rotation speed

Sampling frequency

No. of channels

A-D, D-A converter

Frequency

Wow and flutter

Cassette deck section

Track format

4 tracks, 2 channels stereo

Frequency response

50 Hz to 15000 Hz

Recording system

AC bias

Recording/playback head \times 1, erase head \times 1

Heads

General

Power requirements

230 V AC, 50 Hz

150 W

1.5 W (power-economizing mode set to ON)

Dimensions of main unit

(W \times H \times D)

260 \times 324 \times 387 mm

Weight of main unit

10.1 kg

Speaker system SX-WNH898

Cabinet type

3 way, built-in subwoofer (magnetic shielded type)

Speakers

Subwoofer:

160 mm cone type

Full range:

120 mm cone type

Super tweeter:

20 mm ceramic type

LOW FREQ: 6 ohms

HIGH FREQ: 6 ohms

Impedance

87 dB/W/m

240 \times 324 \times 246 mm

5.6 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound, Inc.

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

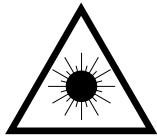
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NB6-905-010	IB,K(E)I<KS>	
1	8Z-NB6-906-010	IB,EZ(9L)I<EZS>	
2	87-A90-030-010	ANT,LOOP AM-NC C	
3	87-043-106-010	WIRE, FM ANT (Z)	
4	8Z-NB5-703-010	RC UNIT,RC-ZAS18	

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 käytööhjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylit-täälle näkymättömälle lasersäteilylle.

VARNING!

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

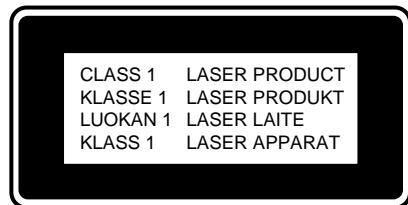
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.

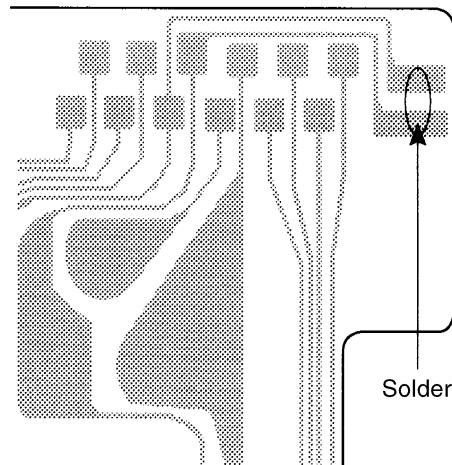


Precaution to replace Optical block (KSS-213F)

PICK-UP Assy P.C.B

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.

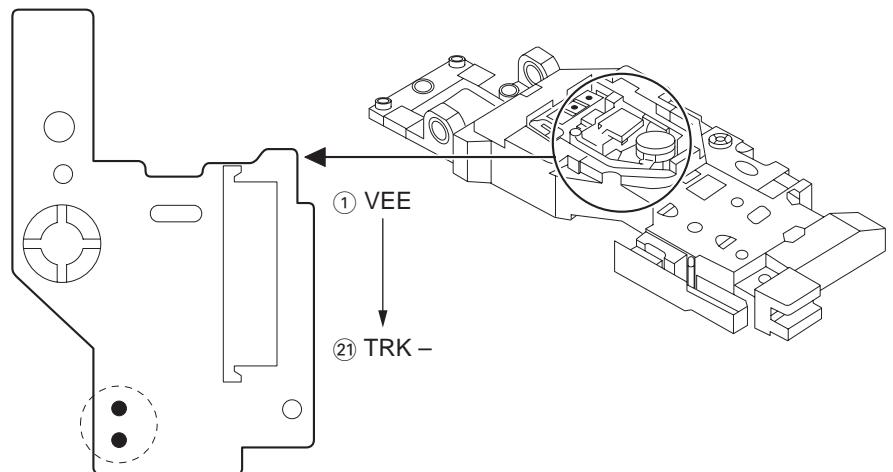
- 1) After the connection, remove solder shown in the right figure.



Precaution to replace Optical block (KMS-260A)

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 the right figure.

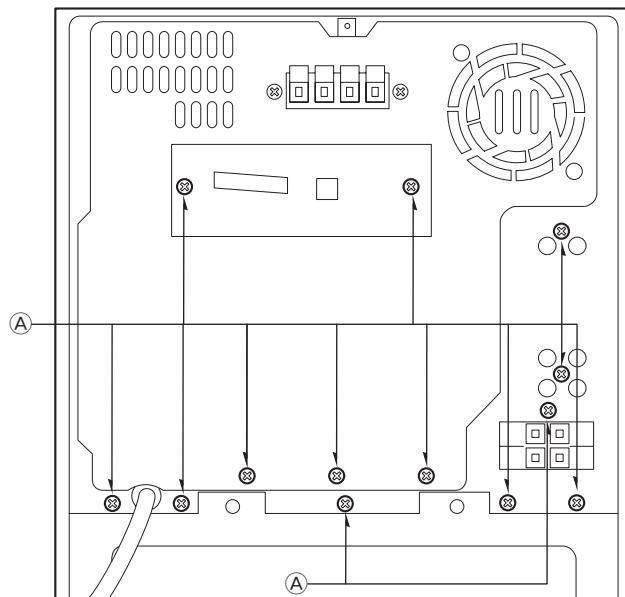


DISASSEMBLY INSTRUCTIONS

1. Disassembling the MD block

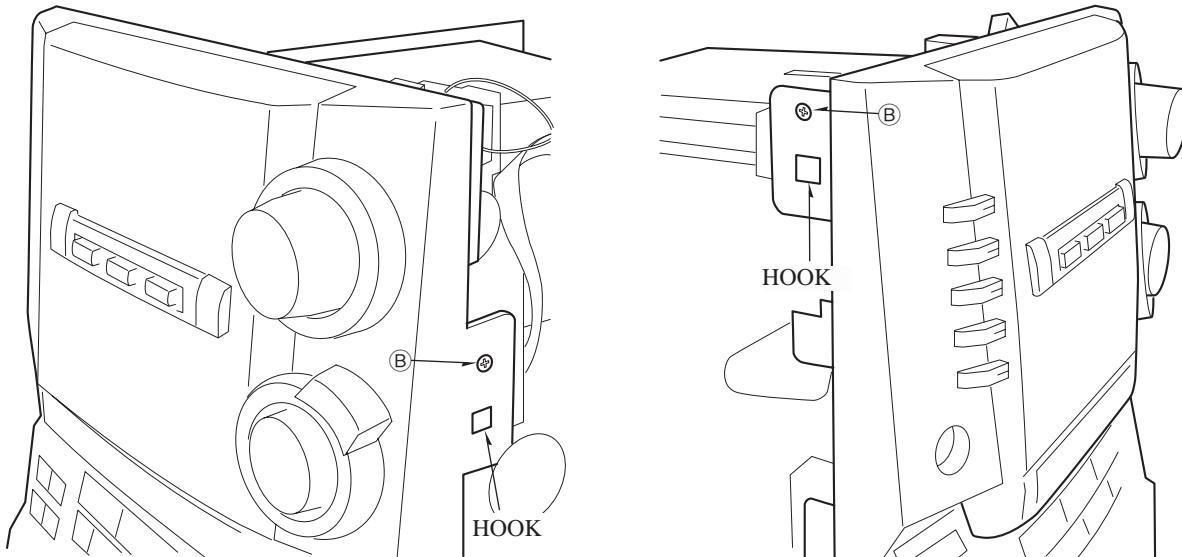
Remove the CABI, STEEL. (Screws: 4 pcs on the right side, 4 pcs on the left side and 7 pcs on the rear: Total 15 screws)

Remove the 13 screws (UTT2+3-8) Ⓐ and remove the rear panel.

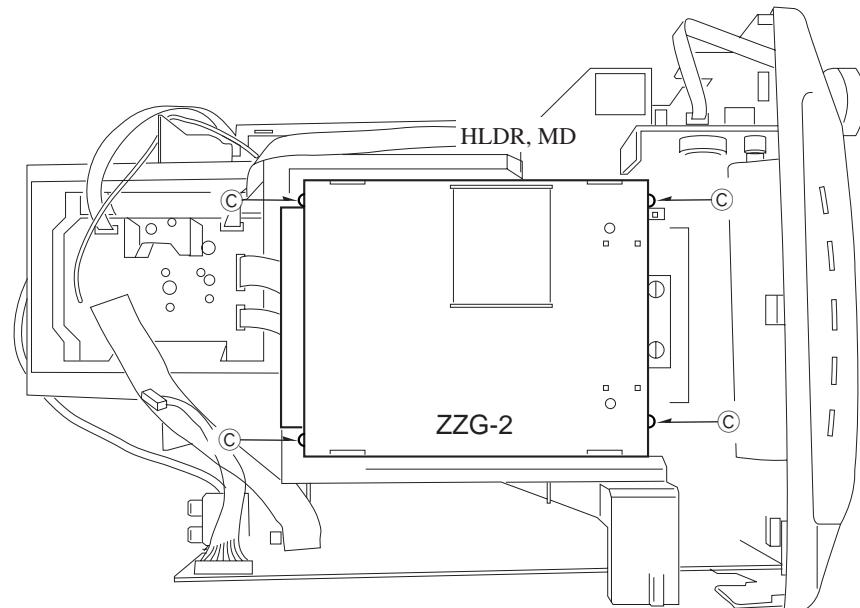


After removing the connectors from the TUNER C.B and the FUN, remove the rear panel.

Remove the two screws (QT2+3-10) Ⓑ. Open the rack and remove the HLDR, MD.



Remove the four screws (BVT2+3-10) ④. Remove the ZZG-2.

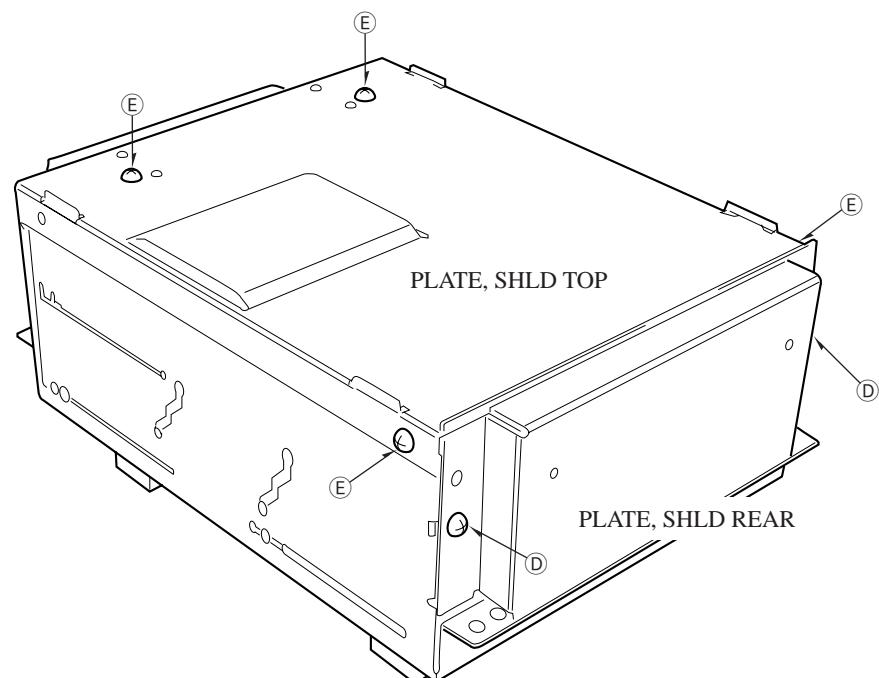


2. Disassembling the MD block and the service position

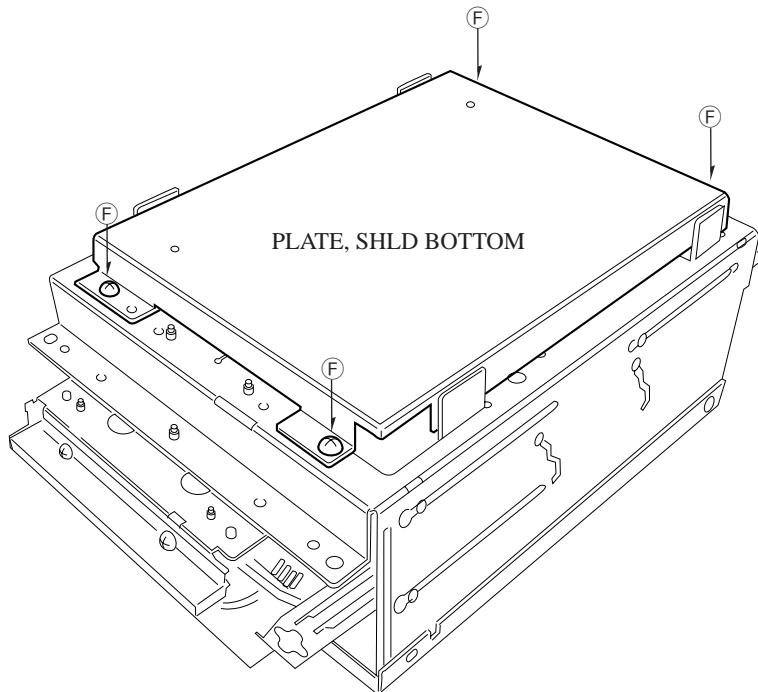
Remove the ZZG-2.

Remove the two screws (UT2+2.6-6 GLD) ⑤ from the PLATE, SHLD REAR. Remove the PLATE, SHLD REAR.

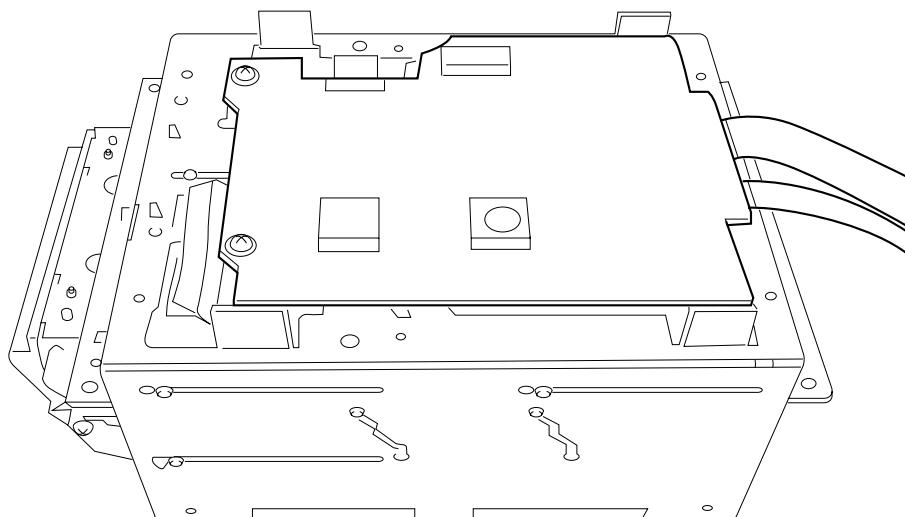
Remove the four screws (U+2+2.6-6) ⑥ from the PLATE, SHLD TOP. Remove the PLATE, SHLD TOP.



Remove the four screws (UT2+2.6-6 GLD) **F** and remove the PLATE, SHLD BOTTOM.



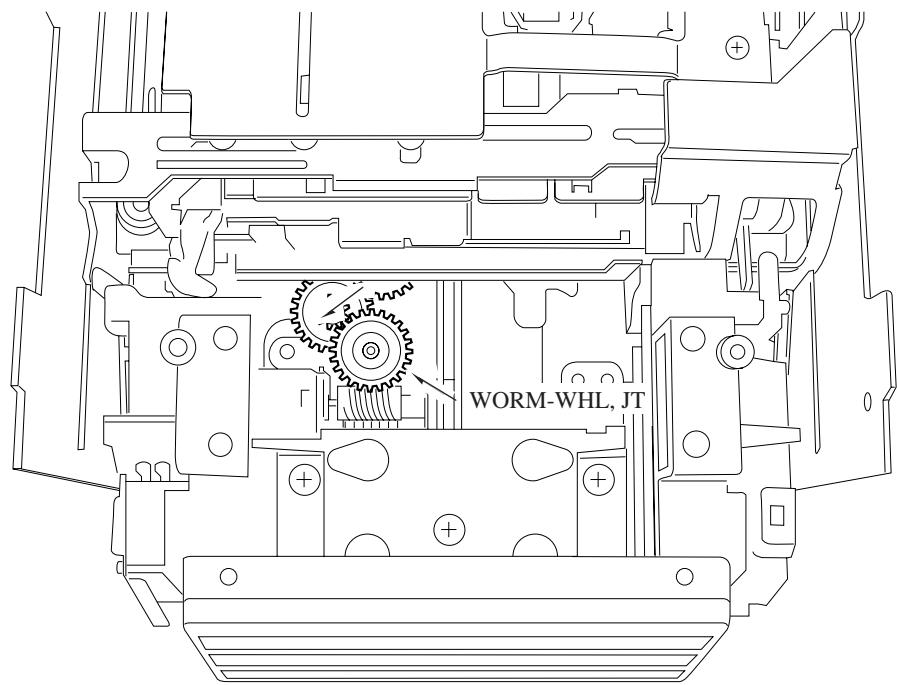
The MD block is ready to be placed in the service position. Connect the MD block with the interface board using the extension FFC as shown below.



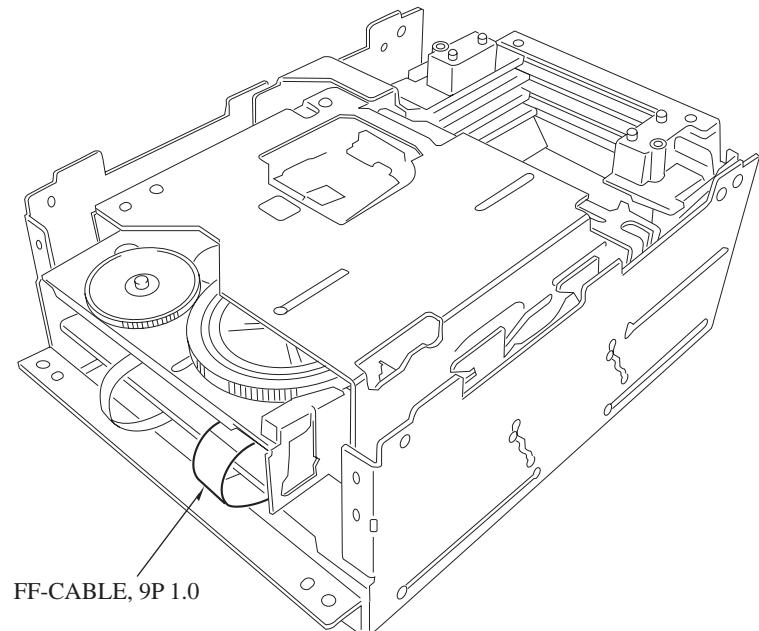
3. Disassembling the elevator

Rotate the WORM-WHL, JT (the gear shown by the arrow below) counterclockwise to move the elevator to the top position.

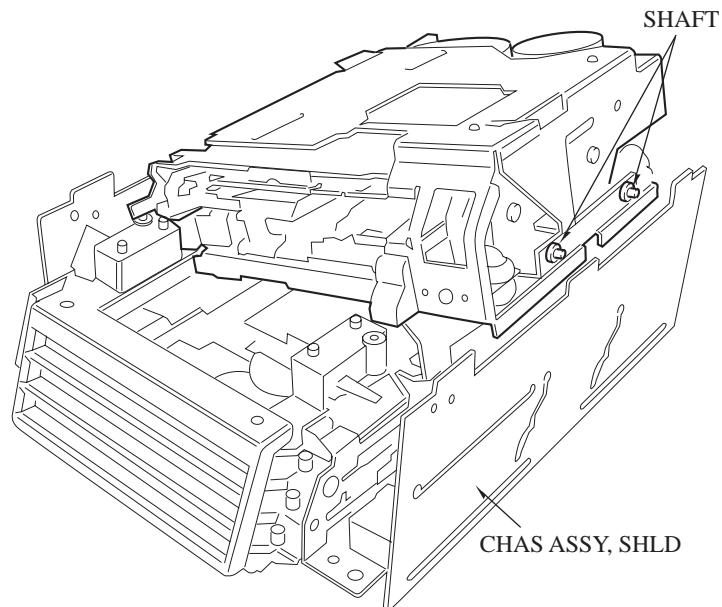
Note: If the PANEL, SHLD BOTTOM is not removed, the elevator cannot be removed.



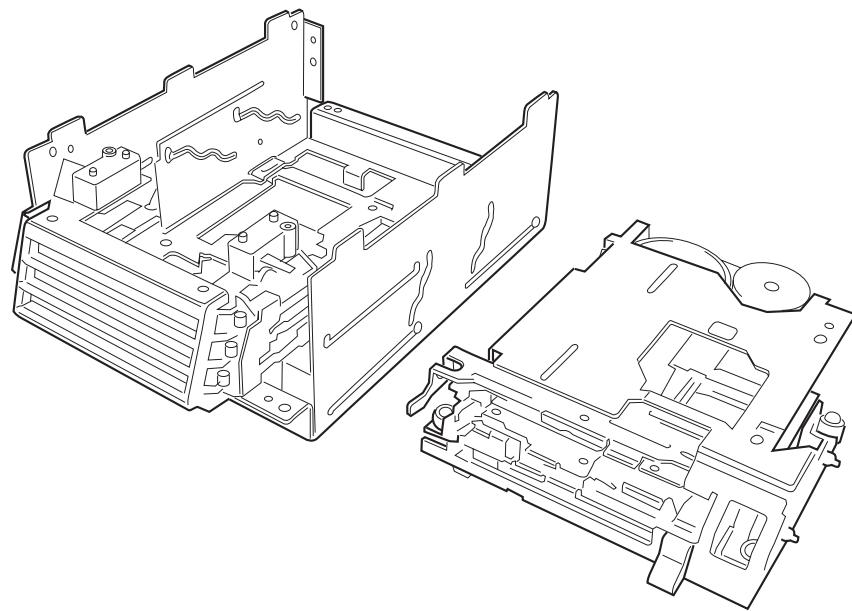
Remove the FF-CABLE, 9P 1.0 from the LOAD C.B.



While lifting up the elevator slightly, remove an end of the shaft of the elevator from the guide hole of the CHAS ASSY, SHLD.
Remove the other end of the shaft and tilt the elevator as shown below.
While tilting the elevator, short the shorting land.

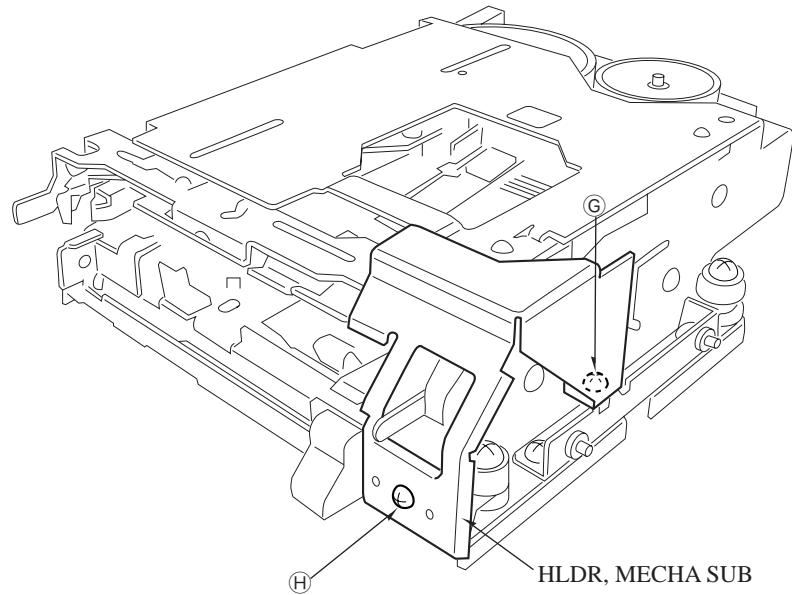


Remove the PICK UP, FFC and the MECHA C.B, FFC, then remove the elevator block.

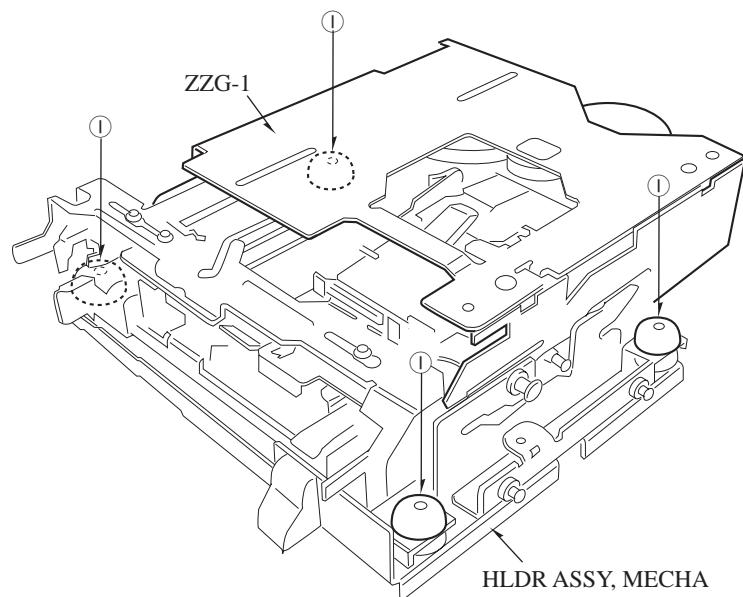


4. Disassembling the elevator block

Remove the screw (UT2+2.6-6 GLD) ⑥ and the screw (VTT+2-4) ⑦. Then remove the HLDR, MECHA SUB.



Remove the four screws (S-SCREW, MD T) ① and remove the ZZG-1 from the HLDR ASSY, MECHA.



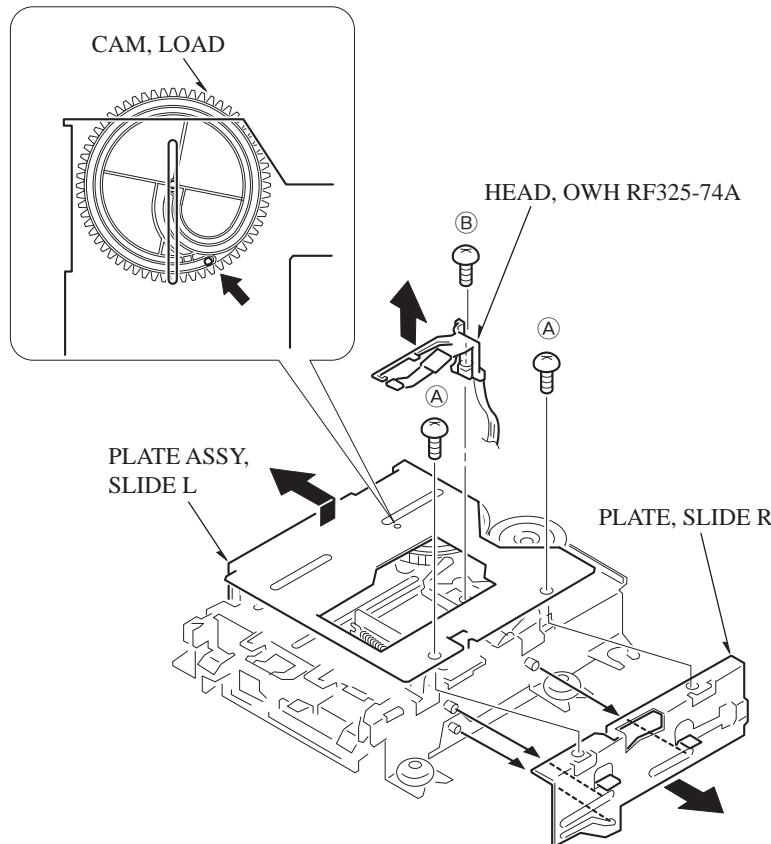
5. Remove the two screws (VTT+2-4) Ⓐ.

Remove the PLATE ASSY, SLIDE L and the PLATE, SLIDE R in the direction of the arrow.

Remove the screw (VW+1.7-5 W/O MFZN2C) Ⓑ.

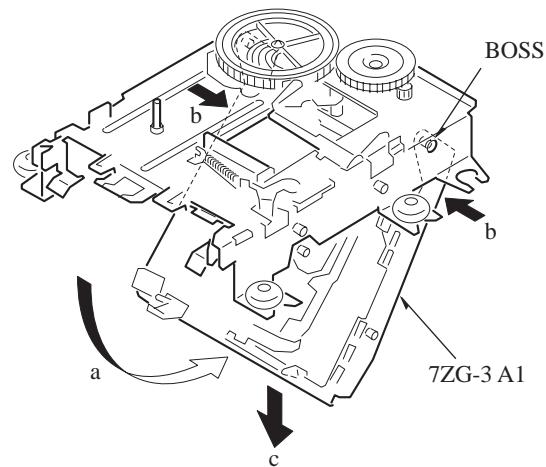
Remove the HEAD, OWH RF325-74A.

Re-assembling: Align the axis of the PLATE ASSY, SLIDE L with the arrow mark of the CAM, LOAD.



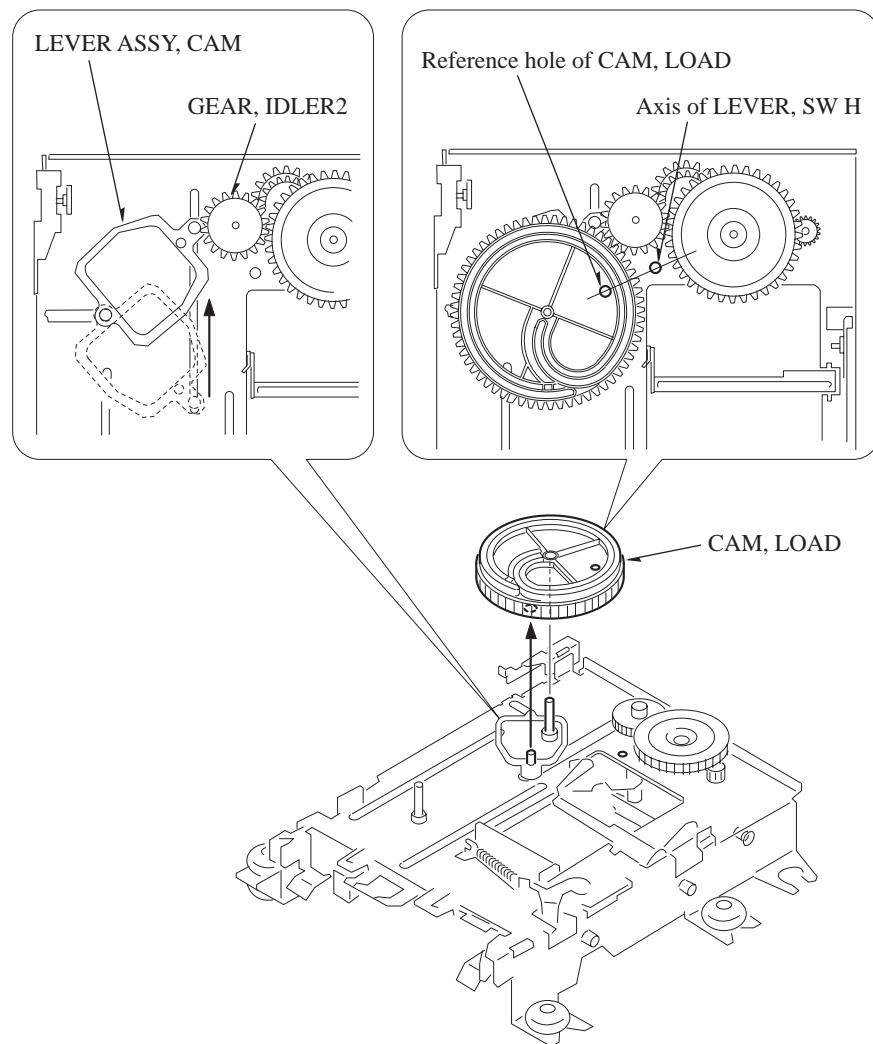
6. Move the 7ZG-3 A1 in the direction of (a).

While pressing the BOSS in the direction of (b), remove the 7ZG-3 A1 in the direction of (c).

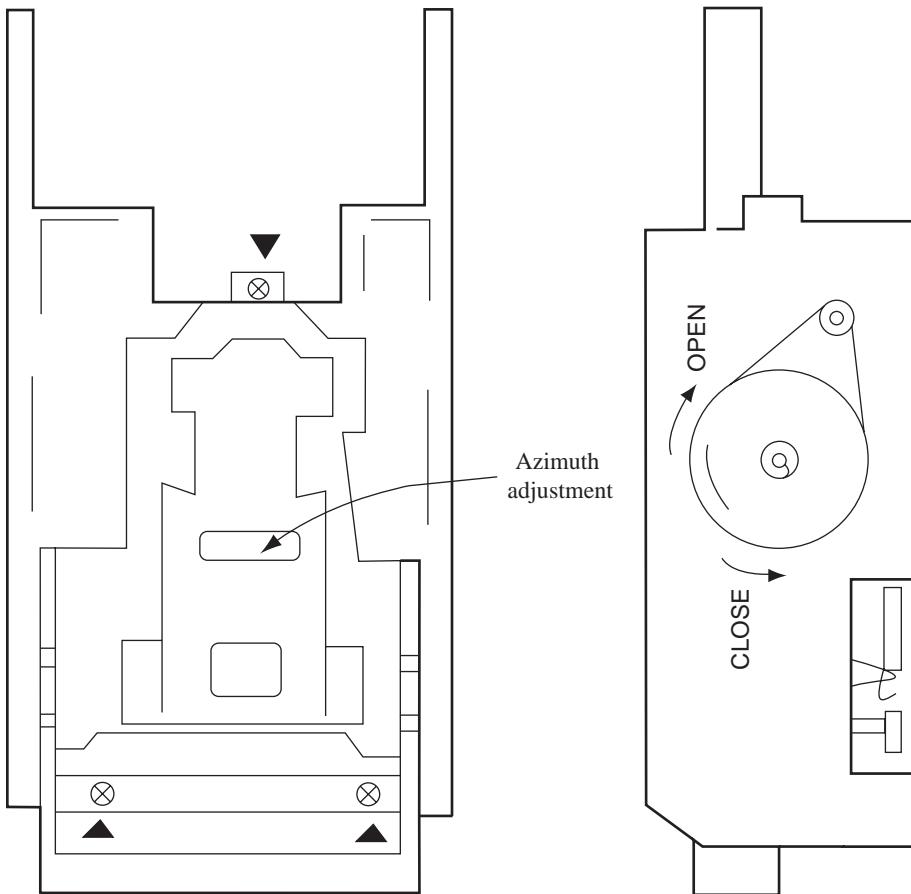


7. Remove the CAM, LOAD in the direction of the arrow.

Re-assembling: Move the LEVER ASSY, CAM in the direction of the arrow mark as much as it can be moved.
Move the reference hole of the CAM, LOAD closer to the axis of the LEVER, SW H as close as possible.
Align the CAM, LOAD with the gear of the GEAR, IDLER2.



CASSETTE MECHANISM DISASSEMBLY INSTRUCTIONS



- Remove the three ▲ screws (VT3-5) and open the cassette tray halfway. After pulling up the XR-H560MD and closing the tray again, remove it.
- Perform the azimuth adjustment through the hole on the top surface.
- Perform the motor speed adjustment through the hole at the bottom of the amplifier chassis using the clock screwdriver "d".
- The tray of the cassette deck cannot be operated without the CD board. Open/close the tray with hand.

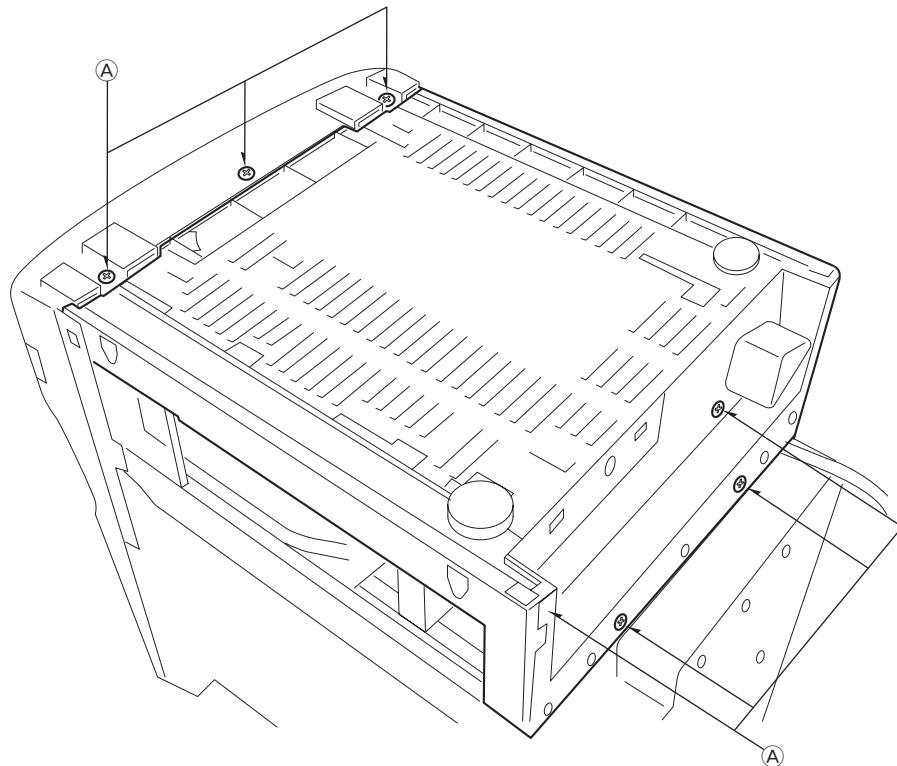
NOTE ON BEFORE STARTING REPAIR

- CD service position

Remove the CABI, STEEL.

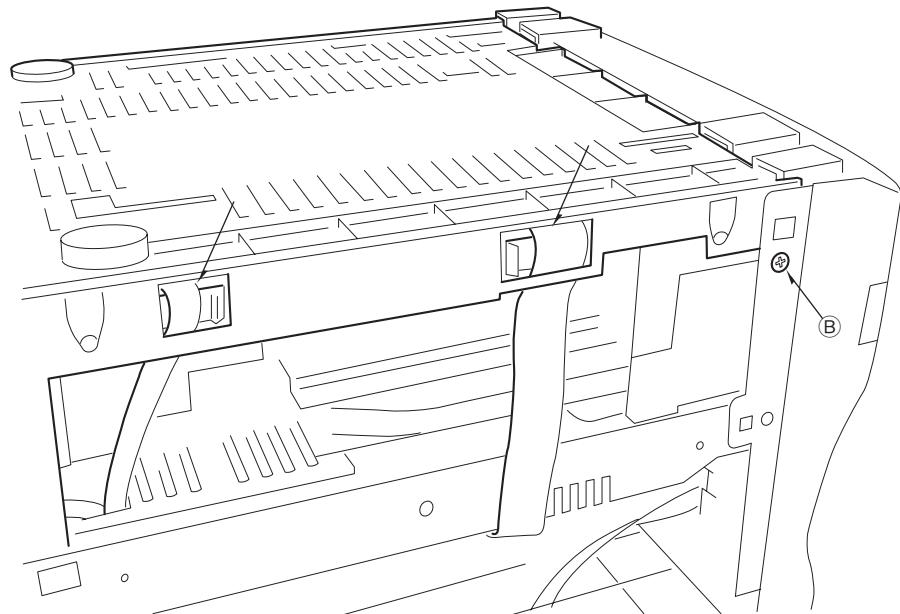
Remove the three screws (BVT2+3-10) Ⓐ.

Turn over the unit and remove the CABI, BOTTOM.

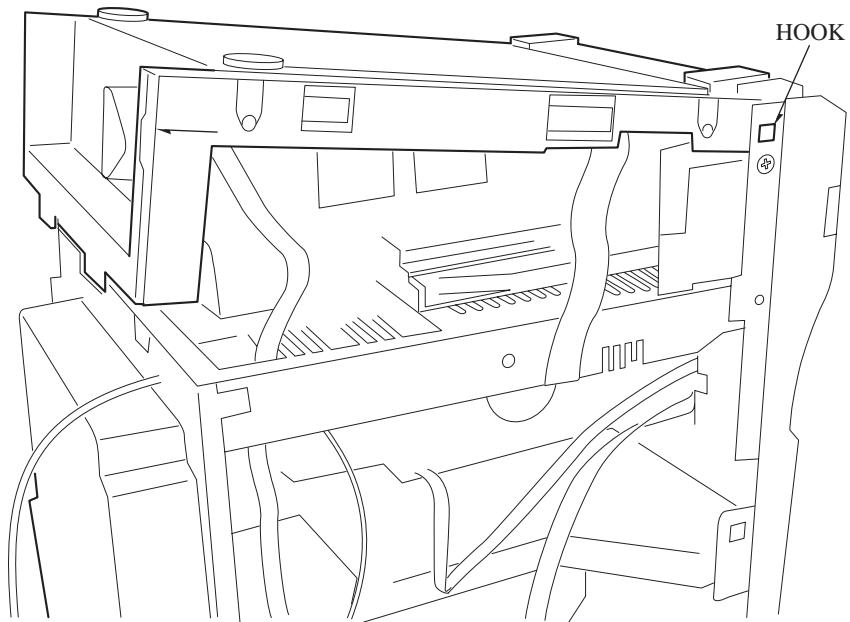


Remove the two FFCs (13P and 6P) the CD block from the hook of the CABI, BOTTOM.

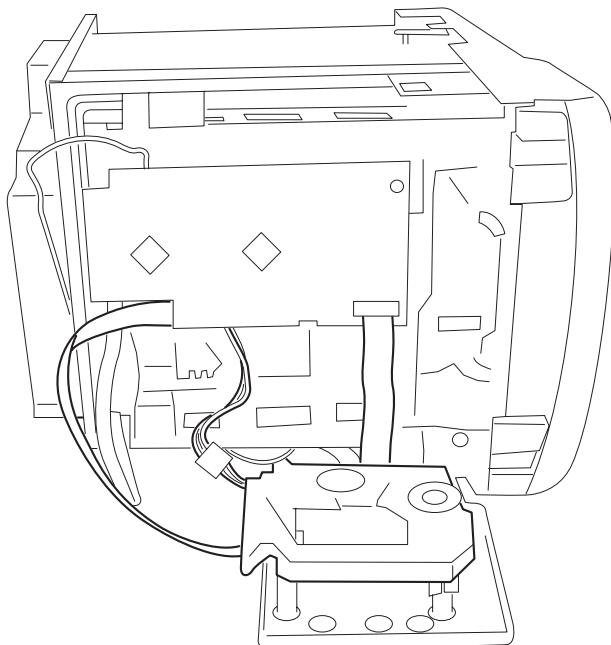
Loosen the two screws (QT2+3-12) Ⓑ of the 4ZG-1 CABI, FR. (The screws are used at the both sides.)



Remove the hooks in the direction of the arrow. (The hooks are used at the both sides.) Pull the CABI, BOTTOM up to the diagonally top right and remove it.



Lay down the unit and remove the 3ZG-2 mechanism.
Extend the 3ZG-2 mechanism using the respective extension jigs.



Service position

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
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				87-A40-270-080	C-DIODE, MC2838		
8Z-NB6-615-010	C-IC,LC876580A			87-A40-269-080	C-DIODE, MC2836		
87-A20-914-010	IC,SPS-442-1-F			87-A40-488-080	DIODE,1SS244		
87-A20-783-040	C-IC,BA7762AFS			87-A40-509-080	ZENER,MTZJ6.8C		
87-A21-022-040	C-IC,BA3880FS			87-A40-469-080	C-DIODE, HSM2838CTR		
87-A21-021-040	C-IC,BU2099FV			87-A40-468-080	C-DIODE, HSM2836CTR		
87-A21-031-040	C-IC,BU4551BF			87-A40-002-080	ZENER,MTZJ5.1C		
87-A21-202-040	C-IC,M62445AFTP			87-A40-438-080	ZENER,MTZJ4.7A		
87-A21-023-040	C-IC,BA3835F			87-A40-234-080	ZENER,MTZJ5.6A		
87-A21-103-040	C-IC,MM1454XFBE			87-017-932-080	ZENER,MTJ6.2B		
87-A20-707-010	C-IC,CXA2523AR			87-001-166-080	DIODE,1SS301		
87-A20-708-010	C-IC,CXD2652AR			87-A40-412-040	C-DIODE,SB05-05CP		
87-A20-709-040	C-IC,BD7910FV			87-020-764-080	CHIP-ZENER,02CZ4.7X		
8Z-ZG2-606-010	C-IC,CXP81952						
87-ZG9-606-040	C-IC,MN41V4400SJ-08						
87-A20-755-080	C-IC,AK93C45AF						
				MAIN C.B			
87-A20-710-040	C-IC,S-8110AMP			C1	87-012-369-080	C-CAP,S 0.047-50F	
87-A20-711-040	C-IC,BA5970FP			C2	87-012-369-080	C-CAP,S 0.047-50F	
87-A20-712-040	C-IC,BA6417F			C3	87-012-368-080	C-CAP,S 0.1-50 F	
87-A21-078-080	C-IC,PCM3003E			C4	87-012-368-080	C-CAP,S 0.1-50 F	
87-017-853-040	IC,NJM2100V			C5	87-012-368-080	C-CAP,S 0.1-50 F	
87-A20-797-040	C-IC,NJU7221U30			C6	87-012-368-080	C-CAP,S 0.1-50 F	
87-A20-798-040	C-IC,NJU7221U35			C9	87-016-658-090	CAP,E 4700-35 SMG	
87-A20-714-040	C-IC,NJM2370U33			C10	87-016-658-090	CAP,E 4700-35 SMG	
				C21	87-010-247-080	CAP, ELECT 100-50V	
				C22	87-010-247-080	CAP, ELECT 100-50V	
TRANSISTOR				C23	87-010-247-080	CAP, ELECT 100-50V	
87-026-245-080	TR,DTC114ES			C24	87-010-247-080	CAP, ELECT 100-50V	
87-026-609-080	TR,KTA1266GR			C25	87-010-430-080	CAP, ELECT 100-63	
87-A30-198-080	TR,KTC3199GR			C26	87-010-263-080	CAP, ELECT 100-10V	
89-213-702-010	TR,2SB1370 (1.8W)			C27	87-012-140-080	CAP 470P	
87-026-610-080	TR,KTC3198GR			C28	87-010-263-080	CAP, ELECT 100-10V	
87-A30-076-080	C-TR,2SC3052F			C29	87-010-408-080	CAP, ELECT 47-50V	
87-A30-075-080	C-TR,2SA1235F			C30	87-010-112-080	CAP, ELECT 100-16V	
87-A30-234-080	TR,CSC4115BC			C31	87-010-235-080	CAP,E 470-16 SME	
87-A30-072-080	C-TR,RT1P 144C			C32	87-012-368-080	C-CAP,S 0.1-50 F	
87-A30-162-010	FET,2SK2937			C33	87-016-299-080	CAP,E 10-100 SME	
87-A30-074-080	C-TR,RT1P 141C			C34	87-016-299-080	CAP,E 10-100 SME	
87-A30-268-040	C-TR,2SA1514K(S)			C61	87-010-260-080	CAP, ELECT 47-25V	
87-A30-240-080	TR,CSA1585BC			C62	87-010-403-080	CAP, ELECT 3.3-50V	
87-A30-086-080	C-TR,CSD1306E			C91	87-010-401-080	CAP, ELECT 1-50V	
87-A30-190-080	TR,CC5551			C92	87-010-263-080	CAP, ELECT 100-10V	
87-A30-137-010	TR,2SD2494			C93	87-010-380-080	CAP, ELECT 47-16V	
87-A30-138-010	TR,2SB1625			C101	87-010-178-080	CHIP CAP 1000P	
87-A30-119-040	C-TR,2SC3906K R			C102	87-010-178-080	CHIP CAP 1000P	
87-A30-087-080	C-FET,2SK2158			C103	87-010-405-080	CAP, ELECT 10-50V	
87-A30-071-080	C-TR,RT1N 144C			C104	87-010-405-080	CAP, ELECT 10-50V	
87-A30-257-080	C-TR,2SD1306E			C107	87-010-408-080	CAP, ELECT 47-50V	
87-A30-109-010	TR,2SD 2495			C108	87-010-408-080	CAP, ELECT 47-50V	
87-A30-108-010	TR,2SB1626			C109	87-010-322-080	C-CAP,S 100P-50 CH	
87-A30-073-080	C-TR,RT1N 141C			C110	87-010-322-080	C-CAP,S 100P-50 CH	
87-A30-159-080	C-TR,KTA1298Y			C111	87-010-260-080	CAP, ELECT 47-25V	
87-A30-047-080	TR,CSD655E			C112	87-010-260-080	CAP, ELECT 47-25V	
87-A30-202-080	C-TR,RT1P441C			C113	87-A10-946-080	C-CAP,S 220P-100 J CH	
87-A30-142-040	C-TR,DTA123EKA			C114	87-A10-946-080	C-CAP,S 220P-100 J CH	
87-026-423-080	C-TR RN2305			C117	87-A11-185-080	C-CAP, 0.47-50 F Z	
89-115-884-080	CHIP -TRANSISTER 2SA1588Y			C118	87-A11-185-080	C-CAP, 0.47-50 F Z	
89-341-164-080	CHIP-TRANSISTOR,2SC4116 Y			C121	87-010-178-080	CHIP CAP 1000P	
87-026-412-080	C-TR RN1305			C122	87-010-178-080	CHIP CAP 1000P	
				C123	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
				C124	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
DIODE				C125	87-012-368-080	C-CAP,S 0.1-50 F	
87-020-465-080	DIODE,1SS133 (110MA)			C126	87-012-368-080	C-CAP,S 0.1-50 F	
87-A40-548-090	DIODE,D3SBA20			C127	87-012-368-080	C-CAP,S 0.1-50 F	
87-070-274-080	DIODE,1N4003 SEM			C128	87-012-368-080	C-CAP,S 0.1-50 F	
87-A40-435-080	ZENER,MTZJ30D			C131	87-010-197-080	CAP, CHIP 0.01 DM	
87-A40-345-080	ZENER,MTZJ10C			C132	87-010-197-080	CAP, CHIP 0.01 DM	
87-A40-183-090	DIODE,RK36(F)			C133	87-010-197-080	CAP, CHIP 0.01 DM	
87-070-136-080	ZENER,MTZJ5.1B			C136	87-010-196-080	CHIP CAPACITOR,0.1-25	
				C203	87-010-177-080	C-CAP,S 820P-50 SL	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C204	87-010-177-080	C-CAP,S 820P-50 SL		C405	87-010-404-080	CAP, ELECT 4.7-50V	
C209	87-010-403-080	CAP, ELECT 3.3-50V		C406	87-010-404-080	CAP, ELECT 4.7-50V	
C210	87-010-403-080	CAP, ELECT 3.3-50V		C407	87-010-188-080	CAP,CHIP 6800P	
C211	87-010-181-080	CAP,CHIP S 1800P		C408	87-010-188-080	CAP,CHIP 6800P	
C212	87-010-181-080	CAP,CHIP S 1800P		C409	87-012-140-080	CAP 470P	
C213	87-010-401-080	CAP, ELECT 1-50V		C410	87-012-140-080	CAP 470P	
C214	87-010-401-080	CAP, ELECT 1-50V		C411	87-010-404-080	CAP, ELECT 4.7-50V	
C215	87-010-322-080	C-CAP,S 100P-50 CH		C412	87-010-404-080	CAP, ELECT 4.7-50V	
C216	87-010-322-080	C-CAP,S 100P-50 CH		C413	87-010-404-080	CAP, ELECT 4.7-50V	
C217	87-010-401-080	CAP, ELECT 1-50V		C414	87-010-404-080	CAP, ELECT 4.7-50V	
C218	87-010-401-080	CAP, ELECT 1-50V		C415	87-010-197-080	CAP, CHIP 0.01 DM	
C219	87-A10-946-080	C-CAP,S 220P-100 J CH		C416	87-010-197-080	CAP, CHIP 0.01 DM	
C220	87-A10-946-080	C-CAP,S 220P-100 J CH		C417	87-010-956-080	CHIP-CAP,S 0.068-25B	
C225	87-012-368-080	C-CAP,S 0.1-50 F		C418	87-010-956-080	CHIP-CAP,S 0.068-25B	
C226	87-012-368-080	C-CAP,S 0.1-50 F		C419	87-010-260-080	CAP, ELECT 47-25V	
C227	87-010-186-080	CAP,CHIP 4700P		C421	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
C228	87-010-186-080	CAP,CHIP 4700P		C422	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
C229	87-010-993-080	C-CAP,S 0.056-25 B		C451	87-010-401-080	CAP, ELECT 1-50V	
C230	87-010-993-080	C-CAP,S 0.056-25 B		C452	87-010-401-080	CAP, ELECT 1-50V	
C231	87-010-196-080	CHIP CAPACITOR,0.1-25		C457	87-010-196-080	CHIP CAPACITOR,0.1-25	
C232	87-010-196-080	CHIP CAPACITOR,0.1-25		C458	87-010-196-080	CHIP CAPACITOR,0.1-25	
C233	87-010-190-080	S CHIP F 0.01		C461	87-010-544-080	CAP, ELECT 0.1-50V	
C234	87-010-190-080	S CHIP F 0.01		C601	87-010-180-080	C-CER 1500P	
C235	87-016-285-080	CAP,E 47-100SME		C602	87-010-180-080	C-CER 1500P	
C236	87-016-285-080	CAP,E 47-100SME		C605	87-010-318-080	C-CAP,S 47P-50 CH	
C239	87-010-196-080	CHIP CAPACITOR,0.1-25		C606	87-010-318-080	C-CAP,S 47P-50 CH	
C303	87-012-157-080	C-CAP,S 330P-50 CH		C607	87-010-318-080	C-CAP,S 47P-50 CH	
C304	87-012-157-080	C-CAP,S 330P-50 CH		C608	87-010-318-080	C-CAP,S 47P-50 CH	
C307	87-010-196-080	CHIP CAPACITOR,0.1-25		C613	87-016-081-080	C-CAP,S 0.1-16 RK	
C309	87-010-196-080	CHIP CAPACITOR,0.1-25		C614	87-016-081-080	C-CAP,S 0.1-16 RK	
C310	87-010-196-080	CHIP CAPACITOR,0.1-25		C619	87-010-185-080	C-CAP,S 3900P-50 B	
C311	87-010-198-080	CAP, CHIP 0.022		C620	87-010-185-080	C-CAP,S 3900P-50 B	
C312	87-010-198-080	CAP, CHIP 0.022		C621	87-010-401-080	CAP, ELECT 1-50V	
C315	87-010-178-080	CHIP CAP 1000P		C622	87-010-401-080	CAP, ELECT 1-50V	
C316	87-010-178-080	CHIP CAP 1000P		C623	87-A10-773-080	CAP,M 0.10-50 J	
C321	87-016-492-080	C-CAP,S 0.33-16 FZ		C624	87-A10-773-080	CAP,M 0.10-50 J	
C322	87-016-492-080	C-CAP,S 0.33-16 FZ		C625	87-010-401-080	CAP, ELECT 1-50V	
C324	87-010-260-080	CAP, ELECT 47-25V		C626	87-010-401-080	CAP, ELECT 1-50V	
C325	87-010-370-080	CAP,E 330-6.3 SME		C627	87-010-196-080	CHIP CAPACITOR,0.1-25	
C327	87-010-404-080	CAP, ELECT 4.7-50V		C629	87-010-405-080	CAP, ELECT 10-50V	
C328	87-010-404-080	CAP, ELECT 4.7-50V		C630	87-010-213-080	C-CAP,S 0.015-50 B	
C332	87-010-196-080	CHIP CAPACITOR,0.1-25		C631	87-010-992-080	C-CAP,S 0.047-25 B	
C335	87-010-401-080	CAP, ELECT 1-50V		C632	87-010-263-080	CAP, ELECT 100-10V	
C336	87-010-401-080	CAP, ELECT 1-50V		C633	87-010-263-080	CAP, ELECT 100-10V	
C337	87-010-196-080	CHIP CAPACITOR,0.1-25		C634	87-010-196-080	CHIP CAPACITOR,0.1-25	
C339	87-010-196-080	CHIP CAPACITOR,0.1-25		C635	87-010-196-080	CHIP CAPACITOR,0.1-25	
C340	87-010-196-080	CHIP CAPACITOR,0.1-25		C638	87-012-157-080	C-CAP,S 330P-50 J CH GRM	
C351	87-012-140-080	CAP 470P		C641	87-010-196-080	CHIP CAPACITOR,0.1-25	
C352	87-012-140-080	CAP 470P		C677	87-010-196-080	CHIP CAPACITOR,0.1-25	
C354	87-010-175-080	CAP 560P		C957	87-010-405-080	CAP, ELECT 10-50V	
C355	87-012-349-080	C-CAP,S 1000P-50 CH		CN91	87-009-030-010	CONNECTOR 2P PH M	
C356	87-010-260-080	CAP, ELECT 47-25V		CN92	87-009-030-010	CONNECTOR 2P PH M	
C357	87-010-197-080	CAP, CHIP 0.01 DM		CN351	87-099-832-010	CONN,8P V S2M-8W	
C358	87-010-183-080	C-CAP,S 2700P-50 B		CN601	87-A60-349-010	CONN 30P DF8A-30S	
C359	87-010-183-080	C-CAP,S 2700P-50 B		CN603	87-A60-054-010	CONN,14P V 9604S-14C	
C360	87-010-183-080	C-CAP,S 2700P-50 B		CN605	87-099-781-010	CONN,16P V B16B-PH-K-S	
C370	87-010-196-080	CHIP CAPACITOR,0.1-25		CN901	87-099-566-010	CONN,7P TUC-P7P-B1	
C373	87-016-083-080	C-CAP,S 0.15-16 RK		CNA1	8Z-NB6-617-010	CONN ASSY,9P P-SPLY	
C374	87-016-083-080	C-CAP,S 0.15-16 RK		FB301	87-008-372-080	FLTR,EMI BL01 RNI	
C378	87-010-196-080	CHIP CAPACITOR,0.1-25		J202	87-A60-483-010	JACK,DIA6.3 BLK ST W/S KM	
C379	87-010-406-080	CAP, ELECT 22-50		J203	87-033-240-010	TERMINAL,SP 4P32SV1-05	
C380	87-010-406-080	CAP, ELECT 22-50		J204	87-A60-750-010	JACK,PIN 4P R/W BLUE	
C386	87-010-196-080	CHIP CAPACITOR,0.1-25		J602	87-A60-425-010	JACK,PIN 2P YKC21-3838	
C388	87-012-156-080	C-CAP,S 220P-50 CH		L101	87-003-383-010	COIL,1UH-S	
C393	87-010-319-080	C-CAP,S 56P-50 CH		L102	87-003-383-010	COIL,1UH-S	
C394	87-010-319-080	C-CAP,S 56P-50 CH		L201	87-003-383-010	COIL,1UH-S	
C401	87-010-196-080	CHIP CAPACITOR,0.1-25		L202	87-003-383-010	COIL,1UH-S	
C402	87-010-260-080	CAP, ELECT 47-25V		L301	87-A50-049-010	COIL,TRAP 85K(COI)	
C403	87-010-404-080	CAP, ELECT 4.7-50V		L302	87-A50-049-010	COIL,TRAP 85K(COI)	
C404	87-010-404-080	CAP, ELECT 4.7-50V		L351	87-007-342-010	COIL,OSC 85K BIAS	

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
SFR351	87-024-436-080	SFR, 47K RH063EC		LED408	87-A40-451-080	LED, SEL6510C-TP7 GRN	
SFR352	87-024-436-080	SFR, 47K RH063EC		LED409	87-A40-451-080	LED, SEL6510C-TP7 GRN	
TH101	87-A91-042-080	C-THMS, 100K 55001		LED411	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
TH102	87-A91-042-080	C-THMS, 100K 55001		LED412	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
TH201	87-A91-042-080	C-THMS, 100K 55001		LED413	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
TH202	87-A91-042-080	C-THMS, 100K 55001		LED414	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
WH1	87-A90-510-010	HLDR, WIRE 2.5-9P		LED415	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
LED416	87-A40-619-040	LED, SLR-56PT-T31-W GRN		LED417	87-A40-619-040	LED, SLR-56PT-T31-W GRN	
LED418	87-A40-619-040	LED, SLR-56PT-T31-W GRN		LED419	87-A40-589-040	LED, SLR-56VCT31 RED	
FRONT C.B				LED421	87-A40-380-080	LED, SEL6510C-TP5 GRN	
C141	87-010-263-040	CAP, E 100-10		LED422	87-017-980-080	LED, SEL6210S	
C143	87-010-194-080	CAP, CHIP 0.047		LED423	87-A40-380-080	LED, SEL6510C-TP5 GRN	
C151	87-010-264-040	CAP, E 100-10 5L		LED424	87-017-980-080	LED, SEL6210S	
C152	87-010-196-080	CHIP CAPACITOR, 0.1-25		LED425	87-A40-380-080	LED, SEL6510C-TP5 GRN	
C153	87-010-493-040	CAP, E 0.47-50 GAS		LED426	87-017-980-080	LED, SEL6210S	
C154	87-A10-189-040	CAP, E 220-10		LED427	87-A40-380-080	LED, SEL6510C-TP5 GRN	
C155	87-010-154-080	CAP CHIP 10P		LED428	87-017-980-080	LED, SEL6210S	
C156	87-010-854-080	C-CAP, S 560PCH		LED429	87-A40-380-080	LED, SEL6510C-TP5 GRN	
C158	87-010-178-080	CHIP CAP 1000P		LED430	87-017-980-080	LED, SEL6210S	
C159	87-010-196-080	CHIP CAPACITOR, 0.1-25		LED441	87-A40-451-080	LED, SEL6510C-TP7 GRN	
C160	87-010-196-080	CHIP CAPACITOR, 0.1-25		LED442	87-A40-451-080	LED, SEL6510C-TP7 GRN	
C161	87-010-196-080	CHIP CAPACITOR, 0.1-25		LED443	87-A40-451-080	LED, SEL6510C-TP7 GRN	
C162	87-010-178-080	C-CAP, S 1000P-50 K B C2012		ΔPR251	87-A90-247-080	PROTECTOR, 0.315A 60V 491	
C163	87-A10-189-040	CAP, E 220-10		ΔPR451	87-A90-247-080	PROTECTOR, 0.315A 60V 491	
C165	87-012-157-080	C-CAP, S 330P-50 CH		S301	87-A90-095-080	SW, TACT EVQ11G04M	
C166	87-010-075-040	CAP, E 10-16 5L		S302	87-A90-095-080	SW, TACT EVQ11G04M	
C171	87-010-194-080	CAP, CHIP 0.047		S303	87-A90-095-080	SW, TACT EVQ11G04M	
C172	87-010-408-040	CAP, E 47-50 SME		S304	87-A90-095-080	SW, TACT EVQ11G04M	
C173	87-010-981-040	CAP, E 22-35 5L SRE		S305	87-A90-095-080	SW, TACT EVQ11G04M	
C174	87-010-406-040	CAP, E 22-50 SME		S306	87-A90-095-080	SW, TACT EVQ11G04M	
C180	87-010-194-080	CAP, CHIP 0.047		S307	87-A90-095-080	SW, TACT EVQ11G04M	
C183	87-010-197-080	CAP, CHIP 0.01 DM		S308	87-A90-095-080	SW, TACT EVQ11G04M	
C184	87-010-197-080	CAP, CHIP 0.01 DM		S309	87-A90-095-080	SW, TACT EVQ11G04M	
C185	87-010-182-080	C-CAP, S 2200P-50 K B C2012		S310	87-A90-095-080	SW, TACT EVQ11G04M	
C187	87-010-182-080	C-CAP, S 2200P-50 K B C2012		S312	87-A90-095-080	SW, TACT EVQ11G04M	
C191	87-012-368-080	C-CAP, S 0.1-50 F		S313	87-A90-095-080	SW, TACT EVQ11G04M	
C192	87-010-196-080	CHIP CAPACITOR, 0.1-25		S321	87-A90-095-080	SW, TACT EVQ11G04M	
C281	87-010-561-040	CAP, E 100-16 GAS		S322	87-A90-095-080	SW, TACT EVQ11G04M	
C401	87-010-560-040	CAP, E 10-50 GAS		S323	87-A90-095-080	SW, TACT EVQ11G04M	
C402	87-010-196-080	CHIP CAPACITOR, 0.1-25		S324	87-A90-095-080	SW, TACT EVQ11G04M	
C403	87-010-318-080	C-CAP, S 47P-50 CH		S325	87-A90-095-080	SW, TACT EVQ11G04M	
C404	87-010-318-080	C-CAP, S 47P-50 CH		S326	87-A90-095-080	SW, TACT EVQ11G04M	
C406	87-010-318-080	C-CAP, S 47P-50 CH		S327	87-A90-095-080	SW, TACT EVQ11G04M	
C407	87-010-318-080	C-CAP, S 47P-50 CH		S328	87-A90-095-080	SW, TACT EVQ11G04M	
C408	87-010-318-080	C-CAP, S 47P-50 CH		S329	87-A90-095-080	SW, TACT EVQ11G04M	
C410	87-010-196-080	CHIP CAPACITOR, 0.1-25		S330	87-A90-095-080	SW, TACT EVQ11G04M	
C411	87-010-318-080	C-CAP, S 47P-50 CH		S330	87-A90-095-080	SW, TACT EVQ11G04M	
C412	87-010-318-080	C-CAP, S 47P-50 CH		S331	87-A90-095-080	SW, TACT EVQ11G04M	
C413	87-010-318-080	C-CAP, S 47P-50 CH		S341	87-A90-095-080	SW, TACT EVQ11G04M	
C451	87-010-412-040	CAP, E 10-25 M 5L SRE		S342	87-A90-095-080	SW, TACT EVQ11G04M	
C501	87-010-322-080	C-CAP, S 100P-50 CH		S343	87-A90-095-080	SW, TACT EVQ11G04M	
C502	87-010-322-080	C-CAP, S 100P-50 CH		S344	87-A90-095-080	SW, TACT EVQ11G04M	
C503	87-010-322-080	C-CAP, S 100P-50 CH		S345	87-A90-095-080	SW, TACT EVQ11G04M	
C701	87-010-196-080	CHIP CAPACITOR, 0.1-25		S346	87-A90-095-080	SW, TACT EVQ11G04M	
C702	87-012-158-080	C-CAP, S 390P-50 CH		SW162	87-A90-535-010	SW, RTRY EC16B24304	
C703	87-010-196-080	CHIP CAPACITOR, 0.1-25		SW163	87-A91-076-010	SW, RTRY RE0121PVB25FINAL	
C704	87-010-196-080	CHIP CAPACITOR, 0.1-25		SWITCH C.B			
C705	87-010-196-080	CHIP CAPACITOR, 0.1-25					
C706	87-010-196-080	CHIP CAPACITOR, 0.1-25					
C707	87-010-196-080	CHIP CAPACITOR, 0.1-25					
CN101	87-A60-350-010	CONN, 30P DF8A-30P					
CN102	87-099-030-010	CONN, 13P 6216H					
CN252	87-099-209-010	CONN, 4P 6216H					
CN351	87-099-031-010	CONN, 14P 6216 H					
CN451	87-099-209-010	CONN, 4P 6216H					
CN502	87-099-200-010	CONN, 7P 6216H					
CNA251	88-803-091-690	CONN ASSY, 9P					
FL101	8Z-NB6-601-010	FL, BJ698GNK					
L151	87-A50-333-010	COIL, OSC 9.43MHZ					
LED407	87-A40-451-080	LED, SEL6510C-TP7 GRN					
LED405	87-A40-619-040	LED, SEL6510C-TP7 GRN					
LED406	87-A40-619-040	LED, SEL6510C-TP7 GRN					
LED437	87-A40-451-080	LED, SEL6510C-TP7 GRN					
LED438	87-A40-451-080	LED, SEL6510C-TP7 GRN					

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
LED439	87-A40-451-080	LED, SEL6510C-TP7 GRN	C721 87-012-176-080 CAP 15P				
LED444	87-A40-451-080	LED, SEL6510C-TP7 GRN	C722 87-012-176-080 CAP 15P				
LED445	87-A40-451-080	LED, SEL6510C-TP7 GRN	C723 87-012-274-080 CHIP CAP,U 1000P-50B				
LED446	87-A40-451-080	LED, SEL6510C-TP7 GRN	C725 87-018-131-080 CAP, CER 1000P-50V				
S347	87-A90-095-080	SW,TACT EVQ11G04M	C727 87-010-196-080 CHIP CAPACITOR,0.1-25				
S348	87-A90-095-080	SW,TACT EVQ11G04M	C728 87-010-248-080 CAP, ELECT 220-10V				
S349	87-A90-095-080	SW,TACT EVQ11G04M	C729 87-012-274-080 CHIP CAP,U 1000P-50B				
S350	87-A90-095-080	SW,TACT EVQ11G04M	C731 87-012-286-080 CAP, U 0.01-25				
S351	87-A90-095-080	SW,TACT EVQ11G04M	C733 87-012-280-080 CAP, U 3300P-50				
S352	87-A90-095-080	SW,TACT EVQ11G04M	C734 87-012-280-080 CAP, U 3300P-50				
S371	87-A90-095-080	SW,TACT EVQ11G04M	C752 87-012-282-080 CAP, U 4700P-50				
S372	87-A90-095-080	SW,TACT EVQ11G04M	C753 87-012-195-080 C-CAP,U 100P-50CH				
S373	87-A90-095-080	SW,TACT EVQ11G04M	C755 87-012-286-080 CAP, U 0.01-25				
S374	87-A90-095-080	SW,TACT EVQ11G04M	C756 87-012-286-080 CAP, U 0.01-25				
S375	87-A90-095-080	SW,TACT EVQ11G04M	C757 87-012-188-080 C-CAP,U 47P-50 CH				
S376	87-A90-095-080	SW,TACT EVQ11G04M	C758 87-012-167-080 C-CAP,U 5P-50 CH				
S377	87-A90-095-080	SW,TACT EVQ11G04M	C761 87-010-196-080 CHIP CAPACITOR,0.1-25				
S378	87-A90-095-080	SW,TACT EVQ11G04M	C762 87-012-286-080 CAP, U 0.01-25				
S379	87-A90-095-080	SW,TACT EVQ11G04M	C763 87-010-829-080 CAP, U 0.047-16				
S380	87-A90-095-080	SW,TACT EVQ11G04M	C765 87-012-286-080 CAP, U 0.01-25				
PT C.B				C766 87-010-197-080 CAP, CHIP 0.01 DM			
C1	87-010-387-080	CAP, E 470-25 SME	C768 87-012-286-080 CAP, U 0.01-25				
C4	87-010-403-080	CAP, ELECT 3.3-50V	C769 87-010-260-080 CAP, ELECT 47-25V				
C5	87-A10-479-080	CAP,CER 2200P-250 M E KH	C770 87-010-829-080 CAP, U 0.047-16				
C8	87-010-917-090	CAP,E 3300-50 M SMG	C771 87-010-383-080 CAP, ELECT 33-25V				
C9	87-010-917-090	CAP,E 3300-50 M SMG	C772 87-010-829-080 CAP, U 0.047-16				
C10	87-018-209-080	CAP, CER 0.1-50V	C773 87-010-196-080 CHIP CAPACITOR,0.1-25				
C11	87-018-209-080	CAP, CER 0.1-50V	C774 87-010-263-080 CAP, ELECT 100-10V				
CN1	87-A60-851-010	CONN,9P V VH	C775 87-010-404-080 CAP, ELECT 4.7-50V				
△PT1	8Z-NB6-608-010	PT,ZNB-6 E	C776 87-012-286-080 CAP, U 0.01-25				
△PT2	8Z-NF8-662-110	PT,SUB ZNF-8(E)	C777 87-010-493-080 CAP, E 0.47-50 GAS				
RY1	87-A90-976-010	RELAY,AC12V SDT-S-112LMR	C778 87-010-401-080 CAP, ELECT 1-50V				
△T1	87-A60-317-010	TERMINAL, 1P MSC	C779 87-010-401-080 CAP, ELECT 1-50V				
△T2	87-A60-317-010	TERMINAL, 1P MSC	C780 87-010-196-080 CHIP CAPACITOR,0.1-25				
Q-SUR C.B				C781 87-010-405-080 CAP, ELECT 10-50V			
C952	87-010-112-080	CAP, ELECT 100-16V	C782 87-010-405-080 CAP, ELECT 10-50V				
C953	87-010-260-080	CAP, ELECT 47-25V	C783 87-012-286-080 CAP, U 0.01-25				
C954	87-010-197-080	CAP, CHIP 0.01 DM	C784 87-012-286-080 CAP, U 0.01-25				
C955	87-010-197-080	CAP, CHIP 0.01 DM	C785 87-010-405-080 CAP, ELECT 10-50V				
C971	87-010-402-080	CAP, ELECT 2.2-50V	C786 87-010-405-080 CAP, ELECT 10-50V				
C972	87-010-402-080	CAP, ELECT 2.2-50V	C787 87-012-275-080 C-CAP,U 1200P-50 B				
C973	87-010-405-080	CAP, ELECT 10-50V	C788 87-012-275-080 C-CAP,U 1200P-50 B				
C974	87-010-405-080	CAP, ELECT 10-50V	C789 87-012-275-080 C-CAP,U 1200P-50 B				
C975	87-010-322-080	C-CAP,S 100P-50 CH	C790 87-012-275-080 C-CAP,U 1200P-50 B				
CN951	87-A60-689-010	CONN,7P H GRY TUC-P07X-C1	C791 87-010-405-080 CAP, ELECT 10-50V				
MD DOOR C.B				C792 87-012-273-080 C-CAP,U 820P-50 B			
CN452	87-A60-083-010	CONN,04P H 9604S-04F	C793 87-010-406-080 CAP, ELECT 22-50				
S451	87-036-109-010	PUSH SWITCH	C794 87-010-596-080 CAP, S 0.047-16				
M451	87-A90-036-010	MOT ASSY,RF-300CA-11440	C795 87-010-403-080 CAP, ELECT 3.3-50V				
TUNER C.B				C796 87-012-276-080 CAP, CHIP SS 1500 PBK			
C701	87-010-381-080	CAP, ELECT 330-16V	C797 87-012-276-080 CAP, CHIP SS 1500 PBK				
C702	87-010-404-080	CAP, ELECT 4.7-50V	C798 87-010-829-080 CAP, U 0.047-16				
C703	87-012-286-080	CAP, U 0.01-25	C812 87-012-286-080 CAP, U 0.01-25				
C704	87-012-286-080	CAP, U 0.01-25	C814 87-012-286-080 CAP, U 0.01-25				
C709	87-012-195-080	C-CAP,U 100P-50CH	C820 87-010-260-080 CAP, ELECT 47-25V				
C711	87-010-260-080	CAP, ELECT 47-25V	C821 87-012-286-080 CAP, U 0.01-25				
C712	87-010-831-080	C-CAP,U 0.1-16F	C822 87-012-286-080 CAP, U 0.01-25				
C713	87-012-286-080	CAP, U 0.01-25	C823 87-012-196-080 CHIP CAPACITOR,0.1-25				
C714	87-012-286-080	CAP, U 0.01-25	C828 87-010-196-080 CHIP CAPACITOR,0.1-25				
C715	87-012-195-080	C-CAP,U 100P-50CH	C829 87-010-196-080 CHIP CAPACITOR,0.1-25				
C717	87-012-286-080	CAP, U 0.01-25	C859 87-012-286-080 CAP, U 0.01-25				
C719	87-012-286-080	CAP, U 0.01-25	C861 87-012-199-080 CAP 220P				
C720	87-012-195-080	C-CAP,U 100P-50CH	C862 87-012-199-080 CAP 220P				
			C863 87-012-270-080 CAP, U 470P-50				
			C864 87-010-405-080 CAP, ELECT 10-50V				
			C865 87-010-196-080 CHIP CAPACITOR,0.1-25				
			C866 87-010-405-080 CAP, ELECT 10-50V				
			C867 87-012-286-080 CAP, U 0.01-25				
			C868 87-012-184-080 C-CAP,U 33P-50 CH				
			C869 87-012-180-080 C-CAP,U 22P-50 CH				

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C940	87-012-286-080	CAP, U 0.01-25		C103	87-010-787-080	CAP, U 0.022-25	
C942	87-012-168-080	C-CAP,U 6P-50 CH		C104	87-010-662-080	C-CAP,E 22-6.3	
C947	87-012-286-080	CAP, U 0.01-25		C105	87-010-831-080	C-CAP,U,0.1-16F	
C949	87-A10-039-080	C-CAP,U 470P-50 J CH		C106	87-A11-067-080	C-CAP,S 1-10 K B	
C952	87-012-286-080	CAP, U 0.01-25		C107	87-012-195-080	C-CAP,U 100P-50CH	
C958	87-010-197-080	CAP, CHIP 0.01 DM		C108	87-012-274-080	CHIP CAP,U 1000P-50B	
C959	87-010-831-080	C-CAP,U,0.1-16F		C109	87-A11-033-080	C-CAP,TN 47U-4	
C960	87-010-196-080	CHIP CAPACITOR,0.1-25		C111	87-016-296-080	C-CAP,TN 22-4SV(A)	
C962	87-010-401-080	CAP, ELECT 1-50V		C112	87-012-286-080	CAP, U 0.01-25	
CF801	87-008-423-010	CERAMIC FILTER, SFE10.7		C113	87-012-284-080	CAP, U 6800P-50	
CF802	82-785-747-010	CF MS2 GHY R		C114	87-010-828-080	CHIP CAPACITOR,U 0.033-25F	
CN701	87-A60-650-010	CONN,16P H GRY TUC-P16X-C1		C115	87-A10-369-080	C-CAP,S 0.47-16 K B	
FFE801	A8-6ZA-191-130	6ZA-1 FEENN		C116	87-012-282-080	CAP, U 4700P-50	
J801	87-033-241-010	TERMINAL,ANT AJ-2039		C117	87-A11-067-080	C-CAP,S 1-10 K B	
L771	87-A50-266-010	COIL,FM DET-2N(TOK)		C118	87-012-282-080	CAP, U 4700P-50	
L772	87-A91-110-010	FLTR,PCFJZH-450 (TOK)		C119	87-016-491-080	C-CAP,S 0.22-16 FZ	
L781	87-005-847-080	COIL,2.2UH(CECS)		C120	87-010-787-080	CAP, U 0.022-25	
L791	87-A50-027-010	COIL,1 POLE MPX(TOK)		C121	87-012-286-080	CAP, U 0.01-25	
L792	87-A50-027-010	COIL,1 POLE MPX(TOK)		C122	87-010-829-080	CAP, U 0.047-16	
L832	87-005-847-080	COIL,2.2UH(CECS)		C123	87-012-286-080	CAP, U 0.01-25	
L851	87-005-847-080	COIL,2.2UH(CECS)		C124	87-010-662-080	C-CAP,E 22-6.3	
L941	87-A50-020-010	COIL,ANT LW(COI)		C125	87-010-662-080	C-CAP,E 22-6.3	
L942	87-A50-019-010	COIL,OSC LW(COI)		C201	87-010-831-080	C-CAP,U,0.1-16F	
L981	8Z-ZA1-665-010	COIL,AM PACK 2(TOK)		C202	87-010-831-080	C-CAP,U,0.1-16F	
TC942	87-011-164-010	CAPACITOR,TRIMMER 30P		C203	87-010-785-080	C-CAP,U0.015-25BK	
X721	87-A70-061-010	VIB,XTAL 4.500MHZ CSA-309		C204	87-016-461-080	C-CAP,S 0.47-16F	
X851	87-A70-091-010	VIB,XTAL 4.332MHZ CSA-309		C205	87-010-831-080	C-CAP,U,0.1-16F	
TUNER ADAPTER C.B				C206	87-012-270-080	CAP, U 470P-50	
				C207	87-016-461-080	C-CAP,S 0.47-16F	
				C208	87-012-286-080	CAP, U 0.01-25	
CN801	87-009-757-010	CONN,16P PH H		C209	87-010-831-080	C-CAP,U,0.1-16F	
CN802	87-A60-189-010	CONN,16P TUC-P16P-B1		C210	87-012-172-080	CAPACITOR CHIP U 10P CH	
INTERFACE C.B				C211	87-012-172-080	CAPACITOR CHIP U 10P CH	
				C212	87-012-195-080	C-CAP,U 100P-50CH	
				C213	87-010-662-080	C-CAP,E 22-6.3	
C101	87-010-196-080	CHIP CAPACITOR,0.1-25		C214	87-012-274-080	CHIP CAP,U 1000P-50B	
C102	87-010-101-080	CAP, ELECT 220-16		C217	87-012-188-080	C-CAP,U 47P-50 CH	
C104	87-010-370-040	CAP,E 330-6.3 SME		C218	87-012-172-080	CAPACITOR CHIP U 10P CH	
C105	87-010-380-080	CAP, ELECT 47-16V		C219	87-016-296-080	C-CAP,TN 22-4SV(A)	
C106	87-010-101-080	CAP, ELECT 220-16		C220	87-010-662-080	C-CAP,E 22-6.3	
C121	87-016-462-080	C-CAP,S 1-16 F		C221	87-010-831-080	C-CAP,U,0.1-16F	
C201	87-010-402-080	CAP, ELECT 2.2-50V		C222	87-016-444-080	C-CAP,TN 47-10 F95E	
C202	87-010-402-080	CAP, ELECT 2.2-50V		C223	87-010-831-080	C-CAP,U,0.1-16F	
C203	87-012-156-080	C-CAP,S 220P-50 CH		C224	87-A10-685-080	C-CAP,S 470P-100 J CH	
C204	87-012-156-080	C-CAP,S 220P-50 CH		C225	87-010-831-080	C-CAP,U,0.1-16F	
C205	87-010-180-080	C-CER 1500P		C226	87-010-831-080	C-CAP,U,0.1-16F	
C206	87-010-180-080	C-CER 1500P		C227	87-012-274-080	CHIP CAP,U 1000P-50B	
C207	87-010-404-080	CAP, ELECT 4.7-50V		C228	87-012-274-080	CHIP CAP,U 1000P-50B	
C208	87-010-404-080	CAP, ELECT 4.7-50V		C229	87-012-274-080	CHIP CAP,U 1000P-50B	
C251	87-010-408-080	CAP, ELECT 47-50V		C232	87-012-274-080	CHIP CAP,U 1000P-50B	
C252	87-010-196-080	CHIP CAPACITOR,0.1-25		C233	87-012-274-080	CHIP CAP,U 1000P-50B	
C401	87-010-178-080	CHIP CAP 1000P		C300	87-010-831-080	C-CAP,U,0.1-16F	
C402	87-010-178-080	CHIP CAP 1000P		C301	87-010-831-080	C-CAP,U,0.1-16F	
C403	87-010-196-080	CHIP CAPACITOR,0.1-25		C302	87-010-831-080	C-CAP,U,0.1-16F	
C404	87-010-196-080	CHIP CAPACITOR,0.1-25		C305	87-A11-067-080	C-CAP,S 1-10 K B	
C411	87-012-140-080	CAP 470P		C307	87-010-831-080	C-CAP,U,0.1-16F	
C421	87-010-196-080	CHIP CAPACITOR,0.1-25		C308	87-010-831-080	C-CAP,U,0.1-16F	
CON901	87-A60-139-010	CONN,14P V FE		C311	87-010-662-080	C-CAP,E 22-6.3	
CON902	87-A60-060-010	CONN,07P V 9604S-07C		C312	87-012-195-080	C-CAP,U 100P-50CH	
CON903	87-009-030-010	CONNECTOR 2P PH M		C320	87-A90-399-080	C-FLTR,EMI NFM40R01C	
CON904	87-A60-061-010	CONN,06P V 9604S-06C		C321	87-012-274-080	CHIP CAP,U 1000P-50B	
CON905	87-A60-423-010	CONN,14P V TOC-B		C322	87-012-274-080	CHIP CAP,U 1000P-50B	
CON906	87-A60-422-010	CONN,8P V TOC-B		C323	87-012-274-080	CHIP CAP,U 1000P-50B	
FB401	87-A50-189-080	C-COIL,S BLM21B272S		C324	87-012-274-080	CHIP CAP,U 1000P-50B	
				C325	87-012-274-080	CHIP CAP,U 1000P-50B	
MD C.B				C400	87-010-831-080	C-CAP,U,0.1-16F	
C100	87-016-296-080	C-CAP,TN 22-4SV(A)		C401	87-010-831-080	C-CAP,U,0.1-16F	
C101	87-016-296-080	C-CAP,TN 22-4SV(A)		C402	87-010-831-080	C-CAP,U,0.1-16F	
C102	87-012-286-080	CAP, U 0.01-25		C403	87-010-831-080	C-CAP,U,0.1-16F	
				C404	87-010-831-080	C-CAP,U,0.1-16F	

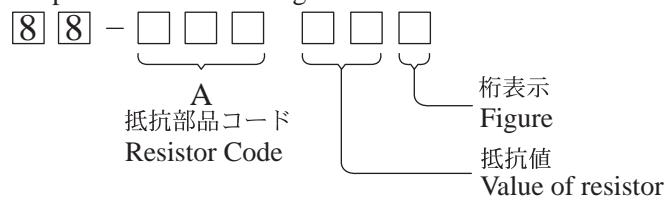
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C405	87-010-661-080	C-CAP,E 10-16	L103 87-A50-117-080 C-COIL,10UHLQH3C				
C406	87-010-779-080	C-CAP,E 100-6.3	L201 87-A50-117-080 C-COIL,10UHLQH3C				
C407	87-012-197-080	C-CAP,U 150P-50 CH	L202 87-A50-117-080 C-COIL,10UHLQH3C				
C408	87-012-197-080	C-CAP,U 150P-50 CH	L203 87-A50-116-080 C-COIL,4.7UHLQH3C				
C411	87-012-271-080	CAP, U 560P-50	L301 87-A50-117-080 C-COIL,10UHLQH3C				
C412	87-012-271-080	CAP, U 560P-50	L501 87-A50-116-080 C-COIL,4.7UHLQH3C				
C413	87-012-197-080	C-CAP,U 150P-50 CH	L502 87-A50-116-080 C-COIL,4.7UHLQH3C				
C414	87-012-197-080	C-CAP,U 150P-50 CH	L503 87-A50-116-080 C-COIL,4.7UHLQH3C				
C417	87-012-268-080	C-CAP,U 330P-50 B	L504 87-005-774-080 C-COIL,4BLH				
C418	87-012-268-080	C-CAP,U 330P-50 B	L505 87-005-774-080 C-COIL,4BLH				
C423	87-012-286-080	CAP, U 0.01-25	L611 87-A50-163-080 C-COIL,ZBFS5101-PT				
C424	87-012-286-080	CAP, U 0.01-25	L612 87-005-512-080 C-COIL, BLM21A05				
C429	87-012-286-080	CAP, U 0.01-25	L613 87-005-512-080 C-COIL, BLM21A05				
C430	87-012-286-080	CAP, U 0.01-25	L614 87-A50-163-080 C-COIL,ZBFS5101-PT				
C431	87-010-779-080	C-CAP,E 100-6.3	L615 87-A90-034-080 C-FLTR, EMI BLM41P750				
C434	87-010-831-080	C-CAP,U,0.1-16F	L616 87-A50-163-080 C-COIL,ZBFS5101-PT				
C500	87-010-661-080	C-CAP,E 10-16	R315 87-022-239-080 C-RES U 10K-1/16WF				
C501	87-010-831-080	C-CAP,U,0.1-16F	R423 87-025-564-080 C-RES, U M/F 47K D				
C502	87-010-831-080	C-CAP,U,0.1-16F	R424 87-025-564-080 C-RES, U M/F 47K D				
C503	87-010-846-080	C-CAP,E 4.7-35V	R425 87-022-583-080 C-RES, U M/F 12K D				
C504	87-010-831-080	C-CAP,U,0.1-16F	R426 87-022-583-080 C-RES, U M/F 12K D				
C505	87-010-846-080	C-CAP,E 4.7-35V	S701 87-A90-947-080 C-SW,MICRO SPPB63				
C506	87-010-831-080	C-CAP,U,0.1-16F	S702 87-A90-947-080 C-SW,MICRO SPPB63				
C507	87-010-661-080	C-CAP,E 10-16	X200 87-A70-105-080 C-VIB,XTAL 22.5792MHZ SMD-49				
C508	87-010-831-080	C-CAP,U,0.1-16F	X301 87-A70-100-080 C-VIB,CER 12.0MHZ PBRC-BR-A				
C509	87-010-846-080	C-CAP,E 4.7-35V	DISC SW C.B				
C510	87-010-831-080	C-CAP,U,0.1-16F	R900 87-022-361-080 C-RES,S 47K-1/10W F				
C511	87-010-661-080	C-CAP,E 10-16	R901 87-022-359-080 C-RES,S22K-1/10WF				
C513	87-010-661-080	C-CAP,E 10-16	R902 87-022-355-080 C-RES,S10K-1/10W F				
C514	87-010-661-080	C-CAP,E 10-16	R900 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C515	87-012-337-080	C-CAP,U 56P-50 CH	S901 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C516	87-012-337-080	C-CAP,U 56P-50 CH	S902 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C517	87-012-278-080	C-CAP,U 2200P-50 B	S900 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C518	87-012-278-080	C-CAP,U 2200P-50 B	S901 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C519	87-010-831-080	C-CAP,U,0.1-16F	S902 87-A90-948-010 SW,LVR 2-1-2 MPU11263MLB0				
C520	87-010-661-080	C-CAP,E 10-16	MOTOR C.B				
C521	87-010-831-080	C-CAP,U,0.1-16F	M900 87-A91-054-010 MOT,FF-050SK				
C522	87-010-661-080	C-CAP,E 10-16					
C523	87-010-662-080	C-CAP,E 22-6.3					
C524	87-010-662-080	C-CAP,E 22-6.3					
C525	87-012-274-080	CHIP CAP,U 1000P-50B	LOAD C.B				
C526	87-012-274-080	CHIP CAP,U 1000P-50B	CN100 87-A60-818-010 CONN,9P H 52807-0910				
C527	87-010-661-080	C-CAP,E 10-16	CN101 87-099-047-010 CONN,04FM-1.0ST				
C528	87-010-661-080	C-CAP,E 10-16	FC100 87-ZG1-605-010 FF-CABLE, 21P 0.5 100MM				
C530	87-010-831-080	C-CAP,U,0.1-16F	FC101 87-ZG1-606-010 FF-CABLE, 8P 1.0 115MM				
C531	87-010-831-080	C-CAP,U,0.1-16F	M100 87-A90-672-010 MOT,M25E-4				
C600	87-010-662-080	C-CAP,E 22-6.3					
C601	87-010-779-080	C-CAP,E 100-6.3	S100 87-036-109-010 PUSH SWITCH				
C602	87-010-779-080	C-CAP,E 100-6.3	S101 87-A90-117-010 SW,PUSH 1-1-1 MPU103				
C603	87-010-662-080	C-CAP,E 22-6.3					
C604	87-010-779-080	C-CAP,E 100-6.3	MECHA C.B				
C605	87-012-286-080	CAP, U 0.01-25	SW400 87-A90-611-010 SW,PUSH 3-2-2 MPU20300MLB0				
C607	87-A10-711-080	C-CAP,E 100-6.3 M MF	SW401 87-A90-612-010 SW,PUSH 2-1-1 MPU10371MLB1				
C701	87-010-779-080	C-CAP,E 100-6.3					
C702	87-012-286-080	CAP, U 0.01-25					
C703	87-012-286-080	CAP, U 0.01-25	DECK C.B				
C706	87-010-831-080	C-CAP,U,0.1-16F	SFR1 87-024-581-010 SFR,3.3KH KVFS 637A				
CN100	87-A60-537-080	C-CONN,21P H CFP55	SOL1 82-ZM1-618-310 SOL ASSY,27				
CN200	87-A60-816-080	C-CONN,9P V 6232	SW2 87-A90-248-010 SW,MICRO ESE11SH2CXQ				
CN300	87-A60-518-080	C-CONN,8P H 6232	SW3 87-A90-248-010 SW,MICRO ESE11SH2CXQ				
CN400	87-A60-714-080	C-CONN,8P V FMN-BMTR	SW4 87-A90-248-010 SW,MICRO ESE11SH2CXQ				
CN600	87-A60-519-080	C-CONN,14P H 6232	SW5 87-A90-248-010 SW,MICRO ESE11SH2CXQ				
CN700	87-A60-814-080	C-CONN,4P H 6232	SW6 87-A90-248-010 SW,MICRO ESE11SH2CXQ				
CN900	87-A60-817-010	CONN,4P V 52806-0410					
FB501	87-A90-828-080	C-F-BEAD, BK1608LM182					
FC201	8Z-ZG2-612-010	FF-CABLE, 9P 1.0 90MM	MOTOR-1				
FC700	8Z-ZG2-613-010	FF-CABLE, 4P 1.0 70MM	M2 87-A90-346-010 MOT,RF-500TB 12560				
L100	87-A50-117-080	C-COIL,10UHLQH3C	SW7 87-036-110-010 SW,MICRO SPPB62				
L101	87-A50-012-080	C-COIL,100UH LQH3C					
L102	87-A50-117-080	C-COIL,10UHLQH3C					
			RELAY C.B				

- Regarding connectors, they are not stocked as they are not the initial order items.
The connectors are available after they are supplied from connector manufacturers upon the order is received.

○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

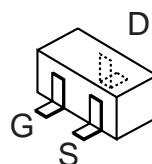
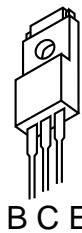
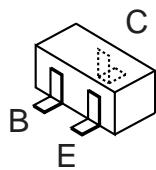
Chip Resistor Part Coding



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 Resistor Code : A	
				外形／Form	L	W		
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



2SA1235

2SA1514

2SA1588

2SC3052

2SC3906

2SC4116

2SD1306

CSD1306

DTA123EKA

KTA1298

RN1305

RN2305

RT1N141C

RT1N144C

RT1P141C

RT1P144C

RT1P441C

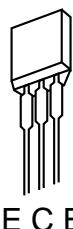
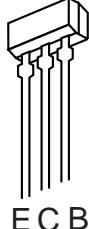
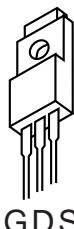
2SB1370

2SD2494

2SB1625

2SD2495

2SK2158



2SK2937

CC5551

CSD655

KTC3199

CSA1585

CSC4115

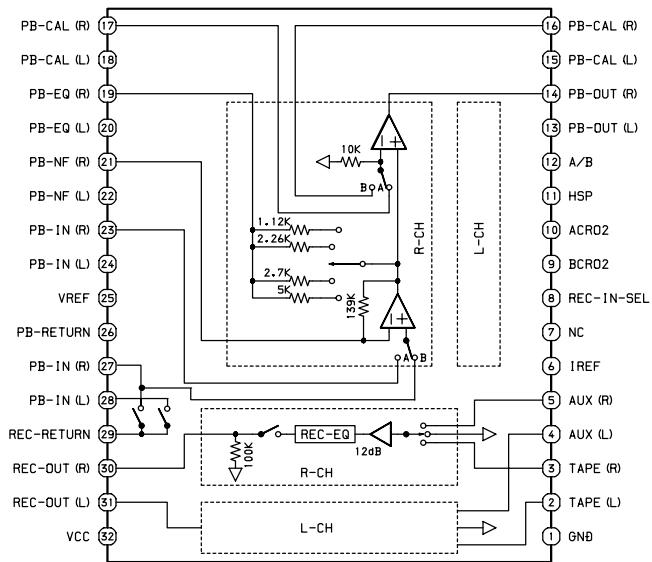
DTC114ES

KTA1266

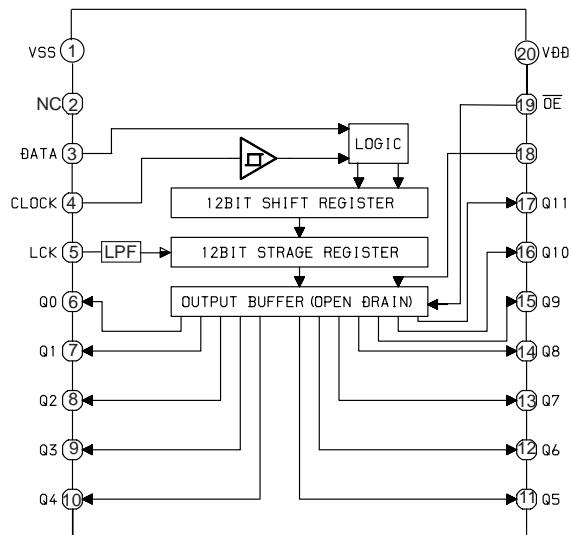
KTC3198

IC BLOCK DIAGRAM

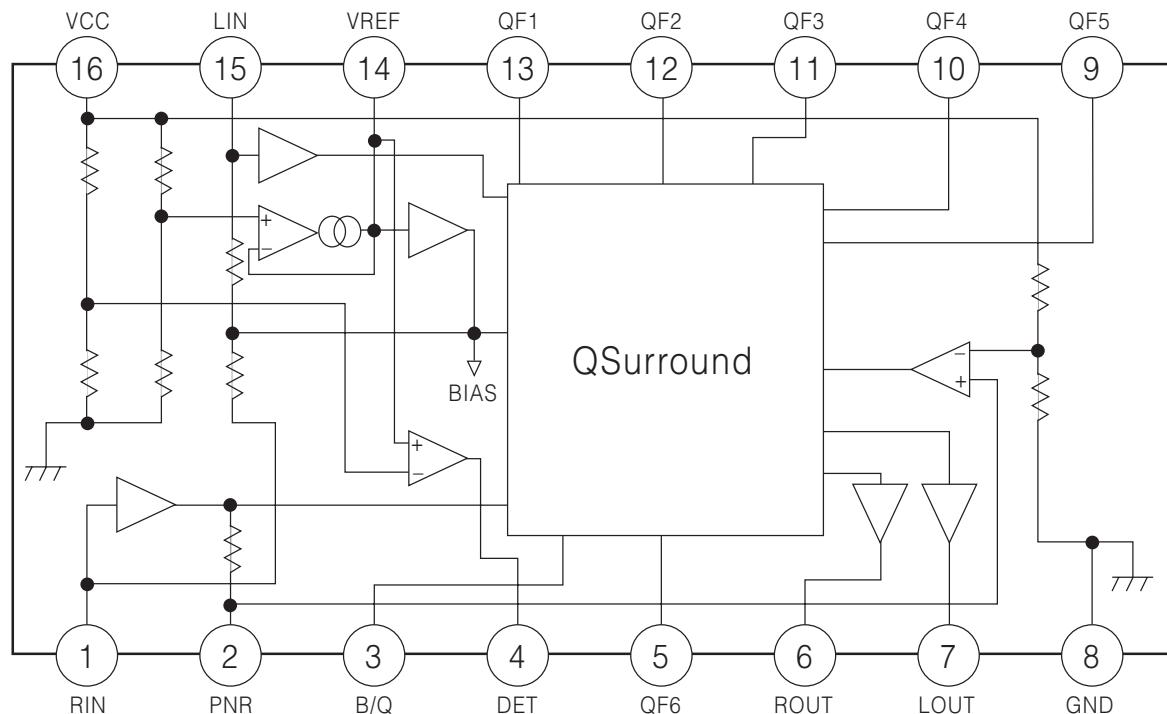
IC, BA7762AFS



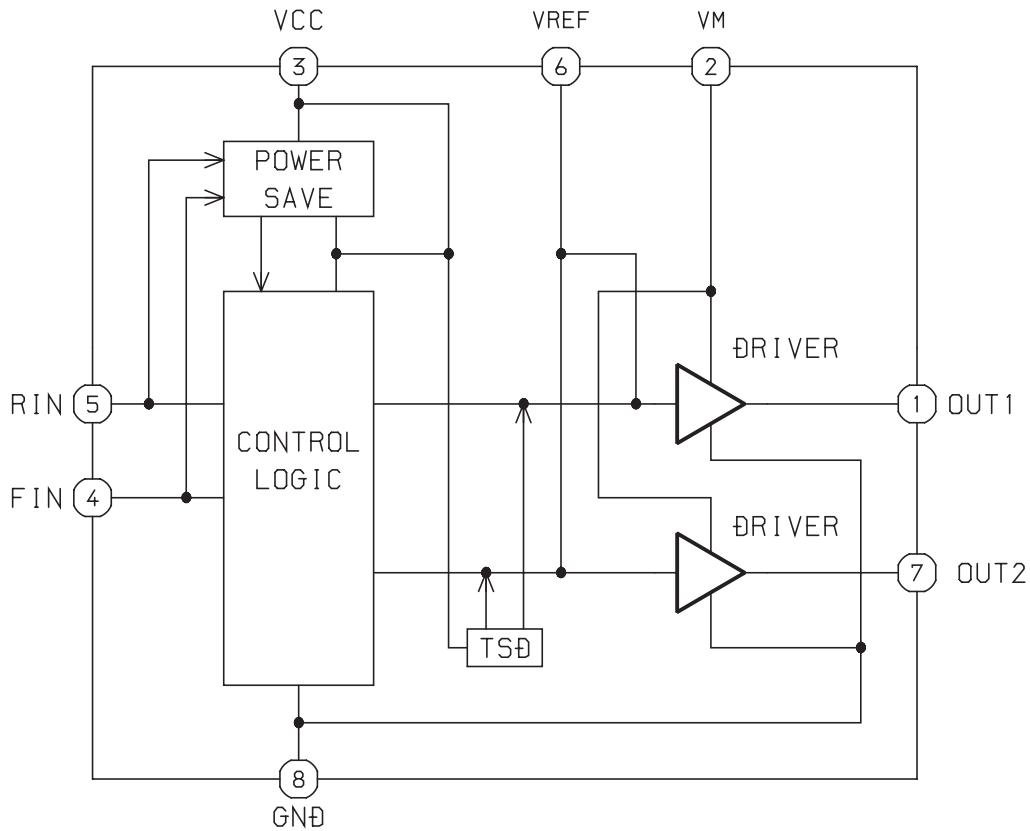
IC, BU2099FV



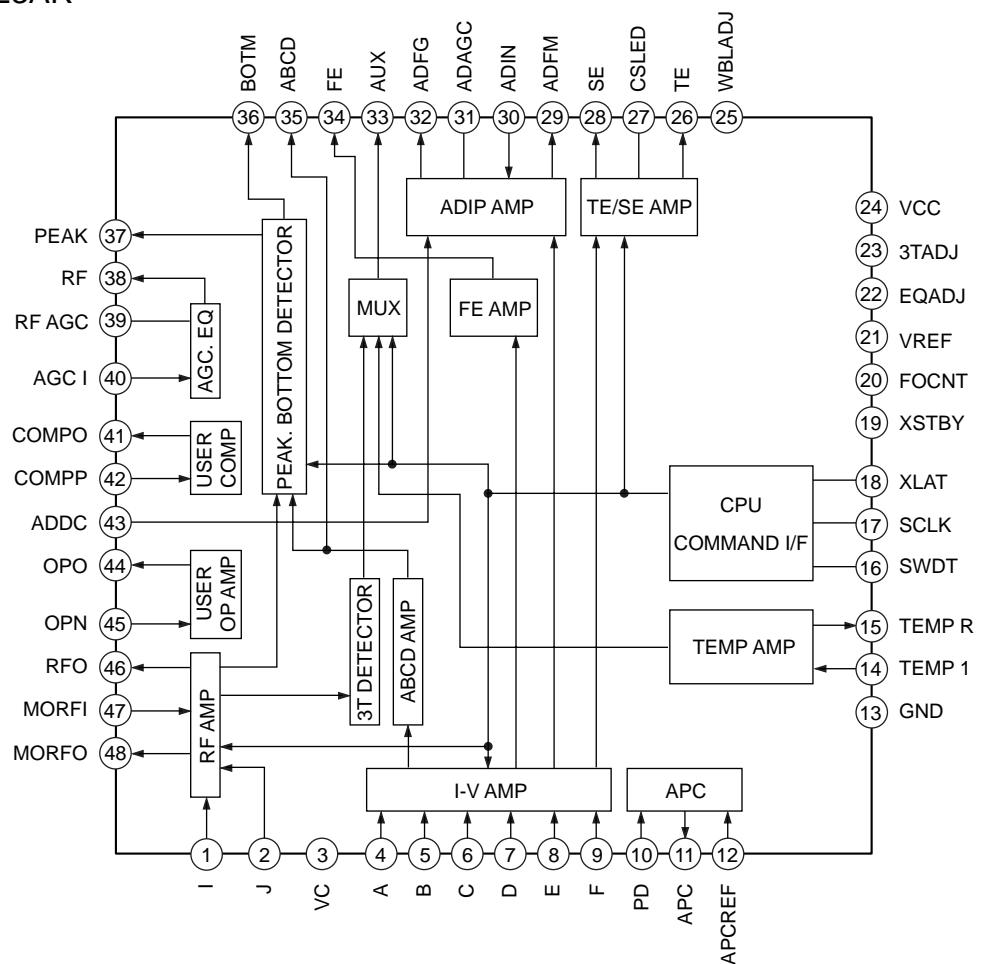
IC, MM1454XFBE



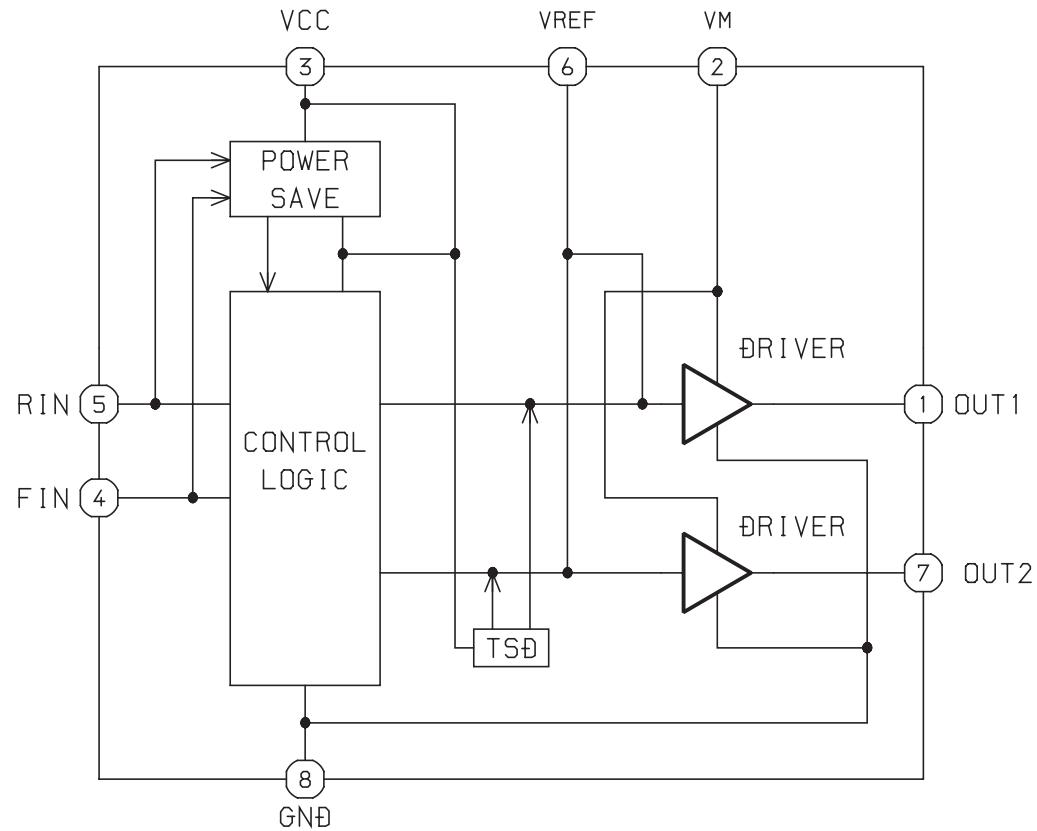
IC, BA6417F



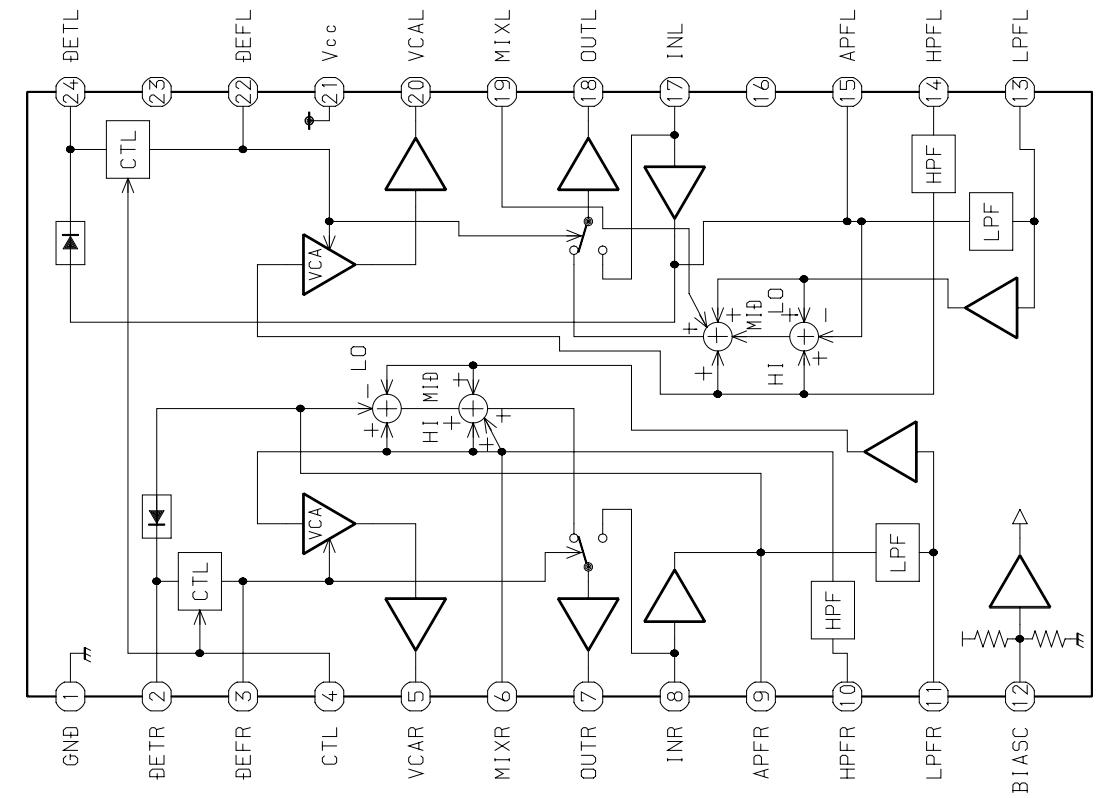
IC, CXA2523AR



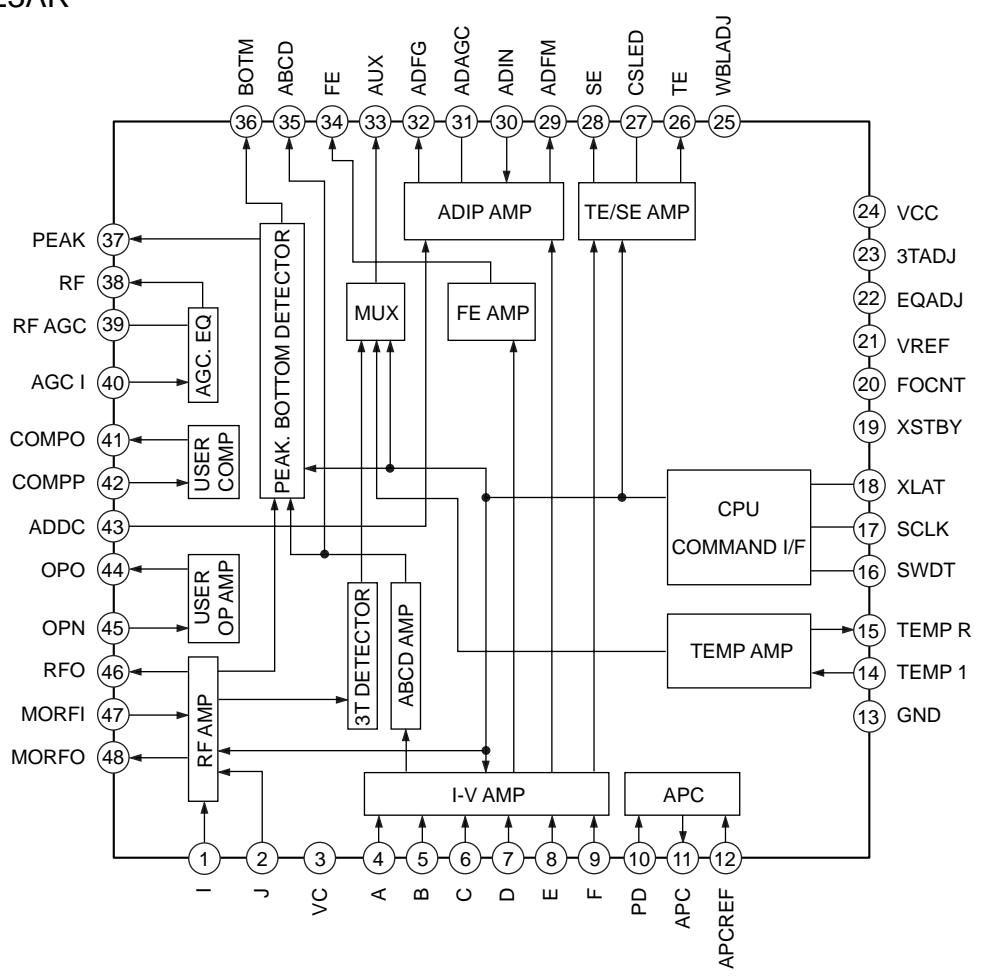
IC, BA6417F



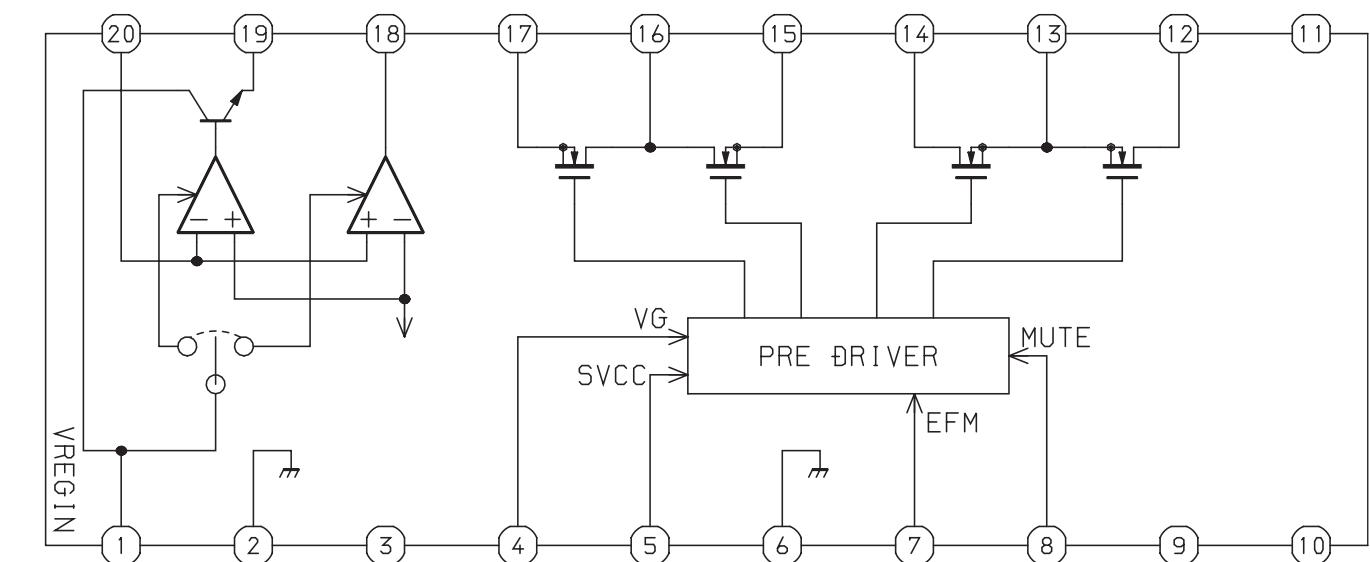
IC, BA3880FS



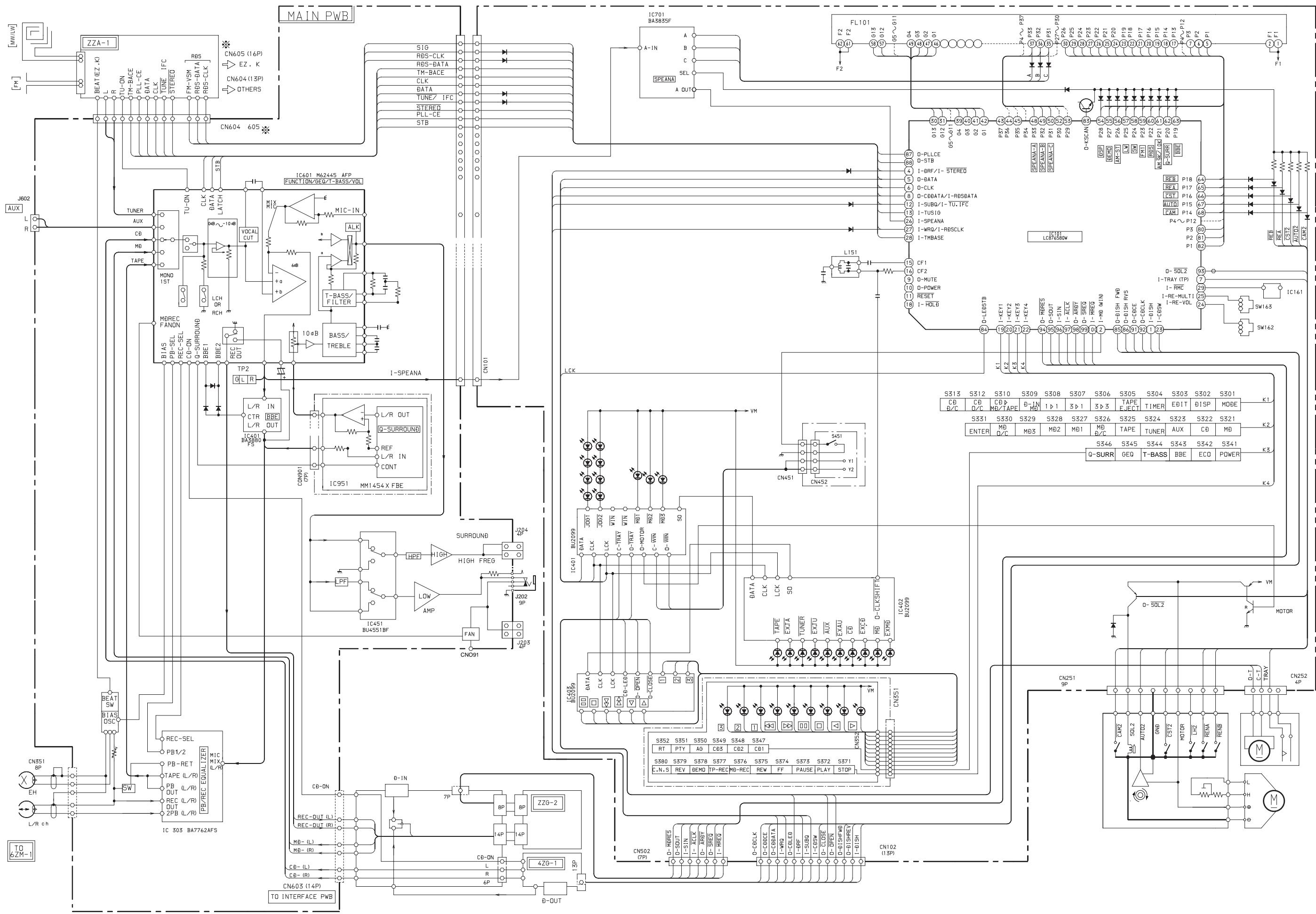
IC, CXA2523AR



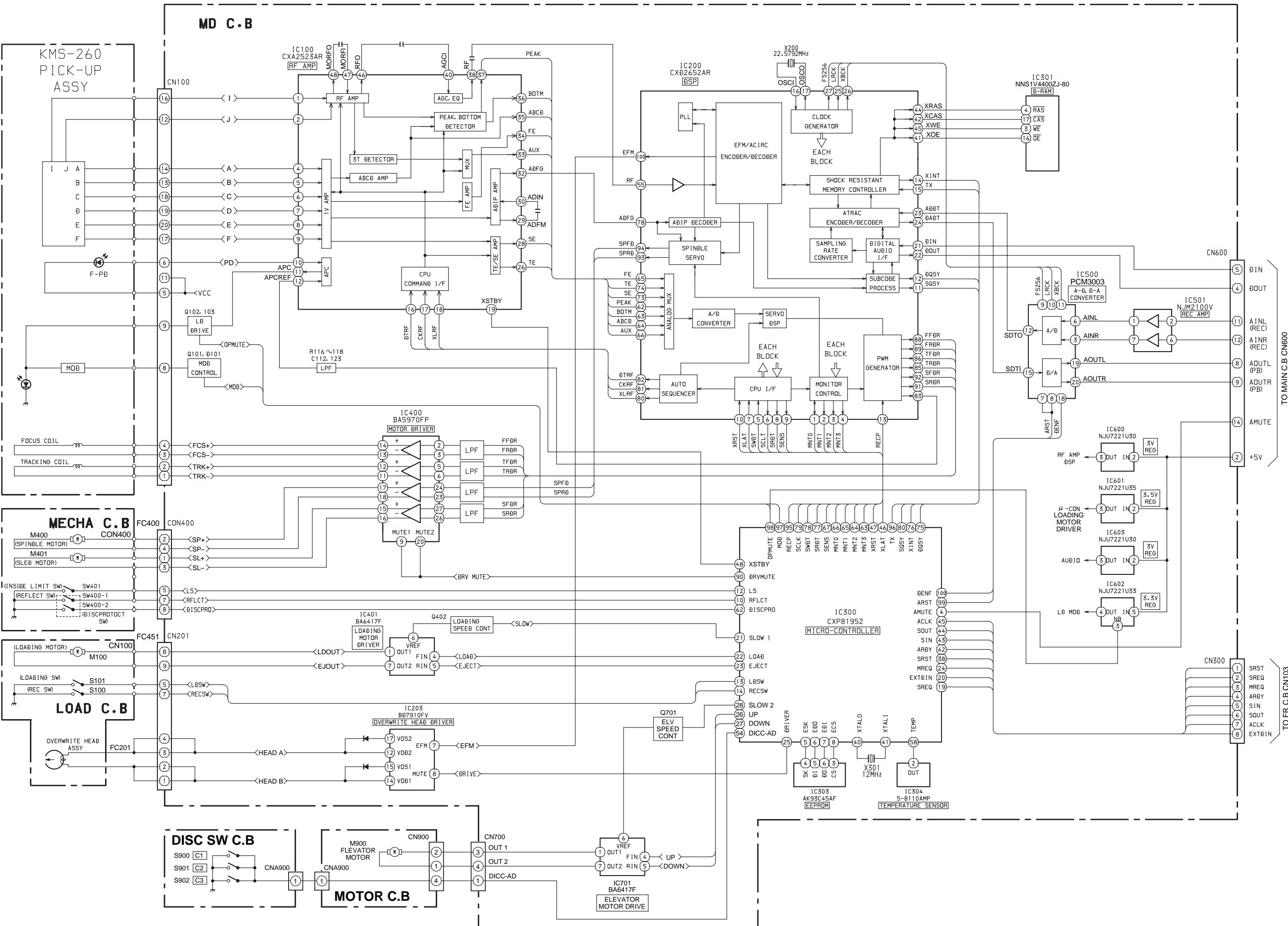
IC, BD7910FV



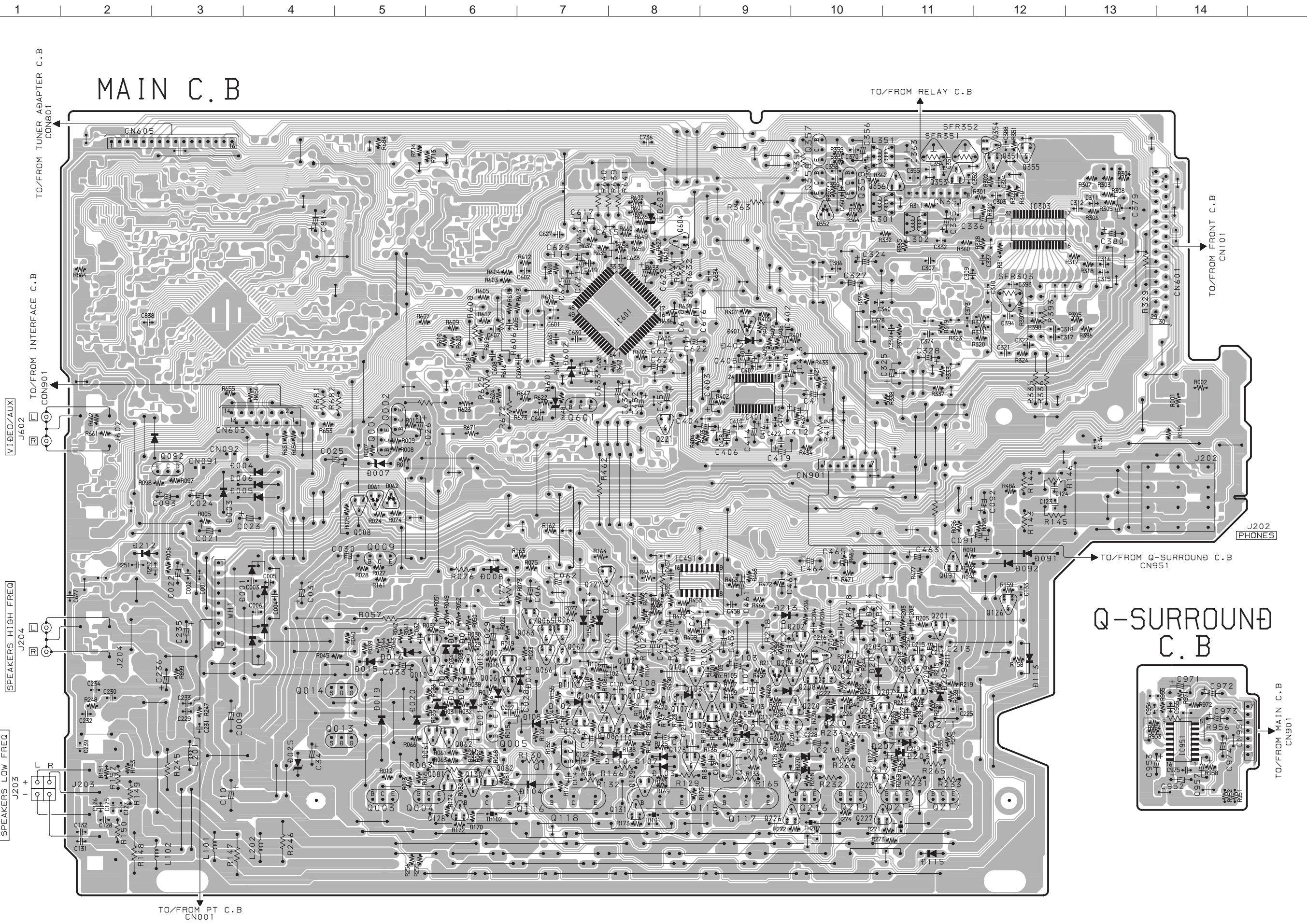
BLOCK DIAGRAM-1 (MAIN)



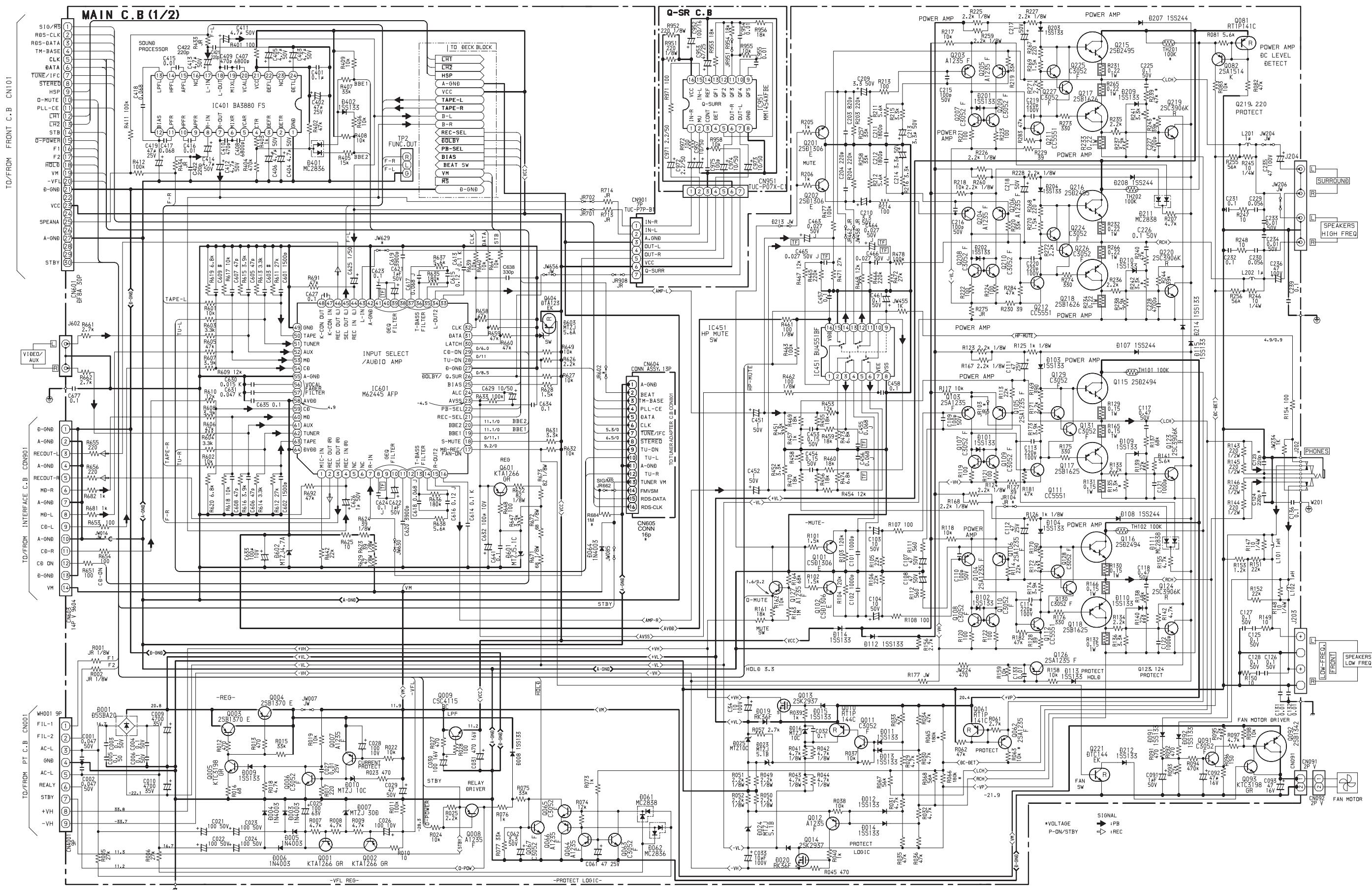
BLOCK DIAGRAM-2 (MD)



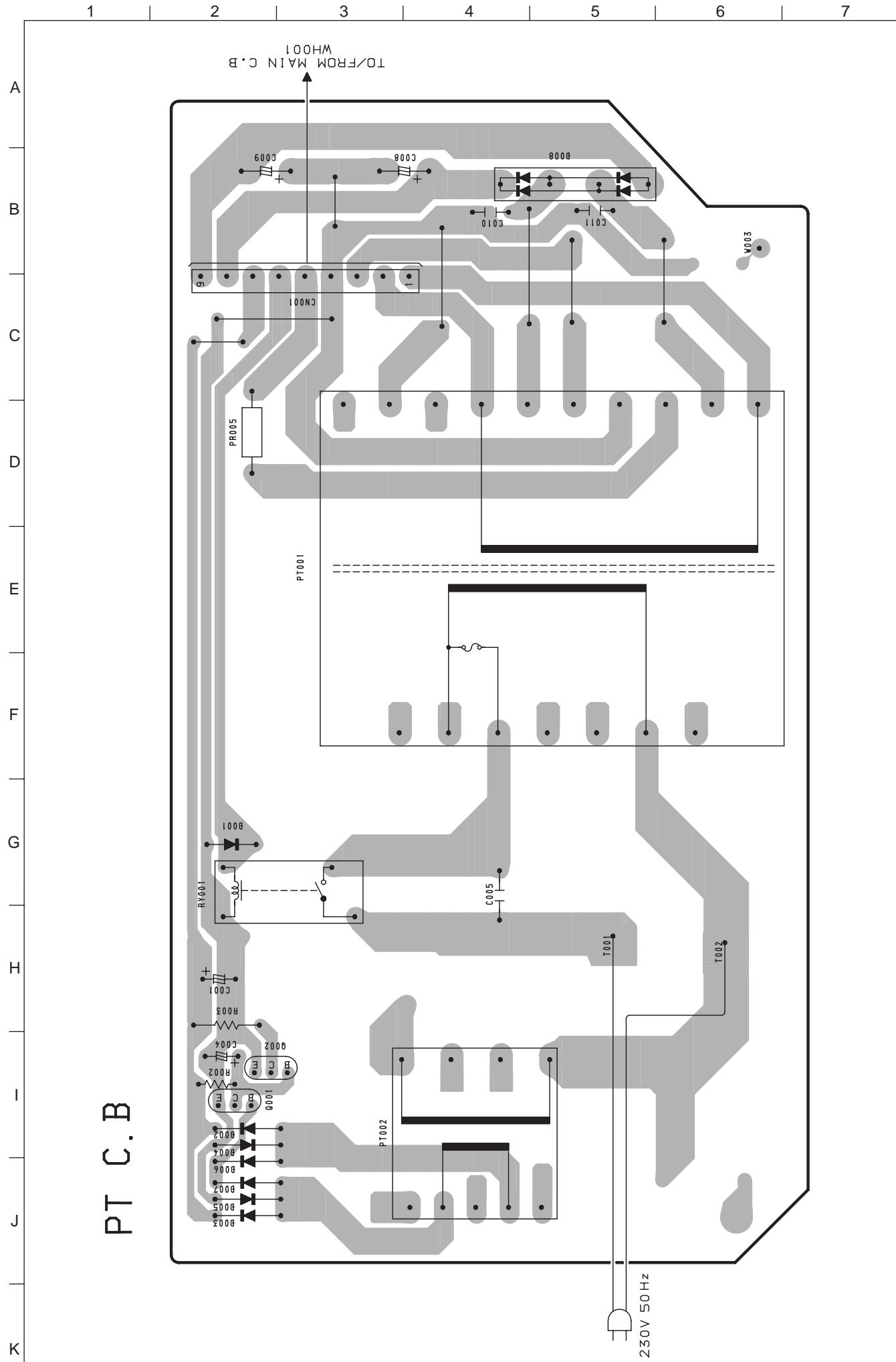
WIRING-1 (MAIN)



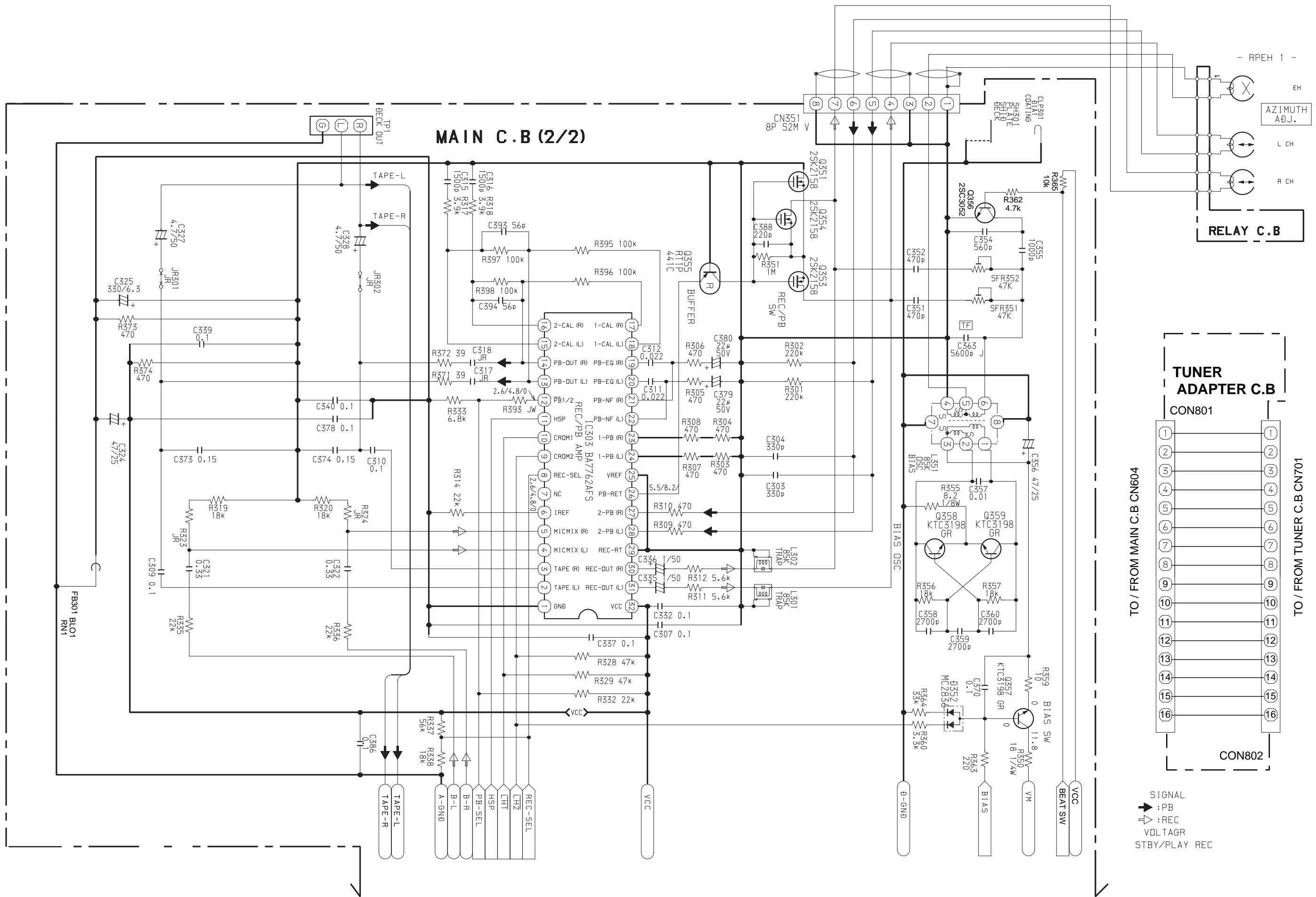
SCHEMATIC DIAGRAM-1 (MAIN 1/2)



WIRING-2 (PT)

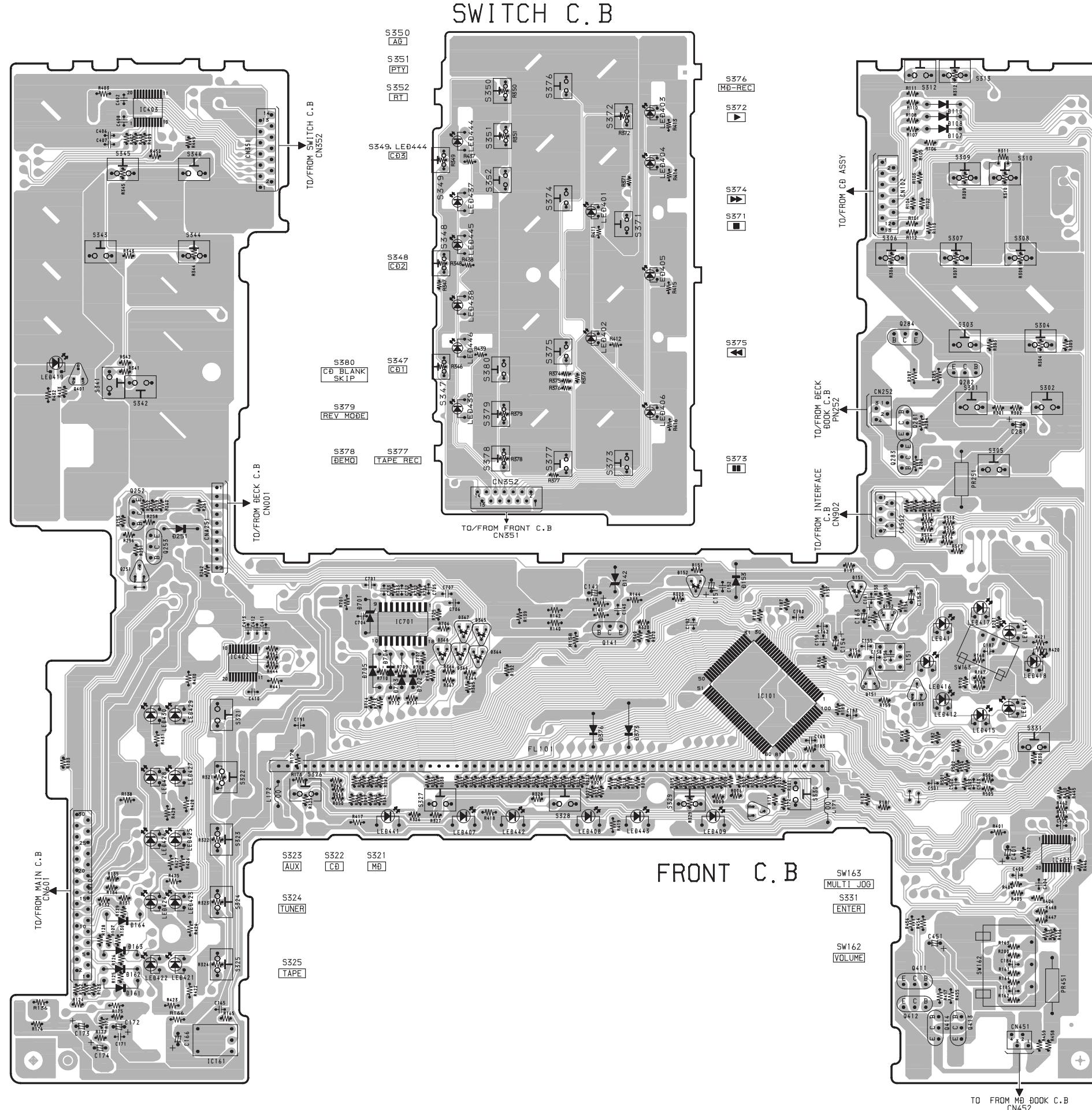


SCHEMATIC DIAGRAM-3 (MAIN 2/2)

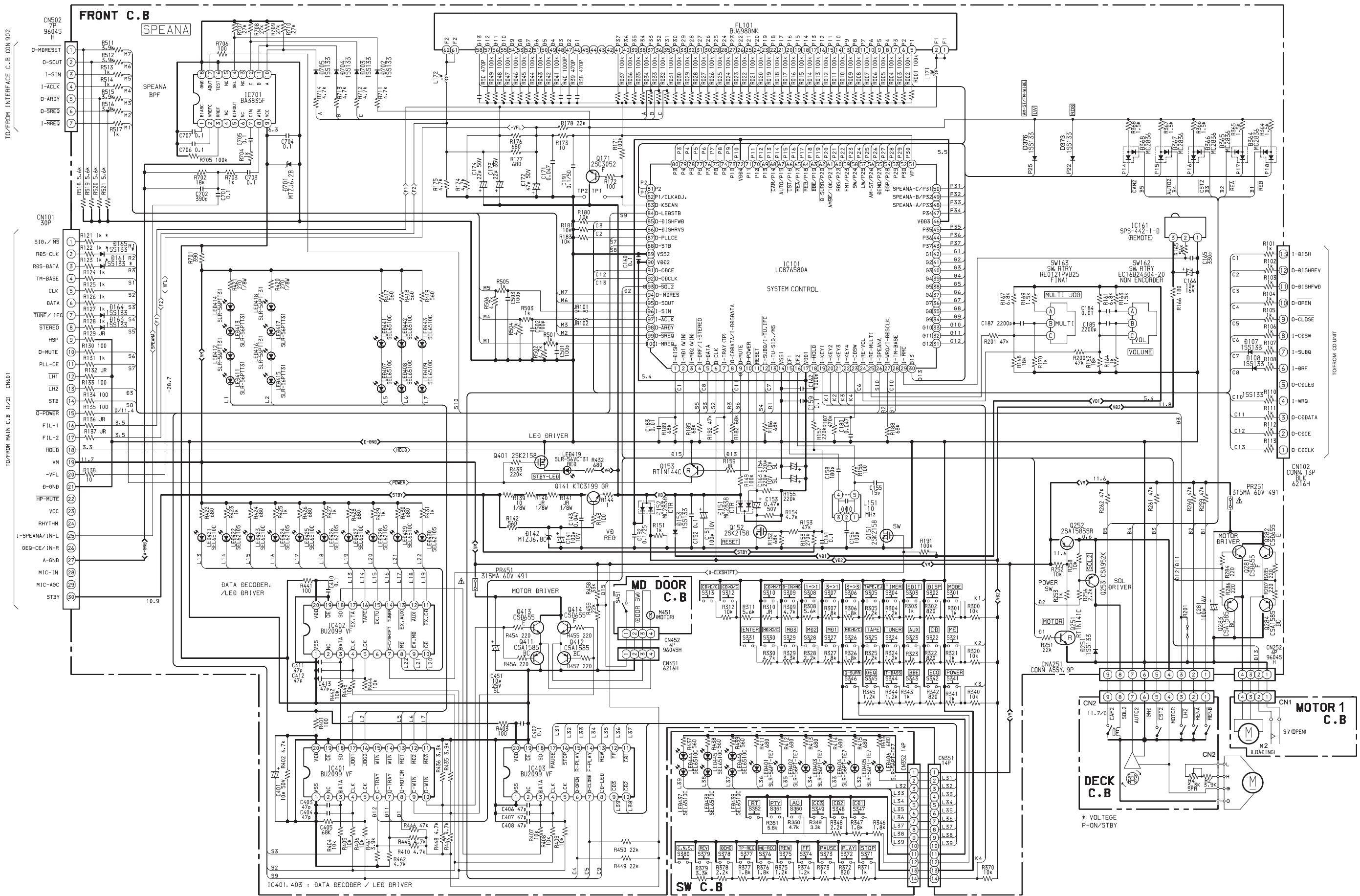


WIRING-3 (FRONT)

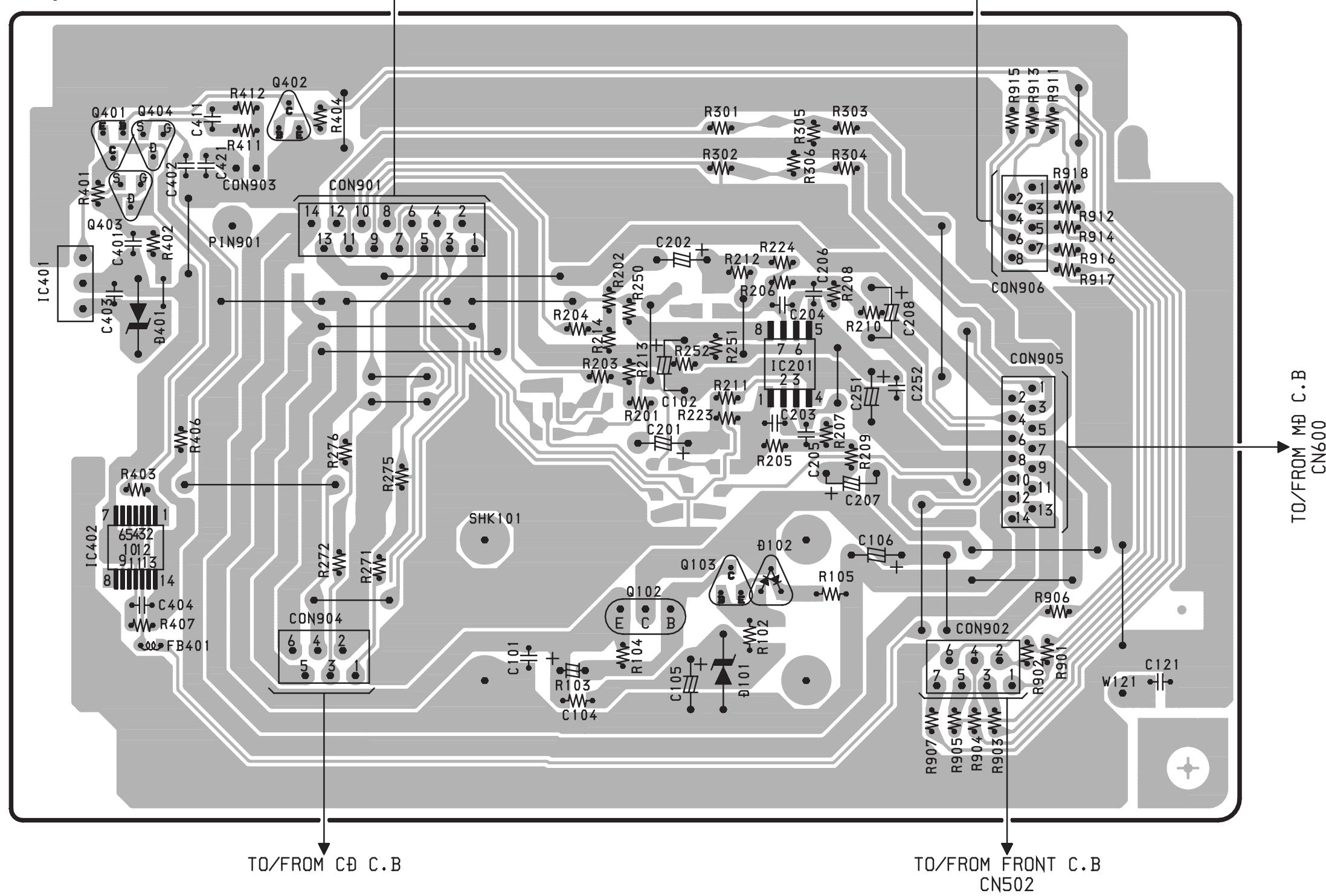
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |



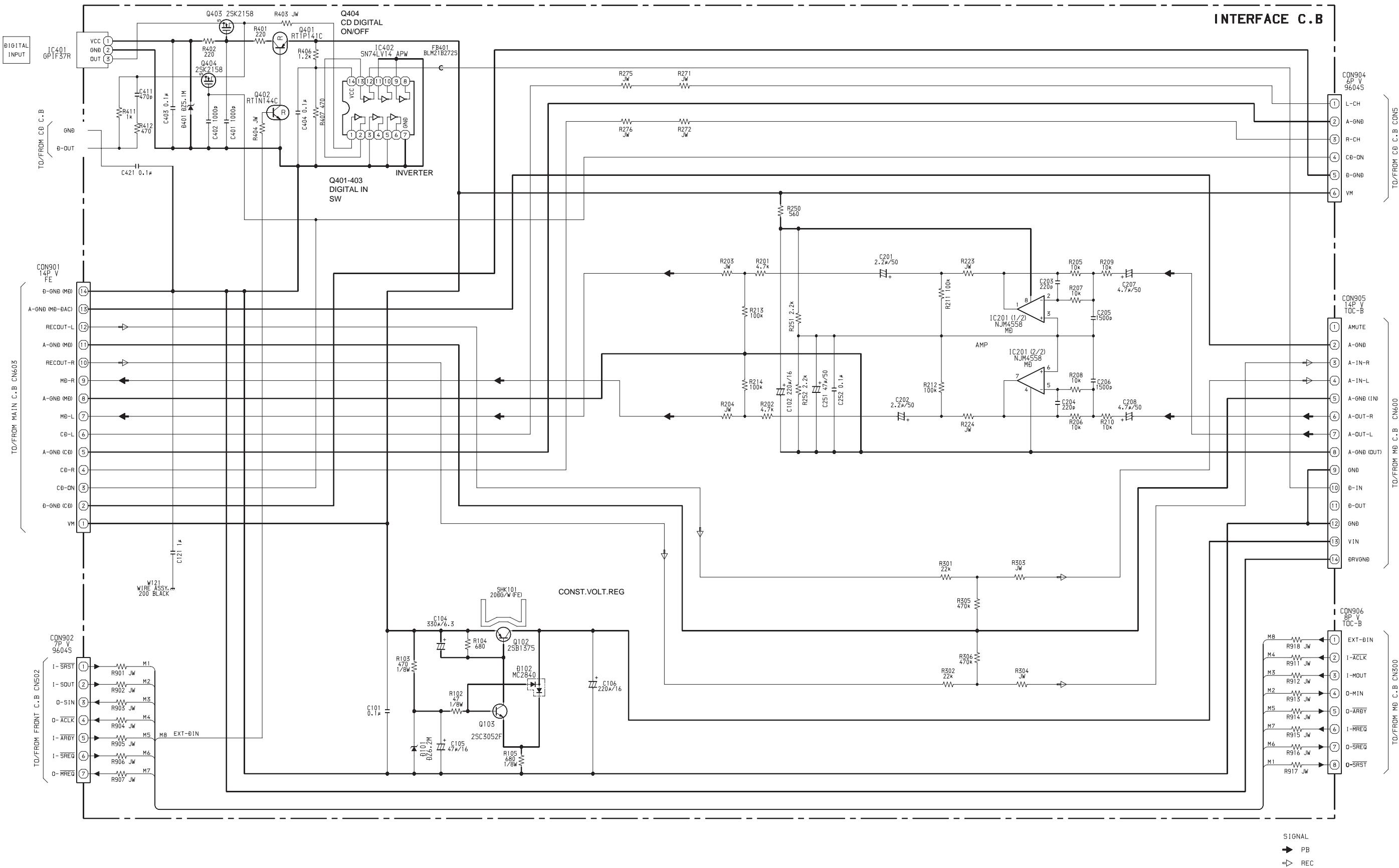
SCHEMATIC DIAGRAM-4 (FRONT)



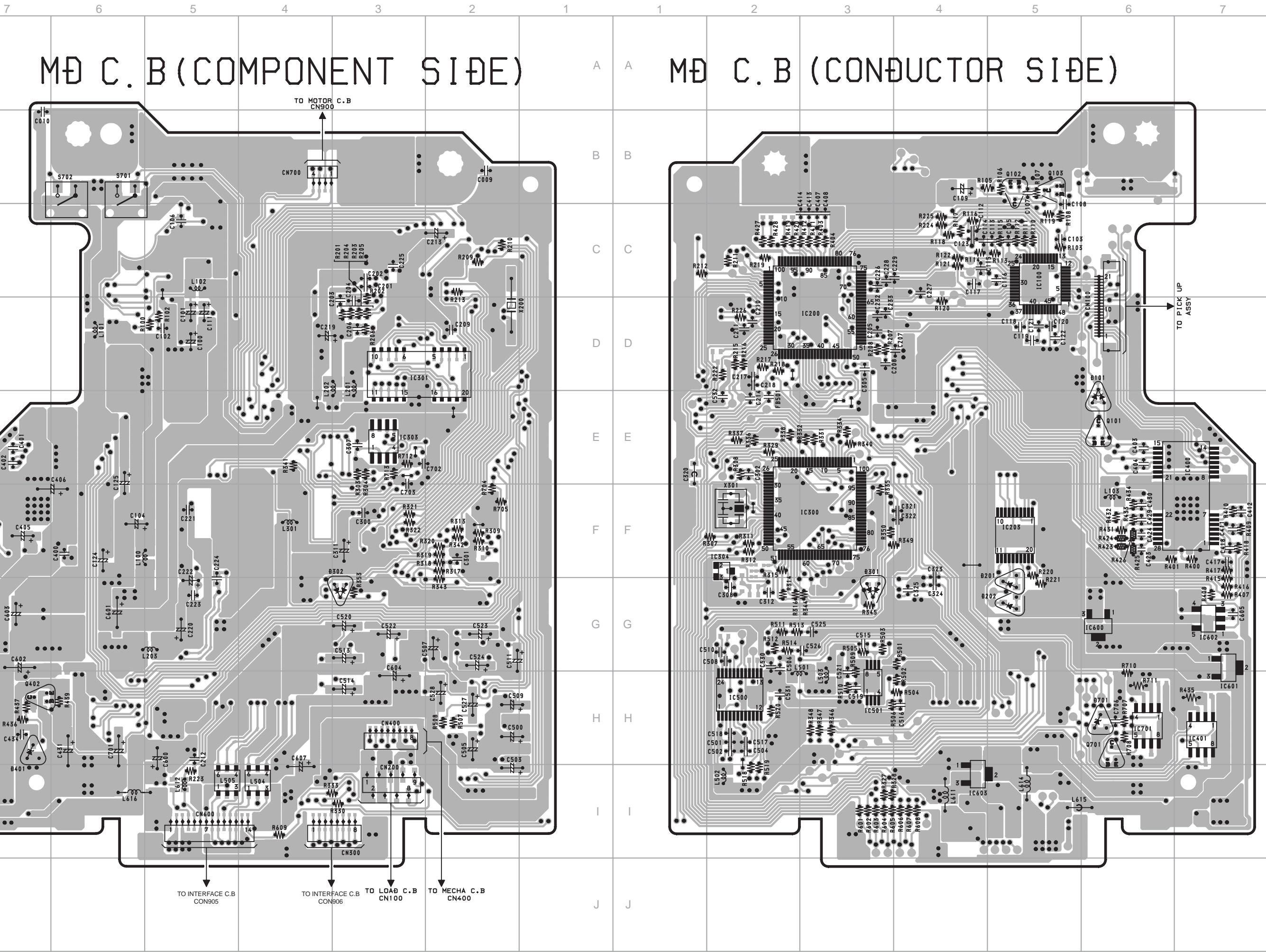
**INTER FACE
C.B**



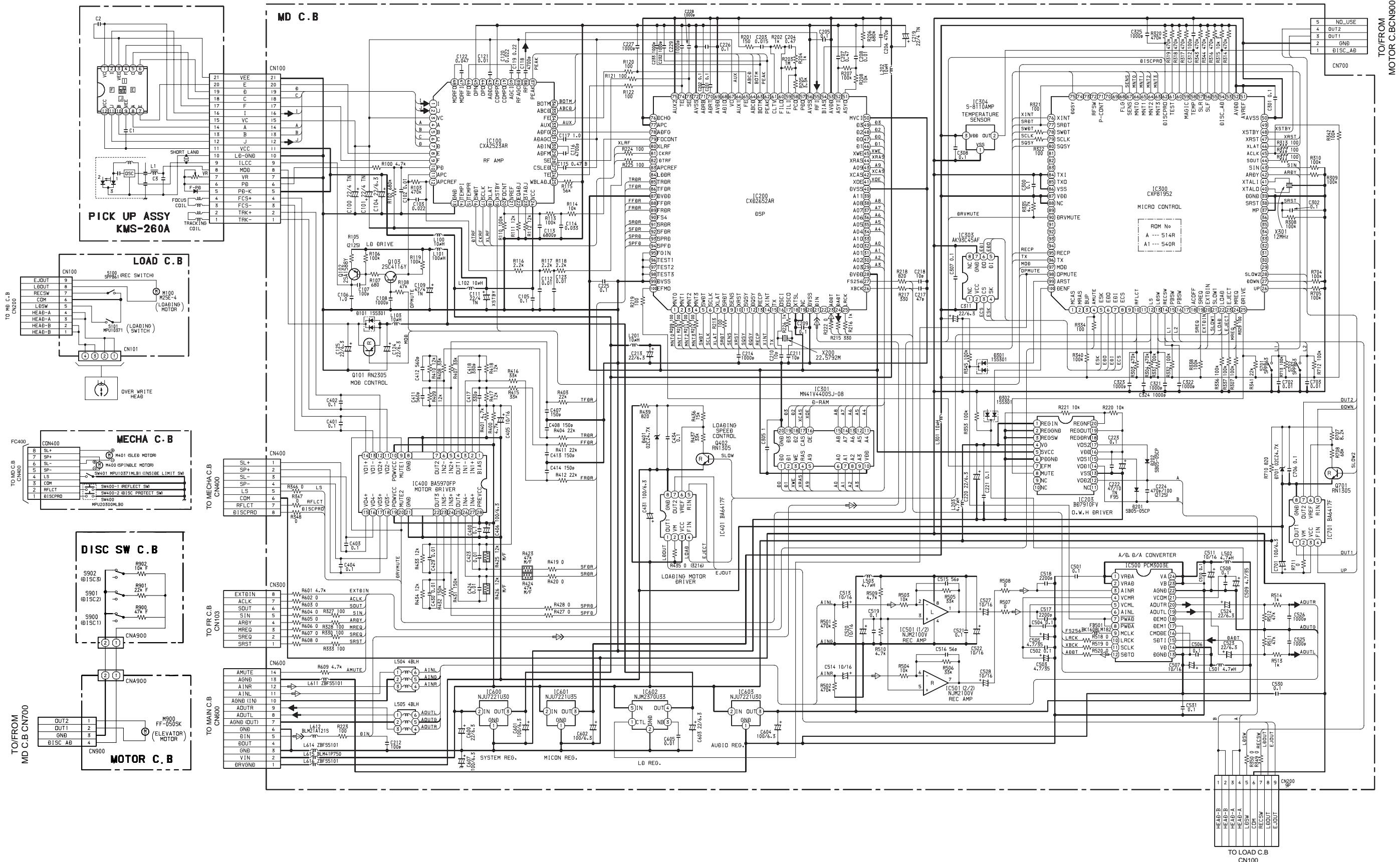
SCHEMATIC DIAGRAM-5 (INTERFACE)



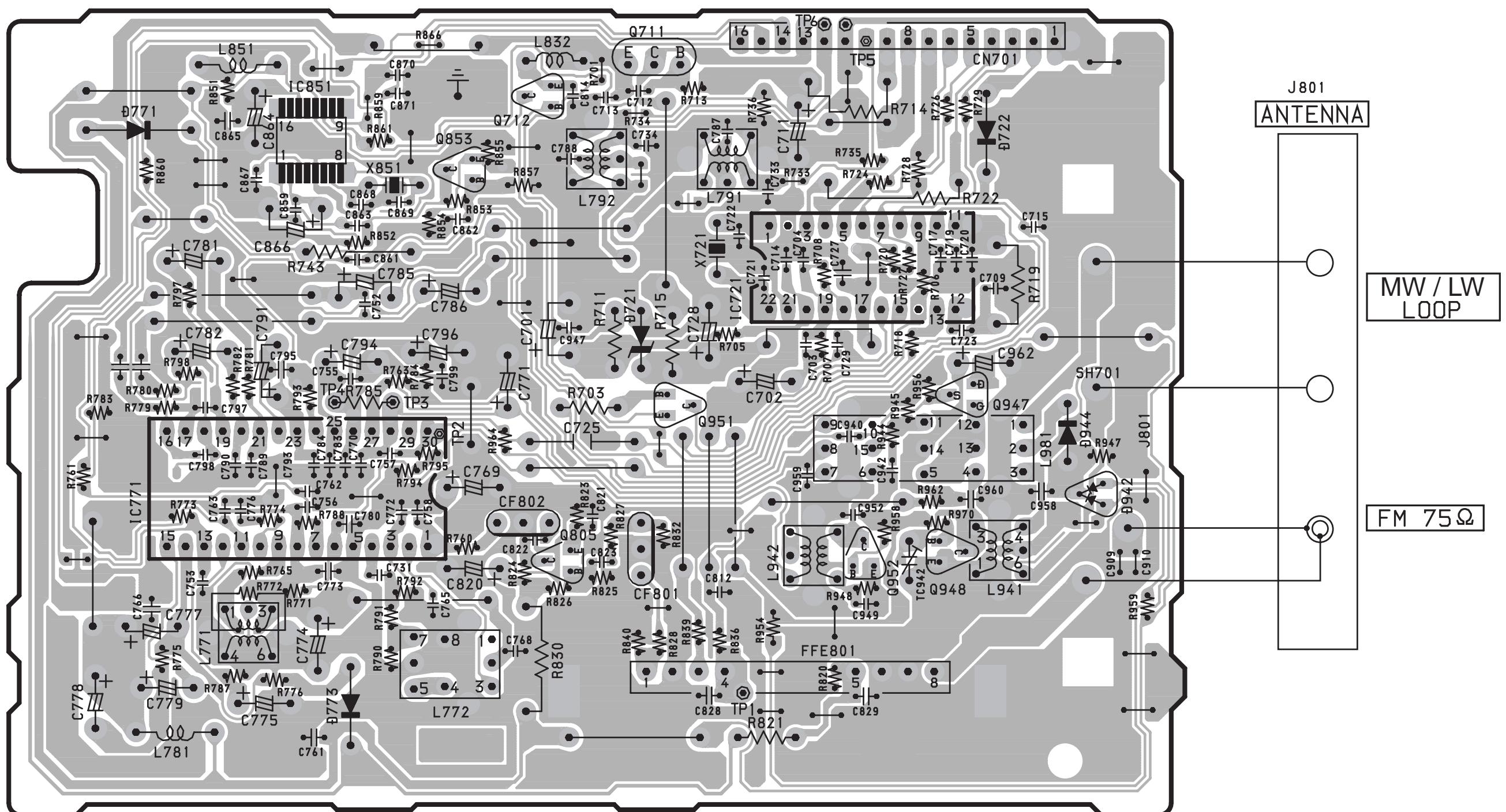
SIGNAL
→ PB
⇒ REC



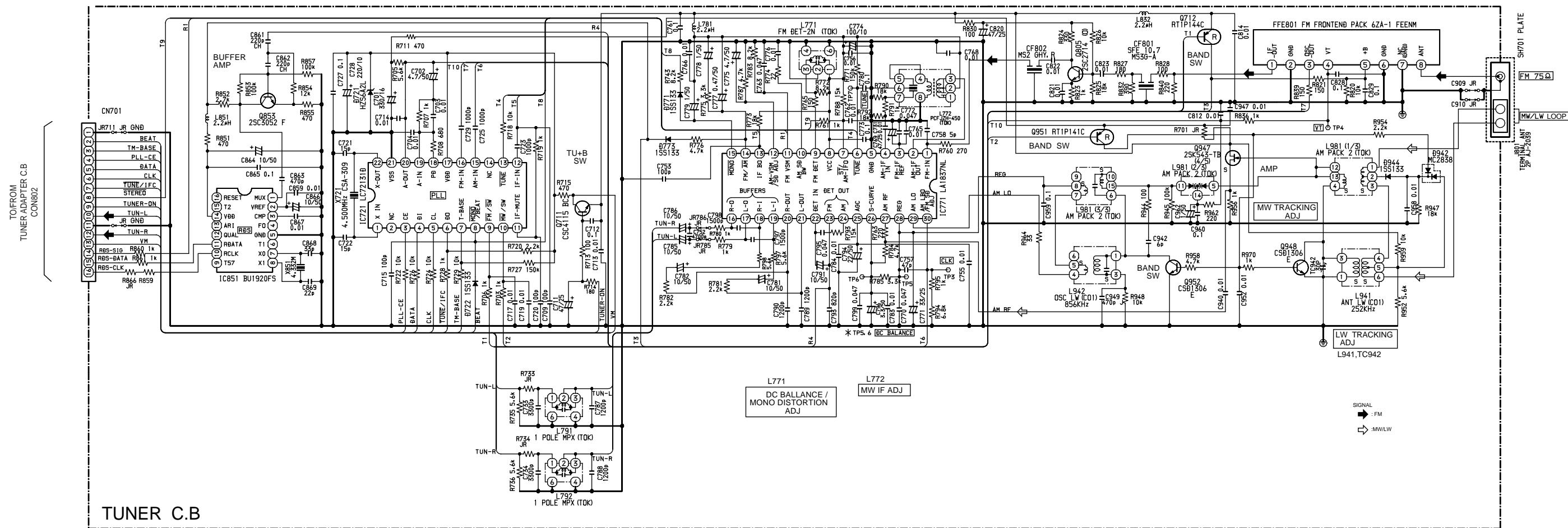
SCHEMATIC DIAGRAM-6 (MD)



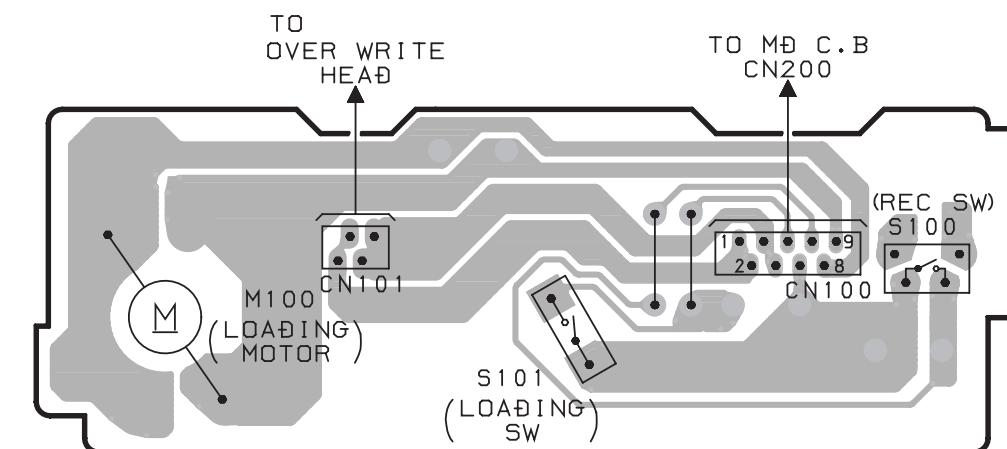
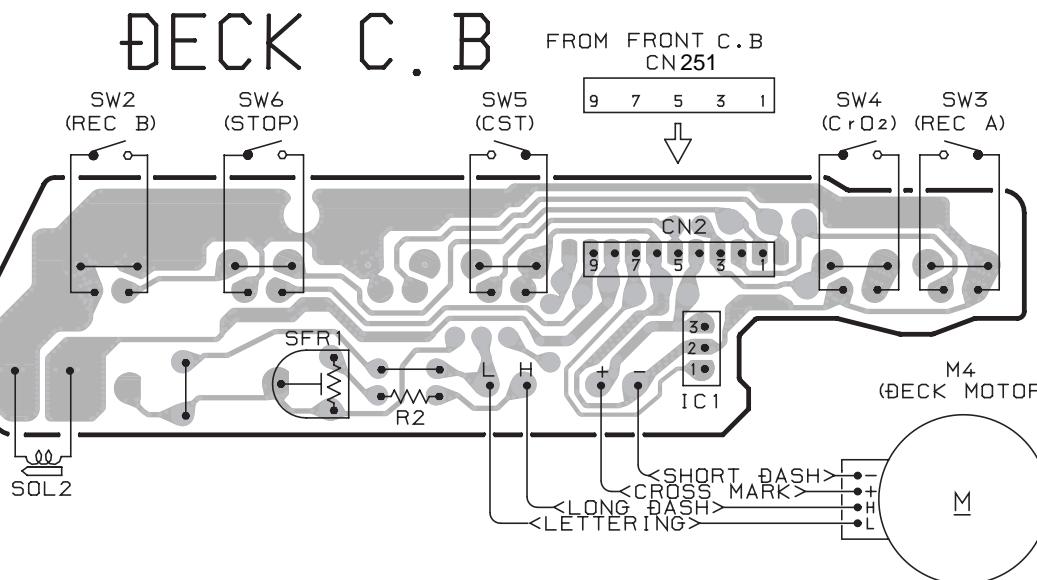
TUNER C. B

TO/FROM
TUNER ADAPTER C.B
CON802

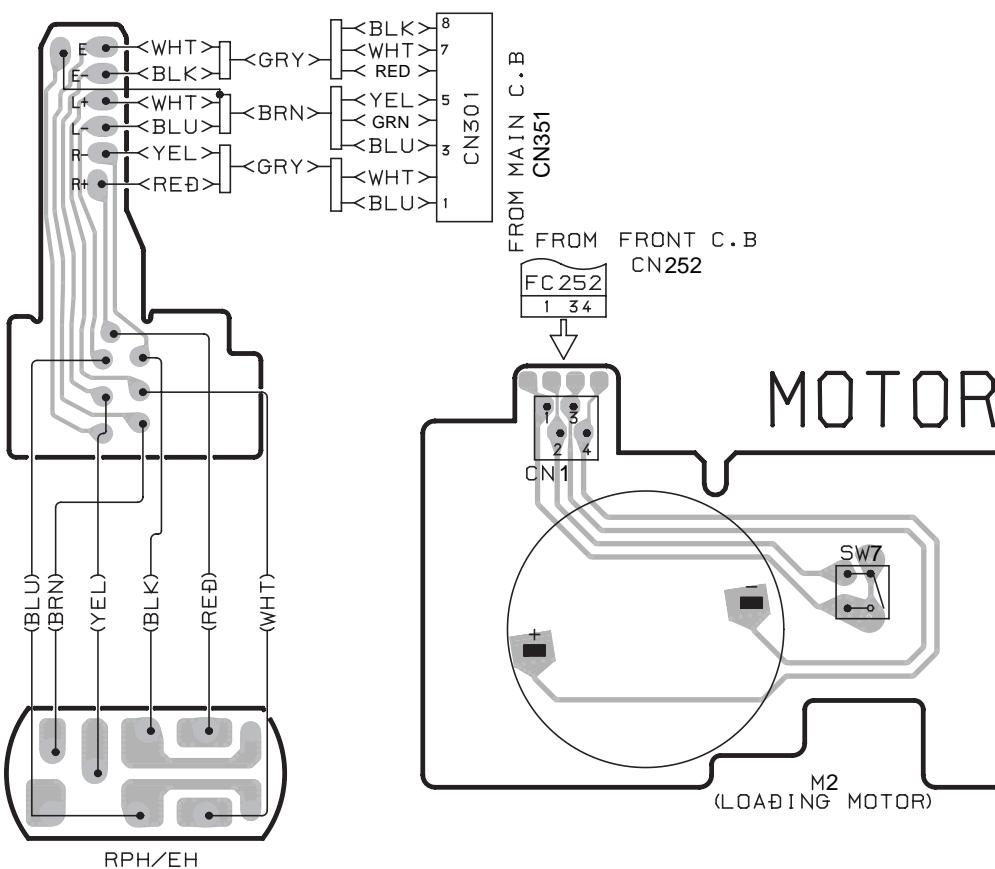
SCHEMATIC DIAGRAM-7 (TUNER)



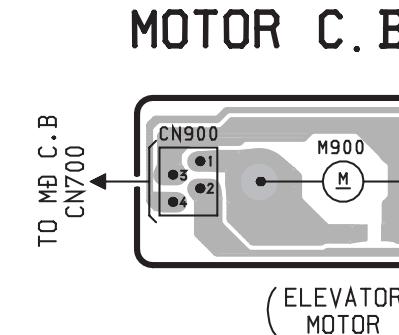
WIRING-7 (MECHA)



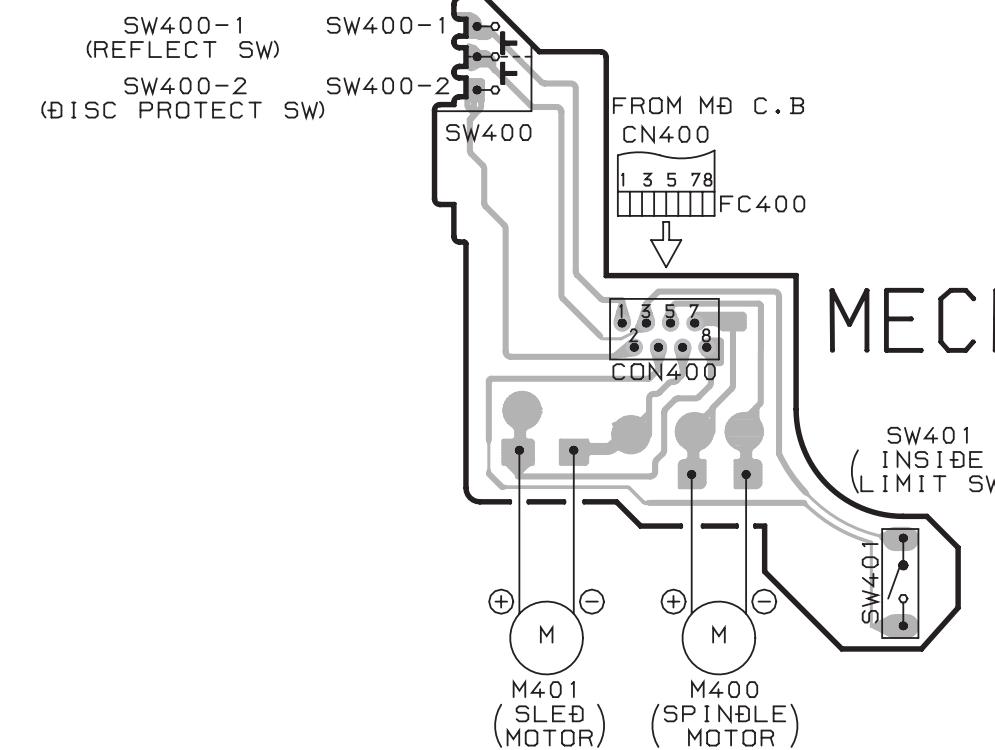
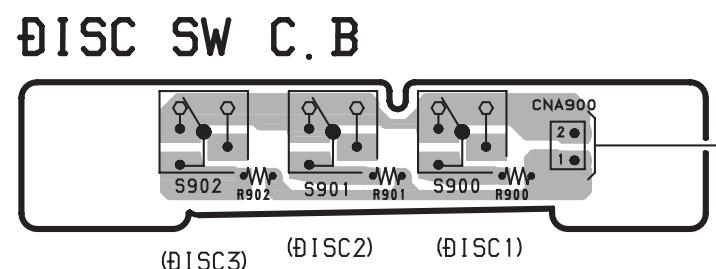
RELAY C. B



MOTOR -1 C. B

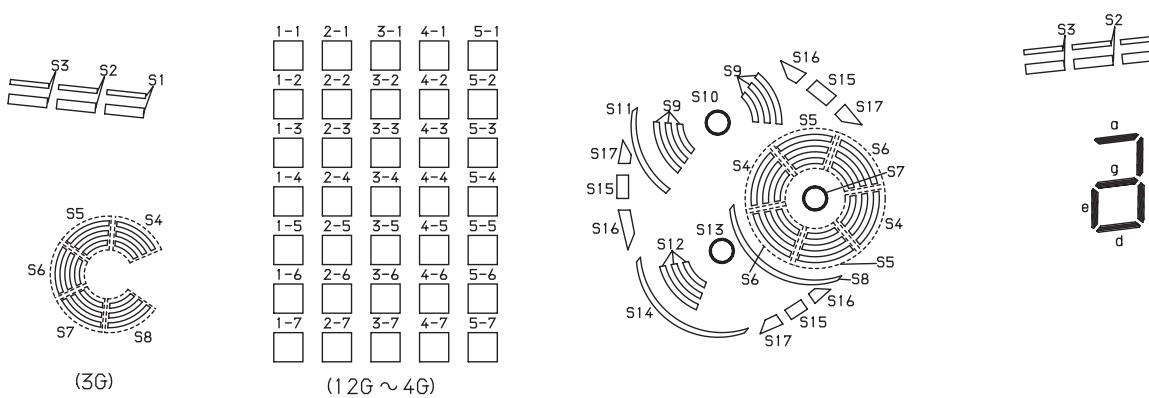
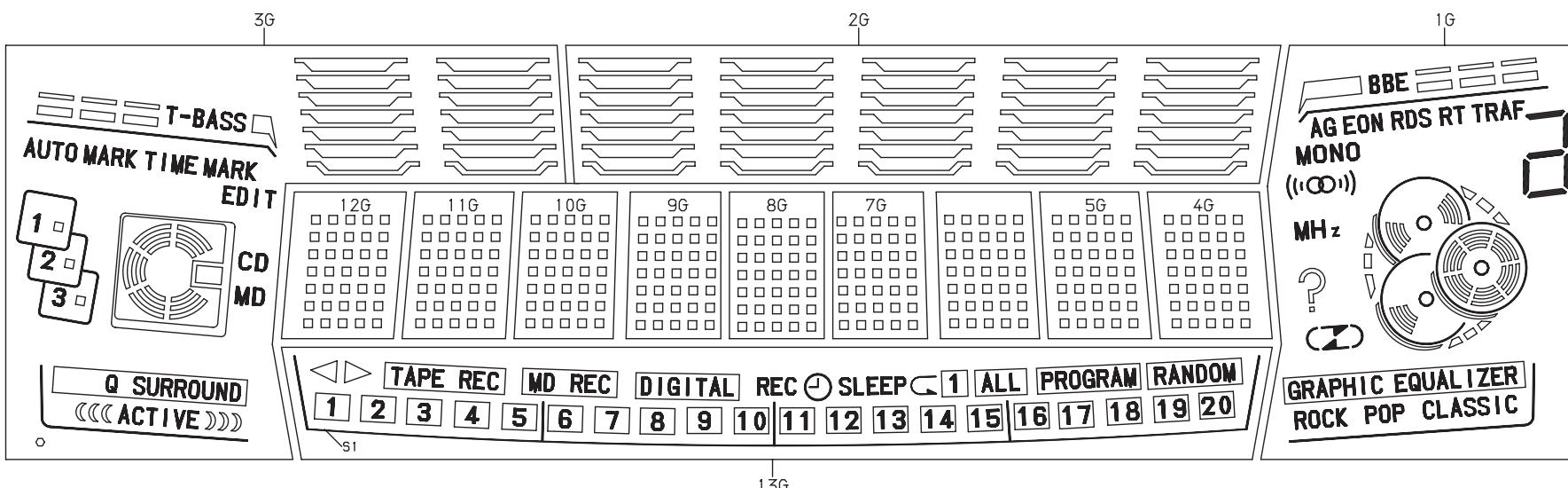


DISC SW C. B

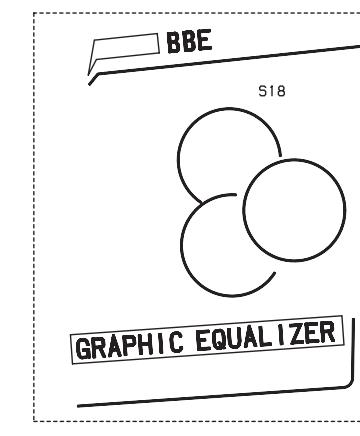
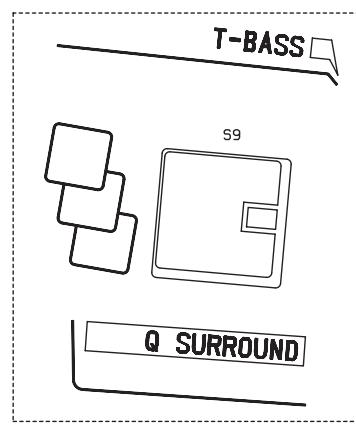
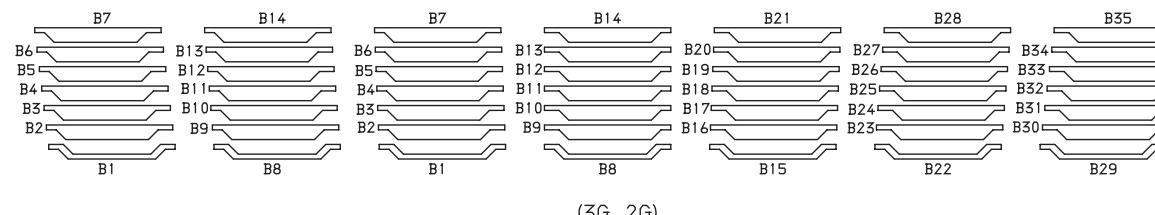


FL (BJ698GNK) GRID ASSIGNMENT/ANODE CONNECTION

GRID ASSIGNMENT



GRID ASSIGNMENT



ANODE CONNECTION

	13G	12G~4G	3G	2G	1G
P1	1	1-1	B8	B29	S3
P2	2	2-1	B1	B22	S2
P3	3	3-1	B9	B15	S1
P4	4	4-1	B2	B8	AB
P5	5	5-1	B10	B1	MONO
P6	6	1-2	B3	B30	EON
P7	7	2-2	B11	B23	RDS
P8	8	3-2	B4	B16	RT
P9	9	4-2	B12	B9	TRAF
P10	10	5-2	B5	B2	b
P11	11	1-3	B13	B31	c
P12	12	2-3	B6	B24	a, g, d
P13	13	3-3	B14	B17	e
P14	14	4-3	B7	B10	((OO))
P15	15	5-3	EDIT	B3	MHz
P16	16	1-4	TIME MARK	B32	?
P17	17	2-4	AUTO MARK	B25	S17
P18	18	3-4	S1	B18	S15
P19	19	4-4	S2	B11	S16
P20	20	5-4	S3	B4	S10
P21	RANDOM	1-5	1	B33	S9
P22	PROGRAM	2-5	<input type="checkbox"/> (1)	B26	S11
P23	ALL	3-5	2	B19	S7
P24	1	4-5	<input type="checkbox"/> (2)	B12	S5
P25	➡	5-5	3	B5	S4
P26	SLEEP	1-6	<input type="checkbox"/> (3)	B34	S6
P27	⌚	2-6	S4	B27	S8
P28	REC	3-6	S5	B20	S13
P29	DIGITAL	4-6	S6	B13	S12
P30	MD REC	5-6	S7	B6	S14
P31	TAPE REC	1-7	S8	B35	CLASSIC
P32	▶	2-7	CD	B28	POP
P33	◀	3-7	MD	B21	ROCK
P34	—	4-7	(((ACTIVE)))	B14	▷
P35	—	5-7	○	B7	◀
P36	—	—	—	—	⌚
P37	S1	—	S9	—	S18

TEST MODE < MD >

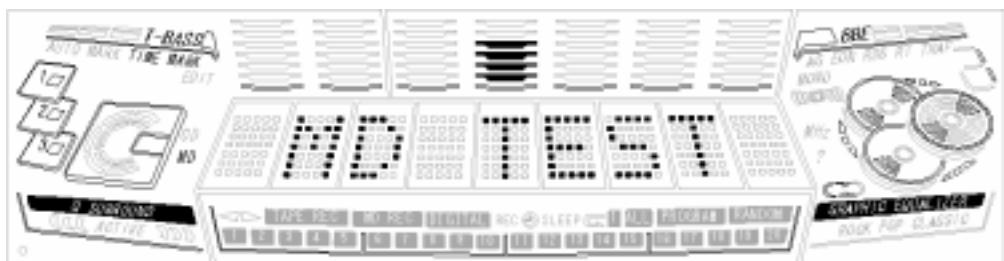
1. How to Start Up the MD Test Mode

While pressing the MD function key, insert the AC plug to the power outlet.

- Note: 1) The CX-NH560 can start up the test mode ignoring the mechanism abnormality even if any abnormality is occurring. If the abnormality occurs, disconnect the AC plug quickly.
2) Normal playback/recording cannot be performed while the test mode is in progress.

2. Checking the MD Test Mode

Indication on display



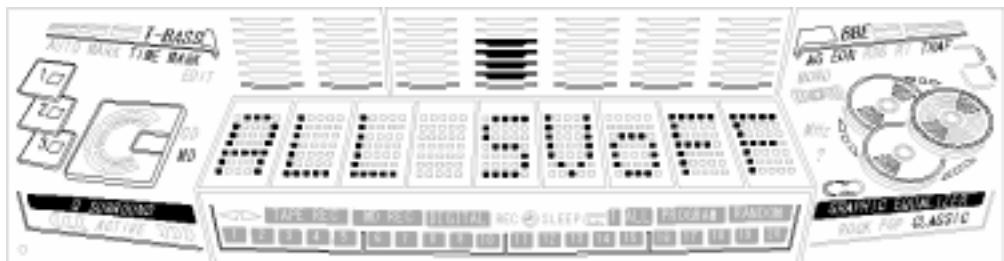
About five seconds later after the test mode has started up, the following message appears and the test mode becomes ready to be operated.

3. How to Exit the MD Test Mode

- 1) Press the "MD EJECT" key and remove the disc.
 - 2) Disconnect the AC plug.
- * If the machine exits the MD test mode by any methods other than the procedure as described above, the machine may operate abnormally when the POWER is turned on next time. In such a case, disconnect the AC plug.

4. How to Switch to Servo Standby Mode

When the test mode has been established, the mode is switched to the servo standby mode by pressing the STOP key. ("ALL SVoFF" is displayed.) Switch this mode to each mode.



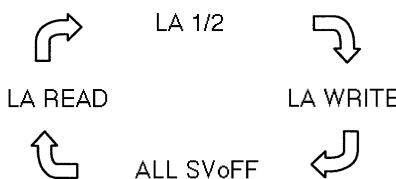
Returns to "ALL SVoFF" by pressing the STOP key from each operation.

5. Checking the Sled Operation

- 1) Pickup moves to the outmost track by pressing the F.SKIP key in the "ALL SVoFF". The message "T.SLEDfwd" is displayed.
 - 2) Pickup moves to the innermost track by pressing the B.SKIP key in the "ALL SVoFF". The message "T.SLEDrvs" is displayed.
- The graphics equalizer "CLASSIS" on the display lights by turning on the INSIDE LIMIT switch.

6. Checking the Laser Output

- 1) The laser power output level can be switched by every pressing of the EDIT key in the "ALL SVoFF". The indication is switched as shown below.



- 2) After confirming the message, press the STOP key to display the "ALL SVoFF".

7. Checking the Operation of Loading Mechanism/OWH

The operations of the loading mechanism and the OWH are checked by the procedure below.

- Method 1: Insert a MO disc to the desired slot among the magazines 1 to 3, and press the MD direct play key of the slot. After loading, confirm that the EON and the AG on the display lights off and the OWH moves up.
Method 2: Loading is started by pressing the 1CD → 1MD key in the "ALL SVoFF". The loading can be performed without a disc. When a disc is loaded, insert the disc into the slot that the elevator stops at. The OWH moves down by pressing the 1CD → 1MD key in the loading status, and the OWH moves up by pressing the MD EJECT key.

1CD → 1MD key.....Loading/OWH DOWN MD EJECT key.....Unloading/OWH UP

- * The status of the loading mechanism and OWH can be checked by FL indication.

Status of each indication	Status of loading mechanism and OWH
EON is displayed only	Loading/OWH DOWN
Both AG and EON lights off	Loading/OWH UP
Both AG and EON lights on	Unloading/OWH UP

* The AG indicates the loading SW. The EON and REC SW indicate the status of the REC SW.

Note: The loading cannot be performed by the MD direct play key without a disc (The disc switch is off.). (The loading can be performed by 1CD → 1MD key.)

8. Checking the Indication and Turning On/Off of Each Switch

The status of each switch can be confirmed by the indication on the display.

	Indication on the display	Function name	Light on	Light off
①	T-BASS	Laser power	Indicated by the level meter of the three steps (READ-1/2-WRITE)	
②	AUTO MARK	Disc mode	MO DISC (GROOVE)	
③	TIME MARD	Disc mode	PIT DISC (PIT)	
④	ROCK	Write-protection detection SW	REC protection	REC OK
⑤	POP	Reflectance detection SW	High reflectance (PIT DISC)	Low reflectance (MO DISC)
⑥	CLASSIC	INSIDE LIMIT SW	SW ON (innermost track)	SW OFF
⑦	AG	LOADING SW	SW OFF	SW ON
⑧	EON	REC SW	SW OFF	SW ON
⑨	RT	Elevator SW (S701)	SW OFF	SW ON
⑩	TRAFF	Elevator SW (S702)	SW OFF	SW ON

Note: The SW ON indicates the status when the switch is pressed.

The loading status is shown by the combination of the AG and EON.

The elevator status is shown by the combination of the RT and TRAF.



9. Checking the Servo Operation

9-1. Checking the Focus Search/Spindle Kick 1 (Check of S-Curve)

- 1) The focus search operation and the spindle kick operation can be performed continuously by pressing the REPEAT key in the “ALL SVoFF” state. During this check, the message “FOCUS CHK” is displayed under this conditions. Because these operations are repeated in this setup regardless whether a disc is inserted or not, the S-curve can be checked when a disc is inserted.
- 2) After checking these operations, press the STOP key to show the message “ALL SVoFF”.

9-2. Checking the Focus Search/Spindle Kick 2

- 1) The focus search operation and the spindle kick operation can be performed continuously by pressing the PLAY key in the “ALL SVoFF” without the inserted disc. During this check, the message “FOCUS SCH” is displayed.
- 2) After checking these operations, press the STOP key to show the message “ALL SVoFF”.

9-3. Checking the Focus Servo

- 1) Insert a disc.
- 2) Press the MODE (MD) key until the following servo mode is selected in accordance with the inserted disc.
 - MO disc “SEL GRV” indication on the display and “AUTO MARK” lights
 - PIT disc “SEL PIT” indication on the display and “TIME MARK” lights
- 3) Press the PLAY key.
When the focus servo is operating normally, the message “FOCUS ON!” is displayed after “FOCUS SCH”.
- 4) After the checking is complete, press the STOP key to display “ALL SVoFF”.

9-4. Checking the Conditions That All Servos Are ON

- 1) When the ENTER key is pressed while the focus servo is locked to ON, the tracking servo is turned on and all servos work.
When all servos are normal, the message “ALL SV ON” is displayed.
- 2) After the check is complete, press the STOP key to display “ALL SVoFF”.

(ELECTRICAL ADJUSTMENT)

All adjustments and checks of the MD disc are performed using the test mode.

1. Temperature Compensation Adjustment

- * In principle, do not perform the temperature compensation adjustment during the normal maintenance or repair work. If the adjustment value is found out that it is far out of the specification values shown in this service manual, perform the temperature compensation adjustment under the environment where the ambient temperature can be precisely measured.
- Test Point: Indication on the display
- Jig: Thermometer
- Adjustment procedure
 - 1) Start up the MD test mode then press the STOP key to display the message “ALL SVoFF”.
 - 2) Press the DISPLAY key to switch the display to “TEMP=\$**”.
 - 3) Press the PAUSE key to switch the display to “T+**C:+00”.
 - 4) Place the thermometer near the MD mechanism to measure the room temperature.
 - 5) Press the B.SKIP and F.SKIP keys until the indication value on the thermometer and the indication value ** on the display are the same. After the two values are adjusted for the unity value, press the ENTER key to set the value.
 - 6) Press the STOP key to display the message “ALL SVoFF”.

2. Laser Power Adjustment

- Test Point: Pickup laser output
- Jig: Laser power meter (The meter capable of measuring up to 10 mW)

2-1. Playback Laser Power Adjustment

- Adjustment procedure
 - 1) Press the EDIT key while the message “ALL SVoFF” appears, to change the display to “LA READ”.
 - 2) Press the PAUSE key once to display the “LASER = \$**”.
 - 3) Measure the laser output of the pickup unit using a laser power meter. Adjust the laser output value for 0.68 ± 0.003 mW by pressing the B.SKIP and F.SKIP keys, and press the ENTER key.
 - 4) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.

2-2. Recording Laser Power Adjustment

- 1) Press the EDIT key three times while the message “ALL SVoFF” appears, to change the display to “LA WRITE”.
- 2) Press the PAUSE key once to display “LASER=\$**”.
- 3) Measure the laser output of the pickup unit using a laser power meter. Adjust the laser output value for 6.8 ± 0.03 mW by pressing the B.SKIP and F.SKIP keys. Press the ENTER key.
- 4) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.

Note: If the laser output exceeds 7.0 mW, the pickup may be damaged.

3. Auto Sequence Adjustment (EFB/IVR/Focus AGC/Tracking AGC Adjustments)

- Test Point: Indication on the display
- Test Disc: MDW-60, TGYS-1 or equivalent

3-1. Adjusting the MO Disc

- Adjustment procedure
 - 1) Load the MDW-60.
 - 2) Press the MODE (MD) key to display “SEL GRV”.
 - 3) When the MD function key is pressed, “AUTO ADJ” is displayed and the adjustment is started. When the adjustment is complete, the message “DONE” is displayed. (If “FAILD” is displayed, it shows that the adjustment has failed.)
 - 4) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.

3-2. Checking the IVR, EFB, Focus/Tracking/Sled Gains of the MO Disc

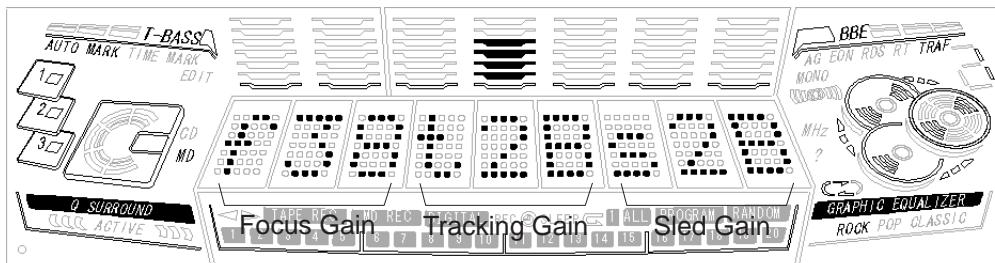
- Adjustment procedure
- 1) Move the pickup to the center track or around the center track of a disc using the B.SKIP and F.SKIP keys.
 - 2) Press the PLAY key to display “FOCUS ON!”.
 - 3) Press the ENTER key to switch the mode to “ALL SV ON”.
 - 4) Press the STOP key and press the DISPLAY key twice. Confirm that the indication value on the display “I\$**:E\$!!” is within the range as follows. (hexadecimal)
I\$ “**” 03 to 09
E\$ “◇◇” 09 to 15
 - 5) Press the DISPLAY key again.
Confirm that the indication value on the display “f**t##s!!” is within the range as follows. (hexadecimal)
f “**” 1A to 45
t “##” 15 to 40
s “△△” 15 to 40
 - 6) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.

3-3. Adjusting the PIT Disc

- Adjustment procedure
- 1) Load the TGYS-1.
 - 2) Press the MODE (MD) key to display “SEL PIT”.
 - 3) Press the MD function key to display “AUTO ADJ”. After the adjustment is complete, “DONE” is displayed. (If “FAILD” is displayed, it shows that the adjustment has failed.)
 - 4) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.

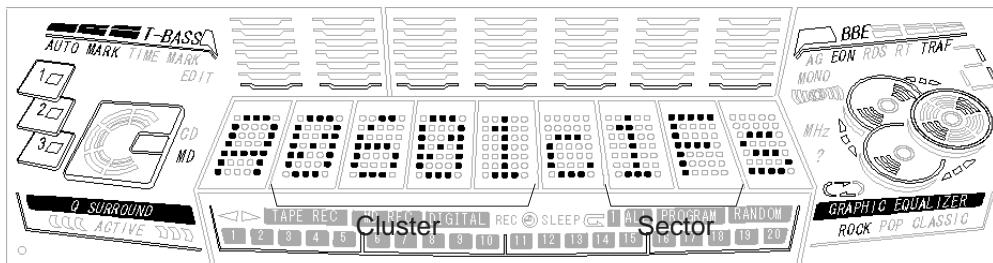
3-4. Checking the IVR, EFB, and the Focus/Tracking/Sled Gains

- Adjustment procedure
- 1) Move the pickup to the center track or around the center track of a disc using the B.SKIP and F.SKIP keys.
 - 2) Press the PLAY key to display “FOCUS ON!”.
 - 3) Press the ENTER key to switch the mode to “ALL SV ON”.
 - 4) Press the STOP key and press the DISPLAY key twice. Confirm that the indication value on the display “I\$**:E\$!!” is within the range as follows. (hexadecimal)
I\$ “**” 14 to 19
E\$ “◇◇” 09 to 15
 - 5) Press the DISPLAY key again.
Confirm that the indication value on the display “f**t##s△△” is within the range as follows. (hexadecimal)
f “**” 1A to 45
t “##” 15 to 40
s “△△” 15 to 40
 - 6) After the adjustment is complete, press the STOP key to display “ALL SVoFF”.



4. Error Rate Check (PIT Disc)

- Test Point: Check the indication on the display
- Test Disc: TGYS-1 or equivalent
- Adjustment procedure
 - 1) Load the TGYS-1.
 - 2) Move the pickup to the center track or around the center track of a disc using the B.SKIP and F.SKIP keys.
 - 3) Press the MODE (MD) key to display “SEL PIT”.
 - 4) Press the PLAY key to display “FOCUS ON!”.
 - 5) Press the ENTER key to display “ALL SV ON”. Press the DISPLAY key once to confirm that the address indication advances constantly.
 - 6) Press the DISPLAY key again to display the playback error rate. Confirm that the data [****:***] of the underlined portion is “0030” or less.
 - 7) After the check is complete, press the STOP key to display “ALL SVoFF”.



5. Recording/Playback Error Rate Check (MO Disc)

- Test Point: Indication on the display
- Test Disc: MDW-60
- Adjustment procedure
 - 1) Load the MDW-60.
 - 2) Move the pickup to the center track or around the center track of a disc using the B.SKIP and F.SKIP keys.
 - 3) Press the CD function key. The recording starts automatically from the 600 cluster.
 - 4) After the recording is performed for about 15 seconds, press the STOP key.
 - 5) When the VIDEO/AUX function key is pressed, the pickup moves to the 600 cluster or its around and the mode is switched to “ALL SV ON” (address is shown on the display.) Therefore, press the DISPLAY key after the address indication is changed to the 600 cluster or higher. Confirm that the data [****:***] of the underlined portion is “0030” or less.
 - 6) After the adjustment is complete, press the STOP key to return to “ALL SVoFF”.

TEST MODE < CD >

1. How to Start the CD Test Mode

While pressing the function CD button, insert the AC plug to the wall outlet. The message “CD TEST” appears on the FL tube and the test mode starts.

2. How to Exit the CD Test Mode

Exit the CD test mode by any of the following procedures.

- Press the function button (except the CD function button.)
- Press the main power switch.
- Disconnect the AC plug.

3. Function Descriptions on the CD Test Mode

After starting the test mode, press the desired button to check the following items.

Mode	Operation	FL indication	Function	Contents
Start mode (Sled mode)		Lights	<ul style="list-style-type: none"> • Initial status 	
	◀▶ button	CD TEST	<ul style="list-style-type: none"> • The pickup moves to the outermost track • The pickup moves to the innermost track * Note 1 (Normal operation as long as the message CD is being played) 	<ul style="list-style-type: none"> • Sled servo • Sled operation check
Search mode	■ button	CD	<ul style="list-style-type: none"> • Normal luminescence of laser diode (CD block power ON) • Continuos focus searching * Note 2 (The pick-up lens repeats the full-swing up and down motions.) • Spindle motor continuos kick rotation. 	<ul style="list-style-type: none"> • APC circuit check • Laser current measurement Focus servo • Focus search waveform check • Focus error waveform check (FOK/FZC does not monitor in search mode)
Play mode	▶ button	CD1Tr	<ul style="list-style-type: none"> • Normal playback • When the TOC reading is not possible, Focus search is continued * Note 2 • Spindle motor kick rotation continues. 	<ul style="list-style-type: none"> • Focus servo/tracking servo • CLV servo/Sled servo • FOK (DRF) check
Traverse mode	■ button	CD1Tr	<ul style="list-style-type: none"> • Turn off the tracking servo 	<ul style="list-style-type: none"> • Tracking servo OFF • Tracking balance (radial balance) check

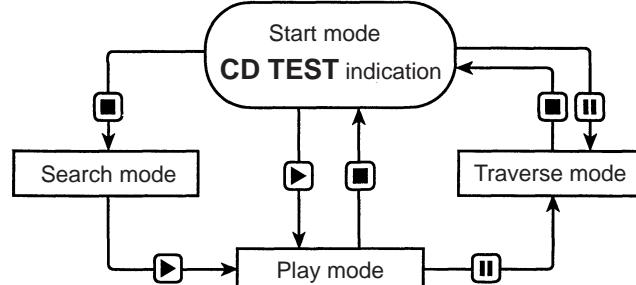
* Note 1: Be careful not to damage the gear because the sled motor rotates when the ▲ or ▼ button is pressed even if the pick-up is located in the innermost track or the outermost track.

The sled movement in the test mode is different from the normal operation. The sled moves to the outer track by pressing the ▲ button and moves to the inner track by pressing the ▼ button.

* Note 2: The driver IC (IC501) heats up so that the protection circuit starts working when the focus search is continued for 10 minutes or longer. There can be a case that the tracking servo cannot be locked-in under such circumstance. In such a case, turn off the main power. After cooling down the machine for 10 minutes heat dissipation, restart the machine.

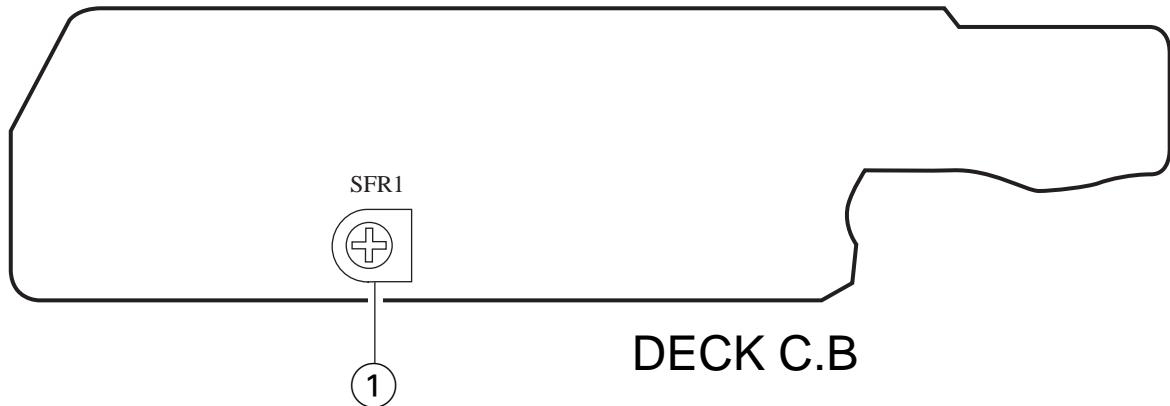
4. Overview of Operation

The each mode can be operated one after another in the order that is shown by the arrow mark in the illustration from the “Start” mode. Change the modes as shown.

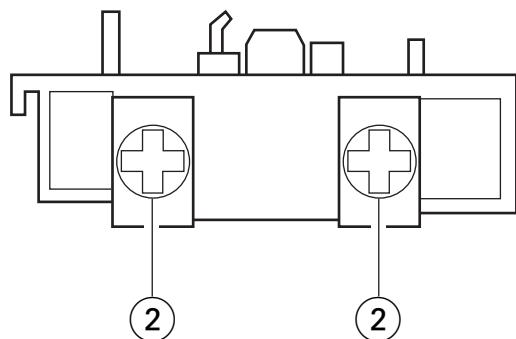


ELECTRICAL ADJUSTMENT

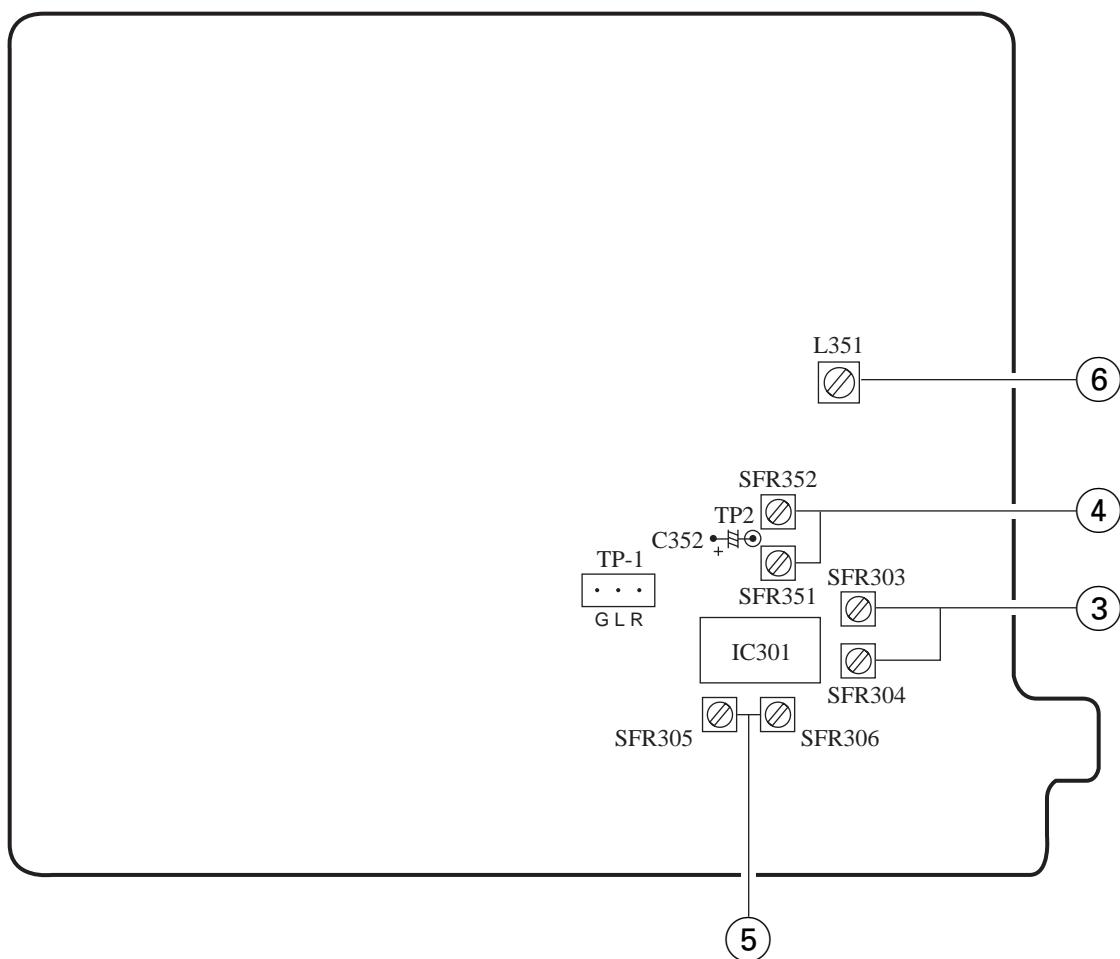
< DECK SECTION >



R.P.E HEAD



MAIN C.B



1. Tape Speed Adjustment

Settings:	<ul style="list-style-type: none"> • Test tape: TTA-100 • Test point: TP8, 9 • Adjustment location: SFR1
Method:	Playback the test tape by DECK2 and adjust SFR1 so that the frequency counter reads 3000Hz±5Hz. Check that the counter reading in the REV mode is within the range of ±45Hz of that in the FWD mode.

2. Azimuth Adjustment

Settings:	<ul style="list-style-type: none"> • Test tape: TTA-330 • Test point: TP8, 9 • Adjustment location: Head azimuth adjustment screw
Method:	Playback the 10kHz signal of the test tape and adjust the adjustment screw so that the output becomes the -5dB point below the maximum reading. The adjustment must ends with the clockwise rotation of the adjustment screw. Perform this adjustment in both FWD and REV directions. Fix the adjustment screw with adhesive agent upon completion of adjustment.

3. PB Sensitivity Check

Settings:	<ul style="list-style-type: none"> • Test tape: TTA-200 • Test point: TP8, 9
Method:	Play back the test tape and check SFRs so that the output level of the TP1 becomes 280mV±3mV.

4. REC/PB Frequency Response Adjustment

Settings:	<ul style="list-style-type: none"> • Test tape: TTA-602 • Test point: TP8, 9 • Input signal: 315Hz/10kHz (LINE IN) • Adjustment location: SFR351 (Lch) SFR352 (Rch)
Method:	Establish the record mode. Input the 315Hz and the 10kHz signals from LINE IN with the input level so that TP1 has the signal level of 12mV. Record the 1kHz and the 10kHz signals, then play them back. Adjust SFR so that the output difference between the 315Hz and the 10kHz signals becomes 0dB±0.5dB.

5. REC/PB Sensitivity Check

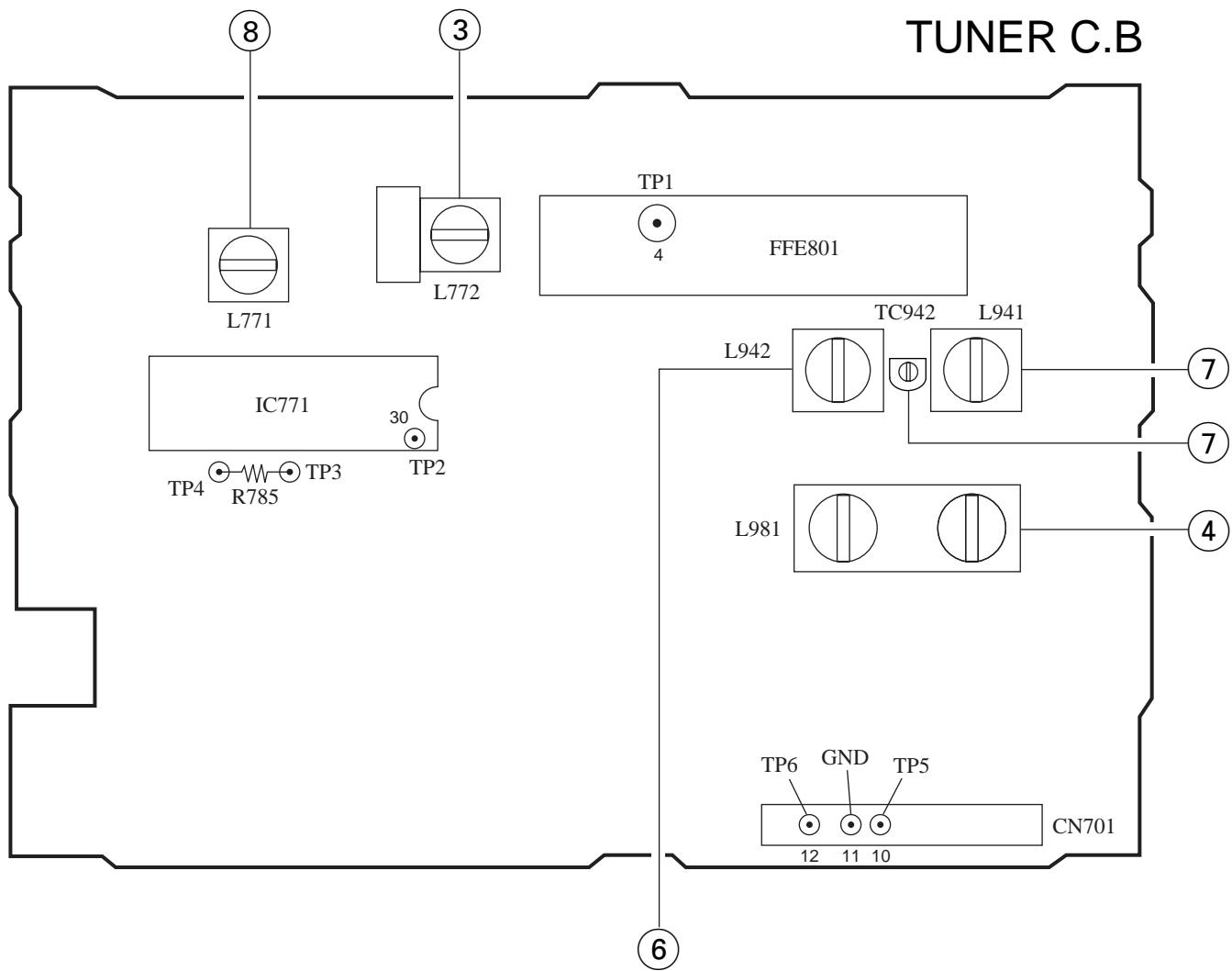
Settings:	<ul style="list-style-type: none"> • Test tape: TTA-602 • Test point: TP8, 9 • Input signal: 1kHz /10kHz (LINE IN)
Method:	Establish the record mode. Input the 1kHz signal from LINE IN with the input level so that TP1 has the signal level of 12mV. Record the 1kHz signal, then play it back. Check SFR so that the output level becomes -1dB±0.5dB.

PRACTICAL SERVICE FIGURE

< DECK SECTION >

Tape speed:	3000Hz±5Hz
Wow & flutter:	Less than 0.18%
(W.R.M.S)	
Distortion (REC/PB):	Less than 2% (NORM, CrO ₂)
Noise level (PB):	Less than 20mV (DOLBY NR OFF, NORM) Less than 35mV
Erasing ratio:	More than 60dB (DOLBY NR ON, CrO ₂)
Test tape:	NORMAL TTA-100 TTA-330 TTA-602 CrO ₂ TTA-200

< TUNER SECTION >



PRACTICAL SERVICE FIGURE

1. Clock Frequency Check

Settings: • Test point: TP2 (CLK IC770 pin30)

Method: Set to MW 1602kHz and check that the test point becomes 2052kHz±45Hz (EZ).
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 IF Adjustment

Settings: • Test point: TP5, TP6
L772 450kHz
4. MW Tracking Adjustment

Settings: • Test point: TP5, TP6
• Adjustment location: L981

Method: Set to MW 999kHz and adjust L981 so that the test point becomes maximum.
5. FM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).
6. LW VT Adjustment

Settings: • Test point: TP2 (VT)
• Adjustment location: L942

Method: Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V±0.05V.

Then set to LW 290kHz and check that the test point is less than 8.0V.
7. LW Tracking Adjustment

Settings: • Test point: TP5, TP6
• 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.
8. DC Balance/Mono Distortion Adjustment

Settings: • Test point: TP3, TP4
• Adjustment location: L771
• Input level: 54dB

Method: Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V±0.04V.

Next, check that the distortion is less than 1.3%.

< TUNER SECTION >

< FM SECTION >

IHF Sensitiviy: (THD 3%)	Less than 13dB (at 108.0/98.0MHz)
Distortion:	Less than 14dB (at 98.0MHz)
Stereo separation:	Less than 1.2% (98.0MHz)
Intermediate frequency:	More than 12dB (98.0MHz) 10.7MHz

< MW SECTION >

Sensitivity: (S/N 20dB)	Less than 60dB (at 600kHz)
Distortion:	Less than 58dB (at 1000/1400kHz)
	Less than 1.5% (at 1000kHz)

< LW SECTION >

Sensitivity:	Less than 70dB (at 144kHz)
	Less than 68dB (at 198kHz)
	Less than 66dB (at 290kHz)

IC DESCRIPTION

IC, LC876580W

Pin No.	Pin Name	I/O	Description
1	I-DISH	I	CD DISH No. detection input.
2	I-MD1	I	MD door SW input.
3	I-MD2	—	Not used.
4	I-STEREO/I-DRF	I	Connected to tuner/stereo detection and CD ASP LA9240M pin-54 DRF.
5	O-DATA	O	Connected to the front shift resistor BU2099 ③ DATA, main shift resistor 4094 ② DATA, and tuner PLL IC LC72131 ④ DI.
6	O-CLK	O	Connected to the front shift resistor BU2099 ④ DATA, main shift resistor 4094 ③ CLK, and tuner PLL IC LC72131 ⑤ DI.
7	I-TRAY	I	Deck door SW input.
8	O-CDDATA/ I-RDS DATA	O	Connected to CD DSP LC78622E 56-pin COIN and ASP LA9240M 52-pin DAT. RDS data input.
9	O-MUTE	O	Main mute output.
10	O-POWER	O	Unit power supply control output.
11	<u>RESET</u>	—	Microprocessor reset.
12	I-TU.IFC/I-SUBQ	I	Connected to tuner PLL IC LC72131 ⑤.
13	I-TU-SIG/I-MS	I	RDS signal level AD value input (A/D) and tape music sensor input (A/D).
14	VSS1	—	Ground.
15	CF1	I	Connected to 5.76 MHz oscillator.
16	CF2	O	
17	VDD1	—	Microprocessor power supply. (μ -com 5 V)
18	I-HOLD	I	Hold status detection.
19-22	I-KEY1-4	I	Key input.
23	I-CDSW	I	CD frame open/close status detection input.
24	I-RE-VOL	I	AD value input to electronic volume control from the rotary encoder outputs A and B.
25	I-RE-MULTI	I	AD value input to multi jog from the rotary encoder outputs A and B.
26	I-SPEANA	I	Input from spectrum analyzer.
27	I-RDSCLK/I-WRQ	I	Connected to RDS CLK input and CD DSP LC78622E pin-53 WRQ.
28	I-TMBASE	I	Connected to reference clock input for watch PLL IC LC72131 ⑦.
29	I-RMC	I	Remote control input.
30-42	13G-1G	O	FL tube grid output.
43-45	P37-P35	O	FL tube anode output.
46	VDD3	—	Microprocessor power supply. (μ -com 5 V)
47	P34	O	FL tube anode output.
48-50	SPEANA/P31-P33	O	
51	VP	—	Connected to minus power supply -VFL for FL.
52, 53	P30, P29	O	FL tube anode output.
54	<u>DSP/P28</u>	I	FL tube anode output and INT.diode matrix input.
55	<u>DEMO/P27</u>	I	
56	AMST/P26	O	
57	LW/P25	O	
58	SW/P24	O	

Pin No.	Pin Name	I/O	Description
59	FM1/P22	O	
60	RDS/P22	O	
61	AM9K/P21	O	FL tube anode output and INT.diode matrix input.
62	Q-SURR/P20	O	
63	BBE/P19	O	
64	REB/P18	I	
65	REA/P17	I	
66	CST/P16	I	FL tube anode output and deck MECHA status detection input.
67	AUTO/P15	I	
68	CAM/P14	I	
69-71	P13-P11	O	FL tube anode output.
72	VDD4	—	Microprocessor power supply. (μ -com 5 V)
73-82	P10-P1	O	FL tube anode output.
83	O-KSCAN	O	Key scan detection output.
84	O-LEDSTB	O	Connected to front LED driver BU2099 ⑤.
85	O-DISH FWD	O	CD flame and dish FWD control output.
86	O-DISH REV	O	CD flame and dish REV control output.
87	O-PLLCE	O	Connected to tuner PLL IC LC72131 ③.
88	O-STB	O	Connected to ⑩ latch of M62445FP.
89	VSS2	—	Ground.
90	VDD2	—	Microprocessor power supply. (μ -com 5 V)
91	O-CDCE	O	CD IC control output.
92	O-CDCLK	O	CD IC control output. Clock output.
93	O-SOL2	O	Deck MECHA plunger control output.
94	O-MDRES	O	MD unit ZZG-2A reset signal output.
95	O-SOUT	O	Serial data output to MD unit control.
96	I-SIN	I	Serial data input to MD unit control.
97	I-ACLK	I	Serial clock input to MD unit control.
98	O-ARDY	O	Serial data send/receive ready output to MD unit control.
99	O-SREQ	O	Serial data transfer request to MD unit control.
100	I-MREQ	I	

IC, CXD2652AR

Pin No.	Pin Name	I/O	Description
1	MNT0	O	Monitor output terminal.
2	MNT1	O	Monitor output terminal.
3	MNT2	O	Monitor output terminal.
4	MNT3	O	Monitor output terminal.
5	SWDT	I	Microprocessor serial interface data input.
6	SCLK	I	Microprocessor serial interface shift clock input.
7	XLAT	I	Microprocessor serial interface latch input. Latched at falling down edge.
8	SRDT	O	Microprocessor serial interface data output.
9	SENS	O	The terminal which outputs internal status in accordance with the address of the microprocessor serial interface.
10	XRST	I	Reset input. L: reset.
11	SQSY	O	Disc sub code Q sync/ADIP sync output.
12	DQSY	O	Subcode Q sync output of U-bit CD or MD format when the DIGITAL IN source is CD or MD.
13	RECP	I	Laser power selection input. H: Recording power, L: Playback power.
14	XINT	O	Interrupt request output terminal. L is output when interrupt status is generated.
15	TX	I	Record data output enable signal input terminal. H: enable.
16	OSCI	I	Crystal oscillator circuit input terminal.
17	OSCO	O	Crystal oscillator circuit output terminal. (Inverted output of OSCI).
18	XTSL	I	OSCI terminal input frequency selection. H: 512 Fs (22.5792 MHz), L: 1024 Fs (45.1584 MHz).
19	NC	—	Not connected.
20	DVSS	—	Digital GND.
21	DIN	I	Digital audio interface signal input.
22	DOUT	O	Digital audio interface signal output.
23	ADDT	I	Analog recording signal input terminal. (External A/D converter output is connected to this terminal).
24	DADT	O	RECORD monitor output/decode audio data output.
25	LRCK	O	LRCK (44.1 kHz) output terminal to external audio block.
26	XBCK	O	Bit clock output (2.8224 kHz) output terminal to external audio block.
27	FS256	O	256 Fs output. (11.2896 MHz).
28	DVDD	—	Digital power supply.
29	A03	O	Address output to external DRAM.
30	A02	O	Address output to external DRAM.
31	A01	O	Address output to external DRAM.
32	A00	O	Address output to external DRAM.
33	A10	O	Address output to external DRAM. (Not used).
34	A04	O	Address output to external DRAM.
35	A05	O	Address output to external DRAM.
36	A06	O	Address output to external DRAM.
37	A07	O	Address output to external DRAM.

Pin No.	Pin Name	I/O	Description
38	A08	O	Address output to external DRAM.
39	A11	O	Address output to external DRAM. (Not used).
40	DVSS	—	Digital GND.
41	XOE	O	External DRAM output enable.
42	XCAS	O	$\overline{\text{CAS}}$ output to external DRAM.
43	A09	O	Address output to external DRAM.
44	XRAS	O	$\overline{\text{RAS}}$ output to external DRAM.
45	XWE	O	Write enable for external DRAM.
46	D1	I/O	Data bus for external DRAM.
47	D0	I/O	Data bus for external DRAM.
48	D2	I/O	Data bus for external DRAM.
49	D3	I/O	Data bus for external DRAM.
50	MVCI	I	External VCO (784 fs) clock input.
51	ASYO	O	Playback EFM full swing output. (L: VSS, H: VDD).
52	ASYI	I	Playback EFM comparator slice voltage input.
53	AVDD	—	Analog GND.
54	BIAS	I	Playback EFM comparator bias current input.
55	RFI	I	Playback EFM RF signal input.
56	AVss	—	Analog power supply.
57	PDO	O	Phase comparison output to EFM decoder analog PLL.
58	PCO	O	Phase comparison output to the master PLL of playback digital PLL and to the recording EFM PLL.
59	FILI	I	Filter input to the master PLL of playback digital PLL and to the recording EFM PLL.
60	FILO	O	Filter output to the master PLL of playback digital PLL and to the recording EFM PLL.
61	CLTV	I	Internal VCO control voltage of the master PLL of playback digital PLL and of the recording EFM PLL.
62	PEAK	I	Optical light volume's peak hold signal input.
63	BOTM	I	Optical light volume's bottom hold signal input.
64	ABCD	I	Optical light volume signal input.
65	FE	I	Focus error signal input.
66	AUX1	I	Auxiliary input 1.
67	VC	I	Center terminal voltage input.
68	ADIO	O	Monitor output of A/D converter input signal.
69	AVDD	—	Analog power supply.
70	ADRT	I	Voltage input of the upper limit of the A/D converter operation range.
71	ADR _B	I	Voltage input of the lower limit of the A/D converter operation range.
72	AVSS	—	Analog GND.
73	SE	I	Sled error signal input.
74	TE	I	Tracking error signal input.
75	AUX2	I	Auxiliary input 2.

Pin No.	Pin Name	I/O	Description
76	DCHG	I	Connected to the low impedance power supply.
77	APC	I	Error signal input to the laser digital APC.
78	ADFG	I	ADIP2 binary-converted FM signal (22.05 ± 1 kHz) input.
79	F0CNT	O	Current source setting output terminal to CXA2523.
80	XLRF	O	Latch output for CXA2523 control. Latched at rise-up.
81	CKRF	O	Shift clock output for CXA2523 control.
82	DTRF	O	Data output for CXA2523 control.
83	APCREF	O	Reference PWM output to laser APC.
84	LDDR	O	PWM output to laser digital APC. (Not used).
85	TRDR	O	Tracking servo drive PWM output. (-).
86	TFDR	O	Tracking servo drive PWM output. (+).
87	DVDD	—	Digital power supply.
88	FFDR	O	Focus servo drive PWM output. (+).
89	FRDR	O	Focus servo drive PWM output. (-).
90	FS4	O	4 fs output. (176.4 kHz).
91	SRDR	O	Sled servo drive PWM output. (-).
92	SFDR	O	Sled servo drive PWM output. (+).
93	SPRD	O	Spindle servo drive PWM output. (PWM (-) or negative polarity).
94	SPFD	O	Spindle servo drive PWM output. (PWM (+) or PWM absolute value).
95	FGIN	I	FG input to spindle CAV servo.
96	TEST1	I	Test pin. Connected to GND.
97	TEST2	I	Test pin. Connected to GND.
98	TEST3	I	Test pin. Connected to GND.
99	DVSS	—	Digital GND.
100	EFMO	O	Low signal during playback. EFM (encode data) output: during recording.

IC, CXP81952

Pin No.	Pin Name	I/O	Description
1	MCAS	—	
2	MRAS	—	Not used.
3	BUP	—	
4	AMUTE	O	Audio mute signal output.
5	ESK	O	Serial clock output for EEPROM interface.
6	EDO	O	Serial data output for EEPROM interface.
7	EDI	I	Serial data input for EEPROM interface.
8	ECS	O	EEPROM interface chip select signal output.
9	—	—	Not used.
10	RFLCT	I	DISC reflectance factor detection switch input.
11	—	—	Not used.
12	LS	I	Optical pickup inner circumference detection switch input.
13	LDSW	I	Loading mechanism, EJECT position detection switch input.
14	PBSW	I	Loading mechanism, PB position detection switch input.
15	RECSW	I	Loading mechanism, RECORD position detection switch input.
16	—	—	
17	—	—	Not used.
18	ACOFF	—	
19	SREQ	I	System control send request signal input for system control interface.
20	EXTDIN	O	External DIGITAL-IN enable signal output.
21	SLOW	O	Loading mechanism speed control signal input.
22	LOAD	O	Loading mechanism operational direction control signal input 1.
23	EJECT	O	Loading mechanism operational direction control signal input 2.
24	MREQ	O	MD microprocessor send request signal output for system control interface.
25	DRIVE	O	EFM driver ON/OFF signal output.
26	—	—	
27	—	—	
28	—	—	
29	—	—	
30	—	—	
31	—	—	Not used.
32	—	—	
33	—	—	
34	—	—	
35	—	—	
36	—	—	
37	MP	—	Connected to VSS.
38	SRST	I	MD microprocessor reset signal input.
39	DGND	—	Connected to VSS.
40	XTALO	O	External system clock oscillation crystal connection terminal 1.
41	XTALI	I	External system clock oscillation crystal connection terminal 2.

Pin No.	Pin Name	I/O	Description
42	ARDY	I	Ready signal input for system control interface.
43	SIN	I	Serial data input for system control interface.
44	SOUT	O	Serial data output for system control interface.
45	ACLK	O	Serial clock output for system control interface.
46	XLAT	O	CXD2652 interface latch signal output.
47	XRST	O	CXD2652 reset signal output.
48	XSTBY	O	CXA2523 standby signal output.
49	—	—	Not used.
50	AVSS	—	Connected to VSS.
51	AVREF	—	Connected to VDD.
52	AVDD	—	
53	—	—	Not used. (PLL UP)
54	—	—	
55	—	—	
56	SLF	—	
57	SRF	—	
58	TEMP	—	
59	MAGIC	—	
60	—	—	
61	TEST	—	
62	DISCPRO	I	DISC write-protection switch input.
63	MNT3	I	CXD2652 monitor signal input 3.
64	MNT2	I	CXD2652 monitor signal input 2.
65	MNT1	I	CXD2652 monitor signal input 1.
66	MNT0	I	CXD2652 monitor signal input 0.
67	SENS	I	CXD2652 SENS signal input.
68	FLG	I	The terminal monitoring the flag included in the SRDT of the CXD2652 interface.
69	—	—	Not used.
70	—	—	
71	P-CONT	—	
72	RFSW	—	
73	—	—	
74	—	—	
75	DQSY	I	DIGITAL-IN SUB-Q sync input.
76	XINT	I	CXD2652 status sync input.
77	SRDT	I	CXD2652 interface serial data input.
78	SWDT	O	CXD2652 interface serial data output.
79	SCLK	O	CXD2652 interface serial clock output.
80	SQSY	I	SUB-Q, ADIP sync input.
81	—	—	Not used.
82	—	—	

Pin No.	Pin Name	I/O	Description
83	—	—	Not used.
84	TXI	—	Connected to VSS.
85	TXO	—	Open. (Not used)
86	VSS	—	Connected to VSS.
87	VDD	—	Connected to VDD.
88	NC	—	
89	—	—	Not used.
90	DRV MUTE	O	BA5970FP mute signal output.
91	—	—	Not used.
92	—	—	
93	—	—	
94	—	—	
95	RECP	O	Laser power selection signal output.
96	TX	O	Record data output enable signal output.
97	MOD	O	RF modulation circuit ON/OFF signal output.
98	OPMUTE	O	Laser mute signal output.
99	ARST	O	AK4512 reset signal output.
100	DENF	O	De-emphasis ON/OFF signal output.

MECHANICAL PARTS LIST 1/1

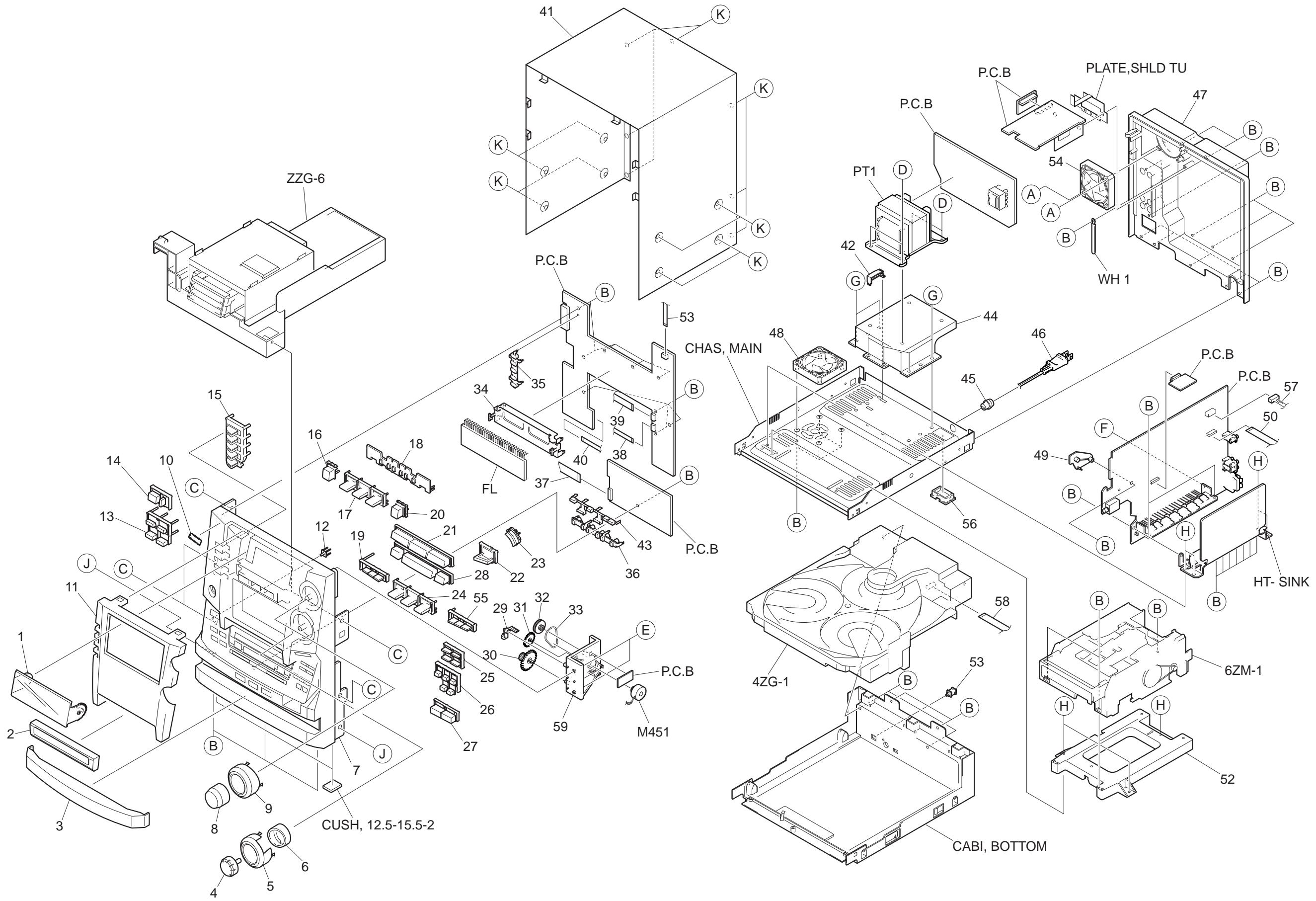
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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NB6-002-010		WINDOW,MD	36	8Z-NB6-223-010		GUIDE,DIRECT CD
2	8Z-NB6-005-010		PANEL,TRAY DECK	37	88-914-201-110		FF-CABLE, 14P 1.25 200MM
3	8Z-NB6-004-010		PANEL,TRAY CD	38	88-904-351-110		FF-CABLE, 4P 1.25
4	8Z-NB6-034-010		KNOB,RTRY JOG	39	88-907-351-110		FF-CABLE, 7P 1.25 350MM
5	8Z-NB6-006-010		PANEL,JOG	40	88-913-451-110		FF-CABLE, 13P 1.25
6	8Z-NB6-035-010		REFLECTOR,JOG	41	8Z-NB6-038-010		CABI,STEEL
7	8Z-NB6-061-010		CABI,FR EZ	42	87-NF4-221-010		HLDR,CABLE
8	8Z-NB6-033-010		KNOB,RTRY VOL	43	8Z-NB6-221-010		GUIDE,OPE
9	8Z-NB6-007-010		RING,VOL	44	8Z-NB6-202-010		HLDR,PT
10	82-NE6-067-010		BADGE,AIWA 30N	45	87-085-185-010		BUSHING, AC CORD (E)
11	8Z-NB6-003-010		WINDOW,DISPLAY	▲	46	87-050-079-010	AC-CORD ASSY,E
12	8Z-NB6-037-010		REFLECTOR,ECO	47	8Z-NB6-047-010		CABI,REAR EZS<EZS>
13	8Z-NB6-017-010		KEY,BBE	47	8Z-NB6-046-010		CABI,REAR KS<KS>
14	8Z-NB6-016-010		KEY,POWER	48	87-A90-796-010		FAN,F614R-12MC-15-300MM
15	8Z-NB6-008-010		KEY,ASSY FUN	49	88-NF5-208-010		HLDR,PWB-M N
16	8Z-NB6-014-010		KEY,DISC CHANGE MD	50	88-914-201-110		FF-CABLE, 14P 1.25 200MM
17	8Z-NB6-011-010		KEY,ASSY DIRECT MD	51	84-ZG1-245-210		CAP,OPTICAL
18	8Z-NB6-222-010		GUIDE,DIRECT MD	52	8Z-NB6-203-010		HLDR,DECK
19	8Z-NB6-024-010		KEY,DEMO	53	88-904-101-110		FF-CABLE, 4P 1.25 100MM
20	8Z-NB6-015-010		KEY,OPEN MD	54	87-A90-296-210		MOT ASSY,F614R-12MC-15
21	8Z-NB6-018-010		KEY,ASSY OPE1	55	8Z-NB6-025-010		KEY,RDS
22	8Z-NB6-026-010		KEY,OPEN DECK	56	8Z-NB5-205-010		CAP,CHAS
23	8Z-NB6-036-010		KEY,ENTER	57	8Z-NB6-624-010		CONN ASSY,16P ZNB6
24	8Z-NB6-029-010		KEY,ASSY DIRECT CD	58	88-906-501-110		FF-CABLE, 6P 1.25
25	8Z-NB6-027-010		KEY,TIMER	59	8Z-NB6-211-010		HLDR,MECHA
26	8Z-NB6-028-010		KEY,DUB	A	87-B10-190-010		BVT2+3-22 W/O SLOT
27	8Z-NB6-032-010		KEY,OPEN CD	B	87-067-703-010		TAPPING SCREW, BVT2+3-10
28	8Z-NB6-021-010		KEY,ASSY OPE2	C	87-721-096-410		QT2+3-10 GLD
29	8Z-NB6-215-010		LEVER,SW	D	87-078-019-010		S-SCREW,IT+4-6
30	8Z-NB6-212-010		GEAR,WINDOW	E	87-067-758-010		BVT2+3-12 W/O SLOT
31	8Z-NB6-213-010		GEAR,RELAY	F	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
32	8Z-NB6-214-010		PULLEY,RELAY	G	87-067-584-010		TAPPING SCREW, BVT2+3-6
33	8Z-NB6-216-010		BELT,SQ1.4-99.2	H	87-067-579-010		TAPPING SCREW, BVT2+3-8
34	87-NF5-203-010		GUIDE,FL	J	87-721-097-410		QT2+3-12 GLD
35	8Z-NB6-224-010		GUIDE,FUN	K	87-067-641-010		UTT2+3-8(W/O SLOT)BL

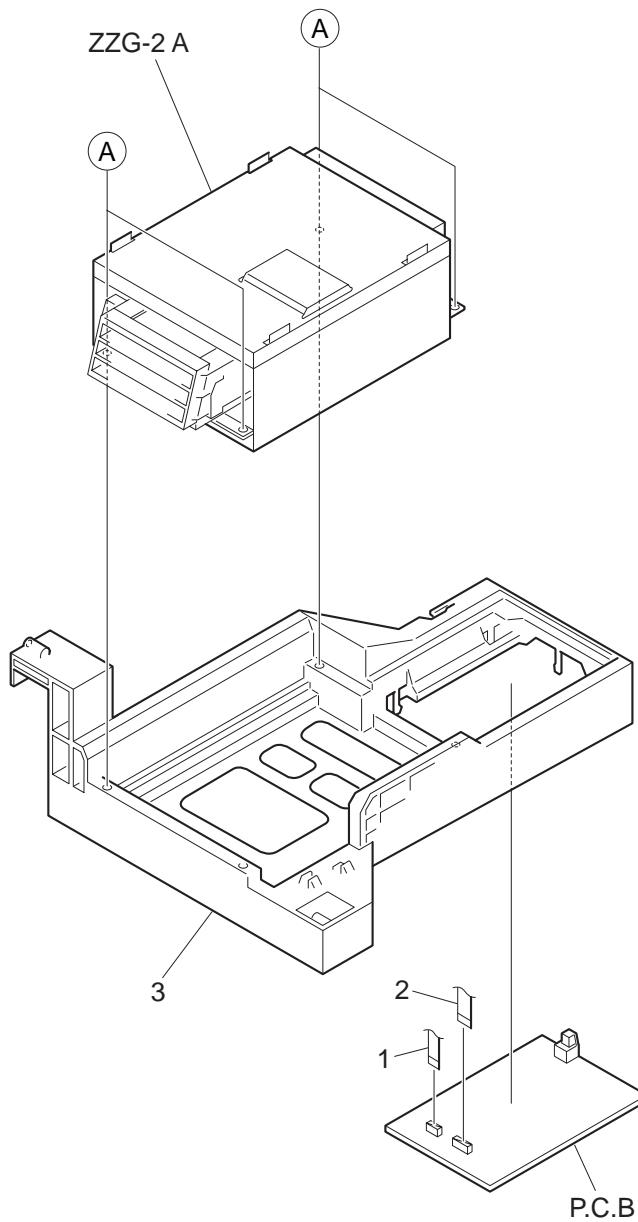
COLOR NAME TABLE

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		

MECHANICAL EXPLODED VIEW 1/1



MD MECHANISM EXPLODED VIEW 1/4

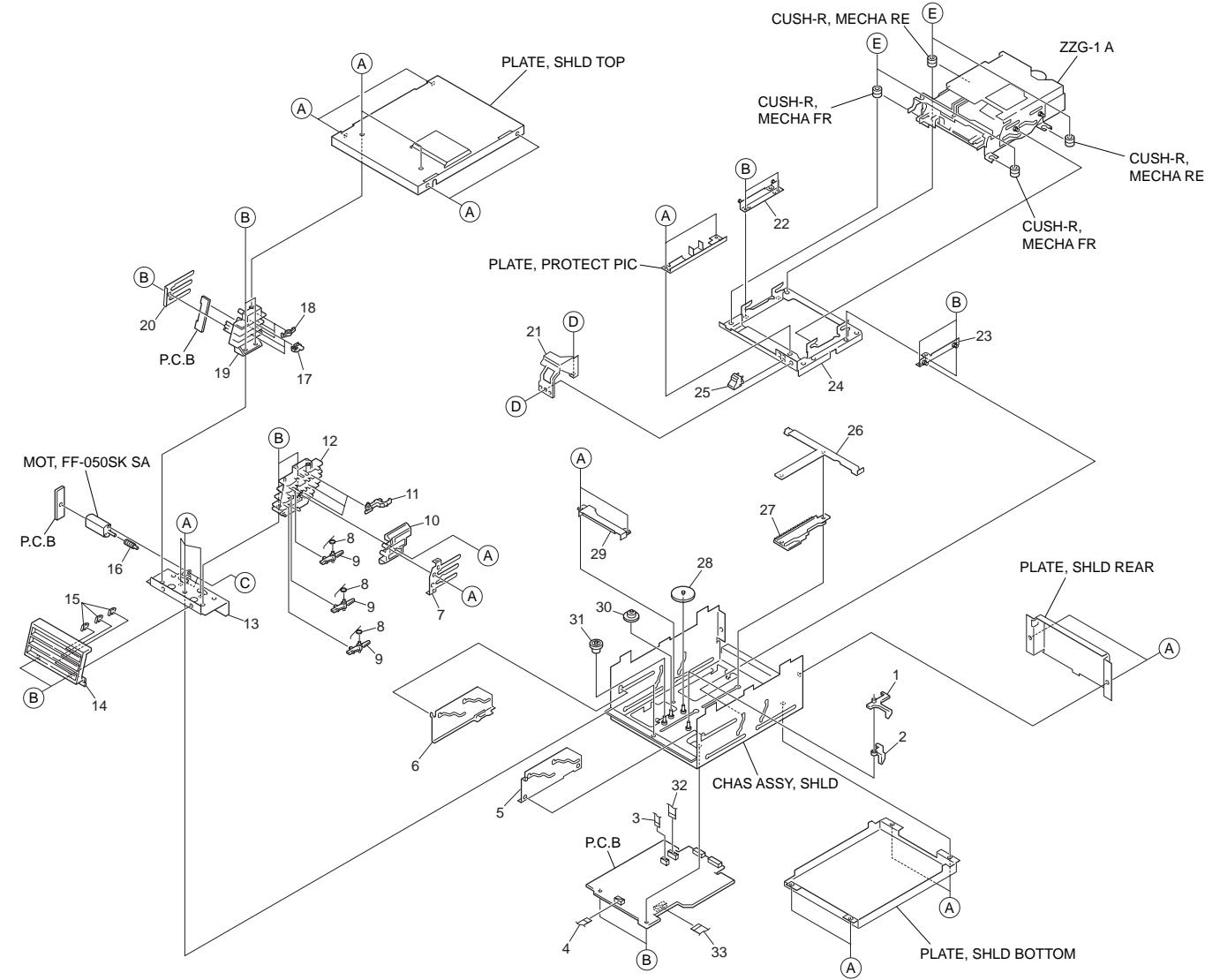


MD MECHANISM PARTS LIST 1/4

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	87-ZGA-611-010		FF-CABLE, 8P 1.0 100MM
2	87-ZGA-612-010		FF-CABLE, 14P 1.0 100MM
3	8Z-NB6-204-010		HLDR, MD
A	87-067-703-010		TAPPING SCREW, BVT2+3-10

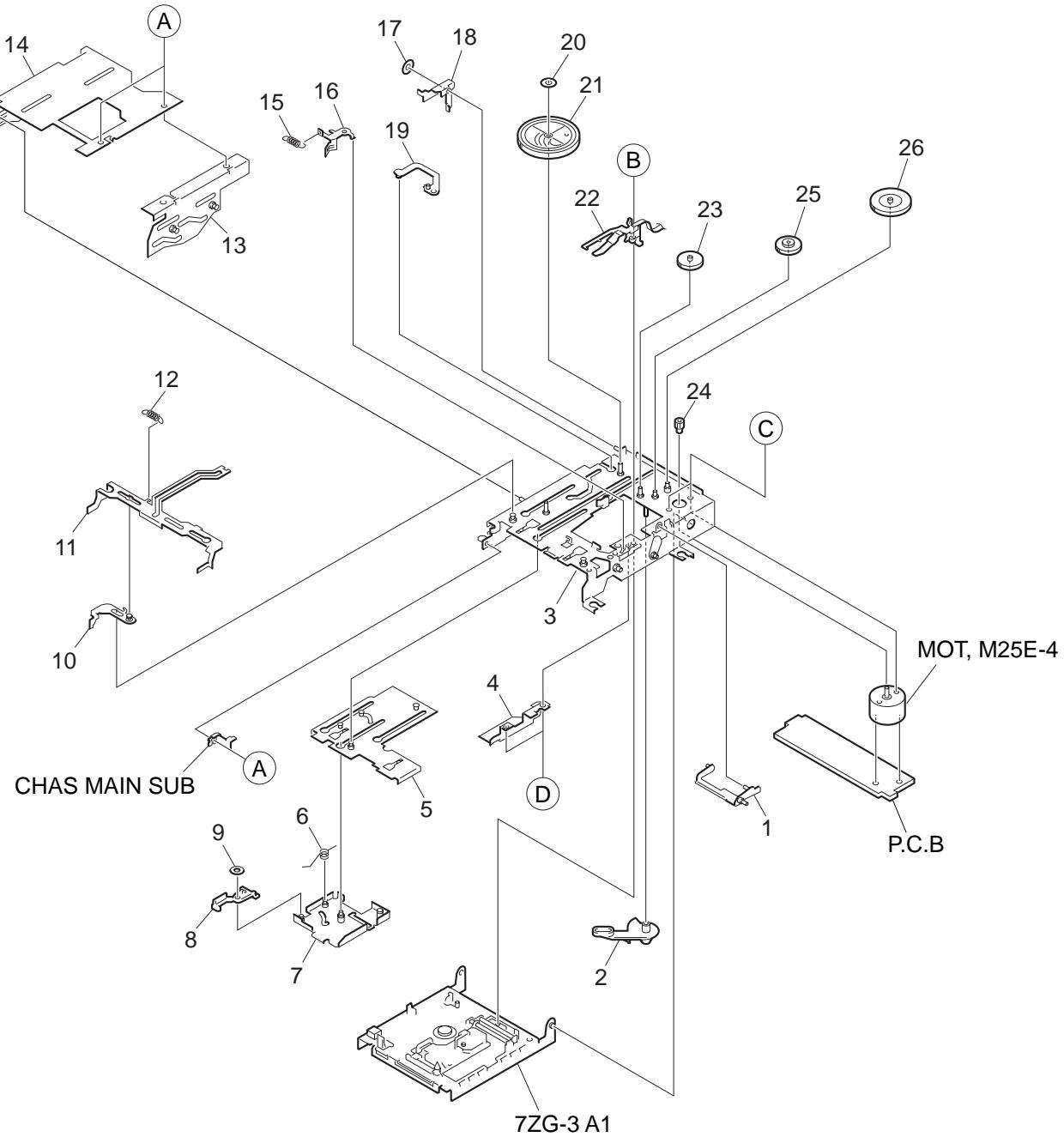
MD MECHANISM EXPLODED VIEW 2/4



MD MECHANISM PARTS LIST 2/4

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZG2-221-010		LEVER, SW RACK B	21	8Z-ZG2-238-010		HLDR, MECHA STOP
2	8Z-ZG2-220-010		LEVER, SW RACK A	22	8Z-ZG2-241-010		HLDR, ASSY M SUB L
3	8Z-ZG1-606-010		FF-CABLE, 8P 1.0 115MM	23	8Z-ZG2-243-010		HLDR, ASSY M SUB R
4	8Z-ZG2-613-010		FF-CABLE, 4P 1.0 70MM	24	8Z-ZG2-235-010		HLDR, MECHA
5	8Z-ZG2-213-010		SLIDER ASSY, CAM R	25	8Z-ZG2-239-010		STOPPER, HLDR M
6	8Z-ZG2-210-010		SLIDER ASSY, CAM L	26	8Z-ZG2-207-010		JOINT ASSY, SLIDER
7	8Z-ZG2-233-010		SPR-P, STOPPER R	27	8Z-ZG2-219-010		GEAR, RACK JT
8	8Z-ZG2-245-010		SPR-T, LVR PUSH	28	8Z-ZG2-218-010		GEAR, JT B
9	8Z-ZG2-230-010		LEVER, PUSH R	29	8Z-ZG2-244-010		PLATE, PROTECTOR
10	8Z-ZG2-231-010		HLDR, LEVER R	30	8Z-ZG2-217-010		GEAR, JT A
11	8Z-ZG2-229-010		LEVER, STOPPER R	31	8Z-ZG2-216-010		WORM-WHL, JT
12	8Z-ZG2-225-010		MAGAZINE, R	32	8Z-ZG2-612-010		FF-CABLE, 9P 1.0 90MM
13	8Z-ZG2-223-010		HLDR, MAGAZINE	33	8Z-ZG1-605-010		FF-CABLE, 21P 0.5 100MM
14	8Z-ZG2-001-010		MAGAZINE, F	A	87-741-073-410		UT2+2.6-6 GLD
15	8Z-ZG2-247-010		PLATE, MAGAZINE F	B	87-743-073-410		UT2+2.6-6
16	8Z-ZG2-215-010		GEAR, WORM JT	C	87-262-545-310		V+2-2.5
17	8Z-ZG2-227-010		STOPPER, L	D	87-067-421-010		VTT+2-4
18	8Z-ZG2-228-010		LEVER, STOPPER L	E	87-ZG9-208-010		S-SCREW, MD T
19	8Z-ZG2-224-010		MAGAZINE, L				
20	8Z-ZG2-232-010		SPR-P, STOPPER L				



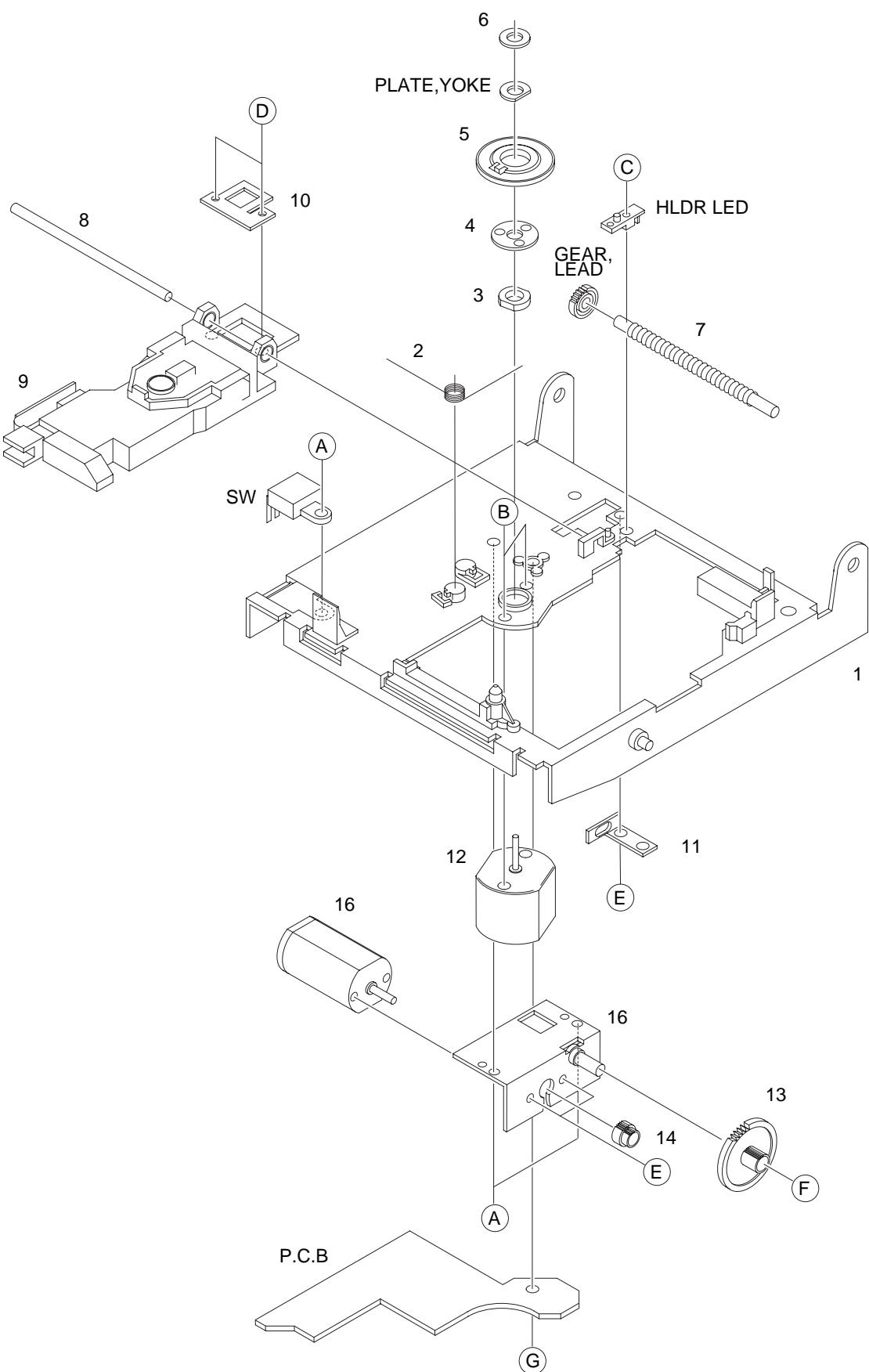
MD MECHANISM PARTS LIST 3/4

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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	87-ZG8-257-210		LEVER ASSY,REC	21	87-ZG8-239-010		CAM,LOAD
2	8Z-ZG1-220-010		LEVER,SW EJECT	22	87-A90-605-010		HEAD,OWH RF325-74A
3	8Z-ZG1-201-010		CHAS ASSY,MAIN	23	8Z-ZG1-243-010		GEAR, IDLER
4	8Z-ZG1-248-010		PLATE,CTRQ	24	87-ZG8-242-010		GEAR,MOT
5	8Z-ZG1-210-010		HLDR ASSY,CTRQ	25	8Z-ZG1-226-010		GEAR,REDUCTION S
6	8Z-ZG1-209-010		SPR-T,LOAD	26	8Z-ZG1-225-010		GEAR,REDUCTION L
7	8Z-ZG1-206-010		PLATE ASSY,EJECT	A	87-067-421-010		VTT+2-4
8	8Z-ZG1-208-010		LEVER,LOAD	B	87-B10-131-010		VW+1.7-5 W/O MFZN2C
9	87-B10-193-010		W-P,1.76-4.5-0.3 SLIT W/O ADH	C	87-B10-128-010		V+1.7-2 W/O MFZN2-C
10	8Z-ZG1-223-010		LEVER ASSY,LOAD M	D	87-B10-129-010		VTT+1.7-3.5 W/O MFZN2-C
11	8Z-ZG1-222-010		SLIDER,OPEN				
12	8Z-ZG1-245-010		SPR-E,SL OPEN				
13	8Z-ZG1-216-010		PLATE ASSY,SLIDE R				
14	8Z-ZG1-214-010		PLATE ASSY,SLIDE L				
15	87-ZG8-232-110		SPR-E,SHUTTER				
16	87-ZG8-231-010		LEVER,SHUTTER				
17	87-B10-130-010		W-P,1.23-3.1-0.25 SLIT				
18	8Z-ZG1-221-010		LEVER,SW PLAY				
19	8Z-ZG1-218-010		LEVER ASSY,CAM				
20	87-B10-267-010		W-P,1.74-4-0.2 BLKSLIT W/O				

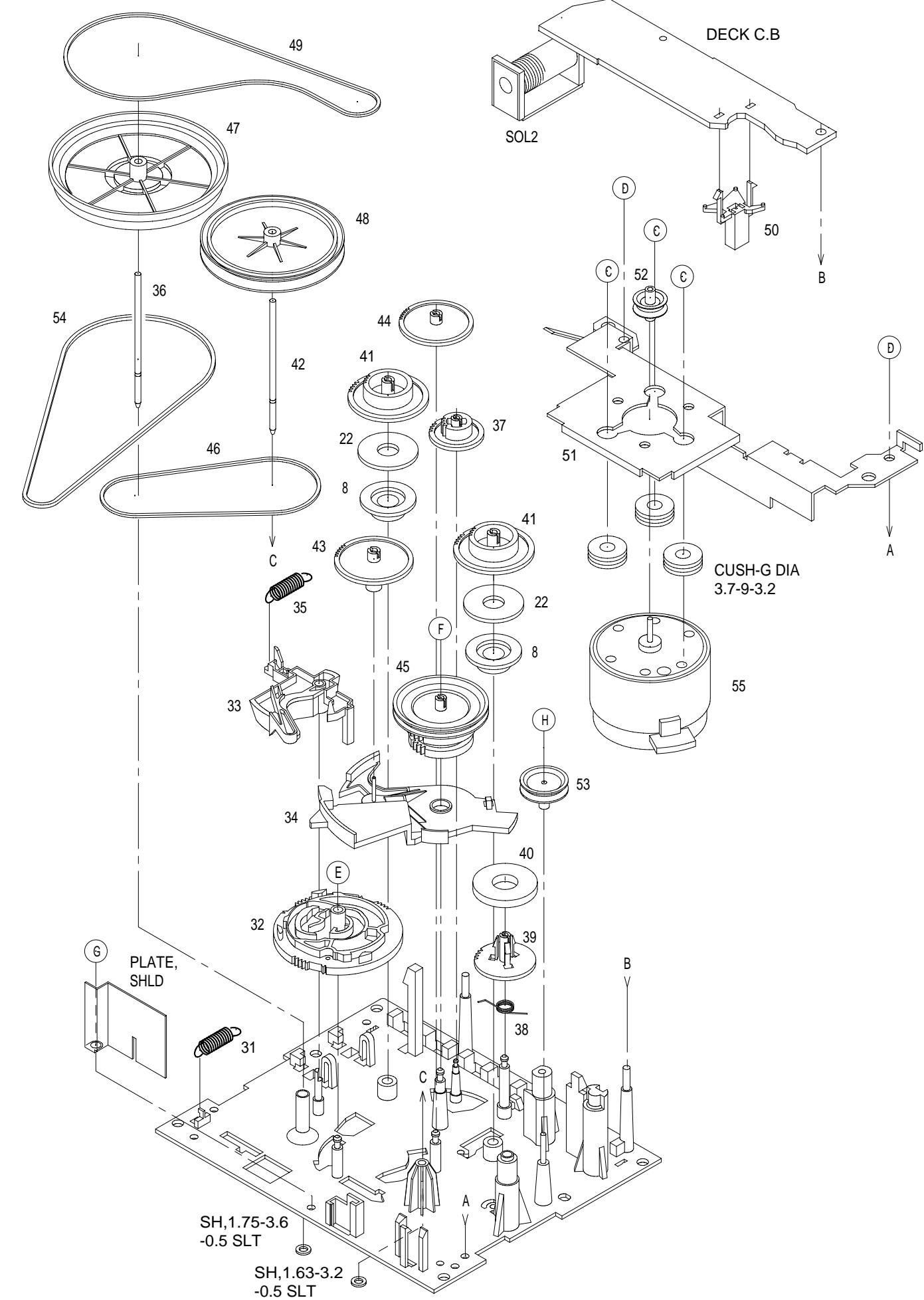
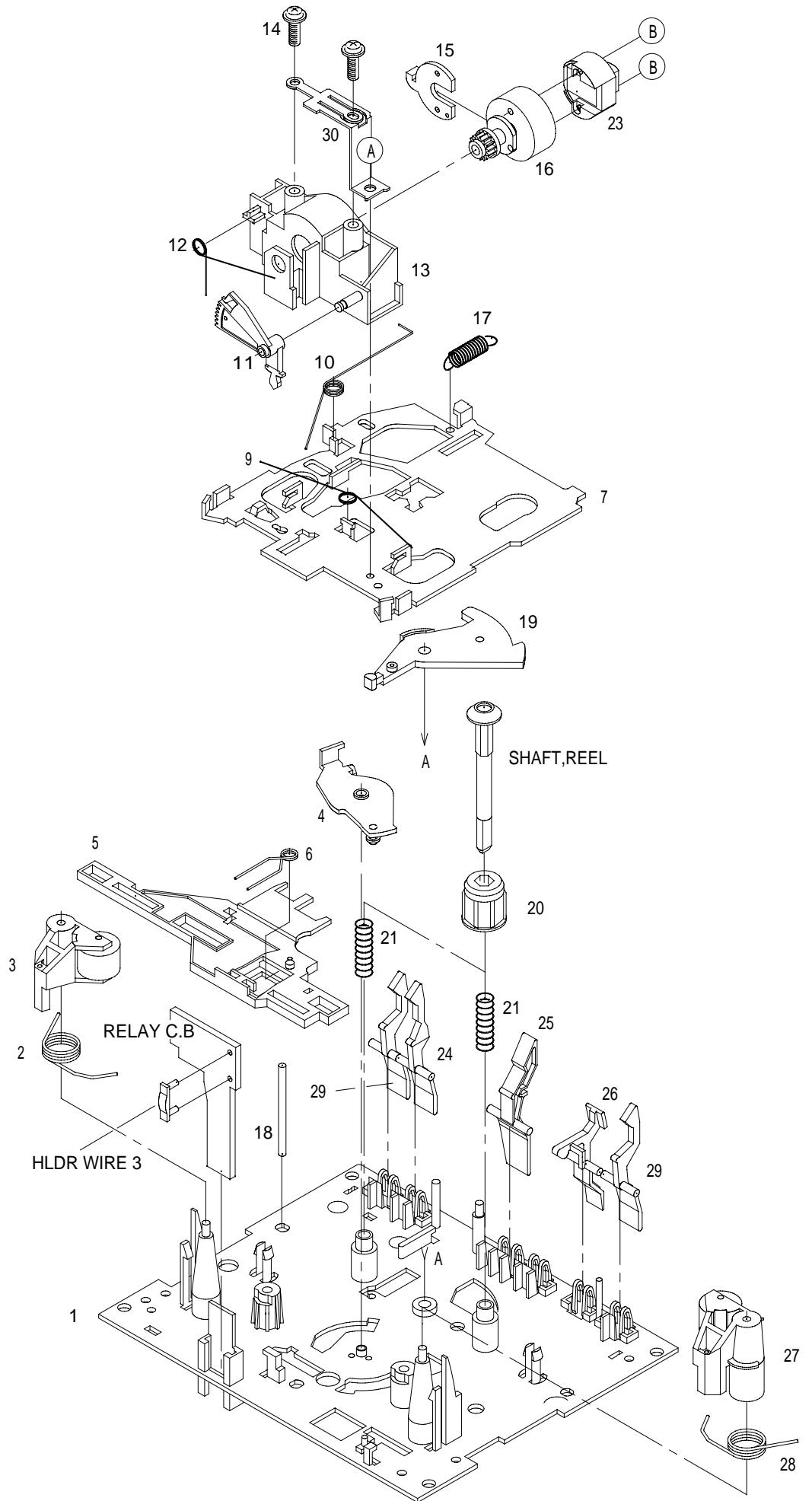
MD MECHANISM PARTS LIST 4/4

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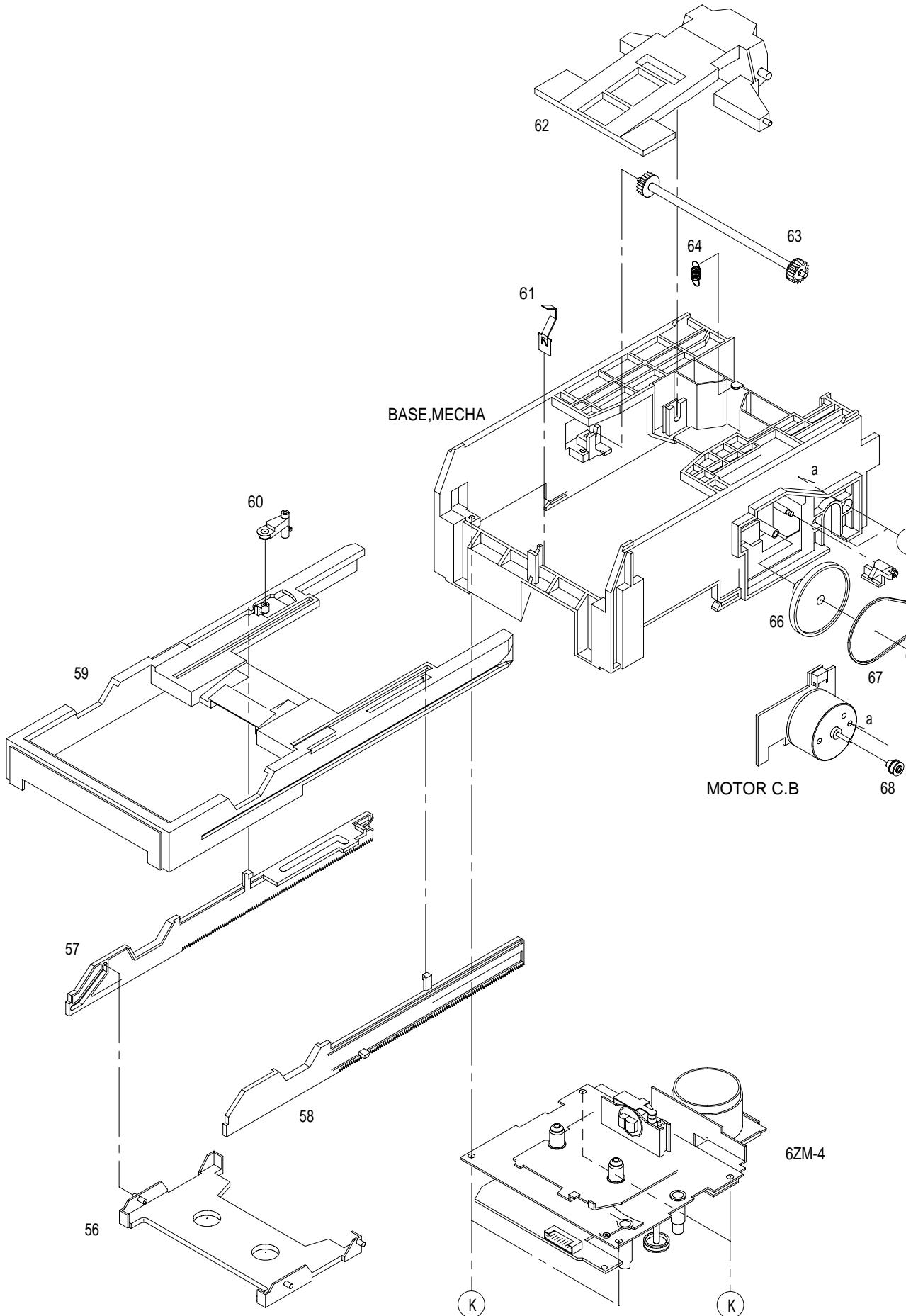


REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	87-ZG3-202-010		CHAS ASSY,OUT-SERT	16	87-A90-616-010		MOT,FF-N30VA
2	87-ZG3-214-010		SPR-T,SPINDLE-A	A	87-261-547-310	V+2-3 BLK (1)	
3	83-ZG5-308-010		BRG,1.5-2	B	87-263-523-310	SCREW, V+1.7-2	
4	83-ZG5-305-010		SPR-P,DISC	C	87-261-509-310	SCREW, V+1.4-4	
5	83-ZG5-302-010		TURN TABLE,MD1	D	87-067-393-010	SCREW +1.4-1.4	
6	83-ZG5-605-010		MAGNET,CHUCK	E	87-261-503-310	PRECISION SCREW, V+1.4-2	
7	87-ZG3-212-010		SHAFT,LEAD	F	87-078-033-010	PW 1.2-2.5-0.25 SLT	
8	87-ZG3-211-010		SHAFT,GUIDE	G	87-341-035-210	SCREW,UT1+2-6	
9	87-A90-613-010		PICKUP,KMS-260A				
10	87-ZG3-216-010		SPR-P,RACK				
11	87-ZG3-213-010		SPR-P,LEAD				
12	87-A90-413-010		MOT,FF-110PH 9				
13	87-ZG3-206-010		GEAR,A				
14	87-ZG3-205-010		GEAR,MOT SL				
15	87-ZG3-208-010		Hldr ASSY,MOTOR				

TAPE MECHANISM EXPLODED VIEW 1/1



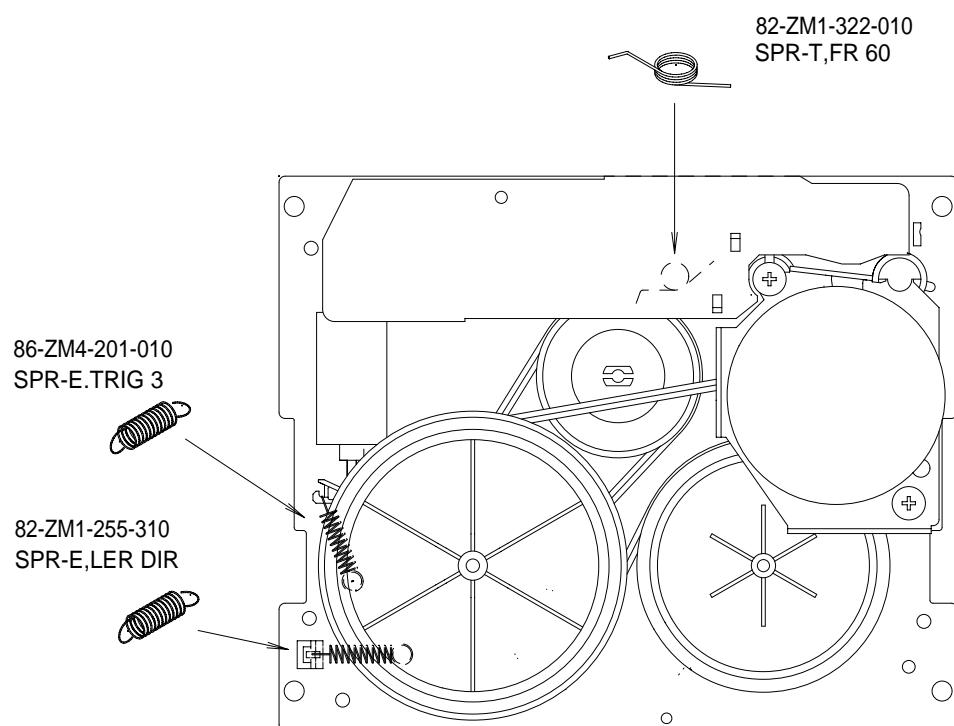
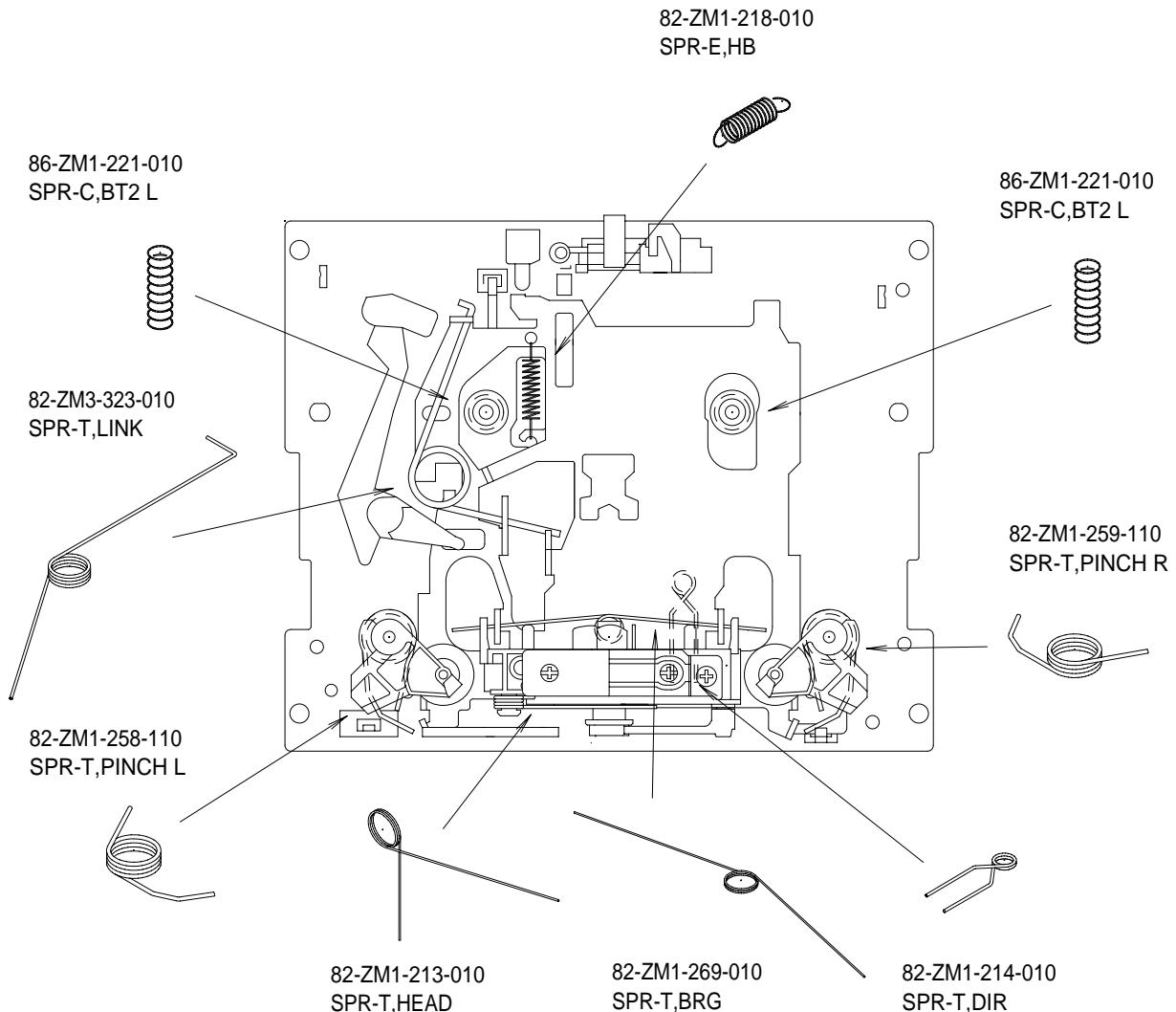
TAPE MECHANISM PARTS LIST 1/1



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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM1-218-010	CHAS ASSY,R		41	82-ZM1-216-310	GEAR, REEL	
2	82-ZM1-258-110	SPR-T, PINCH L		42	82-ZM1-236-010	CAPSTAN, 2-41.5	
3	86-ZM4-202-019	LVR ASSY, PINCH L3		43	82-ZM1-225-210	GEAR, FR	
4	82-ZM1-333-010	PLATE, LINK2		44	82-ZM1-226-010	GEAR, REW	
5	82-ZM1-266-110	LVR, DIR		45	82-ZM3-333-210	SLIP DISK ASSY 2	
6	82-ZM1-214-010	SPR-T, DIR		46	82-ZM1-338-110	BELT, FR 4	
7	82-ZM1-206-910	CHAS, HEAD		47	86-ZM1-216-210	FLY-WHL, R L	
8	86-ZM1-219-010	CLR, REEL SLIP		48	82-ZM3-330-010	FLY-WHL, L2 W	
9	82-ZM1-269-210	SPR-T, BRG		49	86-ZM1-206-010	BELT, MAIN L	
10	82-ZM3-323-010	SPR-T, LINK 3		50	82-ZM1-245-210	HLDR, IC	
11	82-ZM1-210-110	GEAR, H T		51	86-ZM1-215-010	HLDR, MOT L	
12	82-ZM1-213-010	SPR-T, HEAD		52	82-ZM1-247-210	PULLEY, MOTOR	
13	82-ZM1-207-710	GUIDE, TAPE		53	82-ZM3-335-010	PULLEY, COUPLER M3	
14	82-ZM1-283-310	S-SCREW, AZIMUTH		54	86-ZM1-217-010	BELT, MOT	
15	82-ZM1-314-110	PLATE, HEAD		55	87-A90-343-010	MOT, SHU2R 70	
16	82-ZM1-208-310	HLDR, HEAD		56	86-ZL1-203-010	TRAY, CAS	
17	82-ZM1-218-010	SPR-E, HB		57	86-ZL1-204-010	LEVER, SLIDE L	
18	82-ZM3-327-010	SHAFT, COUPLER N2		58	86-ZL1-205-010	LEVER, SLIDE R	
19	82-ZM1-222-210	LVR, PLAY		59	86-ZL1-202-010	FRAME, CAS	
20	86-ZM1-203-010	CAP, REEL		60	86-ZL1-209-010	LEVER, LOCK	
21	86-ZM1-221-010	SPR-C, BT 2L		61	86-ZL1-214-010	SPR-P, CAS	
22	86-ZM1-220-010	FELT, DIA 5.3-14-0.8		62	86-ZL1-211-010	ARM, CLAMP	
23	87-046-399-110	HEAD, RPH YK56R-BS409		63	86-ZL1-206-010	GEAR, TRAY	
24	82-ZM1-241-310	LVR, MC		64	86-ZL1-213-010	SPR-E, CLAMP	
25	82-ZM1-242-010	LVR, CAS		65	86-ZL1-208-010	LEVER, SW	
26	82-ZM1-243-010	LVR, STOP		66	86-ZL1-207-010	GEAR, PULLEY	
27	86-ZM4-204-019	LVR ASSY, PINCH R3		67	86-ZL1-212-010	BELT, L	
28	82-ZM1-259-110	SPR-T, PINCH R		68	86-ZL1-210-010	PULLEY, MOT	
29	82-ZM1-240-110	LVR, REC		A	82-ZM1-315-010	S-SCREW GUIDE TAPE	
30	82-ZM1-298-010	SPR-P EARTH		B	80-ZM6-207-010	V+1.6-7	
31	82-ZM1-255-310	SPR-E, LVR DIR		C	82-ZM3-318-110	S-SCREW MOTOR M2	
32	82-ZM1-221-110	GEAR, CAM		D	87-067-178-010	VTT+2.6-3	
33	82-ZM1-227-210	LVR, TRIG		E	87-B10-008-010	W-P, 2.08-8-0.4 SLIT	
34	82-ZM1-224-410	LVR, FR		F	82-ZM3-334-010	PW, 2.16-6-0.4	
35	86-ZM4-201-010	SPR-E, TRIG 3		G	87-571-032-410	VIT+2-3	
36	82-ZM1-239-010	CAPSTAN, 2.2-41.7		H	87-B10-043-010	W-P, 0.99-4-0.25 SLT	
37	82-ZM1-223-010	GEAR, PLAY		I	83-ZG3-217-010	S-SCREW, GEAR D	
38	82-ZM1-322-010	SPR-T, FR 60		J	87-251-072-410	U+2.6-5	
39	82-ZM1-220-210	GEAR, IDLER		K	87-067-660-010	BVT2+3-8 W/O SLOT BLK	
40	82-ZM1-316-010	RING, MAGNET 3					

SPRING APPLICATION POSITION

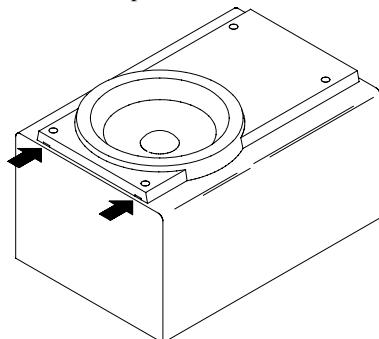


MODEL NO. SX-WNH898

SPEAKER DISASSEMBLY INSTRUCTIONS

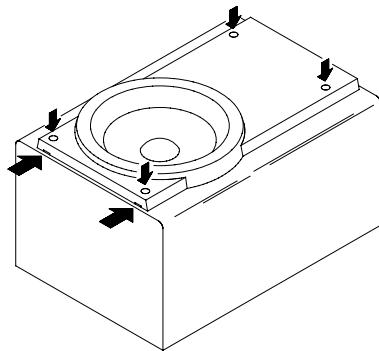
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



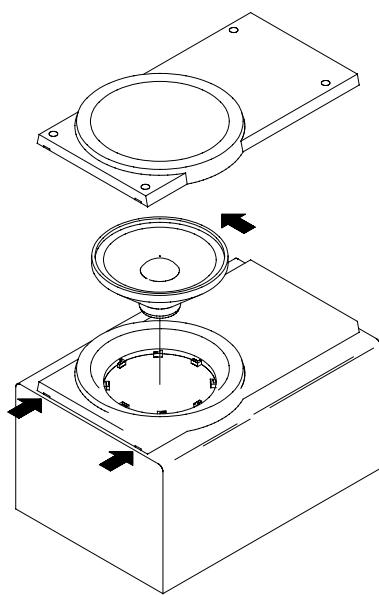
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hold where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



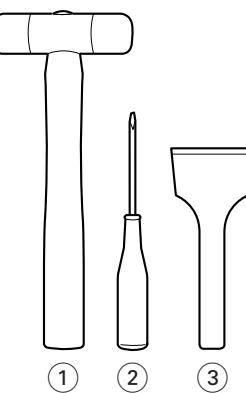
Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4

TOOLS



- (1) Plastic head hammer
- (2) (Φ) flat head screwdriver
- (3) Cut chisel

How to Remove the PANEL, FR

1. Insert the (Φ) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (Φ) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

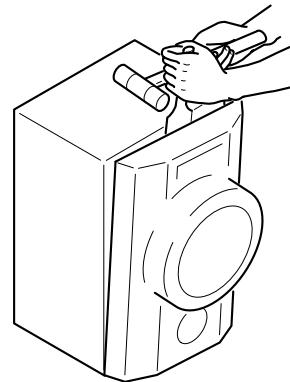
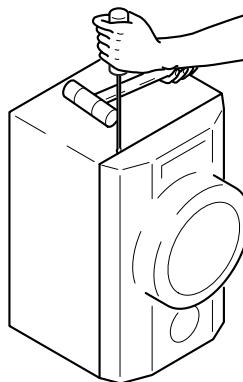


Fig-1

Fig-2

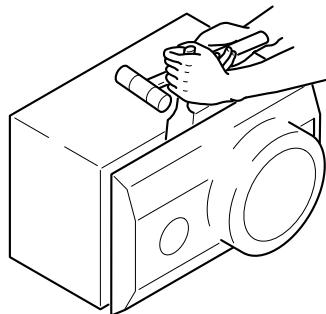


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NSZ-001-010		PANEL, FR
2	8Z-NSZ-003-010		GRILLE, FRAME ASSY
3	8Z-NS6-602-010		SPKR, W 160 WNS777
4	8Z-NS6-604-010		SPKR, M 120 WNS888
5	8Z-NSY-608-010		SPKR, CERAMIC ASSY (SWNH33)
6	88-NS5-610-010		CORD, SPKR
7	88-NS5-611-010		CORD, SPKR B/L



サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

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