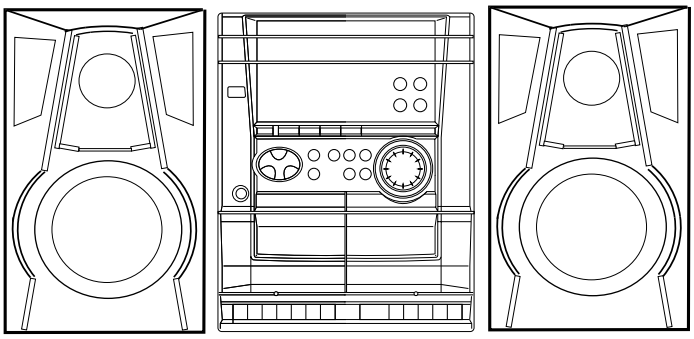
aiwa
SERVICE

NSX-DR2 EZ (S)
NSX-DR3 EZ (S)



SERVICE MANUAL

COMPACT DISC
STEREO CASSETTE RECEIVER

BASIC CD MECHANISM : AZG-1 ZA3RNM/ZA4RNC
BASIC TAPE MECHANISM : ZZM-2 PR1NM/PR1NC

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–DR2	CX–NDR2	SX–NSZ7	RC–ZAS02
NSX–DR3	CX-NDR3	SX–NSZ5	

• If requiring information about the CD mechanism, see Service Manual of AZG-1, (S/M Code No. 09-001-335-3NC).

aiwa

S/M Code No. 09-006-429-1N2

DATA

SPECIFICTAIONS

Main unit

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 μV/m
Antenna	Loop antenna

LW tuner section

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

Amplifier section

Power output	Rated: 6.4 W + 6.4 W (6 ohms, T.H.D. 1%, 1 kHz/DIN 45500) Reference: 8 W + 8 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER: 15 W + 15 W
Total harmonic distortion	0.1% (3 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 8000 Hz
Recording system	AC bias
Heads	Deck 1: Recording/playback head × 1, erase head × 1 Deck 2: Playback head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 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)

General

Power requirements	230 V AC, 50 Hz
Power consumption	42 W
Power consumption in standby mode	14 W with power-economizing mode off 0.9 W with power-economizing mode on
Dimensions (W × H × D)	260 × 324 × 346 mm
Weight	4.7 kg

Speaker system SX-NSZ5/SX-NSZ7

Speaker system	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm cone type Tweeter: 20 mm ceramic type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W × H × D)	220 × 324 × 204 mm
Weight	2.0 kg

• Design and specifications are subject to change without notice.

ACCESSORIES LIST

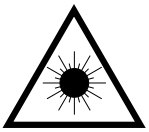
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NFB-916-110		IB,EZ(9L)M -SZ7(RDS)<NDR2>
1	8A-NFB-918-010		IB,EZ(9L)S<NDR3>
2	87-A90-118-010		ANT,WIRE FM(Z)
3	87-A90-030-010		ANT,LOOP AM-NC C<NDR3>
3	87-006-225-010		ANT,LOOP ANT NC2<NDR2>
4	8Z-NF9-701-210		RC UNIT,ZAS02<NDR2>
4	8Z-NF9-702-010		RC UNIT,ZAS02<NDR3>

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



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

VAROITUS!

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

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling 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 hazardousradiation exposure.

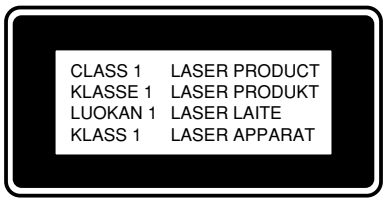
ATTENTION

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

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer 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.

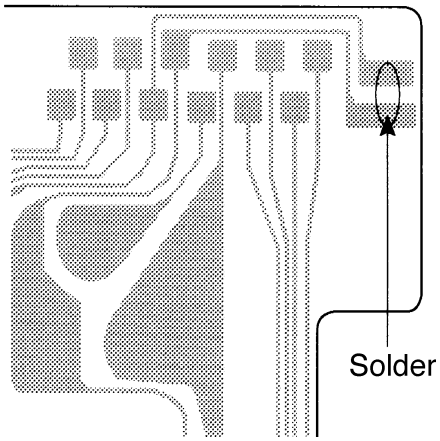


Precaution to replace Optical block (KSS-213F)

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.

PICK-UP Assy PWB



NOTE ON BEFORE STARTING REPAIR -1/2

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur. In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

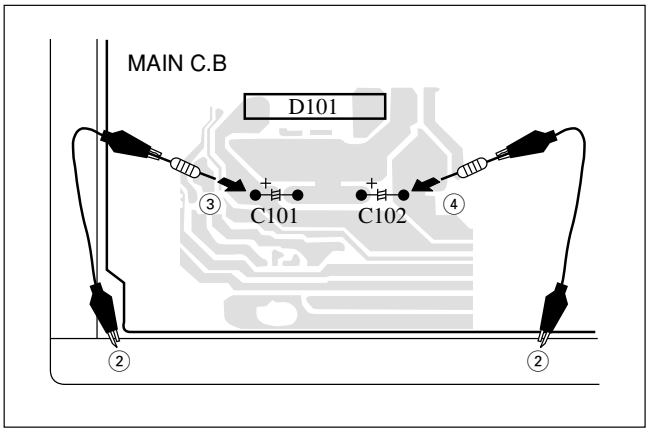


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor ( )	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

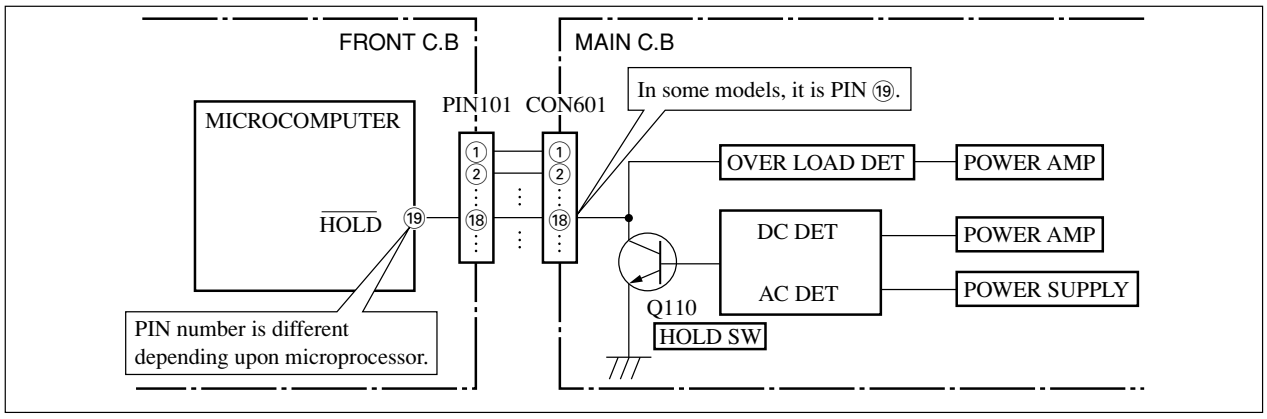


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

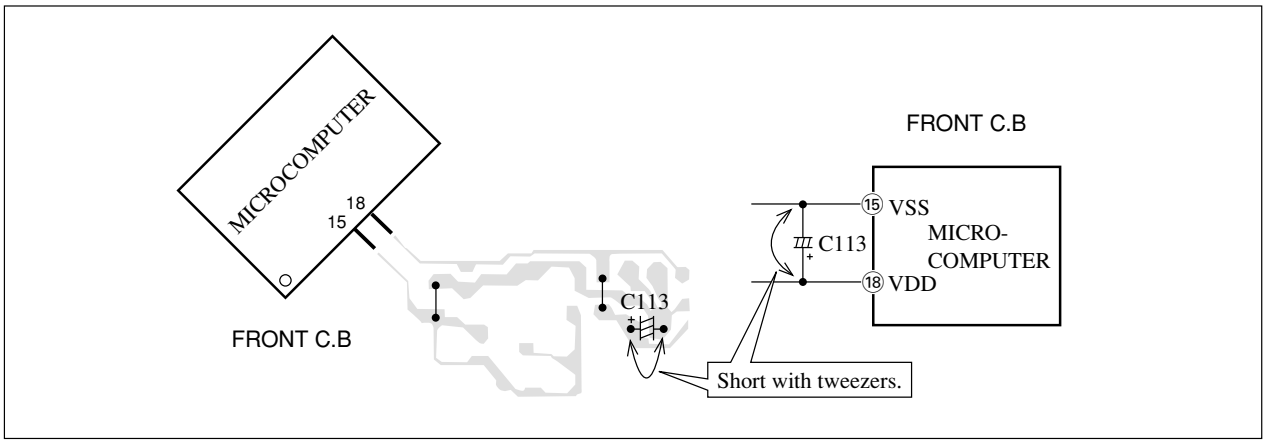


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST -1/3

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-NFA-615-010		C-IC,M38B57MCH-E236FP<NDR3>
	8A-NFA-616-010		C-IC,M38B59MFH-E251FP<NDR2>
	87-A21-482-010		IC,RPM6938-H4
	87-A21-419-040		C-IC,NJM14558MD-TE2
	87-A21-443-040		C-IC,M62495AFP
	87-A21-695-010		IC,LA1845L
	87-A20-440-040		C-IC,BU1920FS<NDR2>
	87-A21-928-010		IC,LC72131D-N
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	89-213-702-010		TR,2SB1370E
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-090-080		FET,2SK2541
	87-A30-484-040		C-TR,KRA102S
	87-A30-468-040		C-TR,KRC102S-RTK
	89-420-613-010		TR,2SD2061F
	89-213-703-010		TR,2SB1370F
	87-A30-091-080		FET,2SJ460
	87-A30-062-040		C-TR,KRC104S
	87-A30-495-080		TR,2SA1981Y
	87-A30-492-080		TR,2SC5343G
	87-A30-234-080		TR,CSC4115BC
	89-327-143-080		C-TR,2SC2714O
	87-A30-489-040		C-TR,KRA107S
	87-A30-086-040		C-TR,CSD1306E
	89-503-602-080		C-FET,2SK360E
DIODE			
	87-A40-535-080		DIODE,1N5393-GOODARK
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-774-080		ZENER,UZ24BSD
	87-020-465-080		DIODE,1SS133
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-739-080		ZENER,UZ2.7BSA
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C0009	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0010	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0011	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0012	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0021	87-016-495-090		CAP,E 3300-25 M SMG
C0022	87-A10-831-080		CAP,E 1000-25 M SMG
C0025	87-010-383-080		CAP,E 33-25 M 11L SME
C0026	87-010-383-080		CAP,E 33-25 M 11L SME
C0030	87-010-384-080		CAP,E 100-25 M 11L SME
C0031	87-010-263-080		CAP,E 100-10 M 11L SME
C0032	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0034	87-010-247-080		CAP,E 100-50 M SME
C0035	87-010-406-080		CAP,E 22-50 M 11L SME
C0036	87-010-381-080		CAP,E 330-16 M SME
C0038	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C0050	87-010-384-080		CAP,E 100-25 M 11L SME
C0060	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0061	87-010-260-080		CAP,E 47-25 M 11L SME
C0101	87-010-185-080		C-CAP,S 3900P-50 K B
C0102	87-010-185-080		C-CAP,S 3900P-50 K B
C0103	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0104	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0105	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C0106	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C0107	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0108	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0109	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0110	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0111	87-010-260-080		CAP,E 47-25 M 11L SME
C0112	87-010-260-080		CAP,E 47-25 M 11L SME
C0113	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0114	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0119	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0120	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0123	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0124	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0125	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0126	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0127	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0128	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0133	87-010-186-080		C-CAP,S 4700P-50 K B C2012
C0140	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C0301	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C0302	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C0303	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0304	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0305	87-010-198-080		C-CAP,S 0.022-25 K B C2012
C0307	87-010-263-080		CAP,E 100-10 M 11L SME
C0308	87-010-263-080		CAP,E 100-10 M 11L SME
C0309	87-010-311-080		C-CAP,S 12P-50 J CH GRM
C0310	87-010-314-080		C-CAP,S 22P-50 J CH GRM
C0311	87-010-598-080		C-CAP,S 0.068-16 K R GRM
C0312	87-010-598-080		C-CAP,S 0.068-16 K R GRM
C0313	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C0314	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C0315	87-010-263-080		CAP,E 100-10 M 11L SME
C0317	87-010-546-080		CAP,E 0.33-50 M 11L SME
C0318	87-010-546-080		CAP,E 0.33-50 M 11L SME
C0320	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0321	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0324	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0325	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0326	87-010-198-080		C-CAP,S 0.022-25 K B C2012
C0327	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0350	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0360	87-010-401-080		CAP,E 1-50 M 11L SME
C0363	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0399	87-012-140-080		C-CAP,S 470P-50 J CH
C0401	87-010-544-080		CAP,E 0.1-50 M 11L SME
C0402	87-010-544-080		CAP,E 0.1-50 M 11L SME
C0403	87-010-321-080		C-CAP,S 82P-50 J CH
C0404	87-010-321-080		C-CAP,S 82P-50 J CH
C0405	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0406	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0407	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0408	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0409	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C0410	87-010-182-080		C-CAP,S 2200P-50 K B C2012
C0411	87-010-405-080		CAP,E 10-50 M 11L SME
C0412	87-010-405-080		CAP,E 10-50 M 11L SME
C0452	87-010-382-080		CAP,E 22-25 M 11L SME
C0453	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C0454	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C0455	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C0456	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0457	87-A12-361-080		CAP,M 5600P-100 J CP
C0458	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0459	87-010-175-080		C-CAP,S 560P-50 J SL
C0460	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0461	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C0462	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C0470	87-018-127-080		CAP,TC U 470P-50 K B UP050
C0605	87-010-179-080		C-CAP,S 1200P-50 K B GRM

ELECTRICAL MAIN PARTS LIST -2/3

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0606	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C0609	87-010-213-080		C-CAP,S 0.015-25 K B GRM
C0610	87-010-213-080		C-CAP,S 0.015-25 K B GRM
C0611	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0612	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0613	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0614	87-010-545-080		CAP,E 0.22-50 M 11L SME
C0615	87-010-154-080		C-CAP,S 10P-50 D CH GRM
C0616	87-010-248-080		CAP,E 220-10 M 11L SME
C0617	87-010-248-080		CAP,E 220-10 M 11L SME
C0618	87-010-405-080		CAP,E 10-50 M 11L SME
C0630	87-016-669-080		C-CAP,S 0.1-25 K B
C0669	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0670	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0677	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0771	87-010-263-080		CAP,E 100-10 M 11L SME
C0772	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0779	87-010-971-080		C-CAP,S 4700P-50 J B
C0780	87-010-971-080		C-CAP,S 4700P-50 J B
C0782	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0783	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0784	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0785	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0786	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0788	87-010-149-080		C-CAP,S 5P-50 C CH GRM
C0789	87-A10-801-080		C-CAP,S 0.022-16 J B CM
C0790	87-A10-801-080		C-CAP,S 0.022-16 J B CM
C0791	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0792	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0793	87-010-404-080		CAP,E 4.7-50 M 11L SME
C0794	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0795	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0796	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0797	87-010-405-080		CAP,E 10-50 M 11L SME
C0798	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0799	87-010-407-080		CAP,E 33-50 M 11L SME
C0800	87-012-369-080		C-CAP,S 0.047-50 Z F
C0801	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0802	87-012-369-080		C-CAP,S 0.047-50 Z F
C0803	87-010-198-080		C-CAP,S 0.022-25 K B C2012
C0804	87-010-263-080		CAP,E 100-10 M 11L SME
C0807	87-010-400-080		CAP,E 0.47-50 M 11L SME
C0808	87-010-401-080		CAP,E 1-50 M 11L SME
C0809	87-010-401-080		CAP,E 1-50 M 11L SME
C0810	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0814	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0815	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0816	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0818	87-010-180-080		C-CAP,S 1500P-50 K B C2012
C0821	87-010-405-080		CAP,E 10-50 M 11L SME
C0823	87-012-349-080		C-CAP,S 1000P-50 J CH GRM
C0824	87-010-404-080		CAP,E 4.7-50 M 11L SME
C0825	87-010-596-080		C-CAP,S 0.047-16 K R C2012
C0831	87-010-406-080		CAP,E 22-50 M 11L SME
C0842	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0844	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0850	87-010-260-080		CAP,E 47-25 M 11L SME
C0851	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0852	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0853	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0858	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0859	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0860	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0869	87-010-197-080		C-CAP,S 0.01-25 K B C2012<NDR2>
C0870	87-010-178-080		C-CAP,S 1000P-50 K B C2012<NDR2>
C0871	87-012-156-080		C-CAP,S 220P-50 J CH GRM<NDR2>
C0872	87-012-156-080		C-CAP,S 220P-50 J CH GRM<NDR2>
C0873	87-012-140-080		C-CAP,S 470P-50 J CH<NDR2>
C0874	87-010-405-080		CAP,E 10-50 M 11L SME<NDR2>
C0875	87-010-196-080		C-CAP,S 0.1-25 Z F C2012<NDR2>
C0876	87-010-405-080		CAP,E 10-50 M 11L SME<NDR2>
C0877	87-010-197-080		C-CAP,S 0.01-25 K B C2012<NDR2>
C0878	87-010-316-080		C-CAP,S 33P-50 J CH GRM<NDR2>
C0879	87-010-314-080		C-CAP,S 22P-50 J CH GRM<NDR2>
C0940	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0942	87-010-149-080		C-CAP,S 5P-50 C CH GRM
C0947	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0948	87-012-140-080		C-CAP,S 470P-50 J CH
C0952	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0957	87-010-311-080		C-CAP,S 12P-50 J CH GRM
C0958	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0959	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0962	87-010-401-080		CAP,E 1-50 M 11L SME
C0963	87-015-785-080		C-CAP, 0.1-25 Z F C3216
C0971	87-010-381-080		CAP,E 330-16 M SME
C0972	87-010-404-080		CAP,E 4.7-50 M 11L SME
C0973	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0974	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0979	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0981	87-010-260-080		CAP,E 47-25 M 11L SME
C0982	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0983	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0984	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0985	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C0987	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0989	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0991	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C0992	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C0993	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0995	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0997	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0998	87-010-260-080		CAP,E 47-25 M 11L SME
C0999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF0831	87-008-423-010		FLTR,CF SFE10.7MS3G-A
CF0832	82-785-747-010		CF,MS2 GHY,R
CN0301	87-A60-620-010		CONN,3P V 2MM JMT
CN0351	87-A60-625-010		CONN,8P V 2MM JMT
CN0601	87-099-719-010		CONN,30P H BLK TYK-B(X)
CN0602	87-099-194-010		CONN,6P V BLK 6216
CON0301	8A-NFA-633-010		CONN ASSY,3P (PH)
CON0351	8A-NFA-634-010		CONN ASSY,8P RPB
FB0301	87-008-372-080		FLTR,EMI BL01 RN1
FB0602	87-008-372-080		FLTR,EMI BL01 RN1
FFC0602	88-906-181-110		FF-CABLE, 6P 1.25
FFE0831	A8-6ZA-199-170		6ZA-1 FEENC<NDR3>
FFE0831	A8-6ZA-19H-030		6ZA-1 FEMENM<NDR2>
J0101	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC
J0103	87-A60-238-010		TERMINAL,SP 4P (MSC)
J0602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J0832	87-A60-403-010		TERMINAL,ANT PAL 2P HSP-312V05
L0101	87-A50-611-010		COIL,1UH K(CS)<NDR3>
L0101	87-A50-610-010		COIL,1UH K(MDEC)<NDR2>
L0102	87-A50-611-010		COIL,1UH K(CS)<NDR3>
L0102	87-A50-610-010		COIL,1UH K(MDEC)<NDR2>
L0451	87-007-342-010		COIL,OSC 85KHZ BIAS
L0801	87-A50-608-010		COIL,FM DET-N(TOK)
L0802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L0811	87-005-847-080		COIL,2.2UH K CECS
L0832	87-005-847-080		COIL,2.2UH K CECS
L0861	87-005-847-080		COIL,2.2UH K CECS<NDR2>
L0941	87-A50-020-010		COIL,ANT LW (COI) 252KHZ
L0942	87-A50-019-010		COIL,OSC LW (COI) 856KHZ
L0951	8A-NF8-668-010		COIL,AM PACK 2(TOK)
R0653	87-016-669-080		C-CAP,S 0.1-25 K B
R0654	87-016-669-080		C-CAP,S 0.1-25 K B
R0790	87-010-197-080		C-CAP,S 0.01-25 K B C2012
R0991	87-010-322-080		C-CAP,S 100P-50 J CH GRM
R0993	87-010-322-080		C-CAP,S 100P-50 J CH GRM
R0995	87-010-322-080		C-CAP,S 100P-50 J CH GRM

ELECTRICAL MAIN PARTS LIST -3/3

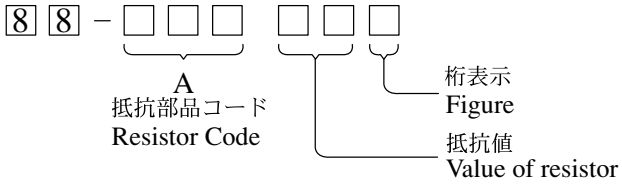
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
TC0942	87-A91-774-080		TRIMMER,PLY 30P 6.8X5.4 CDYL
WH0001	87-A90-460-010		HLDR,WIRE 2.5-7P
X0861	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<NDR2>
X0991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
FRONT C.B			
C0101	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0102	87-012-369-080		C-CAP,S 0.047-50 Z F
C0103	87-010-374-040		CAP,E 47-10 M 11L SME
C0104	87-A10-797-040		CAP,E 47-35 M 5L SRM
C0105	87-010-192-080		C-CAP,S 0.022-50 Z F C2012
C0107	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0108	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0109	87-012-369-080		C-CAP,S 0.047-50 Z F
C0110	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C0111	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0113	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0114	87-010-154-080		C-CAP,S 10P-50 D CH GRM
C0115	87-010-175-080		C-CAP,S 560P-50 J SL
C0116	87-010-400-040		CAP,E 0.47-50 M 11L SME
C0117	87-016-460-080		C-CAP,S 0.22-16 K B
C0118	87-A10-189-040		CAP,E 220-10 M 5L
C0119	87-A10-189-040		CAP,E 220-10 M 5L
C0120	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C0123	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0124	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0125	87-010-405-040		CAP,E 10-50 M 11L SME
C0126	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C0129	87-010-374-040		CAP,E 47-10 M 11L SME
C0210	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C0212	87-010-404-040		CAP,E 4.7-50 M 11L SME
C0213	87-010-404-040		CAP,E 4.7-50 M 11L SME
C0701	87-010-384-040		CAP,E 100-25 M 11L SME
C0702	87-010-178-080		C-CAP,S 1000P-50 K B C2012
CN0101	87-099-720-010		CONN,30P BLK TYK-B(P)
CN0701	87-A60-673-010		CONN,9P H 2MM JMT
CN0801	87-099-015-010		CONN,13P V BLK 6216
FFC0801	88-913-221-110		FF-CABLE, 13P 1.25 220MM
FL0201	8A-NFA-604-010		FL,10-BT-224GNK
L0101	87-A50-655-010		COIL,CLK 4.19MHZ (TOKO)7KLY
LED0101	87-A40-317-080		LED,SLR-342VCT31 RED

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
S0101	87-A91-555-010		SW,RTRY EC12E24504
S0301	87-A90-164-080		SW,TACT SKQNAB(N)
S0302	87-A90-164-080		SW,TACT SKQNAB(N)
S0303	87-A90-164-080		SW,TACT SKQNAB(N)
S0304	87-A90-164-080		SW,TACT SKQNAB(N)
S0305	87-A90-164-080		SW,TACT SKQNAB(N)
S0306	87-A90-164-080		SW,TACT SKQNAB(N)
S0307	87-A90-164-080		SW,TACT SKQNAB(N)
S0308	87-A90-164-080		SW,TACT SKQNAB(N)
S0309	87-A90-164-080		SW,TACT SKQNAB(N)
S0310	87-A90-164-080		SW,TACT SKQNAB(N)<NDR2>
S0311	87-A90-164-080		SW,TACT SKQNAB(N)<NDR2>
S0312	87-A90-164-080		SW,TACT SKQNAB(N)<NDR2>
S0321	87-A90-164-080		SW,TACT SKQNAB(N)
S0322	87-A90-164-080		SW,TACT SKQNAB(N)
S0323	87-A90-164-080		SW,TACT SKQNAB(N)
S0324	87-A90-164-080		SW,TACT SKQNAB(N)
S0325	87-A90-164-080		SW,TACT SKQNAB(N)
S0326	87-A90-164-080		SW,TACT SKQNAB(N)
S0327	87-A90-164-080		SW,TACT SKQNAB(N)
S0328	87-A90-164-080		SW,TACT SKQNAB(N)
S0329	87-A90-164-080		SW,TACT SKQNAB(N)
S0330	87-A90-164-080		SW,TACT SKQNAB(N)
S0331	87-A90-164-080		SW,TACT SKQNAB(N)
SFR0701	87-024-431-080		SFR,3.3K H RH063MC
PT C.B			
C0183	87-010-387-080		CAP,E 470-25 M SME
C0184	87-010-403-080		CAP,E 3.3-50 M 11L SME
C0185	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
⚠PT0001	8A-NFB-611-010		PT,ANF-B EZ LOW
⚠PT0181	8A-NF8-662-010		PT,SUB ANF-8 (E)
⚠RY0181	87-A90-976-010		RELAY,AC12V SDT-S-112LMR
⚠T0181	87-A60-317-010		TERMINAL, 1P MSC
⚠T0182	87-A60-317-010		TERMINAL, 1P MSC
W0181	8A-NFA-628-010		F-CABLE,7P 2.5 260MM
WH0181	87-A90-460-010		HLDR,WIRE 2.5-7P

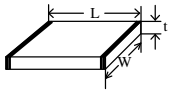
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○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



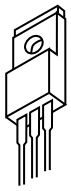
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
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

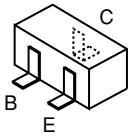
E C B

2SA1981
2SC5343
CSC4115
KTA1266
KTC3198

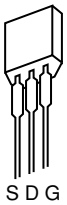


B C E

2SB1370
2SD2061

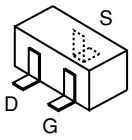


2SA1235
2SC2714
2SC3052
CSD1306
KRA102S
KRA107S
KRC102S
KRC104S



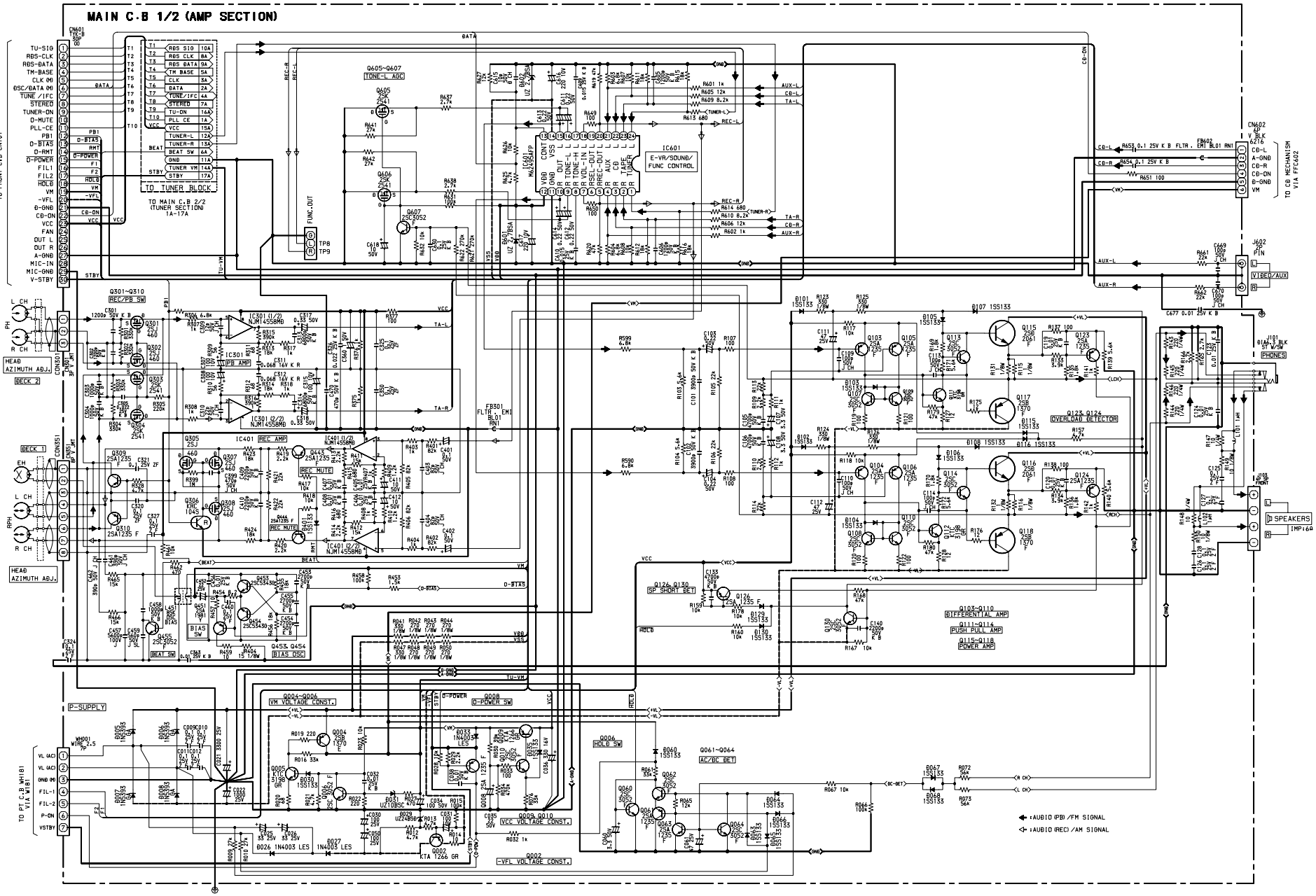
S D G

2SJ460
2SK2541

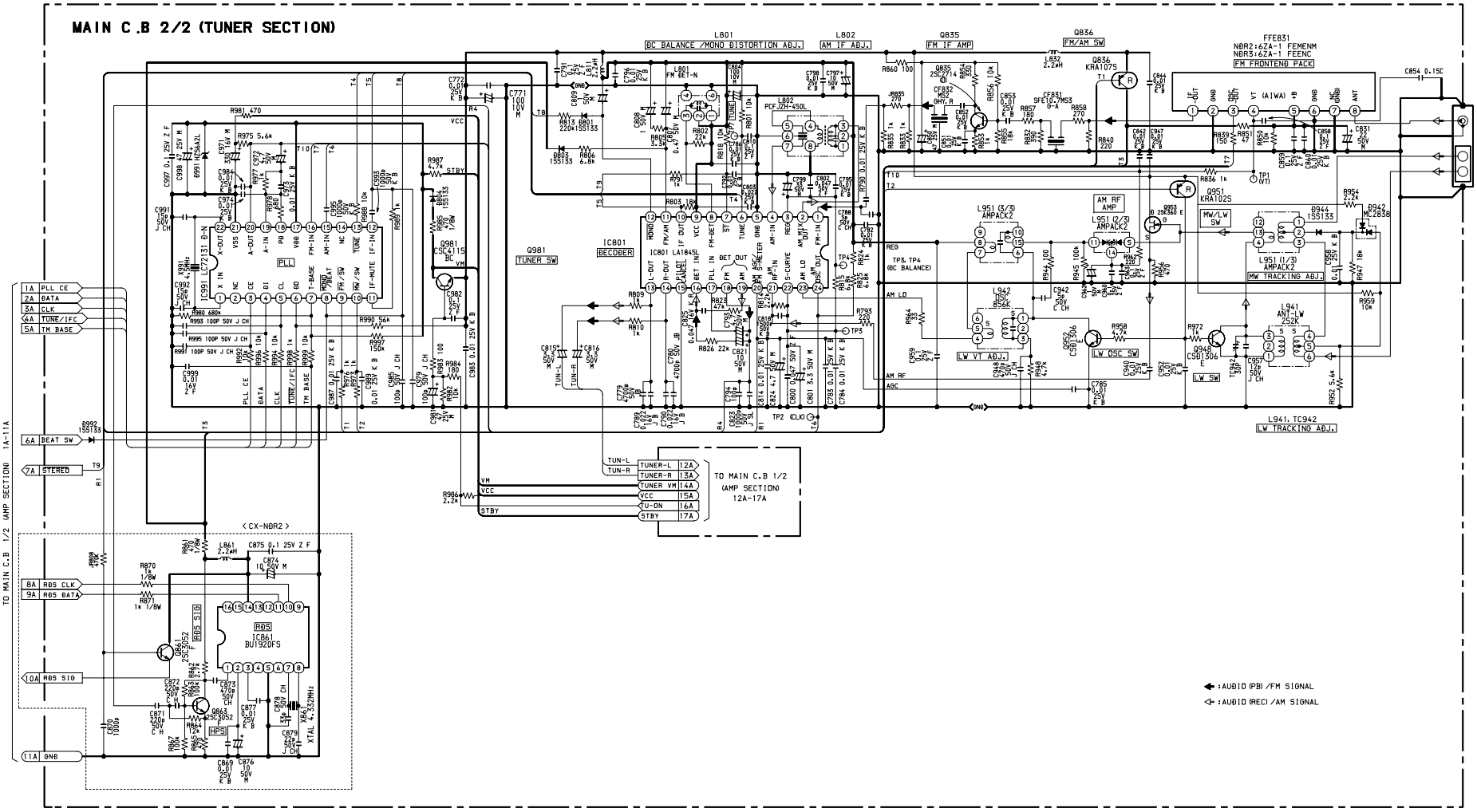


2SK302
2SK360
2SK882

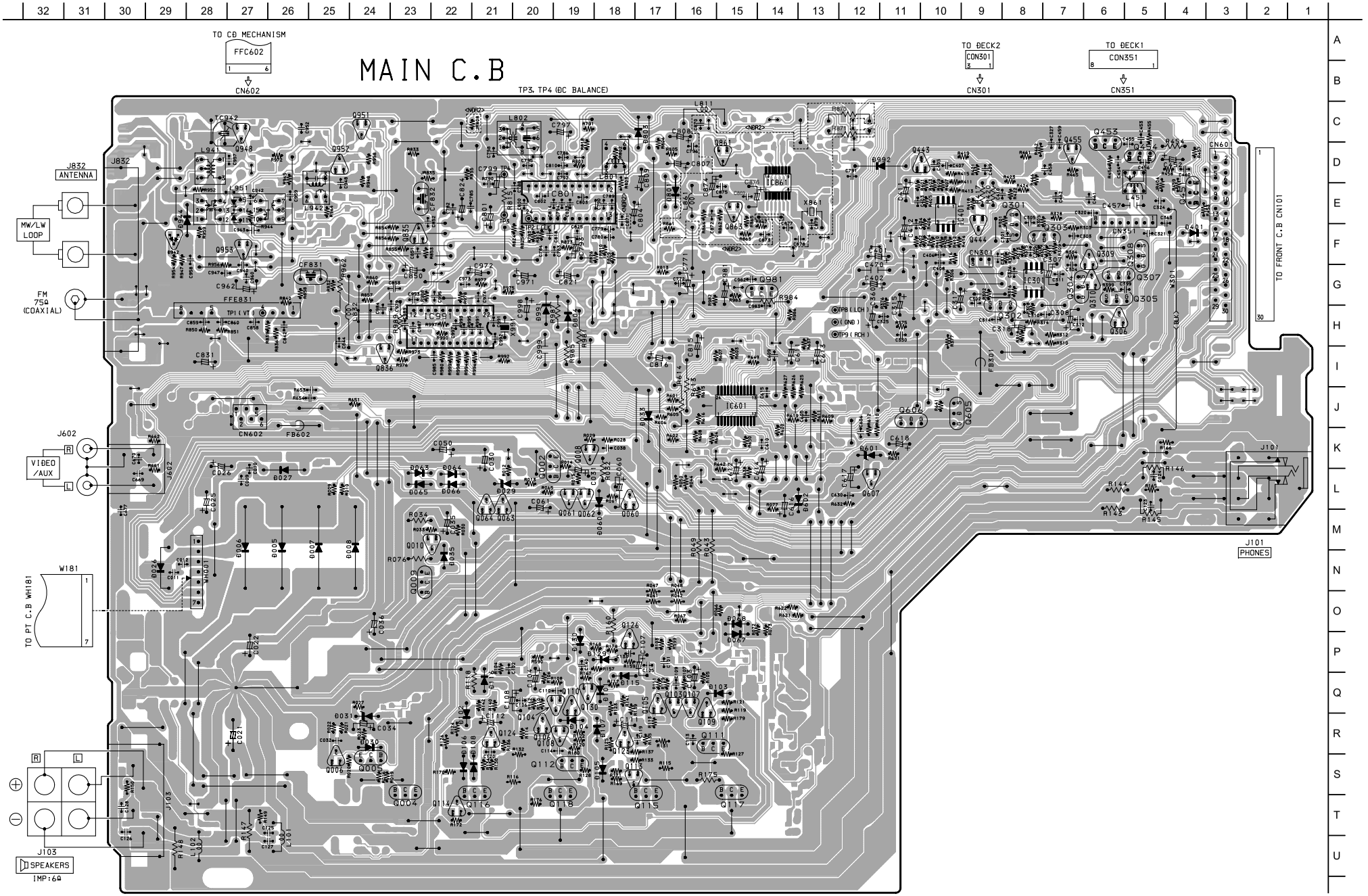
SCHEMATIC DIAGRAM - 1/4 (MAIN AMP SECTION)



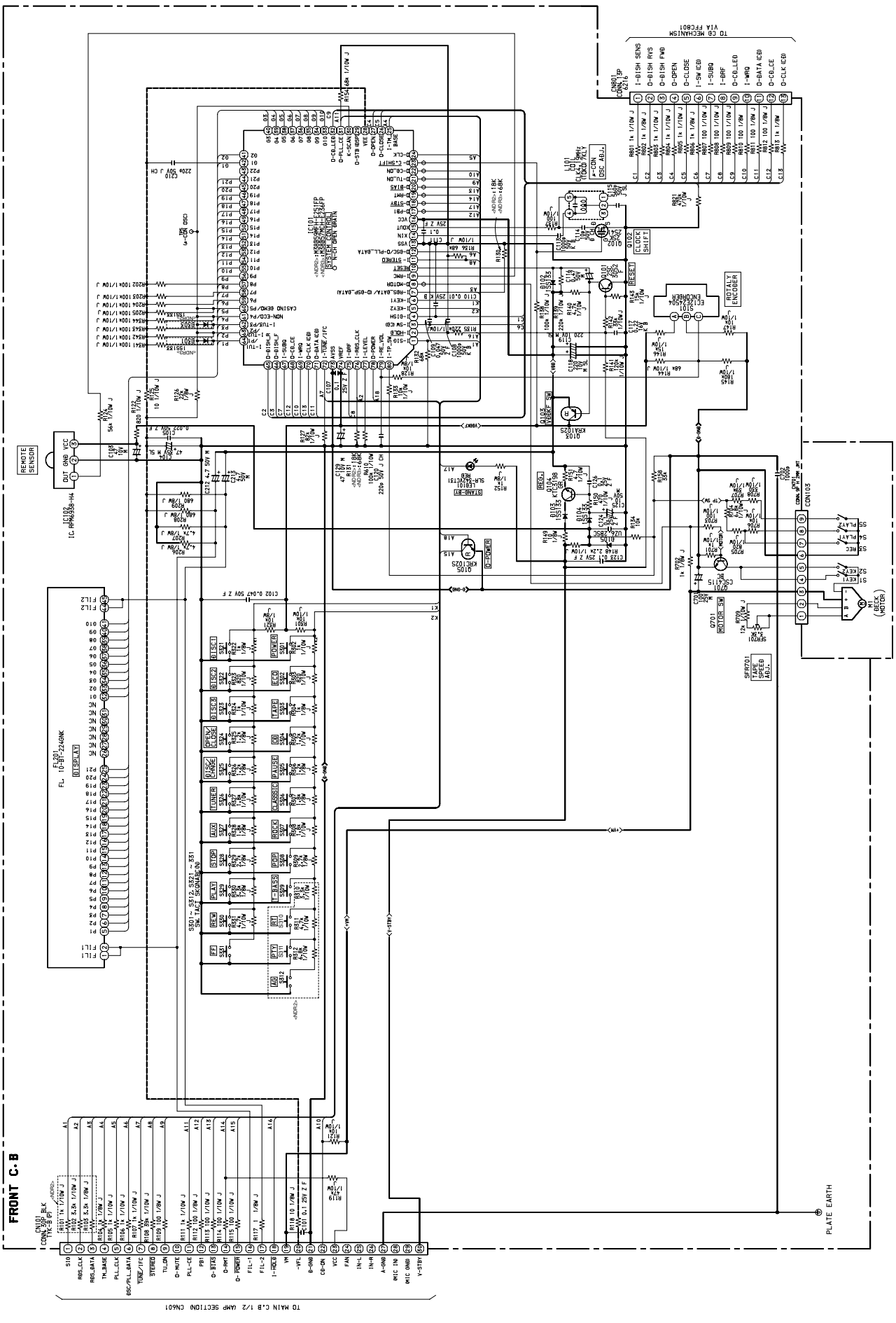
SCHEMATIC DIAGRAM - 2/4 (MAIN TUNER SECTION)

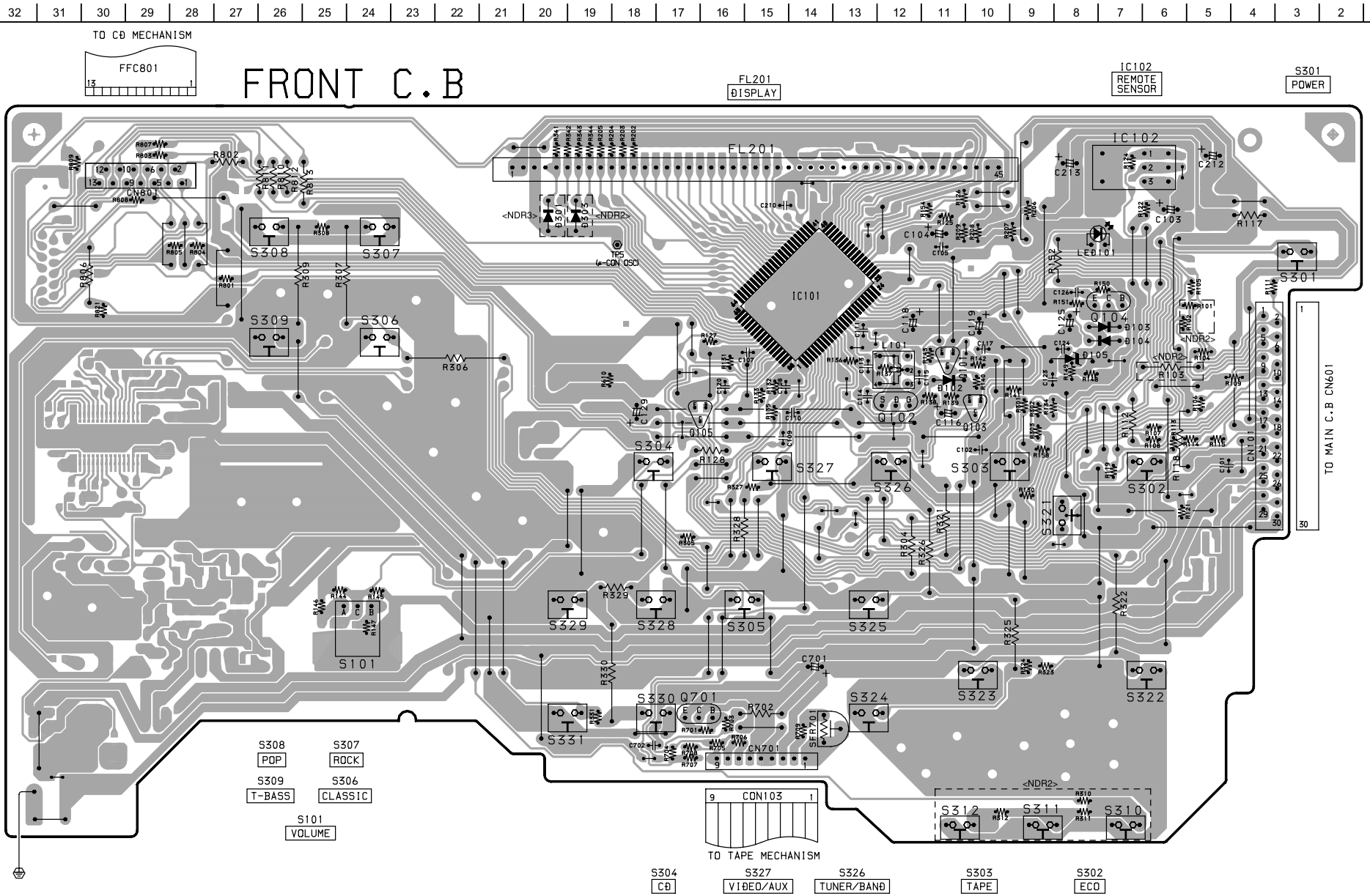


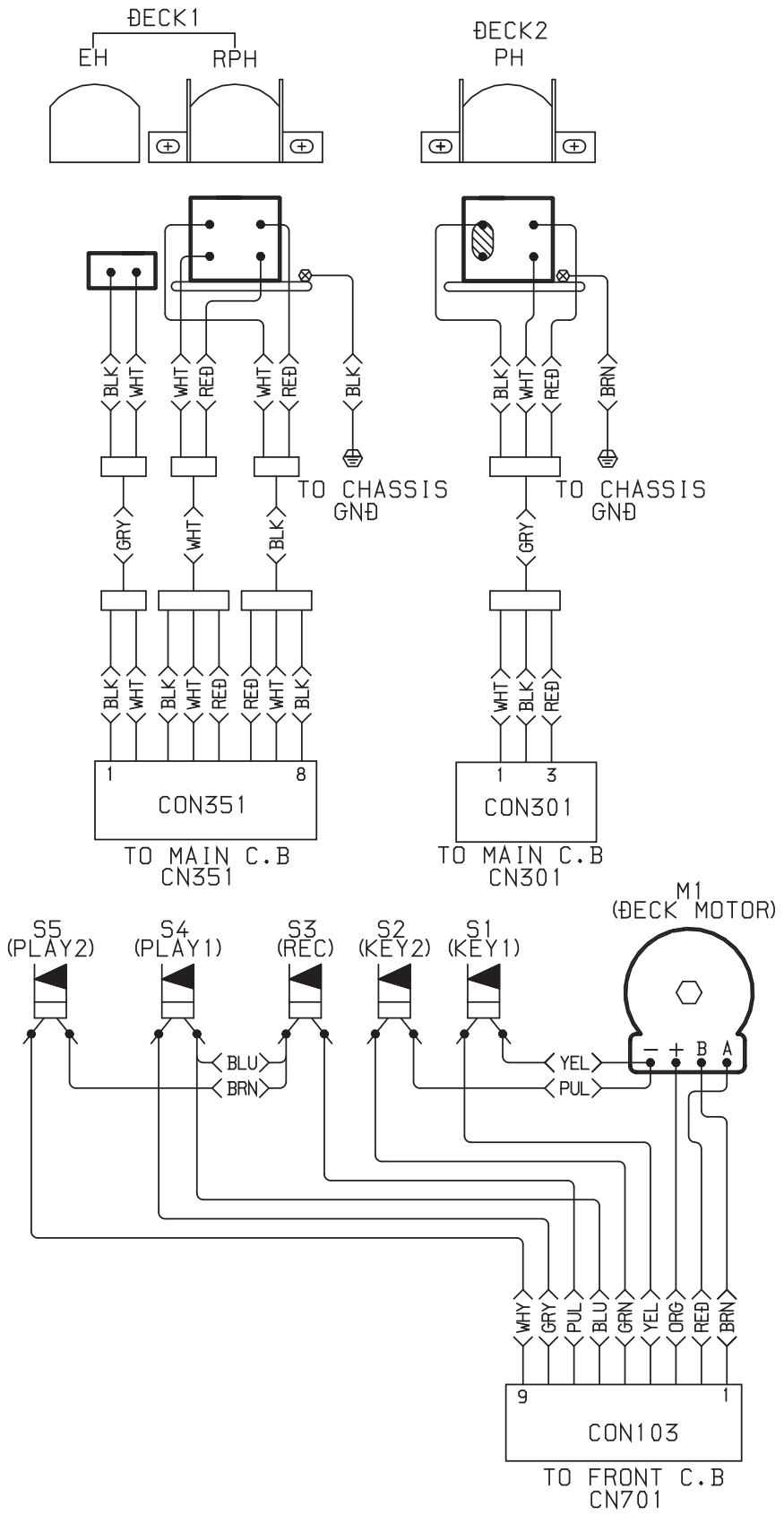
WIRING - 1/4 (MAIN C.B)



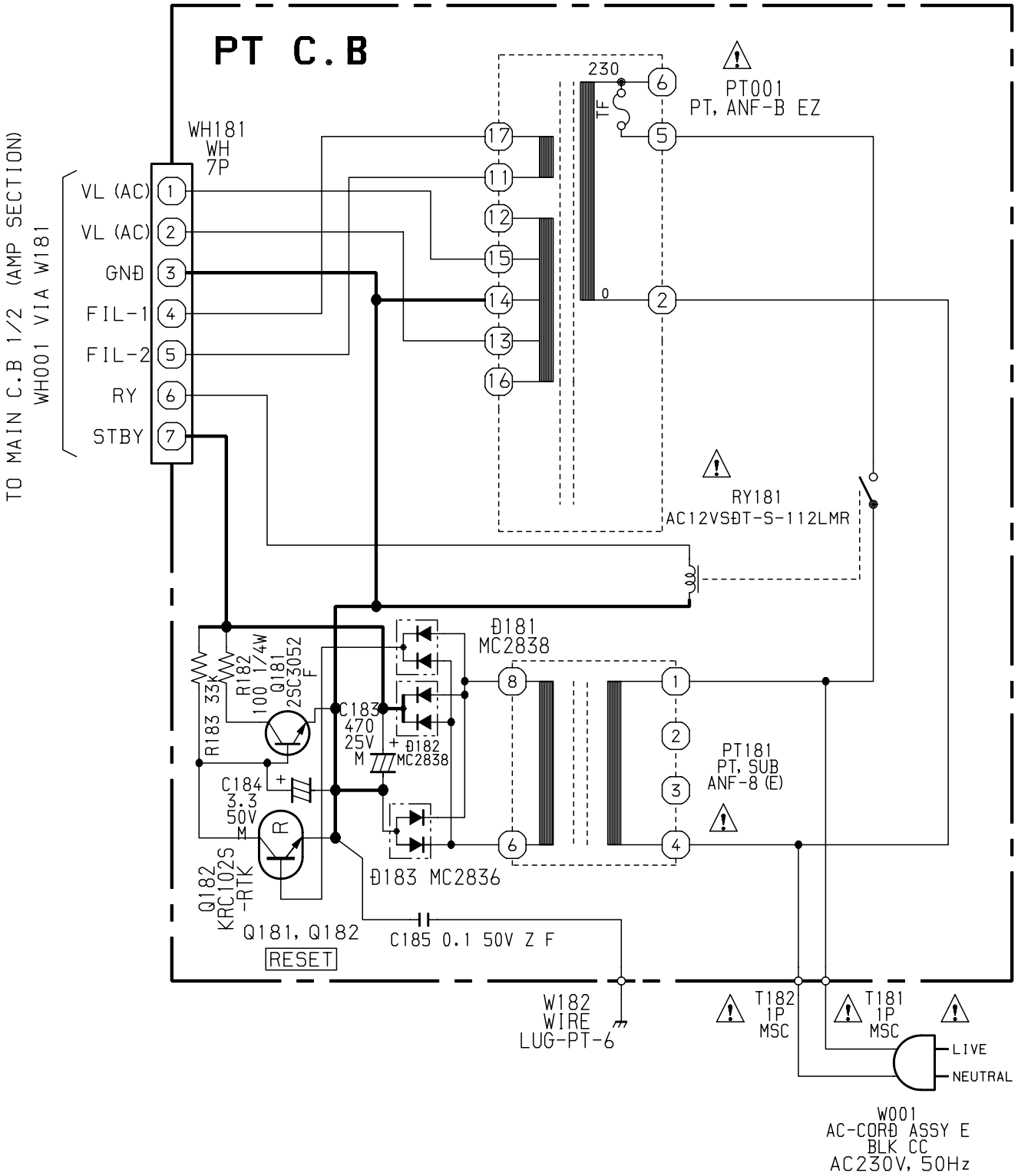
SCHEMATIC DIAGRAM - 3/4 (FRONT SECTION)

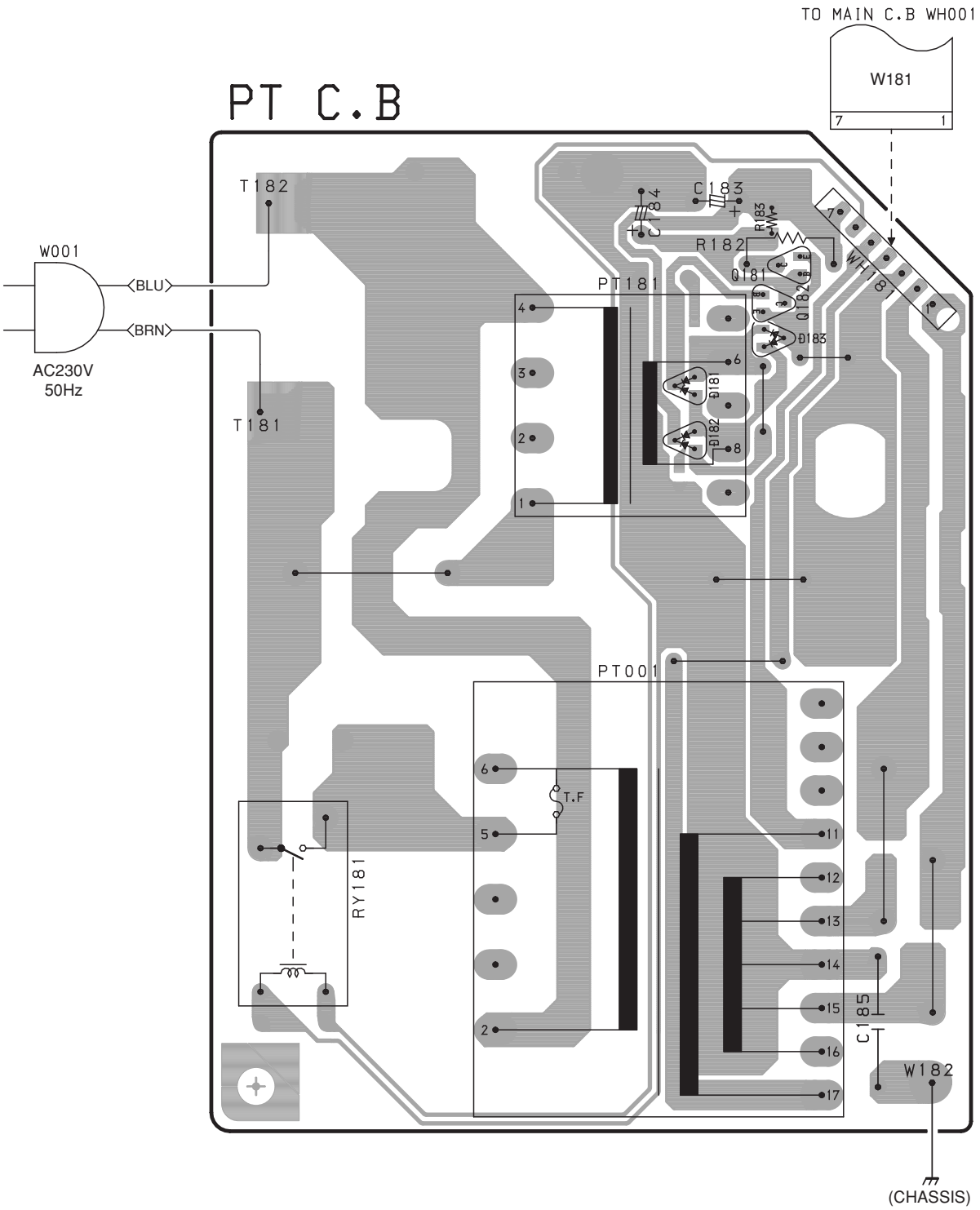



TO CD MECHANISM
FFC801
FRONT C.B
FL201
DISPLAY
IC102
REMOTE SENSOR
S301
POWER
TO MAIN C.B CN601
TO TAPE MECHANISM
CON103
S308 POP
S307 ROCK
S309 T-BASS
S306 CLASSIC
S101 VOLUME
S304 CD
S327 VIDEO/AUX
S326 TUNER/BAND
S329 PRESET
S328 CLEAR
S305 SET
S325 DISC CHANGE
S331 UP
S330 DOWN
S324 OPEN/CLOSE
S303 TAPE
S302 ECO
S321, 322, 323 DISC DIRECT PLAY 1-3
S312 AG
S311 PTY
S310 RT
<NDR2>


ĐECK1
EH
RPH
ĐECK2
PH
BLK
WHT
WHT
REĐ
WHT
REĐ
BLK
BLK
WHT
REĐ
BRN
TO CHASSIS
GNĐ
TO CHASSIS
GNĐ
GRY
WHT
BLK
GRY
BLK
WHT
BLK
WHT
REĐ
REĐ
WHT
BLK
WHT
BLK
REĐ
1
8
CON351
TO MAIN C.B
CN351
1
3
CON301
TO MAIN C.B
CN301
M1
(ĐECK MOTOR)
S5
(PLAY2)
S4
(PLAY1)
S3
(REC)
S2
(KEY2)
S1
(KEY1)
BLU
BRN
YEL
PUL
– + B A
WHY
GRY
PUL
BLU
GRN
YEL
ORG
REĐ
BRN
9
1
CON103
TO FRONT C.B
CN701

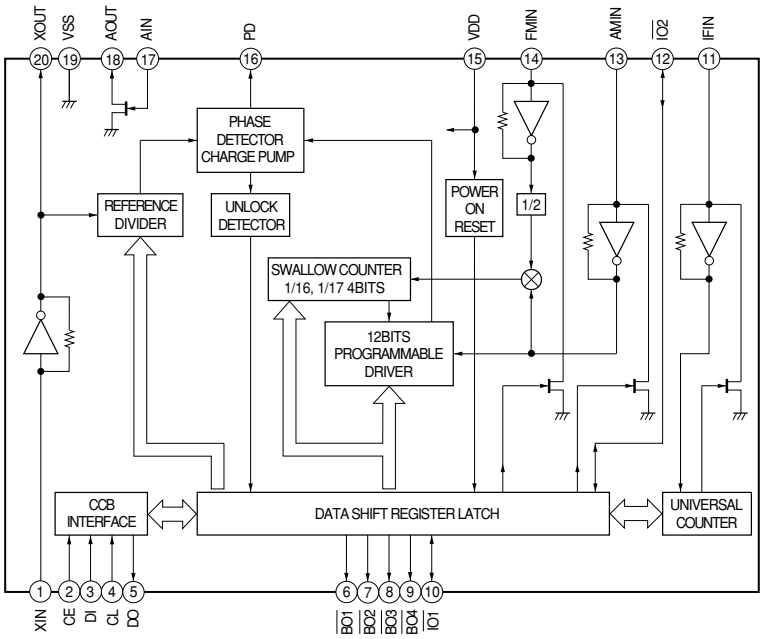
SCHEMATIC DIAGRAM -4/4 (PT SECTION)



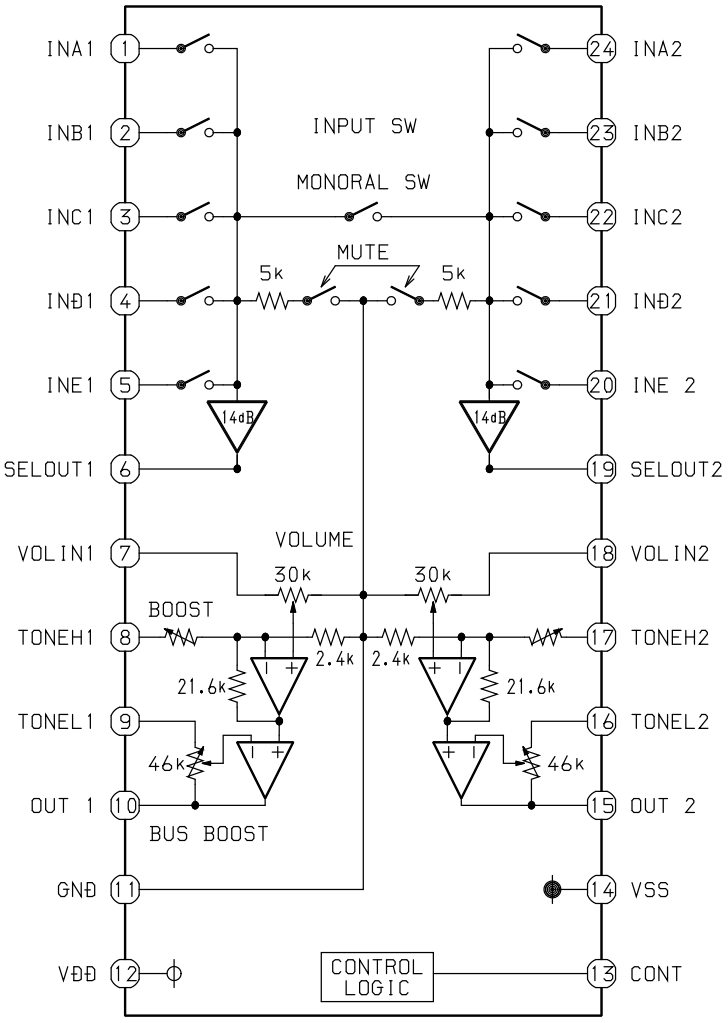

TO MAIN C.B WH001
W181
7
1
PT C.B
T182
W001
BLU
BRN
AC230V
50Hz
T181
C184
C183
R183
R182
Q181
Q182
WH181
PT181
D183
D181
D182
PT001
T.F
RY181
C185
W182
(CHASSIS)

IC BLOCK DIAGRAM -1/2

IC, LC72131D-N

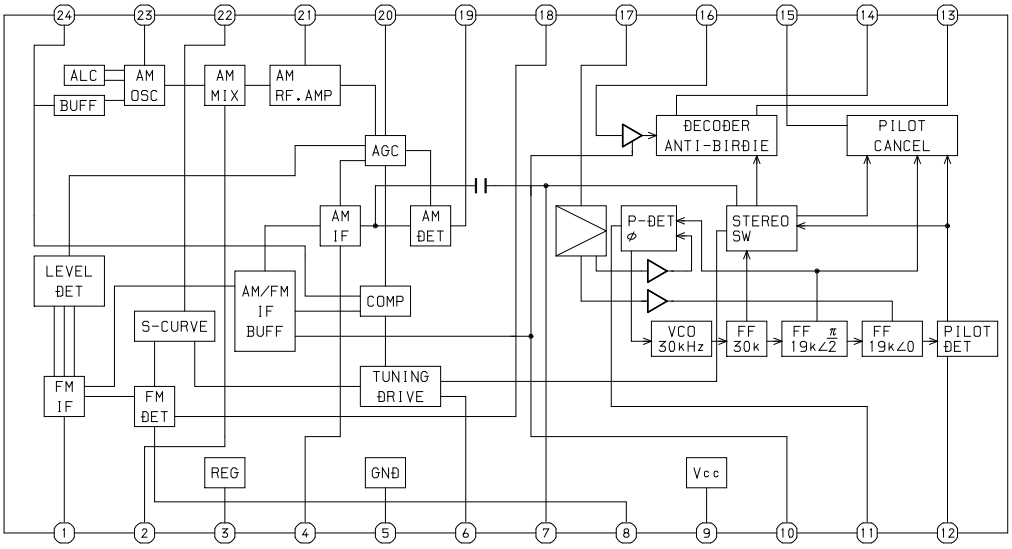


IC, M62495AFP

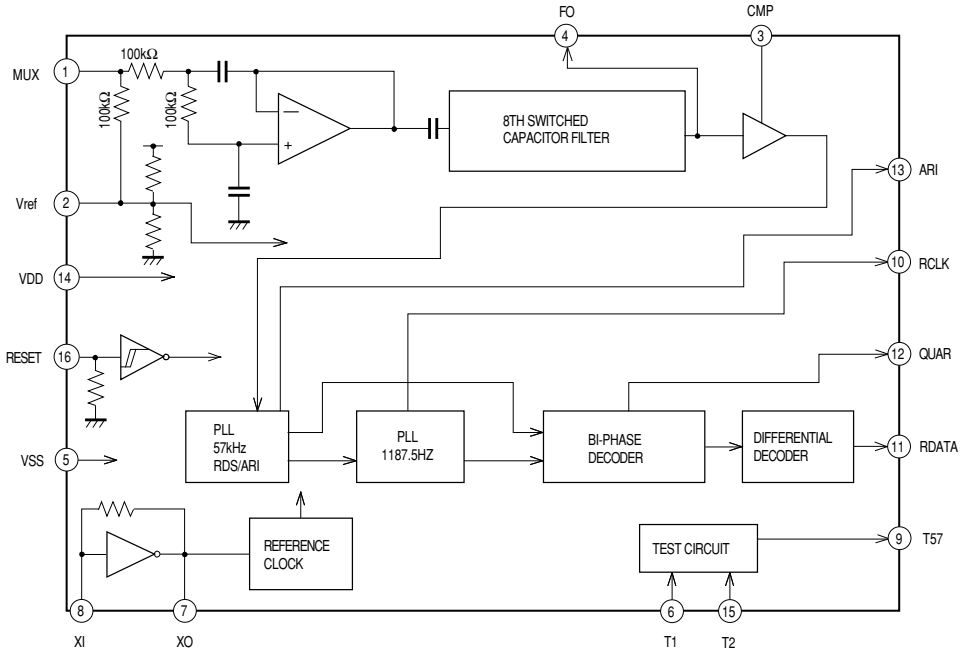


IC BLOCK DIAGRAM -2/2

IC, LA1845L



IC, BU1920FS

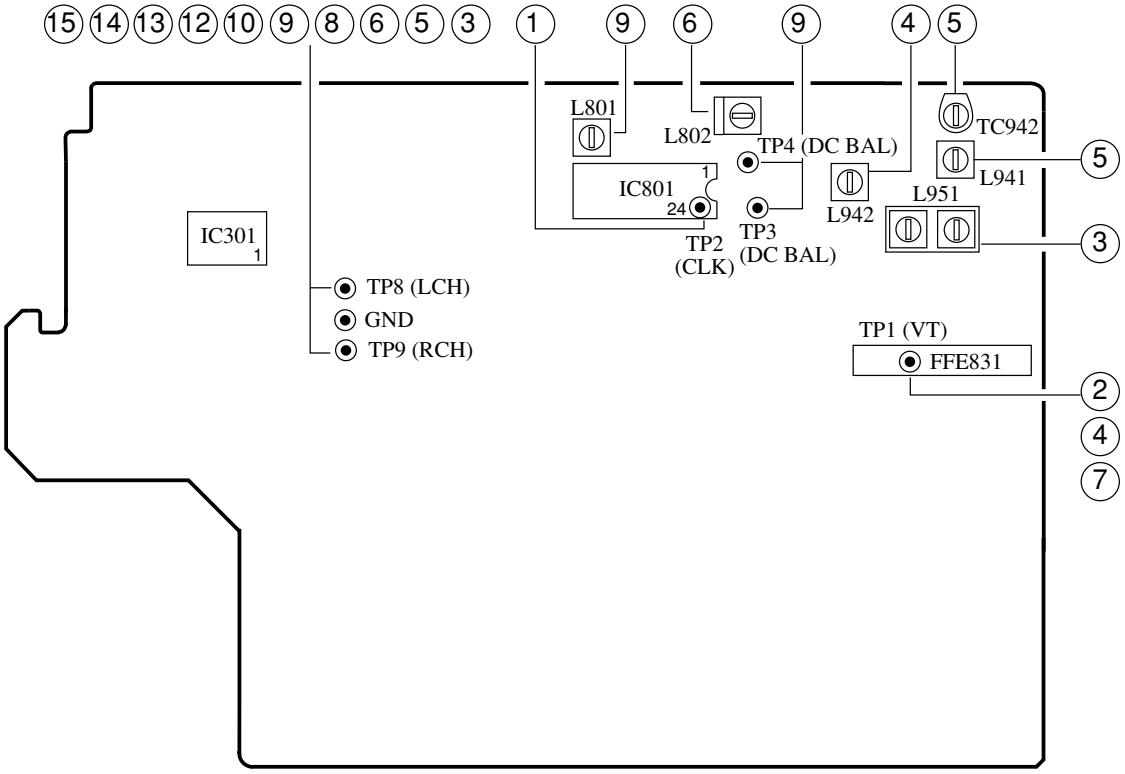


IC DESCRIPTION -1/1 (M38B57MCH-E236FP/M38B59MFH-E251FP) -1/2

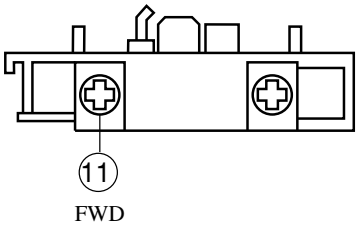
Pin No.	Pin Name	I/O	Description
1	I-SIG	I	RDS signal level A/D input. (Not used)
2	I-$\overline{\text{HOLD}}$	I	Hold voltage level A/D input.
3	I-SW (CD)	I	CD mecha SW A/D input.
4	I-DISH	I	CD turn-table position check A/D input.
5	I-KEY2	I	KEY2 A/D input.
6	I-KEY1	I	KEY1 A/D input.
7	I-RDS-DATA/ (O-DSP_DATA)	I/O	RDS data input/DSP IC data (V-CD) output. (Not used)
8	O-MOTOR	O	Deck motor supply ON/OFF output.
9	I-RMC	I	System remote control signal input. (“L”=ACTIVE)
10	$\overline{\text{RESET}}$	I	System reset input. (“L”=RESET)
11	I-$\overline{\text{STEREO}}$	I	Tuner stereo input. (“L”=STEREO)
12	O-DSC/O-PLL_DATA	O	Function IC control & PLL data output.
13	VSS	—	GND.
14, 15	XIN, XOUT	I/O	4.19MHz system CLK input/output.
16	VCC	—	Power supply input.
17	O-PB1	O	Deck 1/2 switch output. (“L”=PLAYBACK DECK 1)
18	O-$\overline{\text{STBY}}$	O	Standby LED ON/OFF output. (“L”=ON)
19	O-$\overline{\text{RMT}}$	O	REC mute output. (“H”=MUTE)
20	O-$\overline{\text{BIAS}}$	O	Record bias ON/OFF output. (“L”=ON)
21	O-TU_ON	O	Tuner supply ON/OFF output. (“H”=ON)
22	O-CD_ON	O	CD supply ON/OFF output. (“H”= ON)
23	O-$\overline{\text{C.SHIFT}}$	O	MICON clock shift output. (“L”=SHIFT)
24	O-PLL-CLK	O	PLL IC CLK output.
25	I-TM_BASE	I	8 Hz time base input.
26	O-CLOSE	O	CD door close output.
27	O-CD-OPEN	O	CD door open output.
28	VEE	—	Power supply input for FL display.
29	O-STB (DSP)	O	DSP IC strobe output. (Not used)
30	K-SCAN	O	Initial key scan output.
31	O-PLL_CE	O	CD PLL IC chip enable output.
32	O-CD_LED	O	CD flash window LED output.
33-42	G10-G1	O	FL grid output (G10-G1).
43	P22	O	FL segment output (P22). (Not used)
44-58	P21-P7	O	FL segment output (P21-P7).
59	PHONO/P6	I/O	PHONO diode input/FL segment output (P6).
60	CASINO DEMO/P5	I/O	CASINO DEMO diode input (Not used)/FL segment output (P5).
61	NON-ECO/P4	I/O	ECO OFF diode input/FL segment output (P4).
62	I-TU3/P3	I/O	TU 3 diode input (Not used)/FL segment output (P3).
63	I-TU2/P2	I/O	TU 2 diode input (Not used)/FL segment output (P2).
64	I-TU1/P1	I/O	TU 1 diode input (Not used)/FL segment output (P1).

Pin No.	Pin Name	I/O	Description
65	O-DISH_R	O	CD turn-table reverse turn output.
66	O-DISH_F	O	CD turn-table forward turn output.
67	I-SUBQ	I	Sub code-Q data input.
68	O-CD_CE	O	CD DSP chip enable output.
69	I-WRQ	I	CD WRQ input.
70	O-CLK (CD)	O	CD control clock output .
71	O-DATA (CD)	O	CD control data output.
72	I-$\overline{\text{TUNE}}$/IFC	I	Tuner SD input/IF count input.
73	AVSS	—	GND.
74	VREF	—	Reference voltage.
75	I-DRF	I	CD DRF input.
76	I-RDS_CLK	I	RDS clock input. (Not used)
77	I-LEVEL	I	Connected to GND through a resistor.
78	O-POWER	O	SYSTEM Power ON/OFF output. (“H”=ON)
79	I-RE_VOL	I	Rotary encoder A/D input.
80	I-TP_SW	I	Deck mecha SW A/D input.

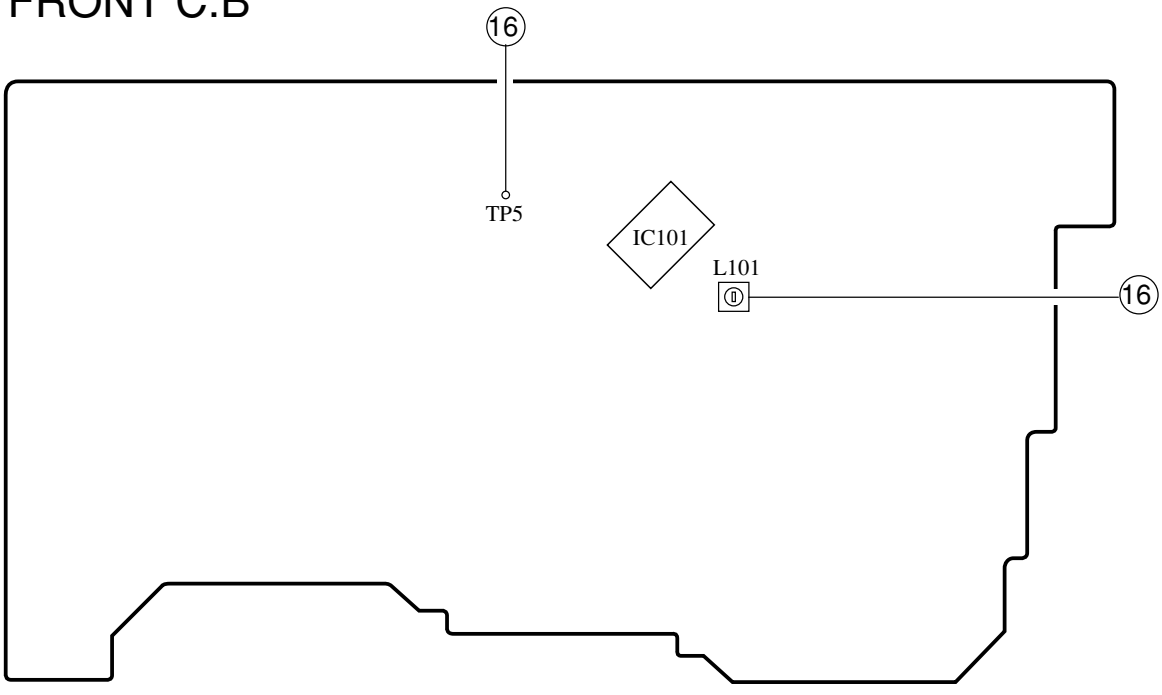
MAIN C.B



DECK-1 R/P/E, DECK-2 P HEAD



FRONT C.B



< TUNER SECTION >

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

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

3. MW Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location: L951 (1/3)
   Method: Set to MW 999kHz and adjust L951 (1/3) so that the test point becomes maximum.

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

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

6. AM IF Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L802 ..... 450kHz

7. FM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to FM 108.0MHz and check that the test point is less than 8.0V (V model: 9.5V). Then set to FM 87.5MHz (V model: 65.0MHz) and check that the test point is more than 0.5V (V model: 1.0V).

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

9. DC Balance/Mono Distortion Adjustment
   Settings: • Test point: TP3, TP4 (DC balance)
   TP8 (Lch), TP9 (Rch) (Distortion)
   • Adjustment location: L801
   • Input level: 60dBµV
   Method: Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V±0.04V.
   Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 1)
    Settings: • Test tape: TTA-100
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: SFR701
    Method: Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz±5Hz.

11. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: Head azimuth adjustment screw
    Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.
    Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

13. PB Sensitivity Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-200
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the test tape and check that the output level of the test point is 110mV±3.5dB.

14. REC/PB Frequency Response Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz/8kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is 0dB±5dB with respect to that of the 1kHz signal.

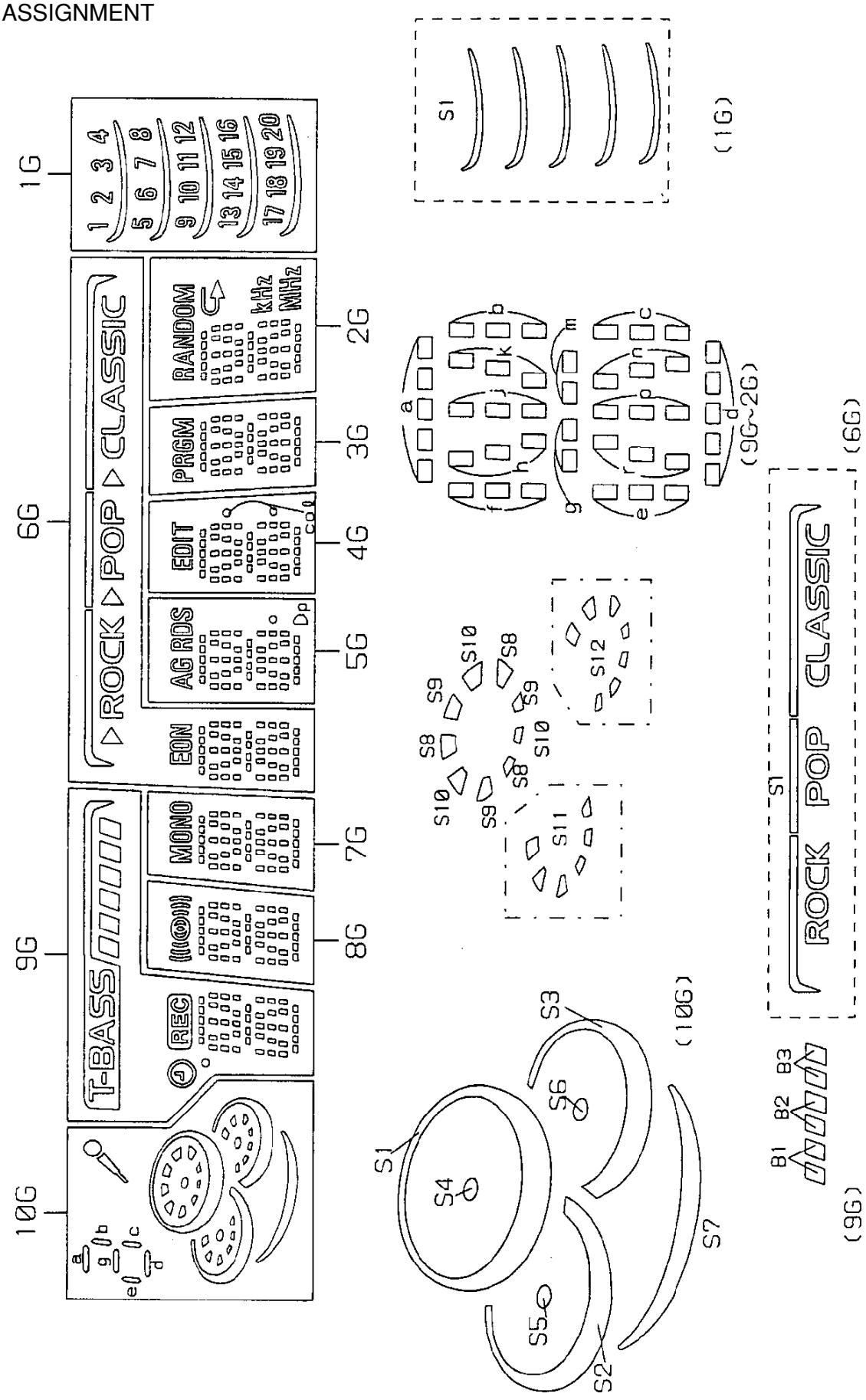
15. REC/PB Sensitivity Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB±3.5dB.

< FRONT SECTION >

16. u-CON OSC Adjustment
    Settings: • Test point: TP5
    • Adjustment location: L101
    Method: Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz±0.02Hz.

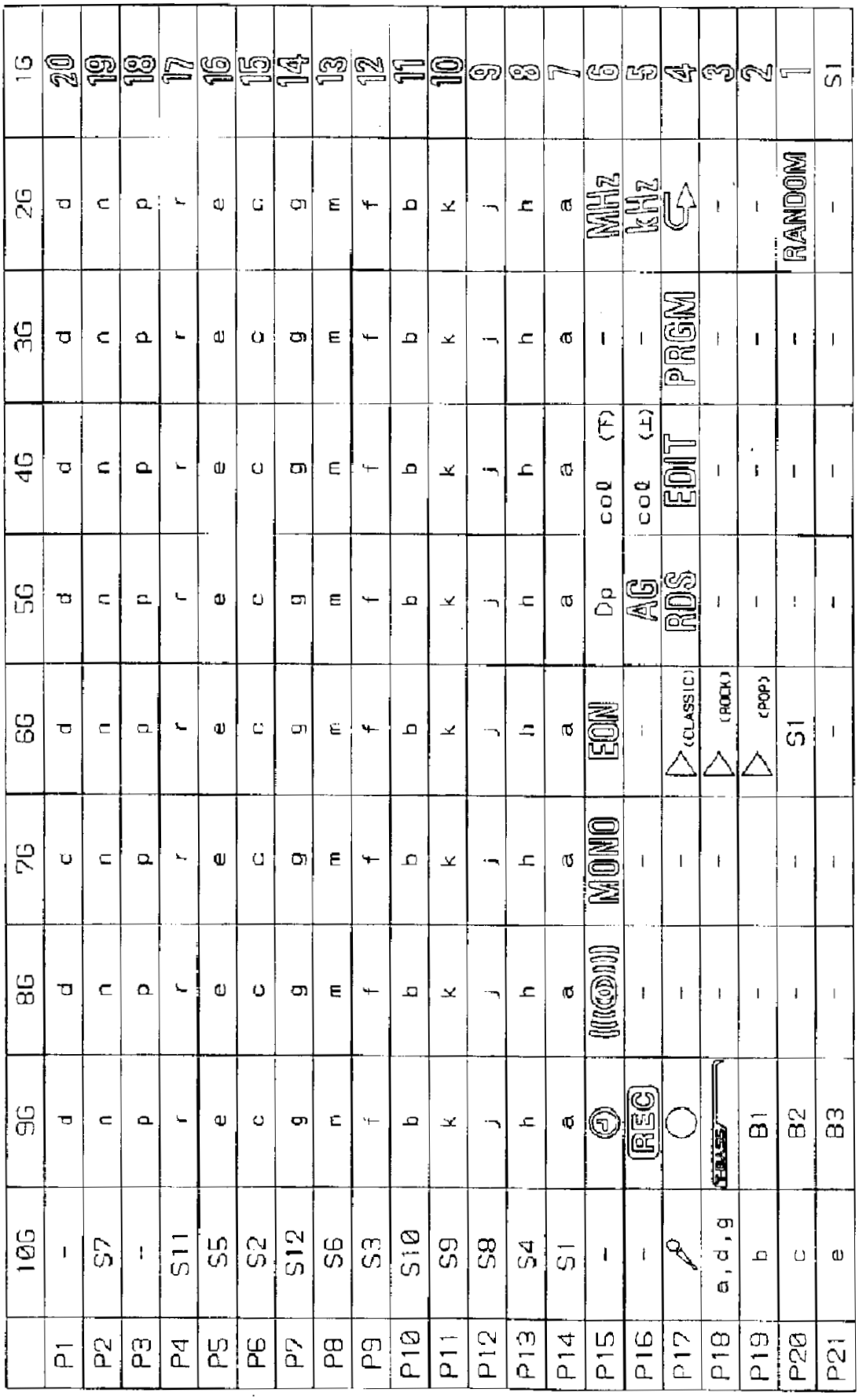
FL (10-BT-224GNK) GRID ASSIGNMENT/ANODE CONNECTION -1/2

GRID ASSIGNMENT

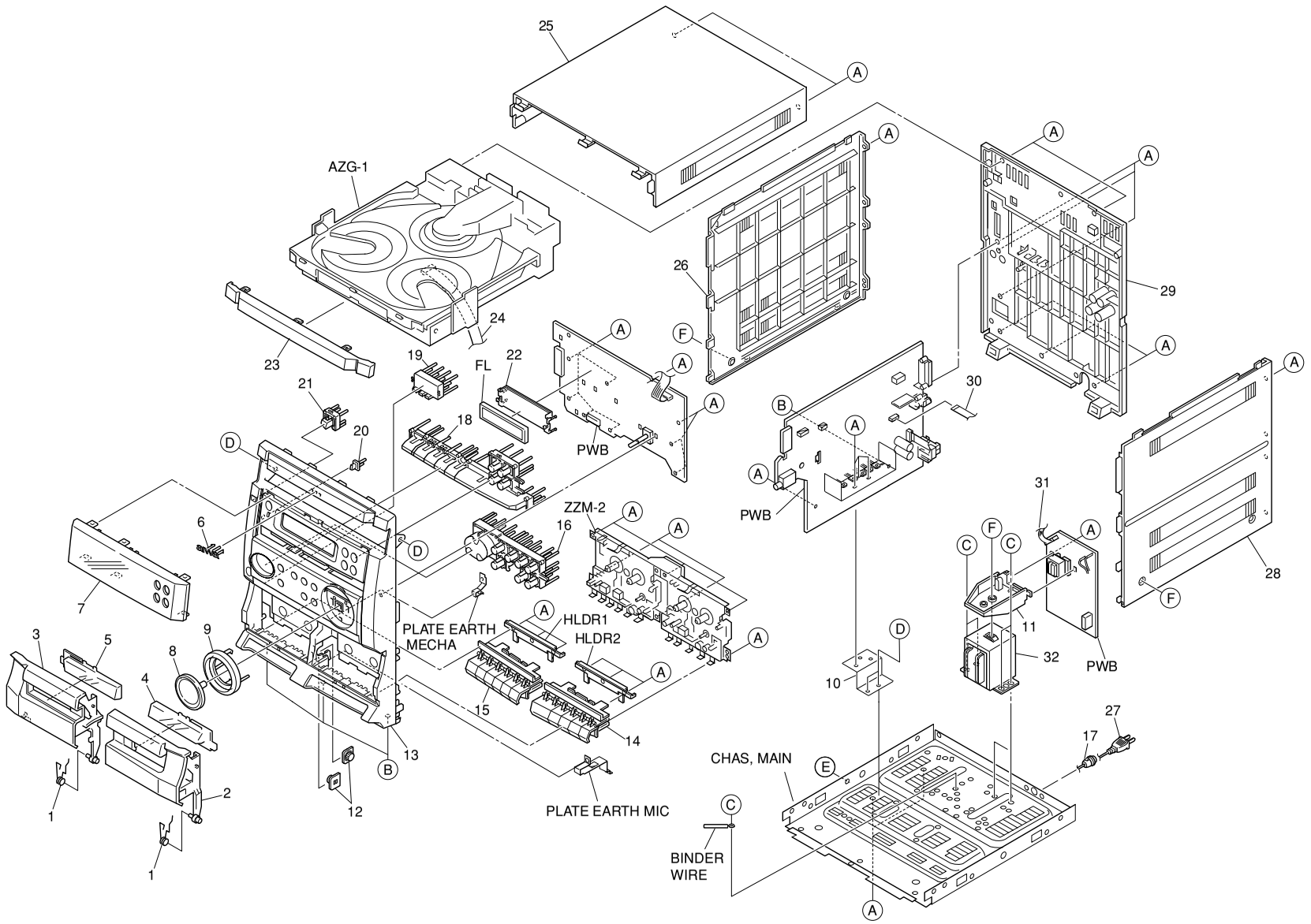


FL (10-BT-224GNK) GRID ASSIGNMENT/ANODE CONNECTION -2/2

ANODE CONNECTION



MECHANICAL EXPLODED VIEW -1/1



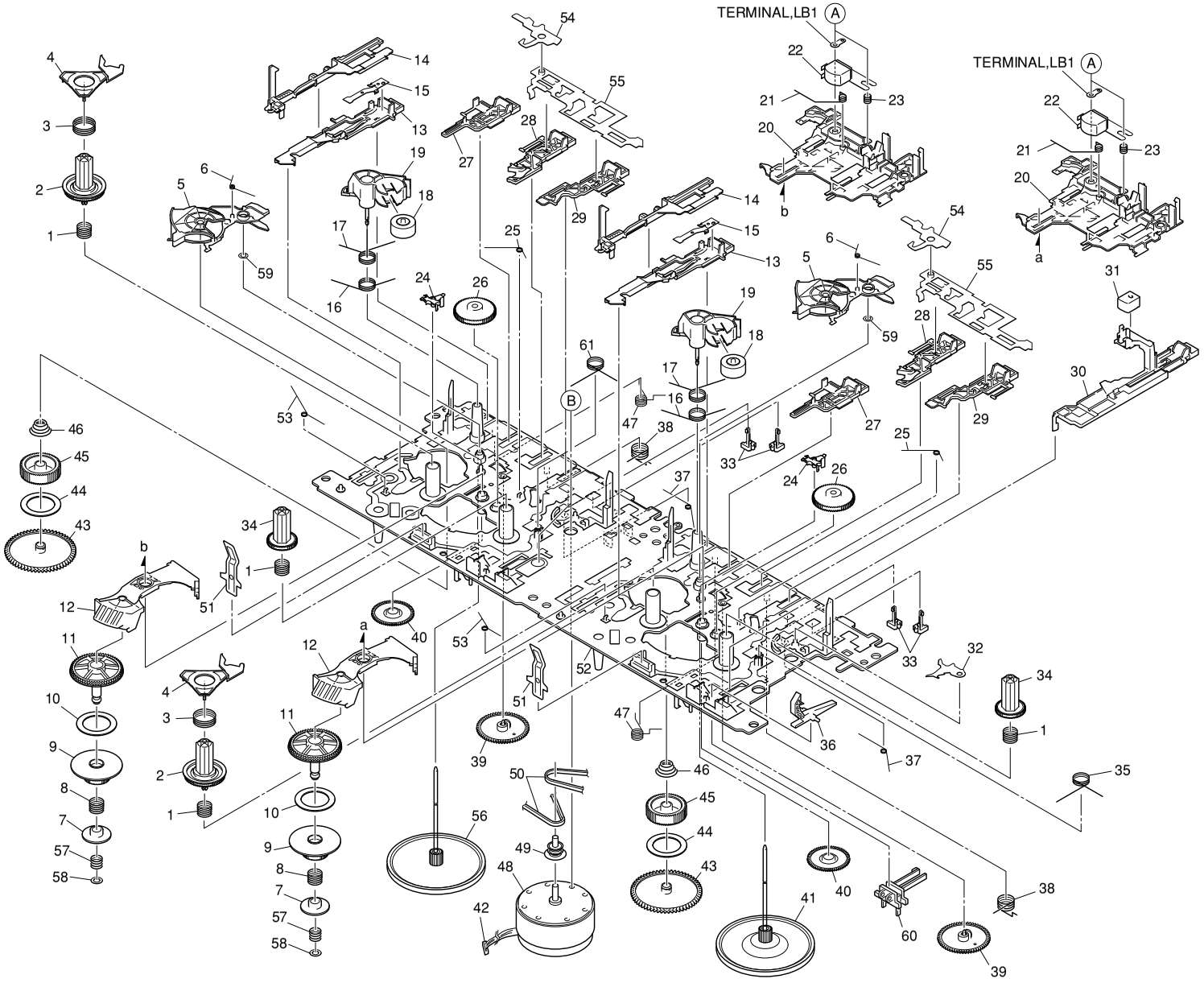
MECHANICAL MAIN PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	82-NF7-218-010		SPR-T,CASS
2	8A-NFA-004-010		BOX,CASS 2
3	8A-NFA-003-010		BOX,CASS 1
4	8A-NFA-007-010		WINDOW,CASS 2
5	8A-NFA-006-010		WINDOW,CASS 1
6	87-B00-002-010		BADGE,AIWA 30 ABS SIL<NDR3>
6	87-CE3-023-010		BADGE,AIWA 30N SILV<NDR2>
7	8A-NFB-004-010		WINDOW,DISP EZ DR2<NDR2>
7	8A-NFB-005-010		WINDOW,DISP EZ DR3<NDR3>
8	8A-NFA-011-110		KNOB,RTRY VOL
9	8A-NFA-012-010		RING,VOL
10	8A-NFB-202-010		HLDR,HT-SINK S STEEL
⚠ 11	8A-NF9-211-010		HLDR,PWB PT HI
12	86-NFZ-231-010		DMPR,70
13	8A-NFA-042-210		CABI,FR EZ<NDR2>
13	8A-NFA-091-210		CABI,FR K<NDR3>
14	8A-NFA-014-110		KEY,CASS 2P
15	8A-NFA-013-210		KEY,CASS 1
16	8A-NFA-010-110		KEY,OPE
⚠ 17	87-085-185-010		BUSHING,AC CORD(E) CM-22B
18	8A-NFA-009-010		KEY,FUN
19	8A-NFA-016-010		KEY,RDS<NDR2>
20	8A-NFA-018-010		REFLECTOR,ECO
21	8A-NFA-008-010		KEY,POWER
22	8A-NFA-208-010		GUIDE,FL 100-25 ANFA
23	8A-NFA-002-010		PANEL,TRAY H
24	88-913-221-110		FF-CABLE, 13P 1.25 220MM
25	8A-NFA-062-010		PANEL,TOP V-2
26	8A-NFA-067-010		PANEL,RIGHT V-2 PL
⚠ 27	87-A80-157-010		AC CORD ASSY,E BLK CC
28	8A-NFA-063-010		PANEL,LEFT V-2
29	8A-NFB-017-010		CABI,REAR EZ W/O SPEC
30	88-906-181-110		FF-CABLE, 6P 1.25
31	8A-NFA-628-010		F-CABLE,7P 2.5 260MM
⚠ 32	8A-NFB-611-010		PT,ANF-B EZ LOW
A	87-067-703-010		BVT2+3-10 W/O SL0T
B	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
C	87-078-200-010		S-SCREW,ITC+4-8 R
D	87-721-097-410		QT2+3-12 W/O SLOT
E	87-067-688-010		BVTT+3-6
F	87-067-641-010		UTT2+3-8 W/O SLOT BLK

COLOR NAME TABLE

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

TAPE MECHANISM EXPLODED VIEW -1/1 (ZZM-2 PRINM/PRINC)



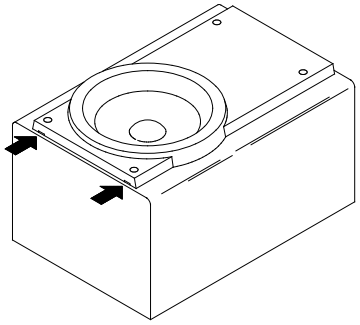
TAPE MECHANISM PARTS LIST -1/1 (ZZM-2 PRINM/PRINC)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C,REEL R
2	8Z-ZM1-225-110		GEAR,REEL R
3	8Z-ZM1-253-110		SPR-C,AUTO SENSOR
4	8Z-ZM1-217-110		LEVER,AUTO SENSOR
5	8Z-ZM1-212-110		LEVER,T-UP
6	8Z-ZM1-245-010		SPR-T,AUTO
7	8Z-ZM1-236-010		CLR,SLIP FF/REW
8	8Z-ZM1-252-010		SPR-C,FF/REW
9	8Z-ZM1-230-010		GEAR,SLIP FF/REW A
10	8Z-ZM1-269-010		FELT,FF/REW 2
11	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
12	8Z-ZM1-237-010		LEVER,FF/REW 2
13	8Z-ZM1-209-210		LEVER,PAUSE
14	8Z-ZM1-218-110		LEVER,E-LOCK H
15	8Z-ZM1-256-010		SPR-P,PAUSE
16	8Z-ZM1-244-010		SPR-T,T-UP
17	8Z-ZM1-247-210		SPR-T,PINCH
18	8Z-ZM1-261-110		ROLLER ASSY,PINCH
19	8Z-ZM1-221-010		LEVER,PINCH
20	8Z-ZM1-205-210		LEVER,PLAY
21	8Z-ZM1-248-110		SPR-T,BRG
22	87-A90-403-110		HEAD,RPH MS15R
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	8Z-ZM1-216-010		LEVER,AUTO
25	8Z-ZM1-246-010		SPR-T,AUTO 2
26	8Z-ZM2-214-010		GEAR,IDL REW ZZM-2
27	8Z-ZM2-212-010		LEVER,STOP ZZM-2
28	8Z-ZM1-207-010		LEVER,FF
29	8Z-ZM1-206-010		LEVER,REW
30	8Z-ZM1-210-010		LEVER,REC
31	87-A90-404-010		HEAD,EH LE15B
32	8Z-ZM2-218-010		LEVER,REC LOCK ZZM-2
33	87-A91-492-010		SW,LEAF MSW18560
34	8Z-ZM1-226-010		GEAR,REEL L
35	8Z-ZM1-241-010		SPR-T,PLAY
36	8Z-ZM1-220-110		LEVER,REC SENSOR
37	8Z-ZM1-249-010		SPR-T,FR
38	8Z-ZM1-242-110		SPR-T,FF/REW
39	8Z-ZM1-229-010		GEAR,CAM
40	8Z-ZM1-232-010		GEAR,IDL FF/REW
41	8Z-ZM1-234-010		FLY-WHL,ZZM-1
42	8Z-ZM1-267-010		SHAFT,CAPSTAN 2
43	8Z-ZM1-228-010		GEAR,SLIP T-UP B
44	8Z-ZM1-265-010		FELT,T-UP
45	8Z-ZM1-227-010		GEAR,SLIP T-UP A
46	8Z-ZM1-251-110		SPR-C,T-UP SLIP
47	8Z-ZM1-243-210		SPR-T,STOP/PAUSE
48	87-A91-532-010		MOT,MS15U2LW1A
49	8Z-ZM1-235-010		PULLEY,MOT
50	8Z-ZM2-216-010		BELT,MAIN M
51	8Z-ZM1-260-010		SPR-P,CASETTE
52	8Z-ZM2-201-010		CHAS ASSY,ZZM-2
53	8Z-ZM1-255-110		SPR-T,E-LOCK
54	8Z-ZM2-219-010		LEVER,E-OPEN ZZM-2
55	8Z-ZM1-214-110		LEVER,LOCK
56	8Z-ZM2-211-010		FLY-WHL,ZZM-2
57	8Z-ZM1-257-110		SPR-C,F/R
58	8Z-ZM1-275-010		W-L,1.47-4-0.25
59	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
60	87-A91-494-010		SW,LEAF MSW17820
61	8Z-ZM1-241-010		SPR-T,PLAY
62	8Z-ZM2-601-010		CONN ASSY,9P ZZM-2
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

SPEAKER DISASSEMBLY INSTRUCTIONS

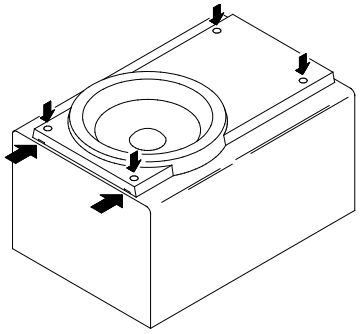
Type.1

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



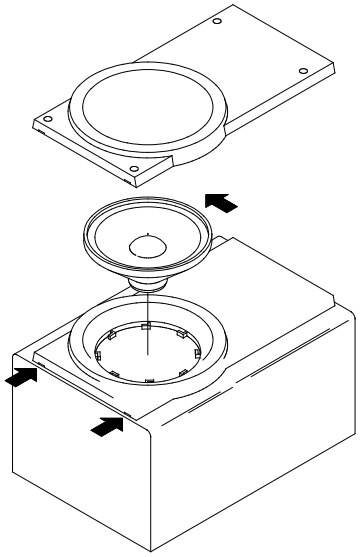
Type.2

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.

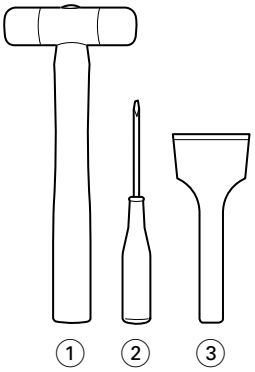


Type.3

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



Type.4



TOOLS

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

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) 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.

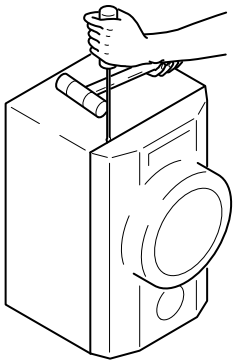


Fig-1

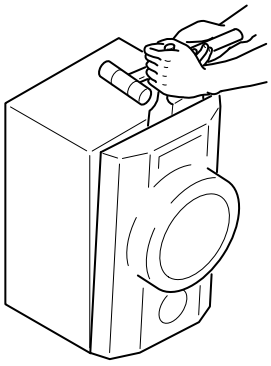


Fig-2

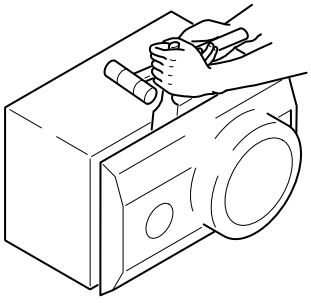


Fig-3

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

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSL-001-010		PANEL,FR
2	8A-NSL-003-010		GRILLE,FRAME ASSY<EXCEPT NSZ7YSC1>
2	8A-NSL-021-010		GRILLE,FRAME ASSY L<NSZ7YSC1>
3	8Z-NSL-601-110		SPKR, W 120<NSZ5YSC9>
3	8A-NSL-606-010		SPKR, W 120<EXCEPT NSZ5YSC9,NSZ7YSC9>
3	8Z-NSL-603-010		SPKR, W 120<NSZ7YSC9>
4	87-NS7-611-010		CORD,SPKR<NSZ5YSC9,NSZ7YSC9>
4	8A-NSL-017-010		CORD,SPKR ASSY<EXCEPT NSZ5YSC9,NSZ7YSC9>

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