

SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR7NM
BASIC CD MECHANISM : AZG-1 VZD3RNDM

SYSTEM	CD CASSEIVER	MAIN SPEAKER	REMOTE CONTROLLER
NSX-WV89	CX-NWV89	SX-NDP84	RC-ZAS08

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-WV89 (HR), (S/M Code No. 09-004-433-5T1).
- If requiring information about the CD mechanism, see Service Manual of AZG-1 VZD3RNDM, (S/M Code No. 09-001-335-3NG).

aiwa

S/M Code No. 09-006-433-5R1

REVISION

DATA

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<MW tuner section>

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

<SW tuner section>

Tuning range	5.730 MHz to 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

Power output	Front Rated: 115 W + 115 W (6 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 145 W + 145 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) Rear (Surround) Rated: 25 W + 25 W (8 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 35 W + 35 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) Center Rated: 30 W (8 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 40 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324)
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Total harmonic distortion

Inputs

0.1 % (10.5 W, 1 kHz, 6 ohms, DIN AUDIO/Front)
VIDEO/AUX: 316 mV (adjustable)
MD: 316 mV (adjustable)
MIC 1, MIC 2: 1.0 mV (10 kohms)
5.1 CH INPUT (adjustable) FRONT (L,R): 330 mV REAR (L,R): 200 mV CENTER: 510 mV SUB WOOFER: 360 mV

Outputs

FRONT SPEAKERS: accept speakers of 6 ohms or more
SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms or more
CENTER SPEAKER: accept speakers of 8 ohms or more
SUBWOOFER: 1.1 V
VIDEO OUT: 1.0 Vp-p (75 ohms)
LINE OUT: 210 mV
PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO ₂ tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/Playback head x 1, erase head x 1

<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
Video signal	NTSC/PAL color format (selectable)
Video data	MPEG 1
Audio data	MPEG 1, LAYER 2

<General>

Power requirements	120 V/220–230 V/240 V AC (switchable), 50/60 Hz
Power consumption	245 W
Power consumption in standby mode	If the power-economizing mode is ECO OFF: 31 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
Dimensions of main unit (W x H x D)	260 x 329 x 389.6 mm
Weight of main unit	12.2 kg

<Speaker system SX-NDP84>

Speaker system	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 160 mm cone type Tweeter: 60 mm cone type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W x H x D)	240 x 324 x 245 mm
Weight	5.0 kg

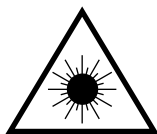
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PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

WARNING!!

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



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

VAROITUS!

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

WARNING!

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

CAUTION

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

ATTENTION

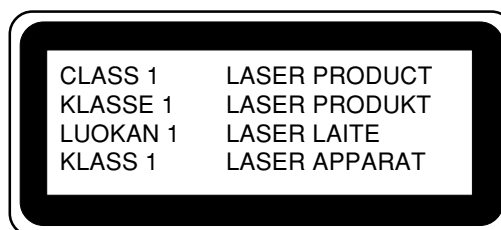
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

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

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

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

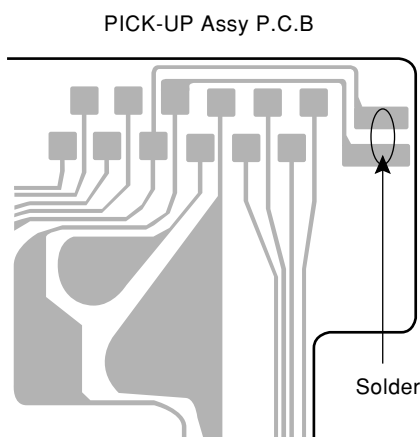


Precaution to replace Optical block

(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 right figure.



NOTE ON BEFORE STARTING REPAIR

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.

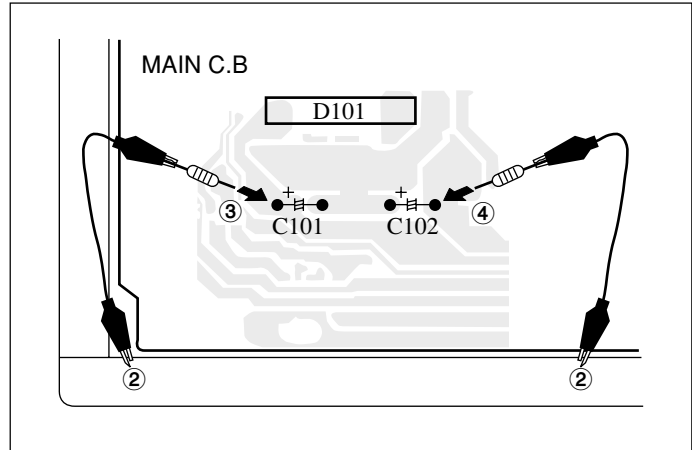


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	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.

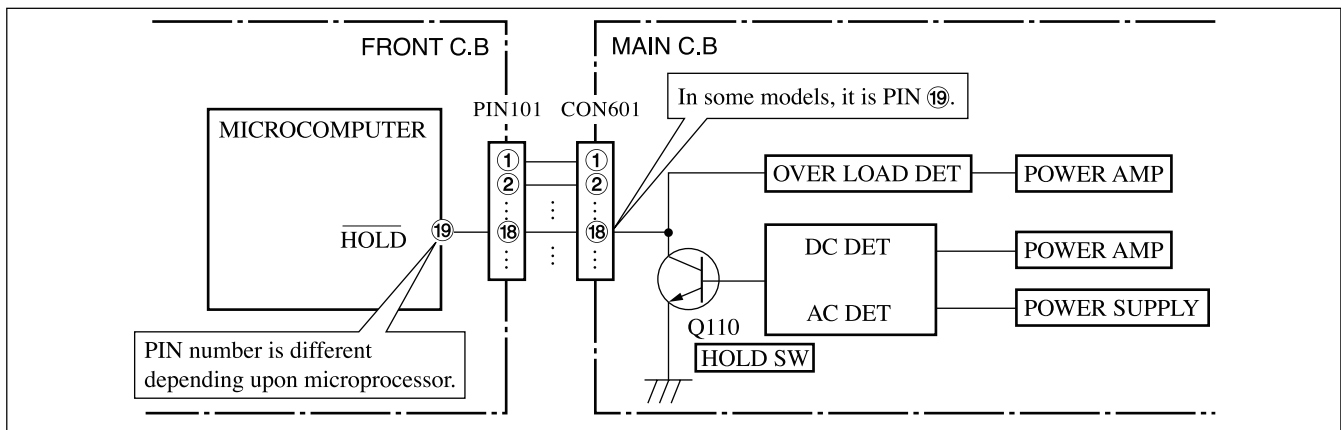


Fig-2-1

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.

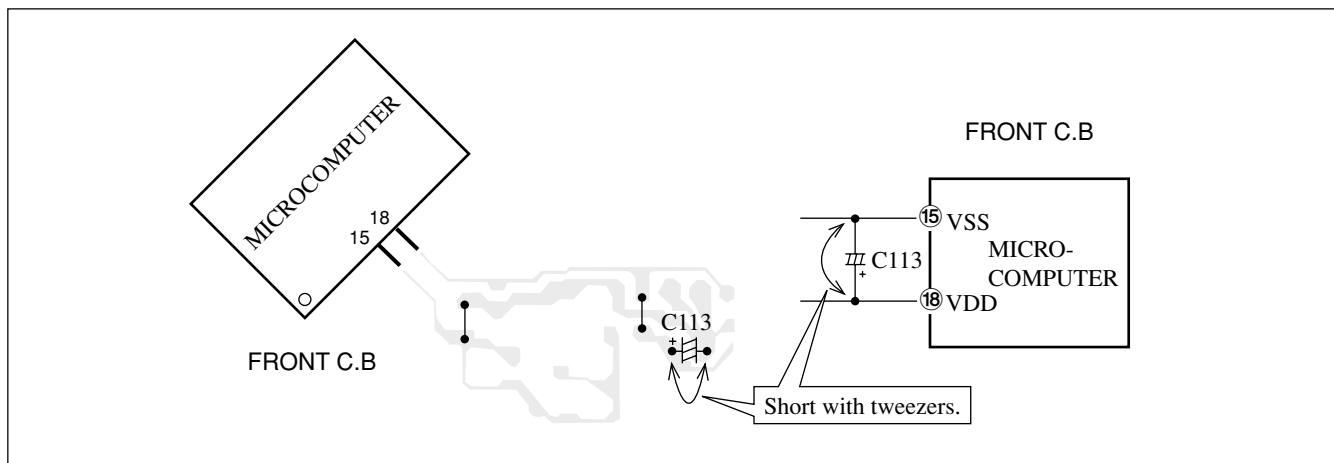


Fig-2-2

- 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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				MAIN C.B			
	8A-NH7-601-010		C-IC, LC876572V-5R25	C003	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-355-010		IC, STK490-140	C004	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-398-010		IC, STK490-110	C021	87-016-658-000		CAP,E 4700-35 M SMG
	87-A20-914-010		IC, SPS-442-1-F	C022	87-016-658-000		CAP,E 4700-35 M SMG
	87-A20-783-040		C-IC, BA7762AFS	C025	87-010-406-080		CAP,E 22-50 M 11L SME
	87-A21-577-040		C-IC, M61506FP	C026	87-010-406-080		CAP,E 22-50 M 11L SME
	87-A21-021-040		C-IC, BU2099FV	C027	87-010-406-080		CAP,E 22-50 M 11L SME
	87-A21-097-040		C-IC, M62463AFP	C028	87-010-406-080		CAP,E 22-50 M 11L SME
	87-070-289-040		C-IC, BU2092F	C031	87-010-263-080		CAP,E 100-10 M 11L SME
	87-A21-015-040		C-IC, M62491FP	C032	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-A20-561-040		C-IC, M65847AFP	C034	87-010-247-080		CAP,E 100-50 M SME
	87-A21-452-030		C-IC, BD3876KS2	C035	87-010-260-080		CAP,E 47-25 M 11L SME
	87-A21-051-040		C-IC, BU9990-03FS	C036	87-010-381-080		CAP,E 330-16 M SME
	87-A21-560-010		IC, LA1844L-A	C038	87-010-247-080		CAP,E 100-50 M SME
	87-070-127-110		IC, LC72131D	C039	87-010-247-080		CAP,E 100-50 M SME
	87-020-454-010		IC, DN 6851	C040	87-010-197-080		C-CAP,S 0.01-25 K B C2012
				C060	87-010-403-080		CAP,E 3.3-50 M 11L SME
				C080	87-010-401-080		CAP,E 1-50 M 11L SME
				C081	87-010-379-080		CAP,E 22-16 M 11L SME
				C082	87-010-260-080		CAP,E 47-25 M 11L SME
TRANSISTOR							
	87-026-245-080		TR, DTC114ES	C115	87-010-546-080		CAP,E 0.33-50 M 11L SME
	87-026-609-080		TR, KTA1266GR	C116	87-010-546-080		CAP,E 0.33-50 M 11L SME
	87-A30-198-080		TR, KTC3199GR	C152	87-010-260-080		CAP,E 47-25 M 11L SME
	87-026-610-080		TR, KTC3198GR	C160	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A30-076-080		C-TR, 2SC3052F	C161	87-010-176-080		C-CAP,S 680P-50 J SL
	87-A30-075-080		C-TR, 2SA1235F	C162	87-010-176-080		C-CAP,S 680P-50 J SL
	87-A30-318-080		TR, CSA952K	C171	87-012-368-080		C-CAP,S 0.1-50 Z F
	89-213-702-010		TR, 2SB1370E	C172	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-087-080		C-FET, 2SK2158	C173	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-107-070		C-TR, CMBT5401	C174	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-468-080		C-TR, KRC102S-RTK	C177	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
	87-A30-074-080		C-TR, RT1P 141C	C178	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
	87-A30-105-080		C-TR, RT1P 441C	C301	87-010-318-080		C-CAP,S 47P-50 J CH GRM
	87-A30-106-040		C-TR, CMBT5551	C302	87-010-318-080		C-CAP,S 47P-50 J CH GRM
	87-A30-190-080		TR, CC5551	C303	87-012-157-080		C-CAP,S 330P-50 J CH GRM
	87-A30-256-010		TR, 2SD1933	C304	87-012-157-080		C-CAP,S 330P-50 J CH GRM
	87-A30-255-010		TR, 2SB1342	C305	87-012-157-080		C-CAP,S 330P-50 J CH GRM
	87-A30-063-080		C-TR, KRA104S	C306	87-012-157-080		C-CAP,S 330P-50 J CH GRM
	87-A30-086-070		C-TR, CSD1306E	C307	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A30-269-040		C-FET, 2SJ461-T1	C309	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A30-329-080		TR, CD1585BC	C310	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	89-327-143-080		C-TR, 2SC27140	C311	87-010-198-080		C-CAP,S 0.022-25 K B C2012
	87-A30-489-080		C-TR, KRA107S	C312	87-010-198-080		C-CAP,S 0.022-25 K B C2012
	87-A30-484-080		C-TR, KRA102S	C313	87-010-181-080		C-CAP,S 1800P-50 K B GRM
	89-503-602-080		C-FET, 2SK360E	C314	87-010-181-080		C-CAP,S 1800P-50 K B GRM
	87-A30-234-080		TR, CSC4115BC	C315	87-010-179-080		C-CAP,S 1200P-50 K B GRM
	87-026-463-080		TR, 2SA933S	C316	87-010-179-080		C-CAP,S 1200P-50 K B GRM
				C321	87-012-142-080		C-CAP,S 0.33-16 Z F GRM
				C322	87-012-142-080		C-CAP,S 0.33-16 Z F GRM
				C324	87-010-260-080		CAP,E 47-25 M 11L SME
DIODE							
	87-A40-673-090		DIODE, D10XB20	C325	87-010-370-080		CAP,E 330-6.3 M SME
	87-A40-547-090		DIODE, D5SBA20	C327	87-010-404-080		CAP,E 4.7-50 M 11L SME
	87-020-465-080		DIODE, 1SS133	C328	87-010-404-080		CAP,E 4.7-50 M 11L SME
	87-A40-553-080		DIODE, 1N4003 LES	C332	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-784-080		ZENER, UZ39BSB	C335	87-010-401-080		CAP,E 1-50 M 11L SME
	87-A40-764-080		ZENER, UZ10BSC	C336	87-010-401-080		CAP,E 1-50 M 11L SME
	87-A40-313-080		C-DIODE, MC2840	C337	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-270-080		C-DIODE, MC2838	C339	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-269-080		C-DIODE, MC2836	C340	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-768-080		ZENER, UZ16BSA	C351	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A40-752-080		ZENER, UZ6.2BSC	C352	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A40-535-080		DIODE, 1N5393-GOODARK	C354	87-010-175-080		C-CAP,S 560P-50 J SL
	87-A40-754-080		ZENER, UZ6.8BSC	C355	87-010-178-080		C-CAP,S 1000P-50 K B C2012
	87-A40-802-080		ZENER, UZ5.1BSC	C356	87-010-260-080		CAP,E 47-25 M 11L SME
	87-A40-760-080		ZENER, UZ9.1BSA	C357	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-A40-747-080		ZENER, UZ5.1BSB	C358	87-010-183-080		C-CAP,S 2700P-50 K B GRM
	87-A40-745-080		ZENER, UZ4.7BSA	C359	87-010-183-080		C-CAP,S 2700P-50 K B GRM
	87-A40-749-080		ZENER, UZ5.6BSB	C360	87-010-183-080		C-CAP,S 2700P-50 K B GRM
	87-017-149-080		ZENER, HZS6A2L				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C370	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C457	87-016-081-080		C-CAP,S 0.1-16 K R GRM
C373	87-016-083-080		C-CAP,S 0.15-16 K R	C461	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C374	87-016-083-080		C-CAP,S 0.15-16 K R	C463	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C378	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C465	87-016-669-080		C-CAP,S 0.1-25 K B
C379	87-010-382-080		CAP,E 22-25 M 11L SME	C466	87-010-194-080		C-CAP,S 0.047-25 Z F
C380	87-010-382-080		CAP,E 22-25 M 11L SME	C467	87-A10-201-080		C-CAP,S 0.33-16 K B
C381	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C468	87-A10-060-080		C-CAP,S 0.18-16 K B
C382	87-010-312-080		C-CAP,S 15P-50 J CH GRM	C472	87-012-140-080		C-CAP,S 470P-50 J CH
C383	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C473	87-012-140-080		C-CAP,S 470P-50 J CH
C384	87-010-402-080		CAP,E 2.2-50 M 11L SME	C474	87-012-140-080		C-CAP,S 470P-50 J CH
C386	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C475	87-012-140-080		C-CAP,S 470P-50 J CH
C387	87-012-145-080		C-CAP,S 270P-50 J CH GRM	C476	87-012-140-080		C-CAP,S 470P-50 J CH
C388	87-012-156-080		C-CAP,S 220P-50 J CH GRM	C477	87-012-140-080		C-CAP,S 470P-50 J CH
C391	87-010-319-080		C-CAP,S 56P-50 J CH	C478	87-010-401-080		CAP,E 1-50 M 11L SME
C392	87-010-319-080		C-CAP,S 56P-50 J CH	C479	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C393	87-010-319-080		C-CAP,S 56P-50 J CH	C480	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C394	87-010-319-080		C-CAP,S 56P-50 J CH	C481	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C401	87-010-176-080		C-CAP,S 680P-50 J SL	C482	87-010-179-080		C-CAP,S 1200P-50 K B GRM
C402	87-010-176-080		C-CAP,S 680P-50 J SL	C489	87-010-402-080		CAP,E 2.2-50 M 11L SME
C403	87-010-958-080		C-CAP,S 0.01-25 J B	C491	87-010-402-080		CAP,E 2.2-50 M 11L SME
C404	87-010-958-080		C-CAP,S 0.01-25 J B	C492	87-010-402-080		CAP,E 2.2-50 M 11L SME
C405	87-010-958-080		C-CAP,S 0.01-25 J B	C531	87-010-405-080		CAP,E 10-50 M 11L SME
C406	87-010-958-080		C-CAP,S 0.01-25 J B	C532	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C407	87-010-401-080		CAP,E 1-50 M 11L SME	C533	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C408	87-010-401-080		CAP,E 1-50 M 11L SME	C534	87-012-156-080		C-CAP,S 220P-50 J CH GRM
C409	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C535	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C410	87-010-384-080		CAP,E 100-25 M 11L SME	C536	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C411	87-010-402-080		CAP,E 2.2-50 M 11L SME	C541	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C412	87-010-402-080		CAP,E 2.2-50 M 11L SME	C609	87-010-181-080		C-CAP,S 1800P-50 K B GRM
C413	87-010-401-080		CAP,E 1-50 M 11L SME	C610	87-010-181-080		C-CAP,S 1800P-50 K B GRM
C414	87-010-401-080		CAP,E 1-50 M 11L SME	C611	87-010-956-080		C-CAP,S 0.068-25 K B GRM
C415	87-010-546-080		CAP,E 0.33-50 M 11L SME	C612	87-010-369-080		C-CAP,S 0.033-25 K B
C416	87-010-546-080		CAP,E 0.33-50 M 11L SME	C613	87-A11-567-080		C-CAP,S 0.01-50 K B
C417	87-010-221-080		CAP,E 470-10 M SME	C614	87-016-669-080		C-CAP,S 0.1-25 K B
C418	87-A10-891-080		CAP,E 4.7-25 SME(K)	C616	87-010-184-080		C-CAP,S 3300P-50 K B C2012
C419	87-A10-800-080		C-CAP,S 6800P-16 J B CM	C617	87-010-194-080		C-CAP,S 0.047-25 Z F
C420	87-010-374-080		CAP,E 47-10 M 11L SME	C618	87-010-401-080		CAP,E 1-50 M 11L SME
C421	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C619	87-010-263-080		CAP,E 100-10 M 11L SME
C422	87-A10-804-080		C-CAP,S 0.1-25 J B	C620	87-016-669-080		C-CAP,S 0.1-25 K B
C424	87-010-374-080		CAP,E 47-10 M 11L SME	C621	87-A11-567-080		C-CAP,S 0.01-50 K B
C425	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C623	87-010-401-080		CAP,E 1-50 M 11L SME
C428	87-012-156-080		C-CAP,S 220P-50 J CH GRM	C624	87-010-401-080		CAP,E 1-50 M 11L SME
C429	87-010-545-080		CAP,E 0.22-50 M 11L SME	C626	87-A11-590-080		C-CAP,S 0.047-16 K B
C430	87-A10-201-080		C-CAP,S 0.33-16 K B	C627	87-010-400-080		CAP,E 0.47-50 M 11L SME
C431	87-010-971-080		C-CAP,S 4700P-50 J B	C628	87-010-400-080		CAP,E 0.47-50 M 11L SME
C432	87-012-349-080		C-CAP,S 1000P-50 J CH GRM	C629	87-A11-590-080		C-CAP,S 0.047-16 K B
C433	87-A11-183-080		C-CAP,S 0.12-16 J B	C630	87-010-383-080		CAP,E 33-25 M 11L SME
C434	87-A11-182-080		C-CAP,S 0.27-16 J B	C631	87-010-185-080		C-CAP,S 3900P-50 K B
C435	87-A11-182-080		C-CAP,S 0.27-16 J B	C632	87-010-185-080		C-CAP,S 3900P-50 K B
C436	87-A11-183-080		C-CAP,S 0.12-16 J B	C633	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C437	87-010-971-080		C-CAP,S 4700P-50 J B	C634	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C438	87-012-349-080		C-CAP,S 1000P-50 J CH GRM	C635	87-A10-307-080		CAP,M 0.1-50 J
C439	87-010-805-080		C-CAP,S 1-16 Z F	C636	87-A10-307-080		CAP,M 0.1-50 J
C440	87-010-401-080		CAP,E 1-50 M 11L SME	C637	87-A10-307-080		CAP,M 0.1-50 J
C441	87-A10-799-080		C-CAP,S 5600P-16 J B CM	C638	87-A10-307-080		CAP,M 0.1-50 J
C442	87-A10-802-080		C-CAP,S 0.047-16 J B CM	C639	87-010-405-080		CAP,E 10-50 M 11L SME
C443	87-A10-229-080		C-CAP,S 0.68-10 K W5R	C641	87-010-401-080		CAP,E 1-50 M 11L SME
C444	87-A11-606-080		C-CAP,S 0.22-25 K B	C642	87-010-401-080		CAP,E 1-50 M 11L SME
C445	87-A11-606-080		C-CAP,S 0.22-25 K B	C643	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C446	87-010-404-080		CAP,E 4.7-50 M 11L SME	C644	87-010-401-080		CAP,E 1-50 M 11L SME
C447	87-010-404-080		CAP,E 4.7-50 M 11L SME	C671	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C448	87-A11-606-080		C-CAP,S 0.22-25 K B	C672	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C449	87-A11-606-080		C-CAP,S 0.22-25 K B	C673	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C450	87-016-081-080		C-CAP,S 0.1-16 K R GRM	C675	87-016-669-080		C-CAP,S 0.1-25 K B
C451	87-A10-802-080		C-CAP,S 0.047-16 J B CM	C676	87-010-382-080		CAP,E 22-25 M 11L SME
C452	87-A10-802-080		C-CAP,S 0.047-16 J B CM	C679	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C453	87-016-081-080		C-CAP,S 0.1-16 K R GRM	C680	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C454	87-016-081-080		C-CAP,S 0.1-16 K R GRM	C771	87-010-263-080		CAP,E 100-10 M 11L SME
C455	87-A10-801-080		C-CAP,S 0.022-16 J B CM	C772	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C456	87-A10-801-080		C-CAP,S 0.022-16 J B CM	C779	87-010-182-080		C-CAP,S 2200P-50 K B C2012

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C780	87-010-182-080		C-CAP,S 2200P-50 K B C2012	C981	87-010-260-080		CAP,E 47-25 M 11L SME
C782	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C982	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C783	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C983	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C784	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C984	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C785	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C987	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C786	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C989	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C788	87-010-149-080		C-CAP,S 5P-50 C CH GRM	C991	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C789	87-A10-592-080		C-CAP,S 0.015-50 J B	C992	87-010-312-080		C-CAP,S 15P-50 J CH GRM
C790	87-A10-592-080		C-CAP,S 0.015-50 J B	C993	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C791	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C995	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C792	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C997	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C793	87-010-404-080		CAP,E 4.7-50 M 11L SME	C998	87-010-260-080		CAP,E 47-25 M 11L SME
C795	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
C796	87-010-197-080		C-CAP,S 0.01-25 K B C2012	CF831	87-008-261-010		FLTR,CF SFE10.7MA5
C797	87-010-405-080		CAP,E 10-50 M 11L SME	CF832	87-008-261-010		FLTR,CF SFE10.7MA5
C798	87-010-197-080		C-CAP,S 0.01-25 K B C2012	CN001	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
C799	87-010-407-080		CAP,E 33-50 M 11L SME	CN091	87-A60-109-010		CONN,2P V S2M-2W
C800	87-012-369-080		C-CAP,S 0.047-50 Z F	CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
C801	87-010-403-080		CAP,E 3.3-50 M 11L SME	CN301	87-A60-620-010		CONN,3P V 2MM JMT
C802	87-012-369-080		C-CAP,S 0.047-50 Z F	CN351	87-A60-625-010		CONN,8P V 2MM JMT
C803	87-010-198-080		C-CAP,S 0.022-25 K B C2012	CN601	87-099-719-010		CONN,30P H BLK TYK-B(X)
C804	87-010-263-080		CAP,E 100-10 M 11L SME	CN602	87-099-194-010		CONN,6P V BLK 6216
C807	87-010-400-080		CAP,E 0.47-50 M 11L SME	CN602	88-906-621-110		FF-CABLE,6P 1.25 620MM
C808	87-010-401-080		CAP,E 1-50 M 11L SME	CN606	87-099-566-010		CONN,7P TUC-P7P-B1
C809	87-010-401-080		CAP,E 1-50 M 11L SME	CNA001	8A-NF6-646-010		CONN ASSY,9P TTD-A(460)
C810	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	CNA002	8A-NF6-640-010		CONN ASSY,3P (VM) ANF-6H
C811	87-010-403-080		CAP,E 3.3-50 M 11L SME	D951	87-A40-618-080		VARI-CAP,SVC 348(S/T)
C812	87-010-403-080		CAP,E 3.3-50 M 11L SME	FFE831	A8-8ZA-190-030		8ZA-1 FEUNM
C814	87-010-197-080		C-CAP,S 0.01-25 K B C2012	J102	87-A60-238-010		TERMINAL,SP 4P (MSC)
C815	87-010-400-080		CAP,E 0.47-50 M 11L SME	J103	87-A60-929-010		JACK,DIA6.3 BLK ST W/S TAI
C816	87-010-400-080		CAP,E 0.47-50 M 11L SME	J431	87-A61-069-010		JACK,PIN 6P R/W,R/W, O/B MSC
C821	87-010-405-080		CAP,E 10-50 M 11L SME	J601	87-A60-885-010		JACK,PIN 6P R/W MSC
C823	87-010-177-080		C-CAP,S 820P-50 J SL C2012	J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
C824	87-010-404-080		CAP,E 4.7-50 M 11L SME	J940	81-754-629-010		CONNECTOR XH 2P (UL)
C825	87-010-596-080		C-CAP,S 0.047-16 K R C2012	L101	87-A50-610-010		COIL,1UH K(MDEC)
C842	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L102	87-A50-610-010		COIL,1UH K(MDEC)
C843	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L301	87-A50-049-010		COIL,TRAP 85K(COI)
C844	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L302	87-A50-049-010		COIL,TRAP 85K(COI)
C845	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L351	87-007-342-010		COIL,OSC 85KHZ BIAS
C846	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L801	87-A50-608-010		COIL,FM DET-N(TOK)
C847	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L802	87-A91-552-010		FLTR,CFMT-450AL (TOK)
C848	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L811	87-005-847-080		COIL,2.2UH K CECS
C849	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L832	87-005-847-080		COIL,2.2UH K CECS
C850	87-010-260-080		CAP,E 47-25 M 11L SME	L941	87-A50-022-010		COIL,ANT SW (COI) 7.96MHZ
C851	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L942	87-A50-550-010		COIL,OSC SW-2N(COI)
C852	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L943	87-A50-522-080		COIL,1MH K CEC
C853	87-010-197-080		C-CAP,S 0.01-25 K B C2012	L944	87-A50-159-010		COIL,10MH K C2B
C858	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	L952	87-A50-430-010		COIL,ANT MW(3BSW)
C859	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	L953	87-A50-431-010		COIL,OSC MW(3BSW)
C860	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R161	87-A00-441-050		RES,270-1/2W J RP
C940	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R162	87-A00-441-050		RES,270-1/2W J RP
C941	87-010-314-080		C-CAP,S 22P-50 J CH GRM	R163	87-A00-441-050		RES,270-1/2W J RP
C943	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R164	87-A00-441-050		RES,270-1/2W J RP
C945	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R407	87-022-214-080		C-RES,S 100K-1/10W F
C946	87-010-971-080		C-CAP,S 4700P-50 J B	R445	87-010-195-080		C-CAP,S 0.068-25 Z F C2012
C947	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R790	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C948	87-010-148-080		C-CAP,S 4P-50 C CH GRM	R991	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C952	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R993	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C953	87-010-197-080		C-CAP,S 0.01-25 K B C2012	R995	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C954	87-010-400-080		CAP,E 0.47-50 M 11L SME	SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
C956	87-010-263-080		CAP,E 100-10 M 11L SME	SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
C959	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	TC941	87-011-254-080		TRIMMER,CER 20P 4.0X4.5 ECR
C962	87-010-401-080		CAP,E 1-50 M 11L SME	TC943	87-011-253-080		TRIMMER,CER 30P 4.0X4.5 ECR
C963	87-015-785-080		C-CAP, 0.1-25 Z F C3216	WH001	87-A90-510-010		HLDR,WIRE 2.5-9P
C964	87-010-854-080		C-CAP,S 560P-50 J CH	X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C971	87-010-381-080		CAP,E 330-16 M SME				
C972	87-010-404-080		CAP,E 4.7-50 M 11L SME		FRONT C.B		
C973	87-010-197-080		C-CAP,S 0.01-25 K B C2012				
C974	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C101	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C979	87-010-322-080		C-CAP,S 100P-50 J CH GRM	C102	87-010-322-080		C-CAP,S 100P-50 J CH GRM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C103	87-010-312-080		C-CAP,S 15P-50 J CH GRM	CN604	87-099-210-010		CONN,5P H BLK 6216
C104	87-012-157-080		C-CAP,S 330P-50 J CH GRM	CN901	87-A60-161-010		CONN,13P H FE
C105	87-010-415-040		CAP,E 10-50 M 5L SRE	CN901	88-913-521-110		FF-CABLE,13P 1.25 520MM
C106	87-010-493-040		CAP,E 0.47-50 M 5L SRE	FB801	87-008-372-080		FLTR,EMI BL01 RN1
C107	87-A10-189-040		CAP,E 220-10 M 5L	FL201	8A-NF6-601-010		FL,BJ750GNK 13G-35S ANF-6
C108	87-A10-189-040		CAP,E 220-10 M 5L	L101	87-A50-333-010		COIL,OSC 9.43MHZ
C109	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	L801	87-A50-093-010		COIL,CLOCK OSC 5.76MHZ
C110	87-010-178-080		C-CAP,S 1000P-50 K B C2012	LED401	87-017-756-040		LED,SLR-342DCT31 ORN
C112	87-012-368-080		C-CAP,S 0.1-50 Z F	LED402	87-017-756-040		LED,SLR-342DCT31 ORN
C113	87-A10-354-080		C-CAP,S 0.047-50 K B	LED403	87-017-756-040		LED,SLR-342DCT31 ORN
C114	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED404	87-017-756-040		LED,SLR-342DCT31 ORN
C115	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED405	87-017-756-040		LED,SLR-342DCT31 ORN
C116	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED406	87-A40-496-040		LED,SLR-342PCT31 GRN
C118	87-012-145-080		C-CAP,S 270P-50 J CH GRM	LED407	87-A40-496-040		LED,SLR-342PCT31 GRN
C180	87-010-178-080		C-CAP,S 1000P-50 K B C2012	LED408	87-A40-496-040		LED,SLR-342PCT31 GRN
C181	87-010-178-080		C-CAP,S 1000P-50 K B C2012	LED409	87-A40-496-040		LED,SLR-342PCT31 GRN
C202	87-012-156-080		C-CAP,S 220P-50 J CH GRM	LED410	87-A40-496-040		LED,SLR-342PCT31 GRN
C203	87-010-322-080		C-CAP,S 100P-50 J CH GRM	LED416	87-A40-809-080		LED,LTL-307KK PGRN
C204	87-012-157-080		C-CAP,S 330P-50 J CH GRM	LED417	87-A40-809-080		LED,LTL-307KK PGRN
C205	87-012-156-080		C-CAP,S 220P-50 J CH GRM	LED418	87-A40-809-080		LED,LTL-307KK PGRN
C214	87-010-322-080		C-CAP,S 100P-50 J CH GRM	LED419	87-A40-809-080		LED,LTL-307KK PGRN
C215	87-010-322-080		C-CAP,S 100P-50 J CH GRM	LED420	87-A40-809-080		LED,LTL-307KK PGRN
C216	87-010-986-080		C-CAP,S 820P-50 J CH	LED421	87-A40-809-080		LED,LTL-307KK PGRN
C221	87-010-421-040		CAP,E 4.7-50 M 5L SRE	LED425	87-A40-496-040		LED,SLR-342PCT31 GRN
C222	87-010-421-040		CAP,E 4.7-50 M 5L SRE	LED426	87-A40-496-040		LED,SLR-342PCT31 GRN
C223	87-010-408-040		CAP,E 47-50 M 11L SME	LED431	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
C224	87-012-369-080		C-CAP,S 0.047-50 Z F	LED432	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
C312	87-010-498-040		CAP,E 10-16 M 5L SRE	LED433	87-A40-678-010		LED,SELU1E10CXM BLUE-DEF
C314	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED440	87-A91-665-010		LED,SELU1E10 CXM-SLF55 BLUE
C315	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED441	87-A91-665-010		LED,SELU1E10 CXM-SLF55 BLUE
C316	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	LED499	87-A40-317-080		LED,SLR-342VCT31 RED
C321	87-012-393-080		C-CAP,S 0.22-16 K W5R CM/CB	S101	87-A91-591-010		SW,RTRY RE0121PVB25FINA24
C382	87-010-320-080		C-CAP,S 68P-50 J CH GRM	S102	87-A91-664-010		SW,RTRY RE0121PVB30F
C383	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S301	87-A91-024-180		SW,TACT KSHG611BT
C384	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S302	87-A91-024-180		SW,TACT KSHG611BT
C385	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S303	87-A91-024-180		SW,TACT KSHG611BT
C386	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S304	87-A91-024-180		SW,TACT KSHG611BT
C387	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S305	87-A91-024-180		SW,TACT KSHG611BT
C392	87-010-320-080		C-CAP,S 68P-50 J CH GRM	S306	87-A91-024-180		SW,TACT KSHG611BT
C402	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S307	87-A91-024-180		SW,TACT KSHG611BT
C403	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S308	87-A91-024-180		SW,TACT KSHG611BT
C404	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S309	87-A91-024-180		SW,TACT KSHG611BT
C405	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S310	87-A91-024-180		SW,TACT KSHG611BT
C406	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S311	87-A91-024-180		SW,TACT KSHG611BT
C407	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S312	87-A91-024-180		SW,TACT KSHG611BT
C408	87-010-322-080		C-CAP,S 100P-50 J CH GRM	S313	87-A91-024-180		SW,TACT KSHG611BT
C461	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S314	87-A91-024-180		SW,TACT KSHG611BT
C462	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S321	87-A91-024-180		SW,TACT KSHG611BT
C463	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S322	87-A91-024-180		SW,TACT KSHG611BT
C464	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S323	87-A91-024-180		SW,TACT KSHG611BT
C465	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S324	87-A91-024-180		SW,TACT KSHG611BT
C652	87-010-183-080		C-CAP,S 2700P-50 K B GRM	S325	87-A91-024-180		SW,TACT KSHG611BT
C653	87-010-213-080		C-CAP,S 0.015-25 K B GRM	S326	87-A91-024-180		SW,TACT KSHG611BT
C701	87-010-406-040		CAP,E 22-50 M 11L SME	S327	87-A91-024-180		SW,TACT KSHG611BT
C802	87-012-154-080		C-CAP,S 150P-50 J CH GRM	S328	87-A91-024-180		SW,TACT KSHG611BT
C804	87-010-187-080		C-CAP,S 5600P-50 K B	S329	87-A91-024-180		SW,TACT KSHG611BT
C805	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S330	87-A91-024-180		SW,TACT KSHG611BT
C806	87-010-401-040		CAP,E 1-50 M 11L SME	S331	87-A91-024-180		SW,TACT KSHG611BT
C807	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S332	87-A91-024-180		SW,TACT KSHG611BT
C808	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	S333	87-A91-024-180		SW,TACT KSHG611BT
C809	87-012-155-080		C-CAP,S 180P-50 J CH GRM	S334	87-A91-024-180		SW,TACT KSHG611BT
C810	87-010-263-040		CAP,E 100-10 M 11L SME	S341	87-A91-024-180		SW,TACT KSHG611BT
C811	87-010-545-040		CAP,E 0.22-50 M 11L SME	S342	87-A91-024-180		SW,TACT KSHG611BT
C812	87-010-405-040		CAP,E 10-50 M 11L SME	S343	87-A91-024-180		SW,TACT KSHG611BT
C821	87-018-209-080		CAP,TC U 0.1-50 Z F UP050	S344	87-A91-024-180		SW,TACT KSHG611BT
CN101	87-099-720-010		CONN,30P BLK TYK-B(P)	S345	87-A91-024-180		SW,TACT KSHG611BT
CN104	87-099-017-010		CONN,15P V BLK 6216	S346	87-A91-024-180		SW,TACT KSHG611BT
CN104	88-915-111-110		FF-CABLE,15P 1.25	S347	87-A91-024-180		SW,TACT KSHG611BT
CN301	87-099-195-010		CONN,7P V BLK 6216				
CN301	88-907-421-110		FF-CABLE,7P 1.25 420MM				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CD KEY C.B				C253	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
CN302	87-099-195-010		CONN,7P V BLK 6216	C254	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
LED451	87-017-756-040		LED,SLR-342DCT31 ORN	C401	87-010-260-080		CAP,E 47-25 M 11L SME
LED452	87-017-756-040		LED,SLR-342DCT31 ORN	CN101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
LED453	87-017-756-040		LED,SLR-342DCT31 ORN	CN102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
LED454	87-A40-496-040		LED,SLR-342PCT31 GRN				
				CN103	87-099-194-010		CONN,6P V BLK 6216
LED455	87-A40-496-040		LED,SLR-342PCT31 GRN	CN103	88-906-151-110		FF-CABLE, 6P 1.25
LED456	87-A40-496-040		LED,SLR-342PCT31 GRN	CNA101	8A-NF6-645-010		CONN ASSY,5P TID-A(530)
S349	87-A91-024-180		SW,TACT KSHG611BT	CNA103	8A-NF8-655-010		CONN ASSY,7P TID-A(250)
S350	87-A91-024-180		SW,TACT KSHG611BT	J201	87-A61-160-010		JACK,PIN 4P R/W/B/B KM
S351	87-A91-024-180		SW,TACT KSHG611BT				
				L251	87-003-383-010		COIL,1UH K
S352	87-A91-024-180		SW,TACT KSHG611BT	L252	87-003-383-010		COIL,1UH K
S353	87-A91-024-180		SW,TACT KSHG611BT	R129	87-A00-764-010		RES,M/F 0.22-3W J
S354	87-A91-024-180		SW,TACT KSHG611BT	R130	87-A00-764-010		RES,M/F 0.22-3W J
S355	87-A91-024-180		SW,TACT KSHG611BT	R181	87-A00-764-010		RES,M/F 0.22-3W J
				R182	87-A00-764-010		RES,M/F 0.22-3W J
MIC C.B				R231	87-A00-258-080		RES,M/F 0.22-1W J
C601	87-010-186-080		C-CAP,S 4700P-50 K B C2012	R232	87-A00-258-080		RES,M/F 0.22-1W J
C602	87-010-405-040		CAP,E 10-50 M 11L SME	WH101	87-A90-459-010		HLDR,WIRE 2.5-5P
C603	87-010-320-080		C-CAP,S 68P-50 J CH GRM	WH102	87-A90-460-010		HLDR,WIRE 2.5-7P
C604	87-010-546-040		CAP,E 0.33-50 M 11L SME				
C605	87-012-368-080		C-CAP,S 0.1-50 Z F	AMP PROLOGIC C.B			
C606	87-010-112-040		CAP,E 100-16 M 11L SME	C160	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C607	87-010-196-080		C-CAP,S 0.1-25 Z F C2012	C161	87-010-188-080		C-CAP,S 6800P-50 K B C2012
C608	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C201	87-010-181-080		C-CAP,S 1800P-50 K B GRM
C621	87-010-178-080		C-CAP,S 1000P-50 K B C2012	C202	87-010-401-080		CAP,E 1-50 M 11L SME
CN603	87-099-212-010		CONN,5P V BLK 6216	C203	87-010-322-080		C-CAP,S 100P-50 J CH GRM
CN603	88-905-281-110		FF-CABLE, 5P 1.25 280MM	C204	87-010-405-080		CAP,E 10-50 M 11L SME
FB01	87-008-372-080		FLTR,EMI BL01 RN1	C205	87-010-260-080		CAP,E 47-25 M 11L SME
J601	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KM	C206	87-A10-946-080		C-CAP,S 220P-100 J CH
J602	87-A61-242-010		JACK,6.3 BLK MONO W/SW V KMVM C.B	C208	87-010-197-080		C-CAP,S 0.01-25 K B C2012
				C209	87-010-260-080		CAP,E 47-25 M 11L SME
VM C.B				C210	87-010-260-080		CAP,E 47-25 M 11L SME
				C211	87-010-178-080		C-CAP,S 1000P-50 K B C2012
				C212	87-010-178-080		C-CAP,S 1000P-50 K B C2012
				C251	87-012-368-080		C-CAP,S 0.1-50 Z F
				C252	87-012-368-080		C-CAP,S 0.1-50 Z F
AMP 1F C.B							
C101	87-010-179-080		C-CAP,S 1200P-50 K B GRM	C253	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
C102	87-010-179-080		C-CAP,S 1200P-50 K B GRM	CN101	87-A61-109-010		CONN,7P V TID-A
C103	87-010-401-080		CAP,E 1-50 M 11L SME	CN104	87-099-194-010		CONN,6P V BLK 6216
C104	87-010-401-080		CAP,E 1-50 M 11L SME	J102	87-A60-573-010		JACK,PIN 1P ORN
C107	87-010-404-080		CAP,E 4.7-50 M 11L SME	L251	87-003-383-010		COIL,1UH K
C108	87-010-404-080		CAP,E 4.7-50 M 11L SME	R218	87-A00-258-080		RES,M/F 0.22-1W J
C111	87-010-179-080		C-CAP,S 1200P-50 K B GRM	TH201	87-A91-042-080		C-THMS,100K 55001
C112	87-010-179-080		C-CAP,S 1200P-50 K B GRM				
C113	87-010-405-080		CAP,E 10-50 M 11L SME				
C114	87-010-405-080		CAP,E 10-50 M 11L SME	PT C.B			
C115	87-016-299-080		CAP,E 10-100 M SME	C001	87-010-387-080		CAP,E 470-25 M SME
C116	87-016-299-080		CAP,E 10-100 M SME	C004	87-A11-148-080		CAP,TC U 0.1-50 Z F
C119	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C005	87-A11-148-080		CAP,TC U 0.1-50 Z F
C120	87-010-197-080		C-CAP,S 0.01-25 K B C2012	C006	87-010-917-000		CAP,E 3300-50 M SMG
C133	87-010-190-080		C-CAP,S 0.01-50 Z F C2012	C007	87-010-917-000		CAP,E 3300-50 M SMG
C153	87-010-188-080		C-CAP,S 6800P-50 K B C2012	C008	87-A11-148-080		CAP,TC U 0.1-50 Z F
C205	87-010-181-080		C-CAP,S 1800P-50 K B GRM	C009	87-A11-148-080		CAP,TC U 0.1-50 Z F
C206	87-010-181-080		C-CAP,S 1800P-50 K B GRM	C010	87-A11-148-080		CAP,TC U 0.1-50 Z F
C207	87-010-400-080		CAP,E 0.47-50 M 11L SME	C011	87-A11-148-080		CAP,TC U 0.1-50 Z F
C208	87-010-400-080		CAP,E 0.47-50 M 11L SME	C012	87-016-657-090		CAP,E 3300-71 M SMG
C211	87-010-405-080		CAP,E 10-50 M 11L SME	C013	87-016-657-090		CAP,E 3300-71 M SMG
C212	87-010-405-080		CAP,E 10-50 M 11L SME	C014	87-A11-148-080		CAP,TC U 0.1-50 Z F
C215	87-010-179-080		C-CAP,S 1200P-50 K B GRM	C015	87-A11-148-080		CAP,TC U 0.1-50 Z F
C216	87-010-179-080		C-CAP,S 1200P-50 K B GRM	C016	87-010-403-080		CAP,E 3.3-50 M 11L SME
C217	87-010-405-080		CAP,E 10-50 M 11L SME	CN001	87-A61-110-010		CONN,9P V TID-A
C218	87-010-405-080		CAP,E 10-50 M 11L SME	CN002	87-A61-108-010		CONN,5P V TID-A
C221	87-010-405-080		CAP,E 10-50 M 11L SME	△ PT002	8A-NF8-663-010		PT,SUB ANF-8 (H)
C222	87-010-405-080		CAP,E 10-50 M 11L SME	△ PT101	8A-NHT-623-010		PT,H EI96-75 ANH-T
C223	87-010-197-080		C-CAP,S 0.01-25 K B C2012	△ RY001	87-A91-281-010		RELAY,AC DC12V OSA-SS-212DM5
C224	87-010-197-080		C-CAP,S 0.01-25 K B C2012	△ S001	87-A90-165-010		SW,SL 1-2-3 SWS2301
C251	87-012-368-080		C-CAP,S 0.1-50 Z F	△ T001	87-A60-317-010		TERMINAL, 1P MSC
C252	87-012-368-080		C-CAP,S 0.1-50 Z F	△ T002	87-A60-317-010		TERMINAL, 1P MSC

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
DECK C.B			
CON501	87-099-756-010		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-410		SOL ASSY,27
SOL2	82-ZM1-618-410		SOL ASSY,27
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75

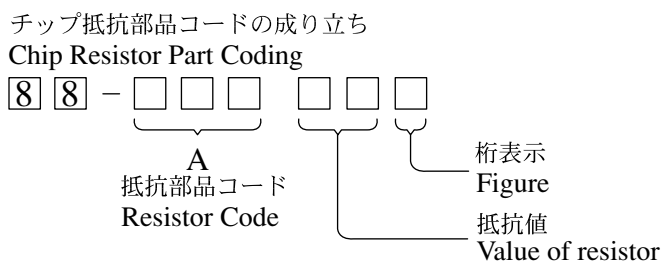
HEAD-1 C.B

HEAD-2 C.B

KEY CON C.B

C551	87-A10-060-080		C-CAP,S 0.18-16 K B
C552	87-A10-060-080		C-CAP,S 0.18-16 K B
C553	87-012-154-080		C-CAP,S 150P-50 J CH GRM
C554	87-012-154-080		C-CAP,S 150P-50 J CH GRM
C555	87-012-145-080		C-CAP,S 270P-50 J CH GRM
C556	87-012-145-080		C-CAP,S 270P-50 J CH GRM
C557	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C559	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C560	87-010-177-080		C-CAP,S 820P-50 J SL C2012
C561	87-010-177-080		C-CAP,S 820P-50 J SL C2012
C562	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C563	87-010-374-080		CAP,E 47-10 M 11L SME
C564	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C565	87-010-263-080		CAP,E 100-10 M 11L SME
C567	87-010-183-080		C-CAP,S 2700P-50 K B GRM
C571	87-016-460-080		C-CAP,S 0.22-16 K B
C572	87-016-460-080		C-CAP,S 0.22-16 K B
C573	87-016-460-080		C-CAP,S 0.22-16 K B
C577	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C1000	87-A11-155-080		CAP,TC U 0.01-16 Z F
CN551	87-A60-689-010		CONN,7P H GRY TUC-P07X-C1

○チップ抵抗部品コード／CHIP RESISTOR PART CODE



チップ抵抗
Chip resistor

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

TRANSISTOR ILLUSTRATION



E C B

KTA1266GR
KTC3198GR
CD1585BC
CSA952K
KTC3199GR



E C B

CC5551



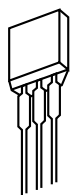
E C B

CSC4115BC



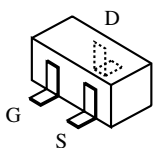
B C E

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2SB1342
2SD1933

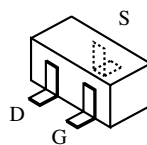


E C B

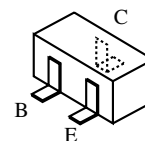
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2SK2158
2SJ461-T1



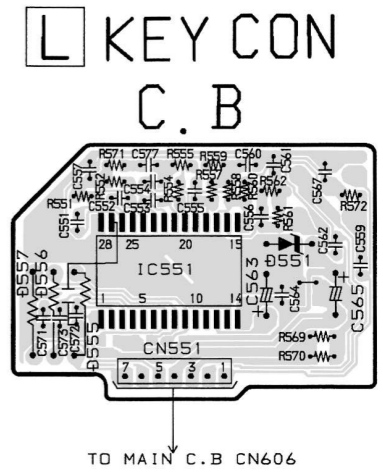
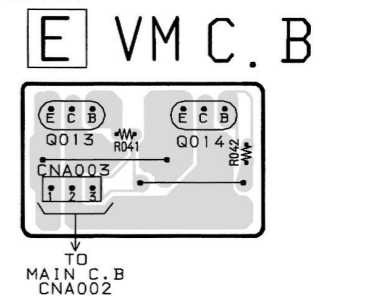
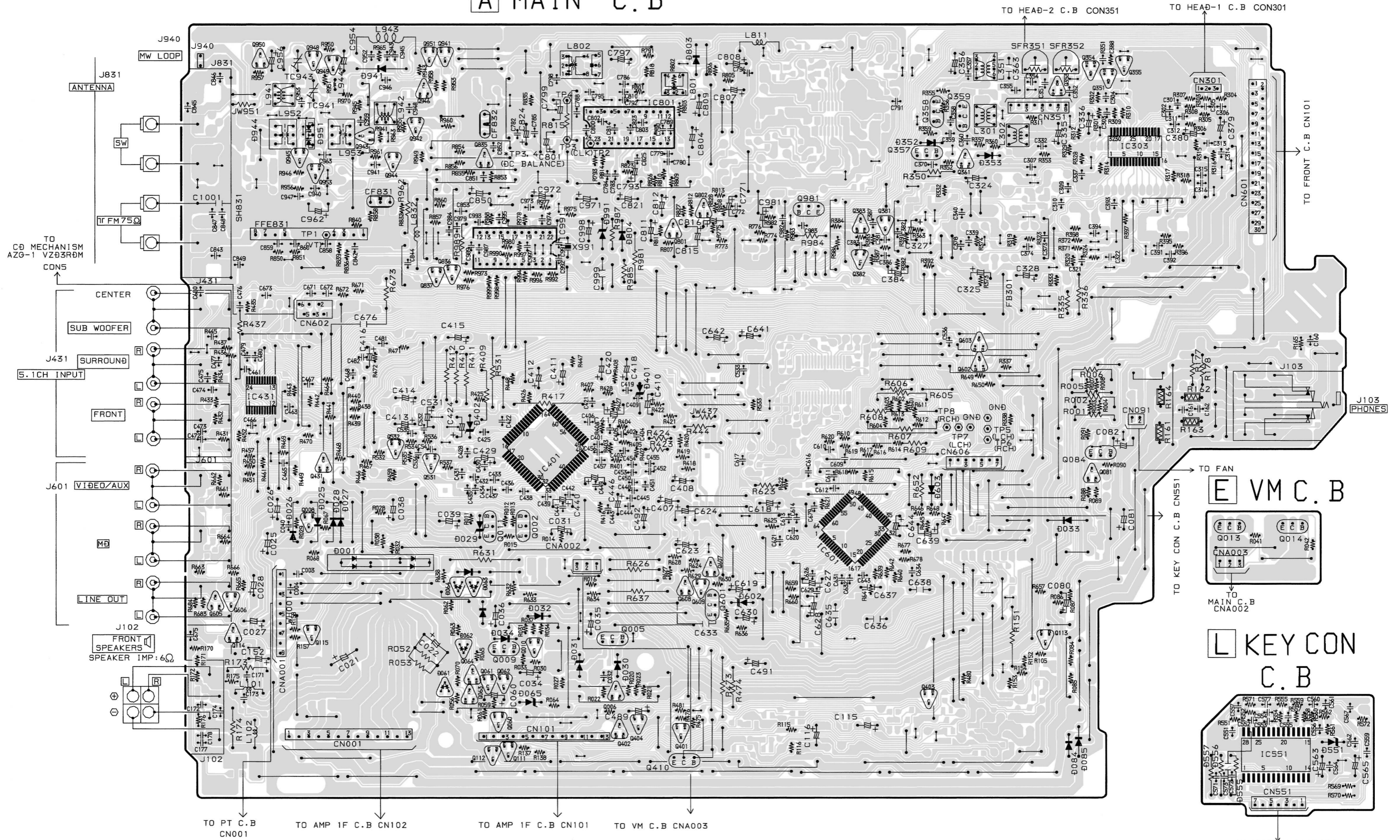
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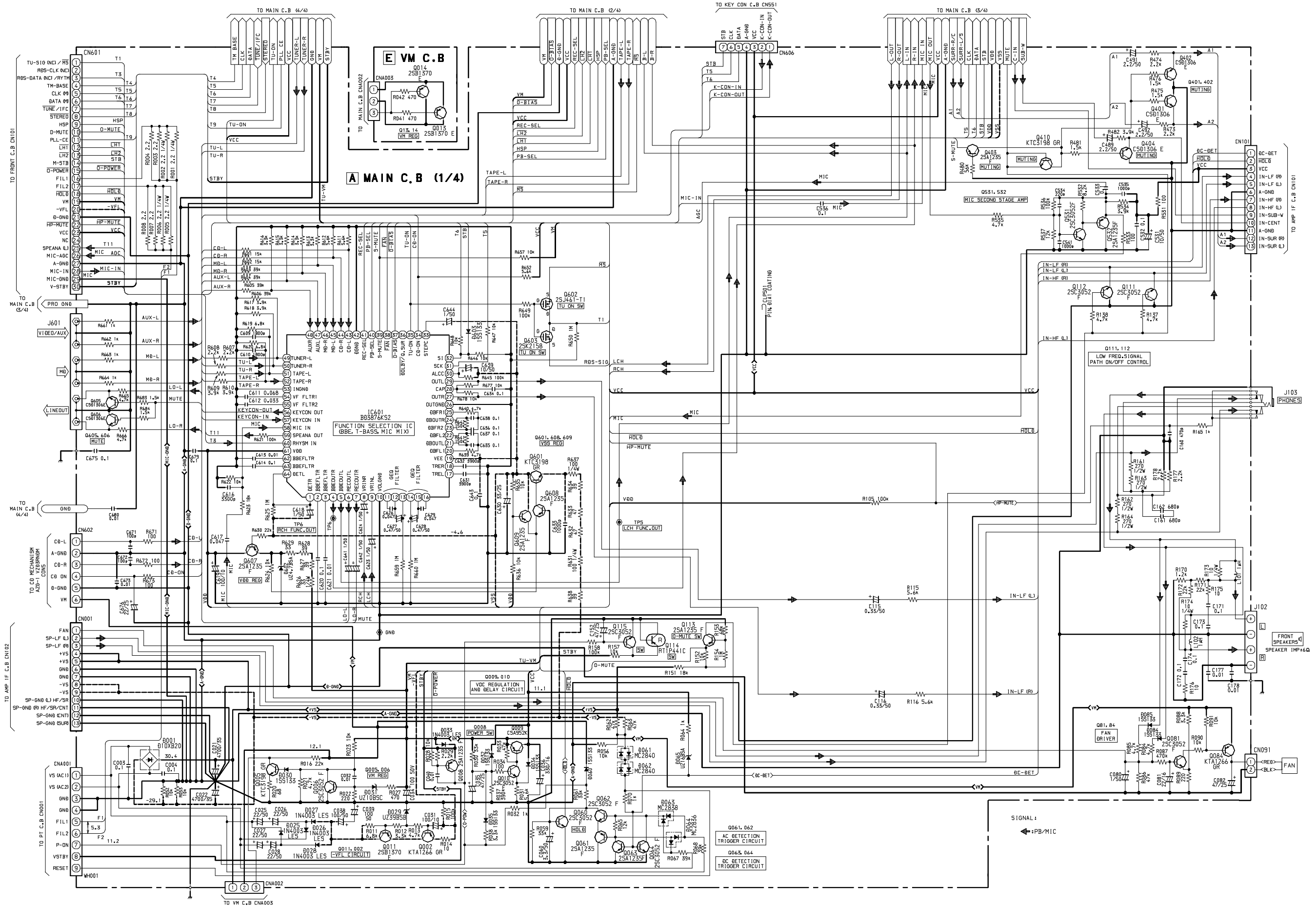
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2SC2714O
2SC3052F
CMBT5551
CMBT5401
RT1P441C

RT1P141C
CSD1306E
KRA104S
KRC102S-RTK
KRA107S
KRA102S

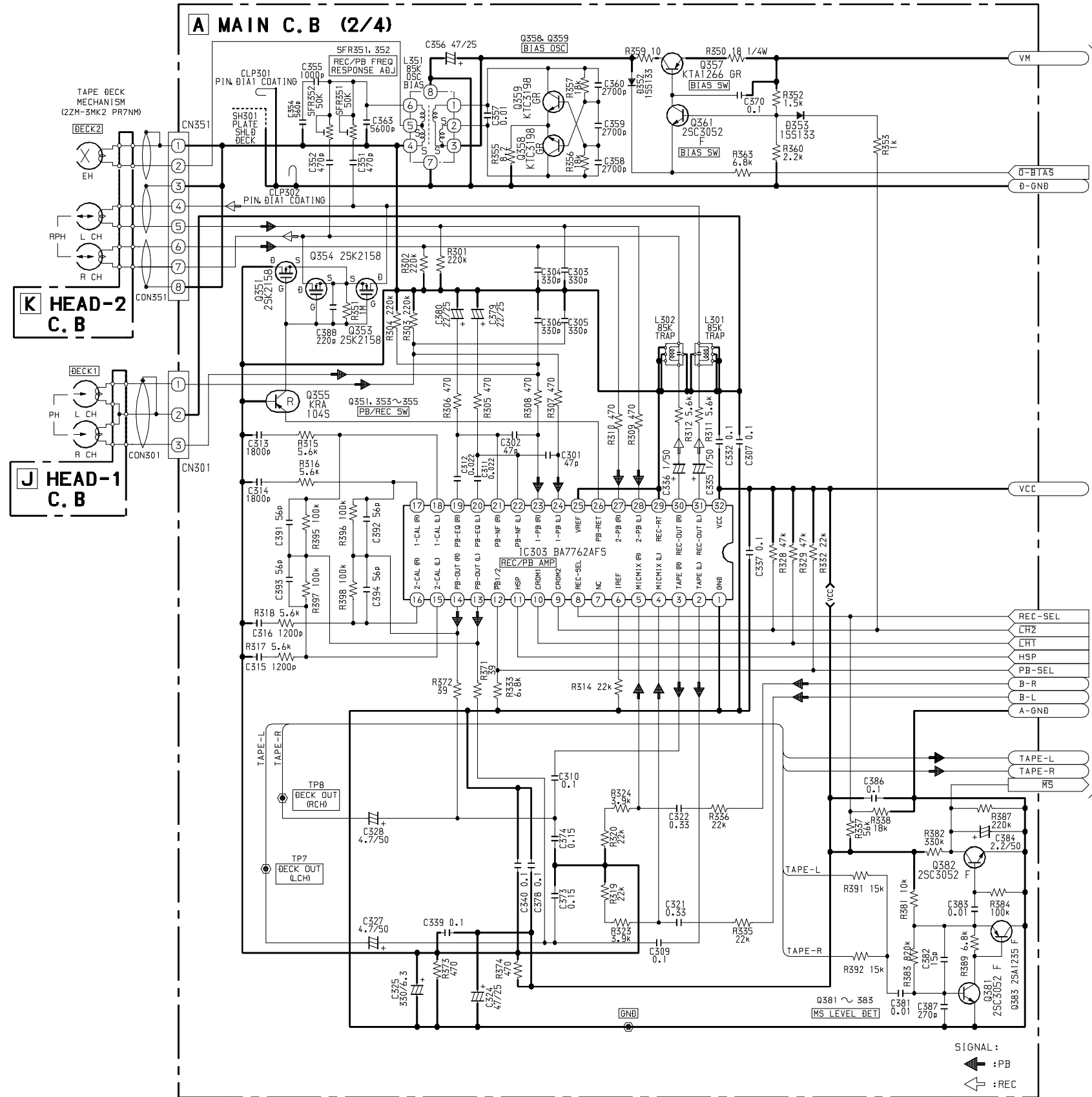
A MAIN C.B



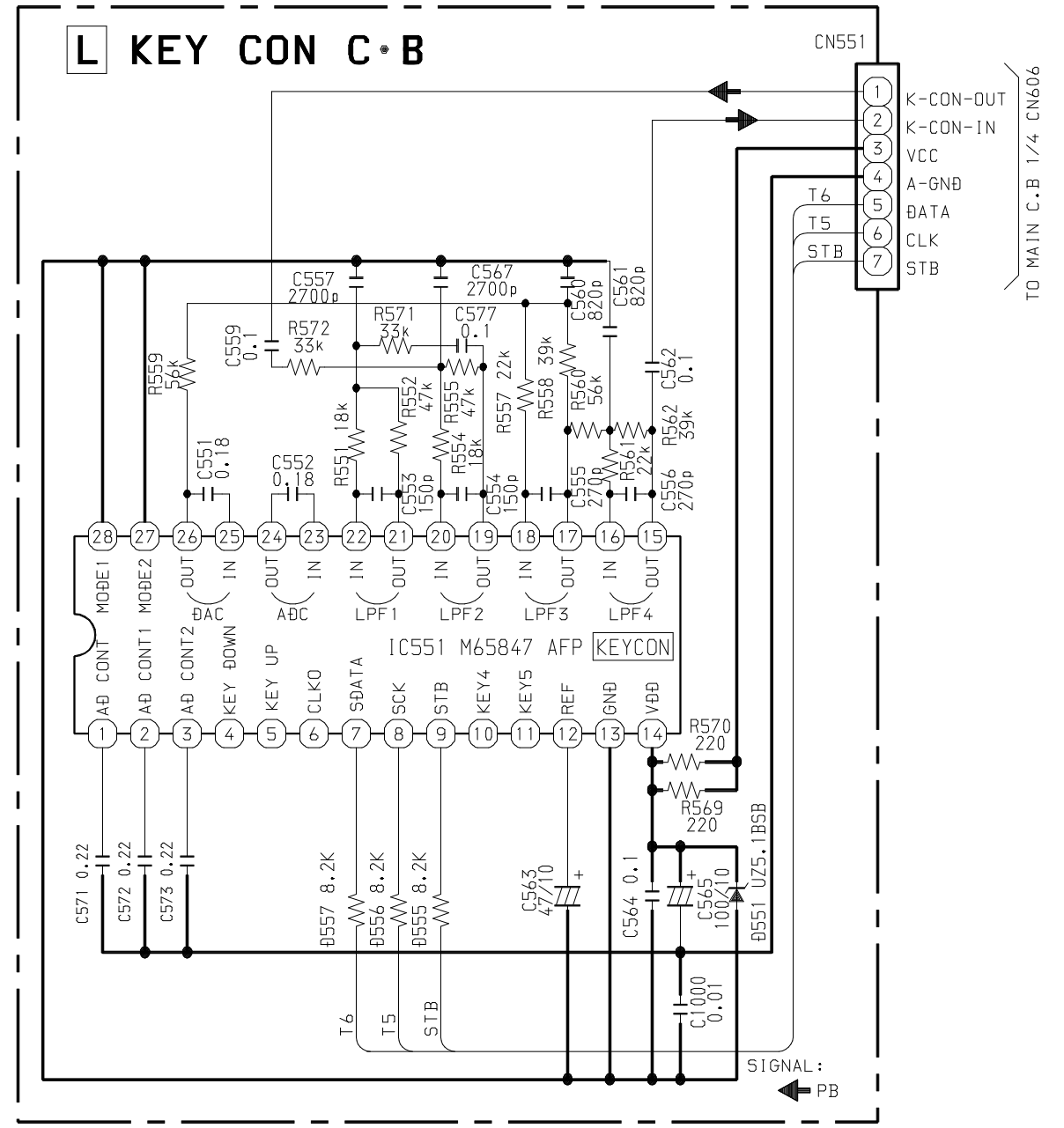
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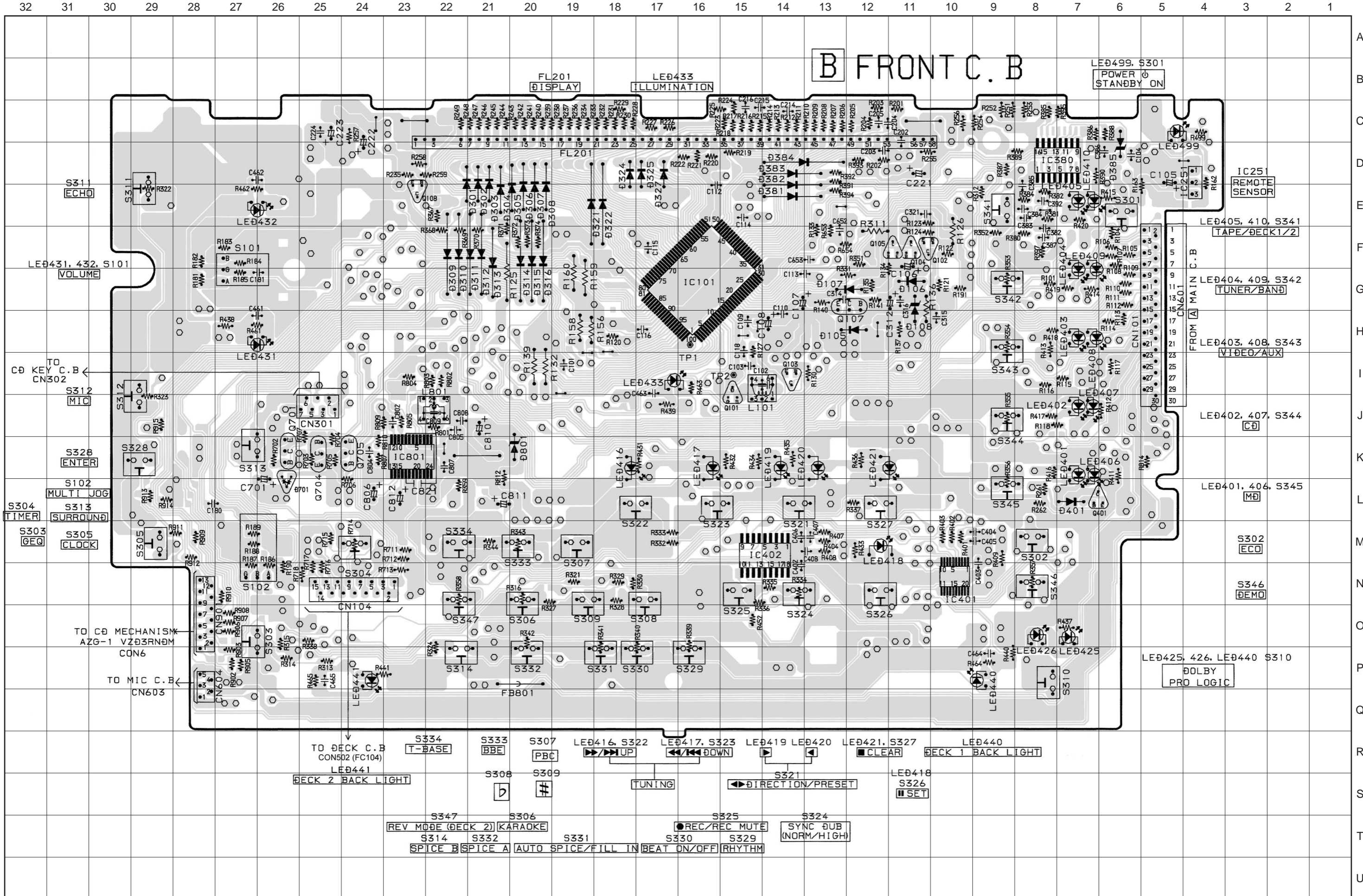
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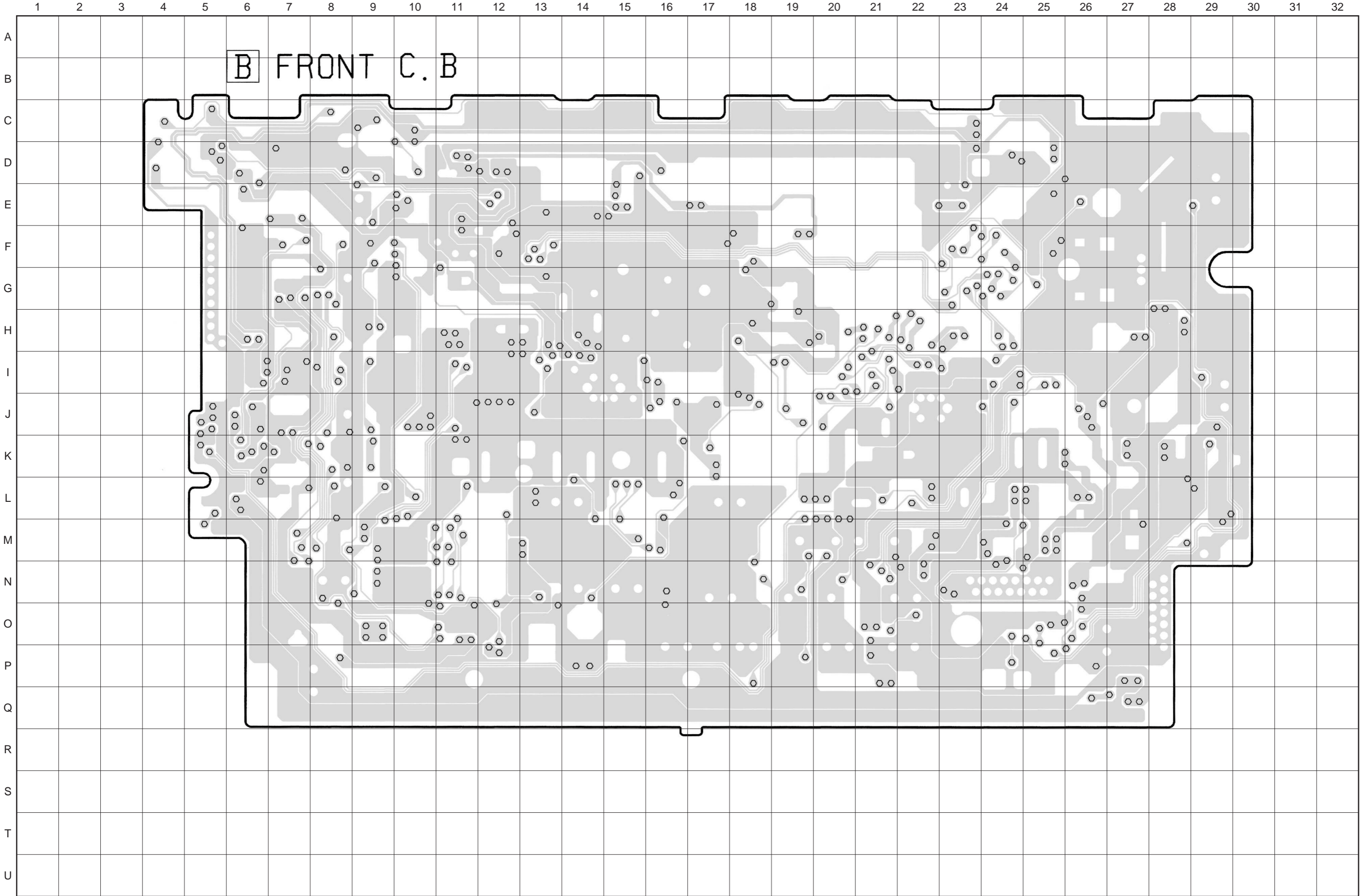


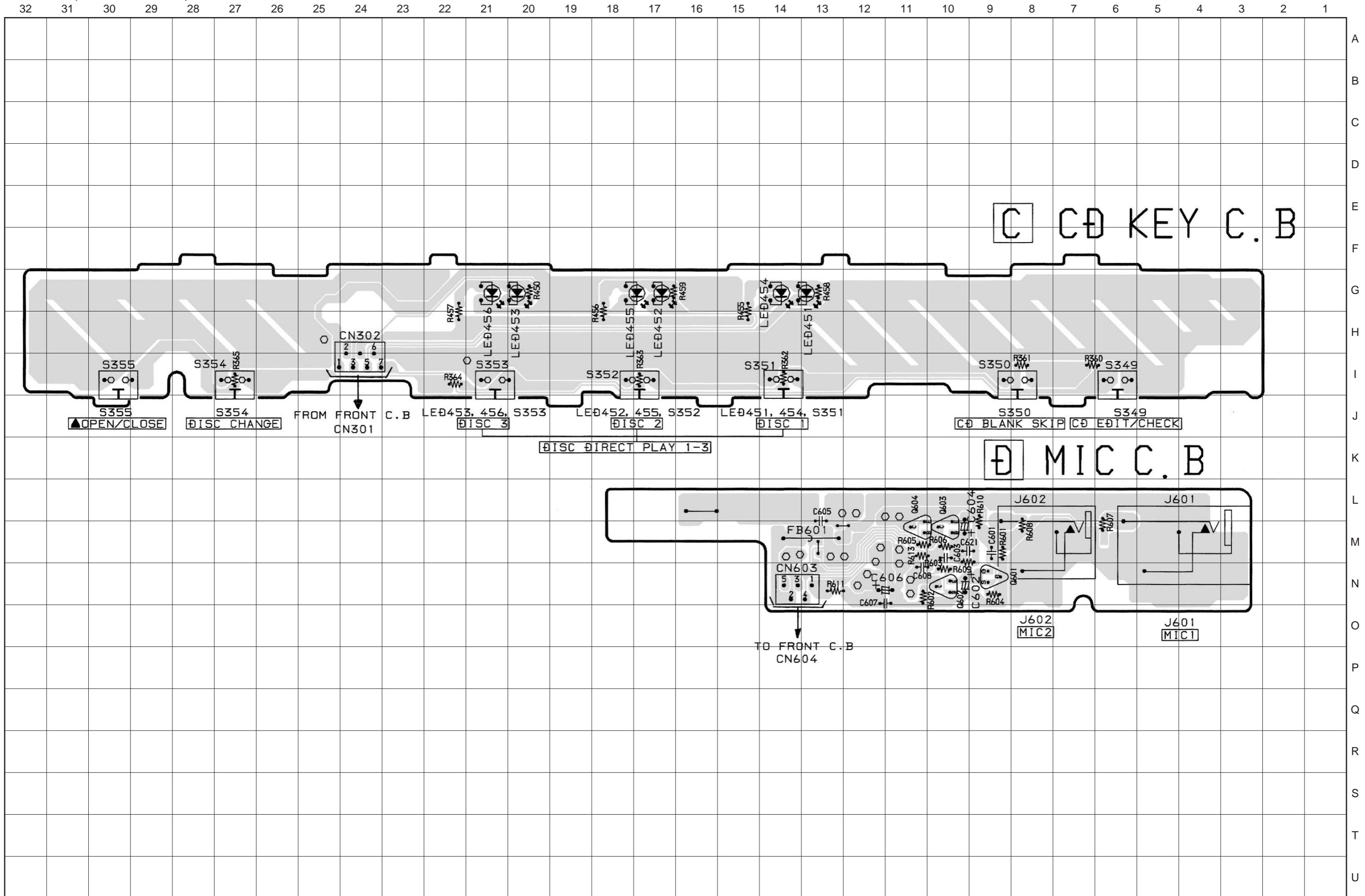
TO MAIN C.B (1/4)



TO MAIN C.B 1/4 CN606

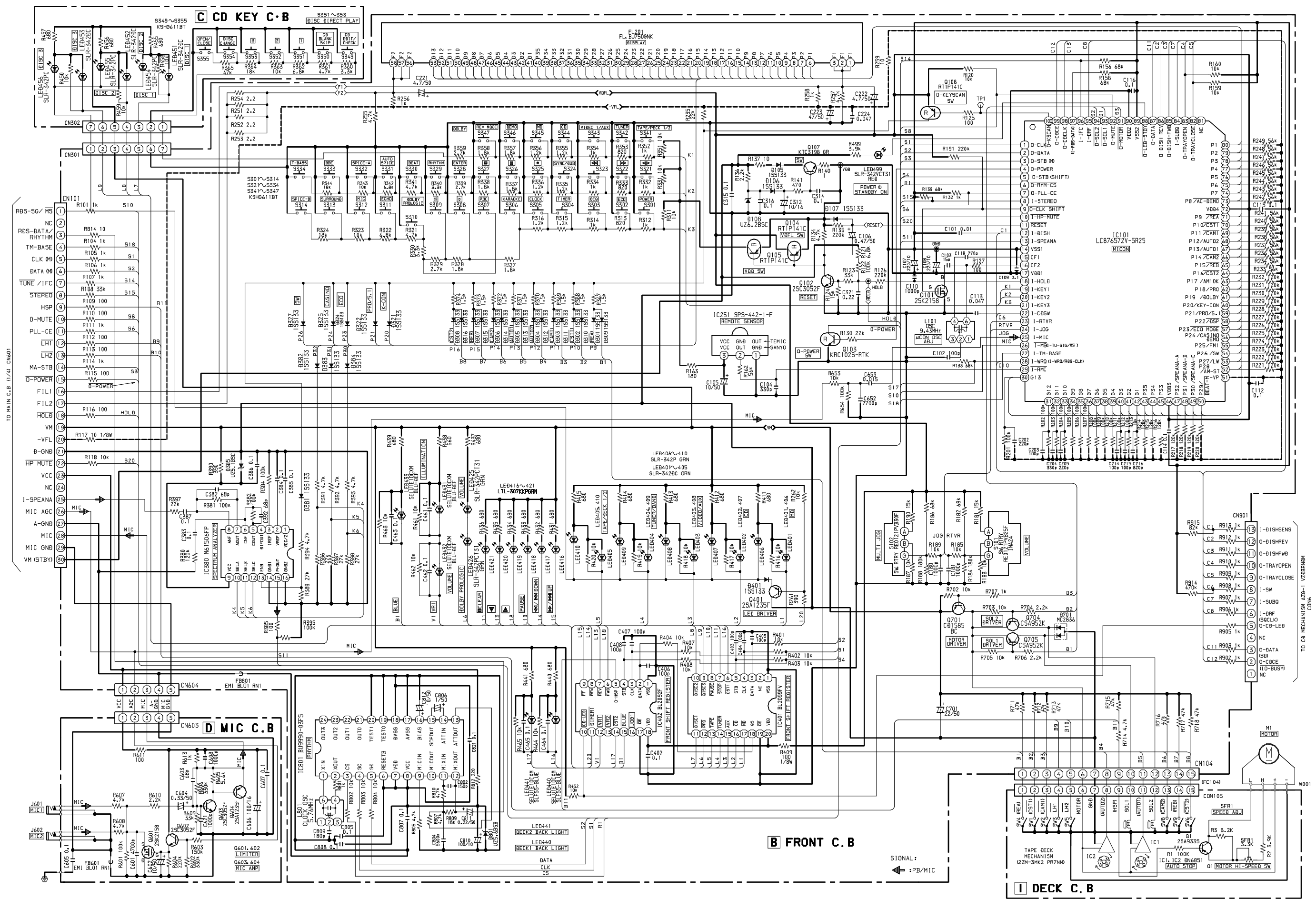






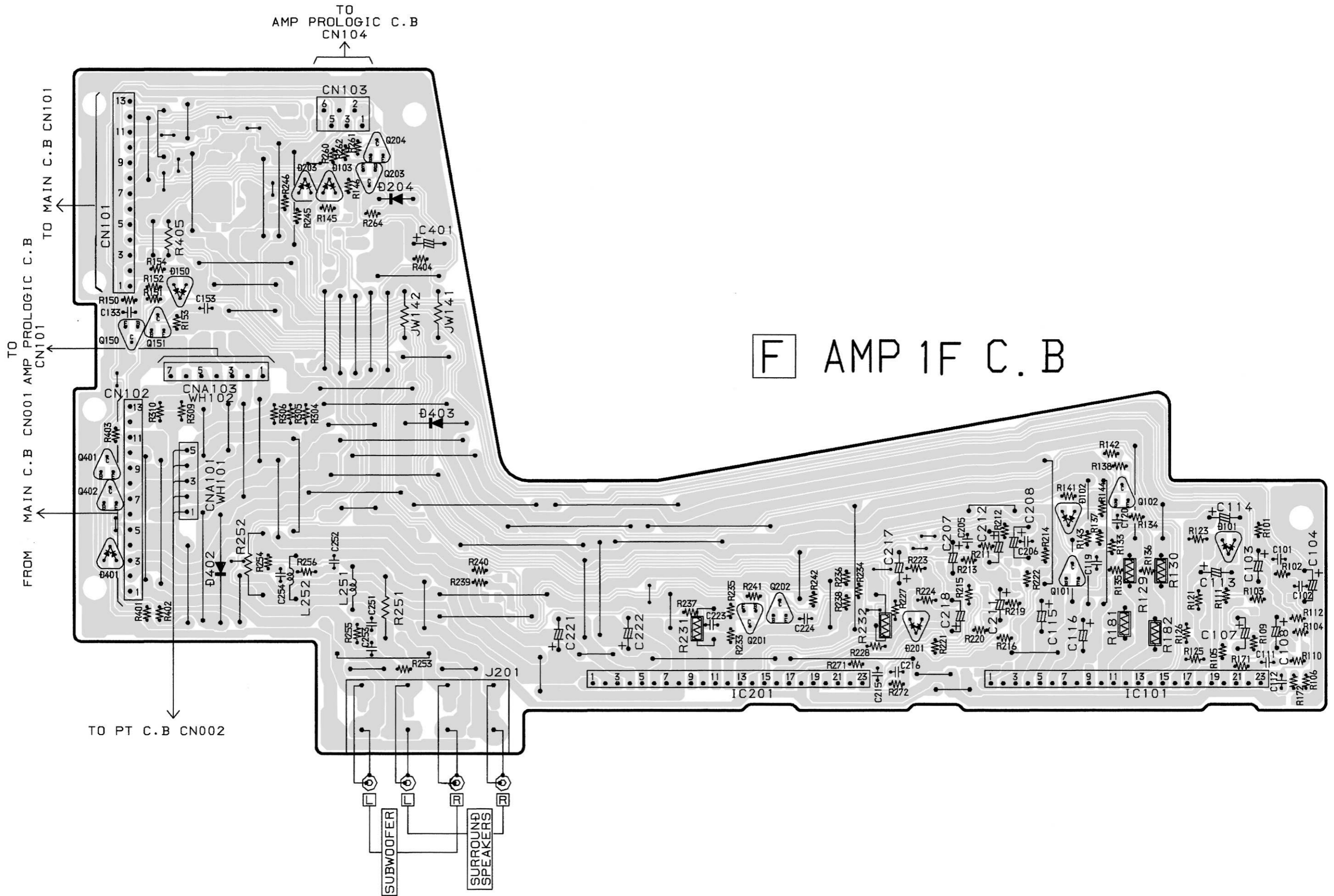
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SCHEMATIC DIAGRAM - 5 (FRONT / CD KEY / MIC / DECK)



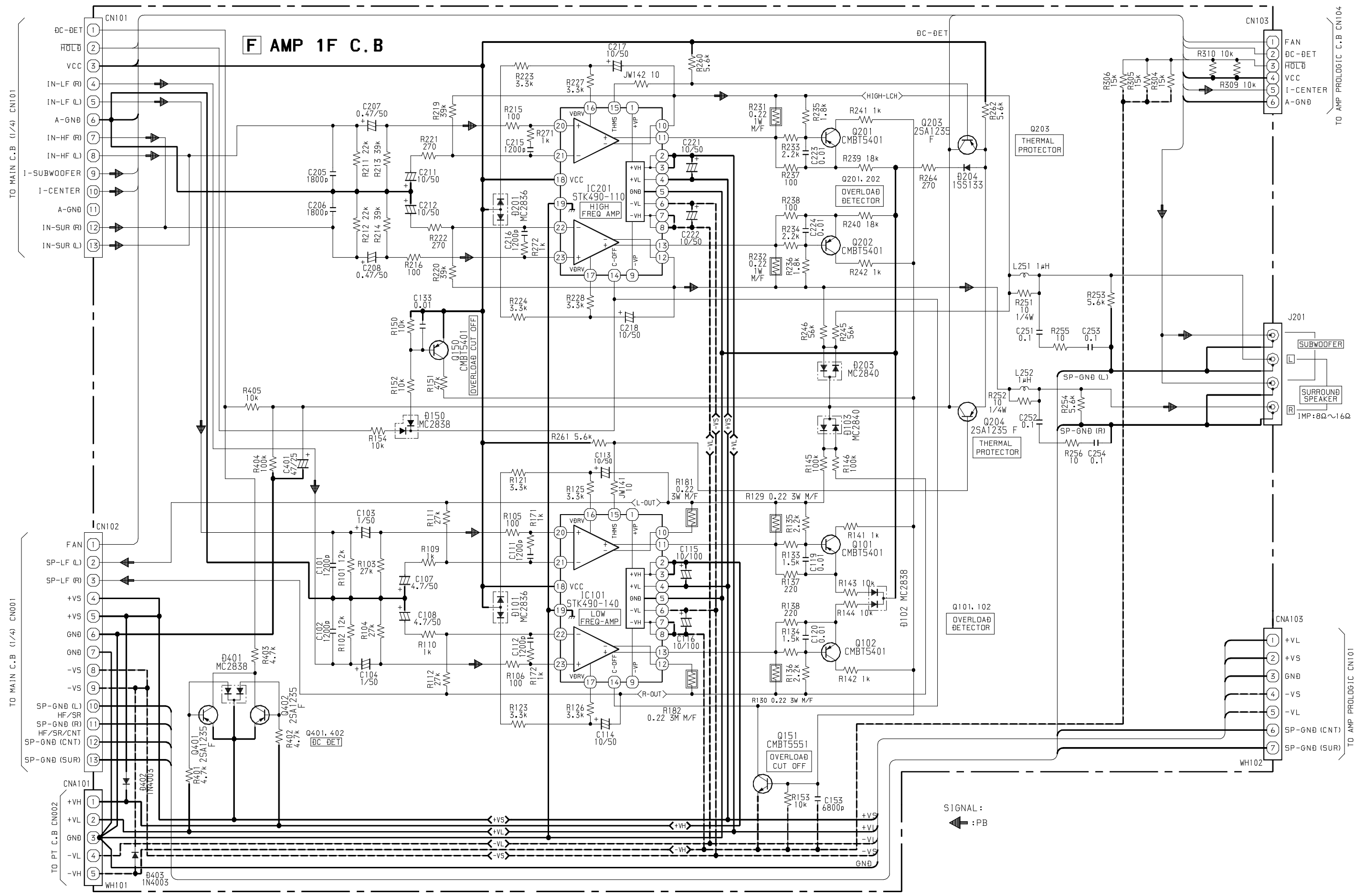
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F AMP 1F C.B

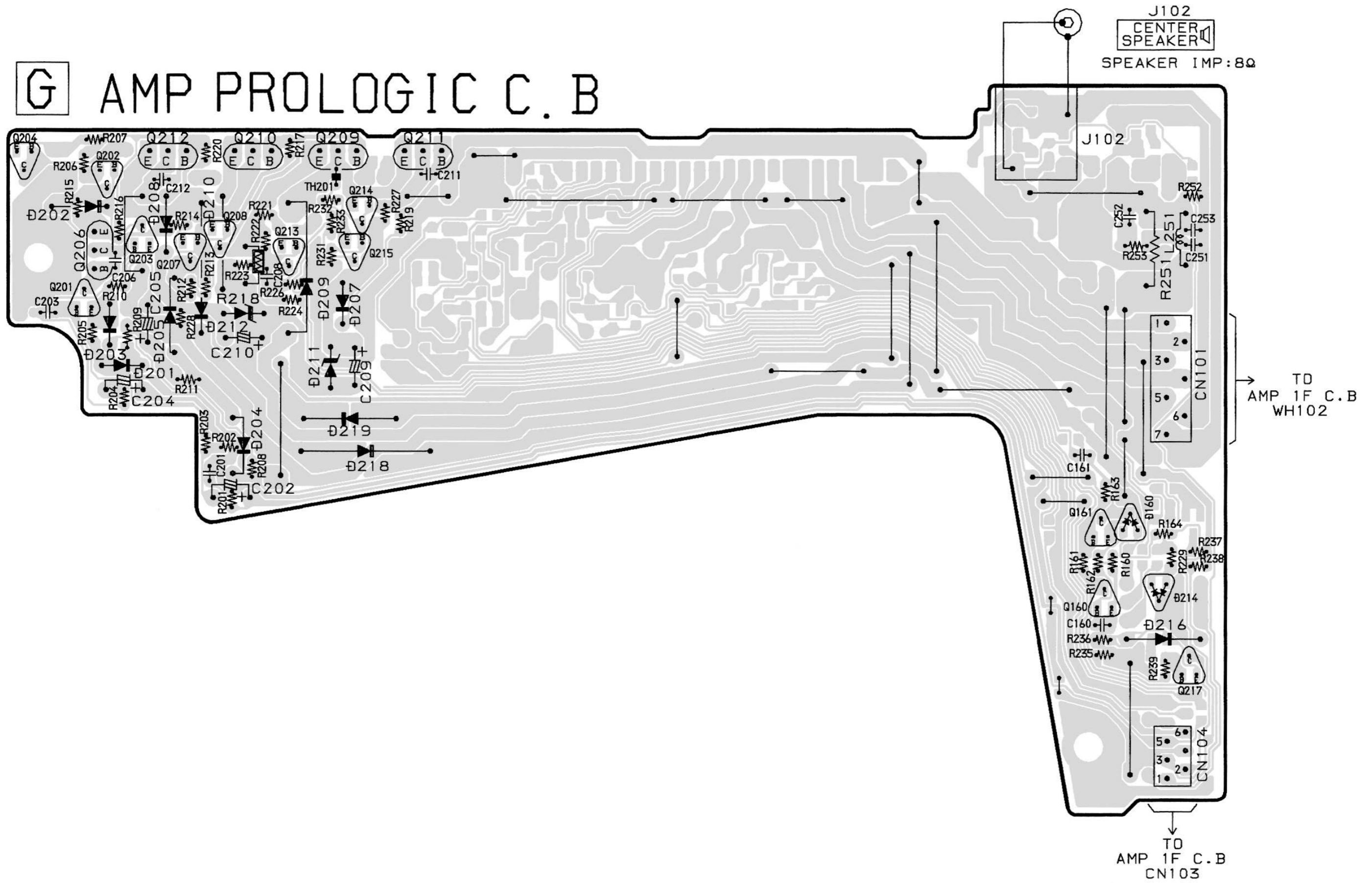
SCHEMATIC DIAGRAM – 6 (AMP 1F)

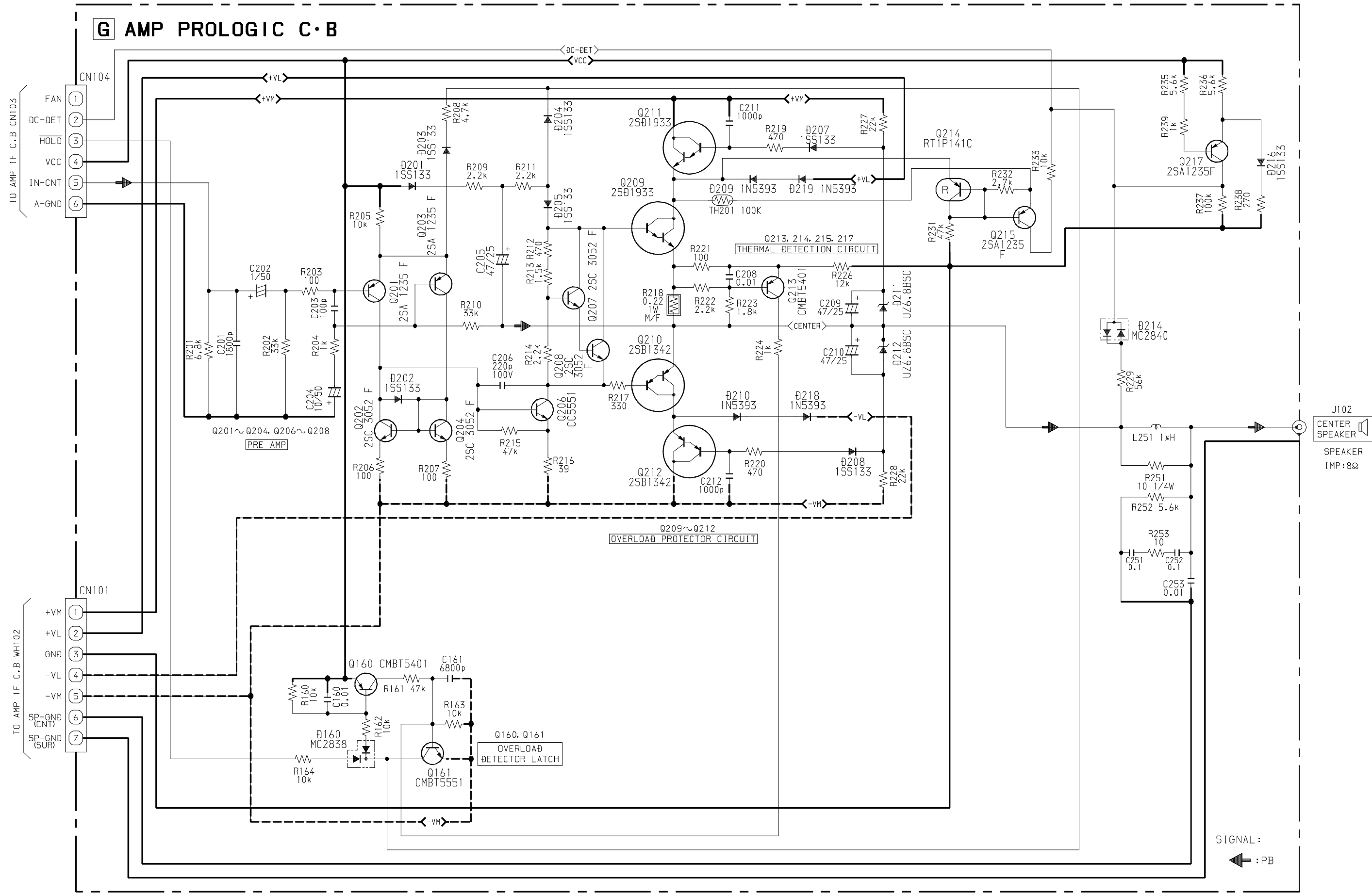


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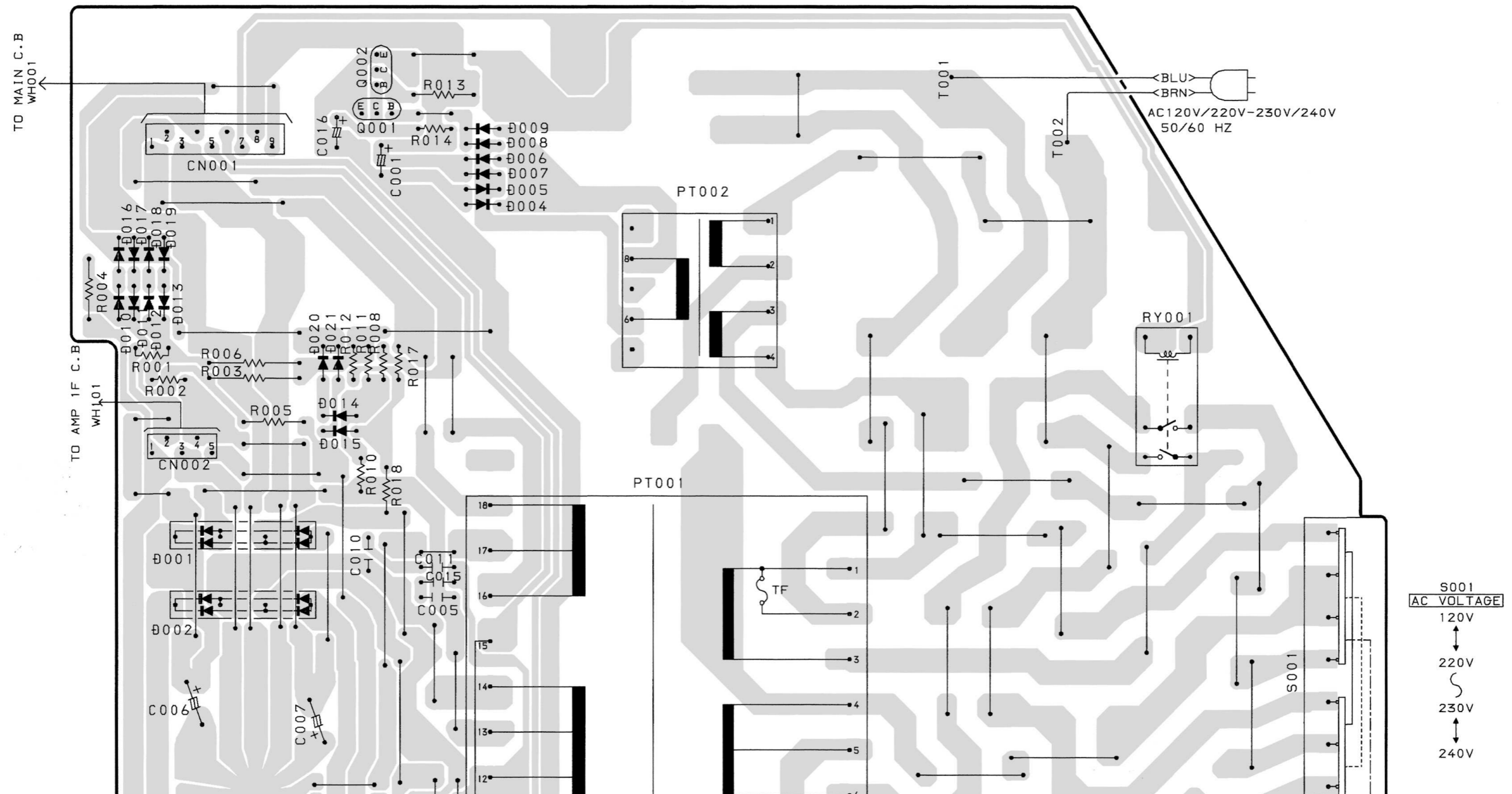
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G AMP PROLOGIC C.B



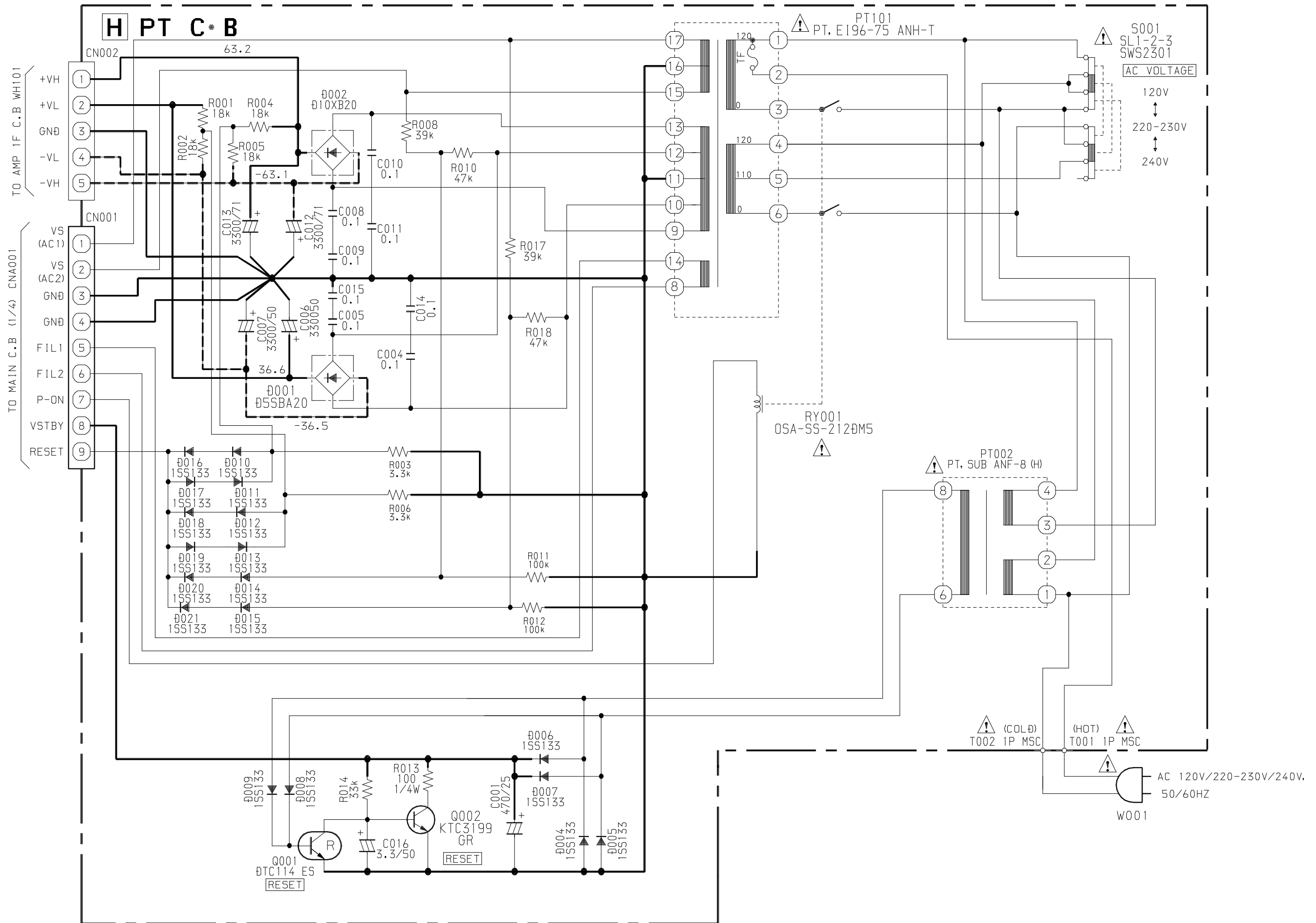


H PT C.B



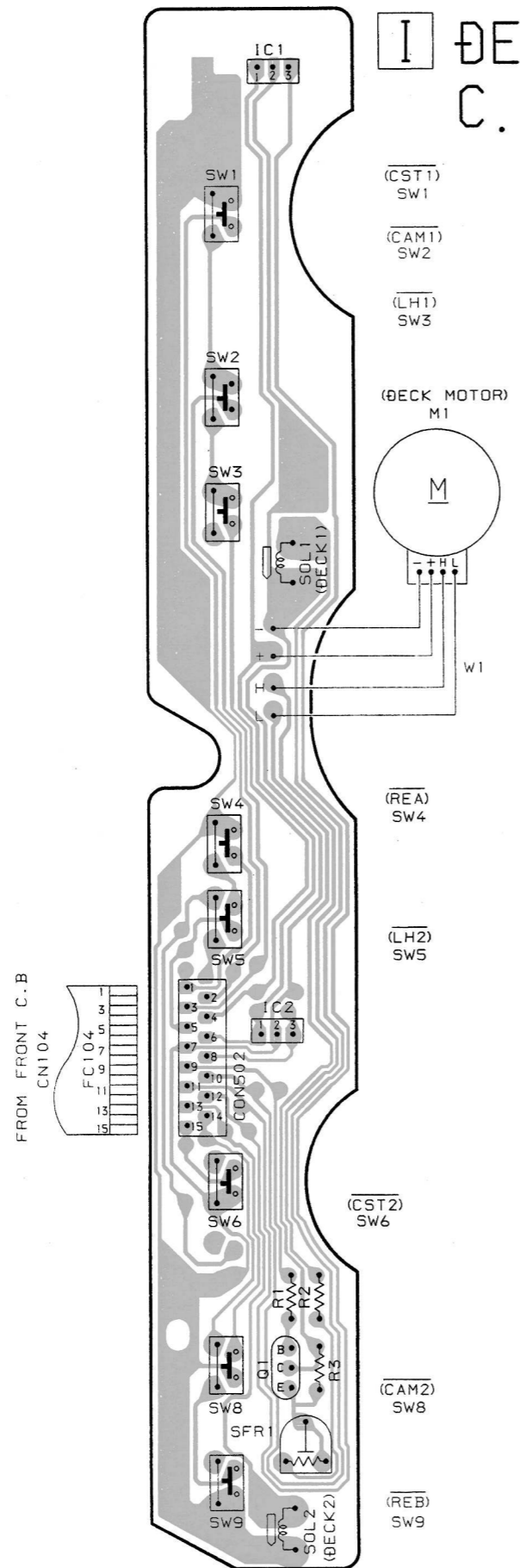
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SCHEMATIC DIAGRAM – 8 (PT)

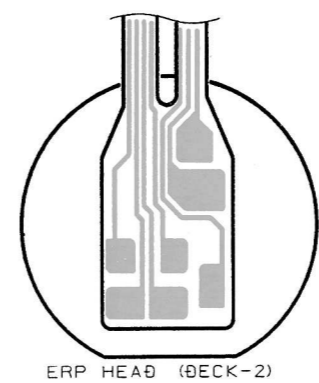
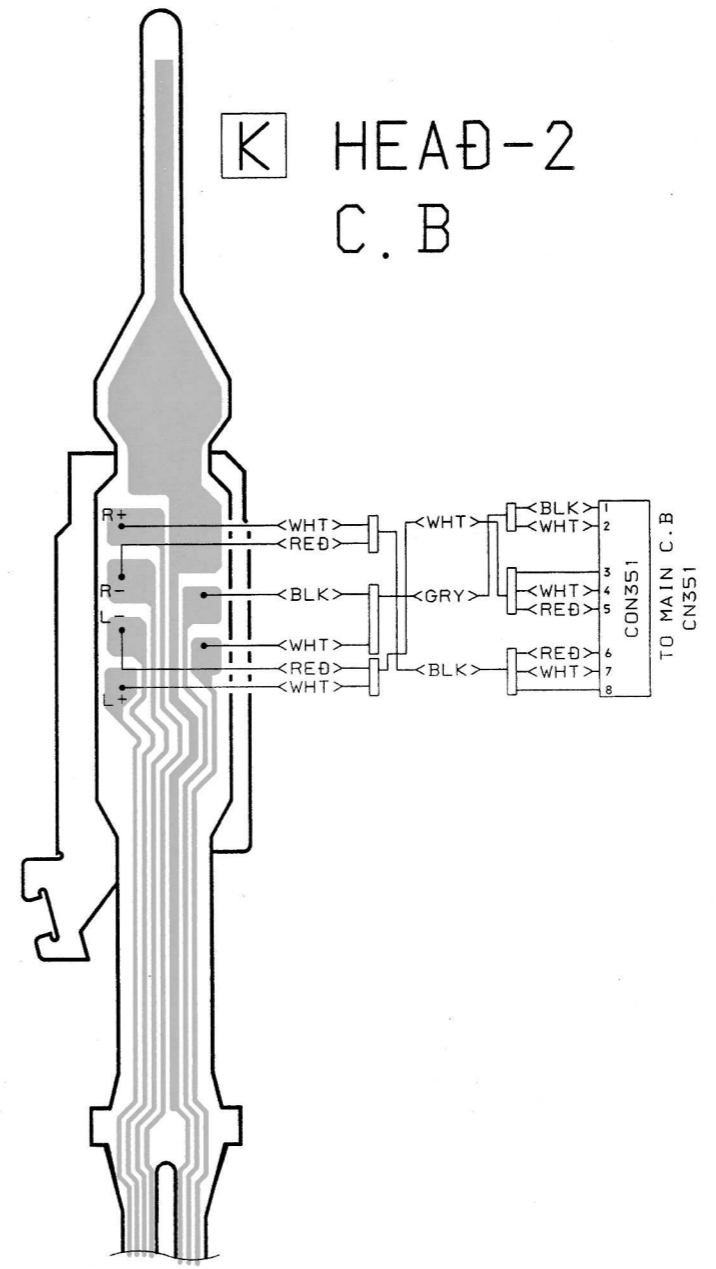
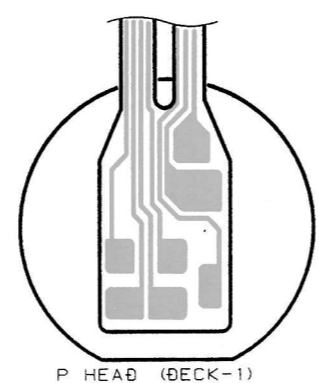
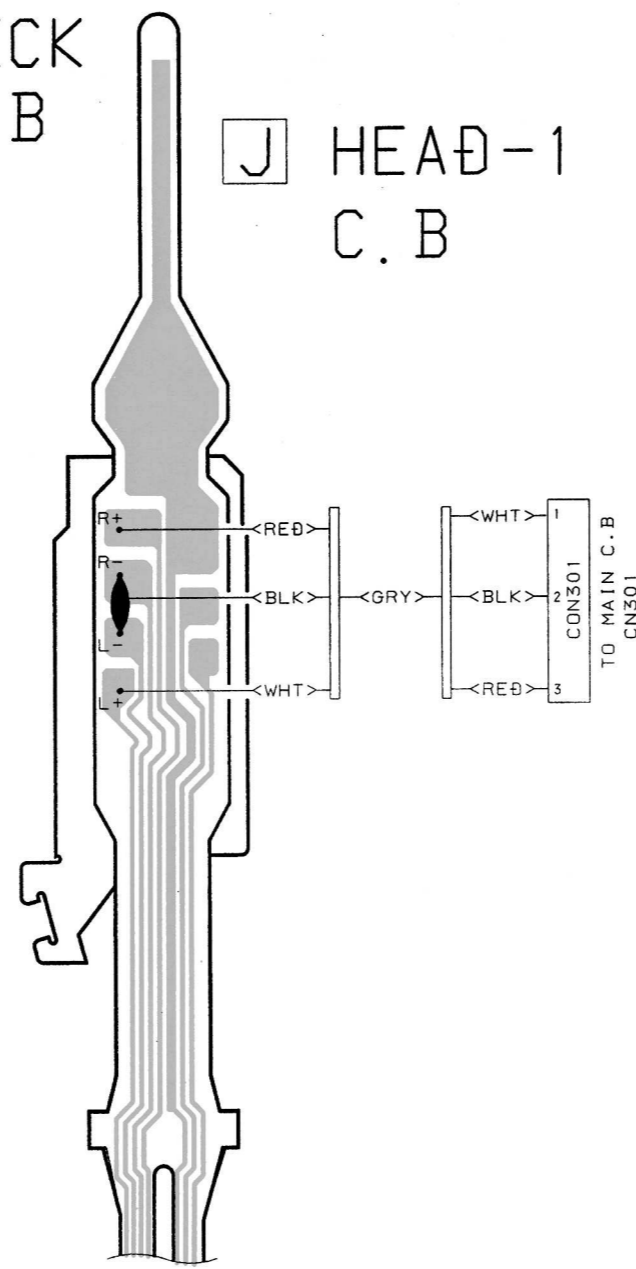


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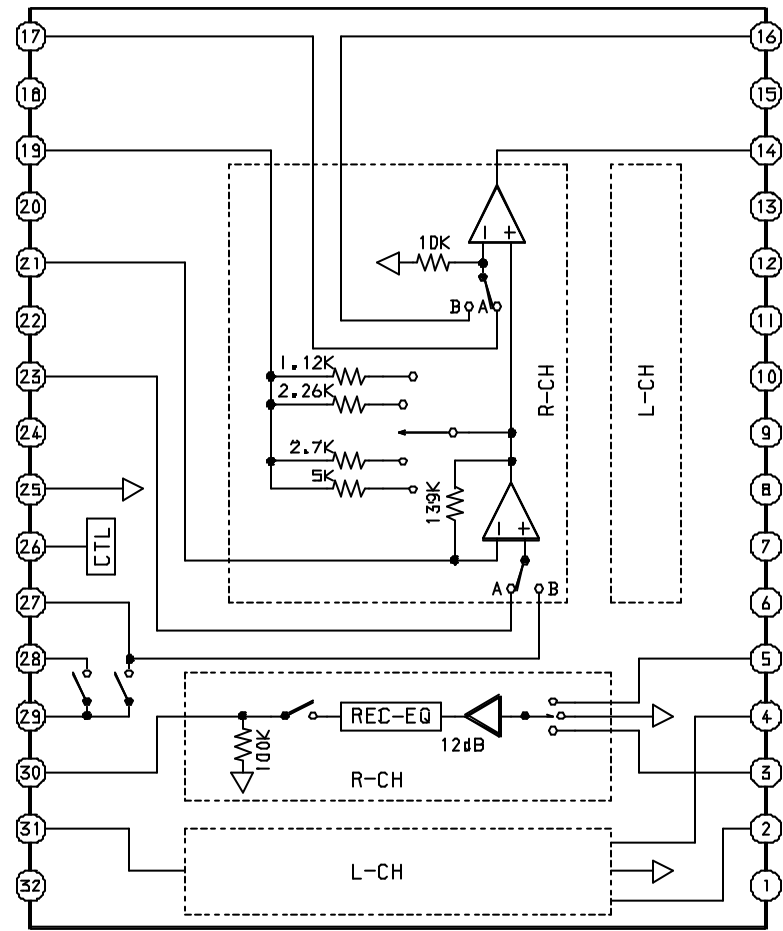


I DECK C.B

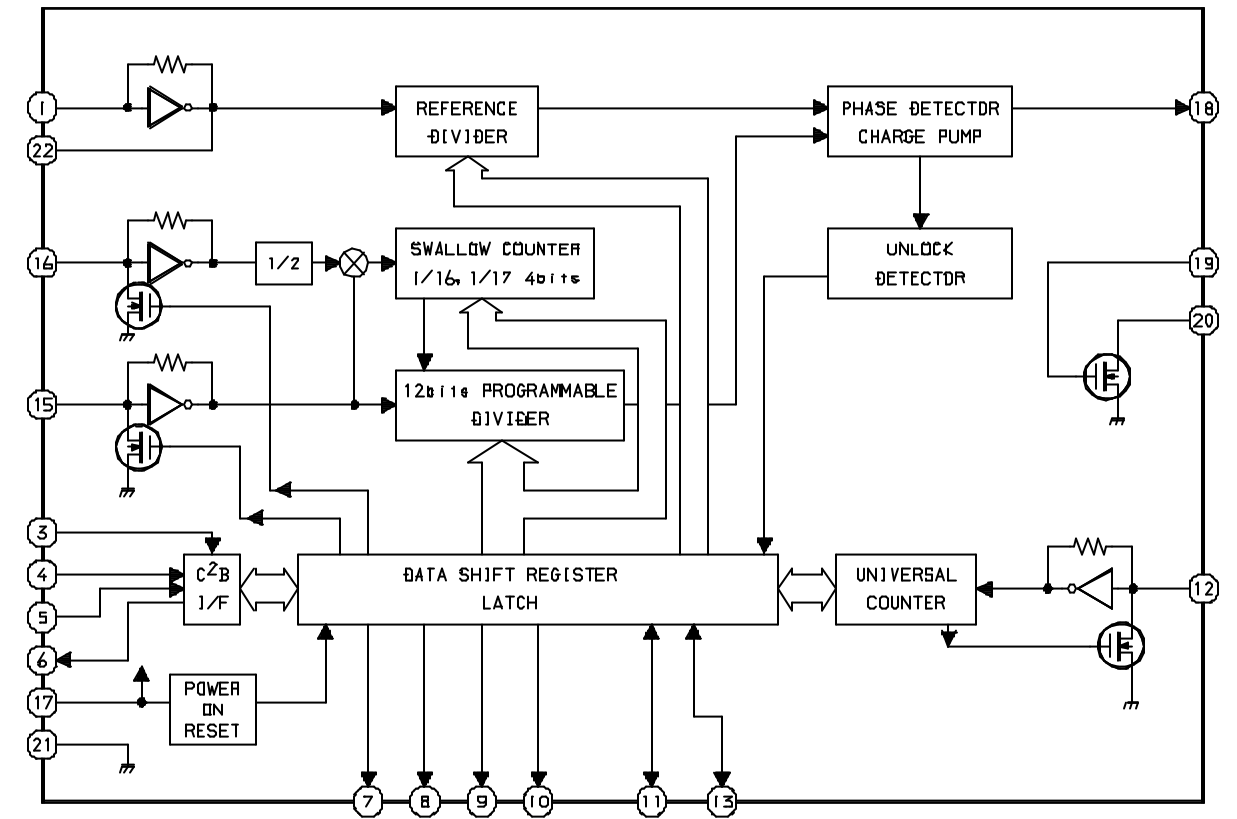


IC BLOCK DIAGRAM

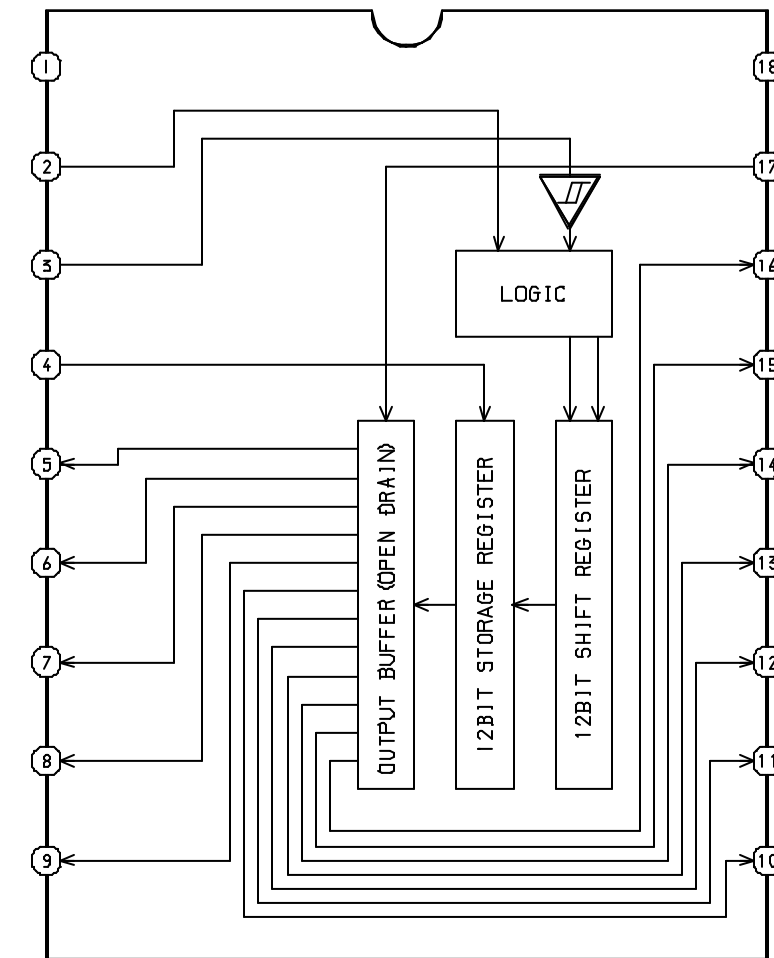
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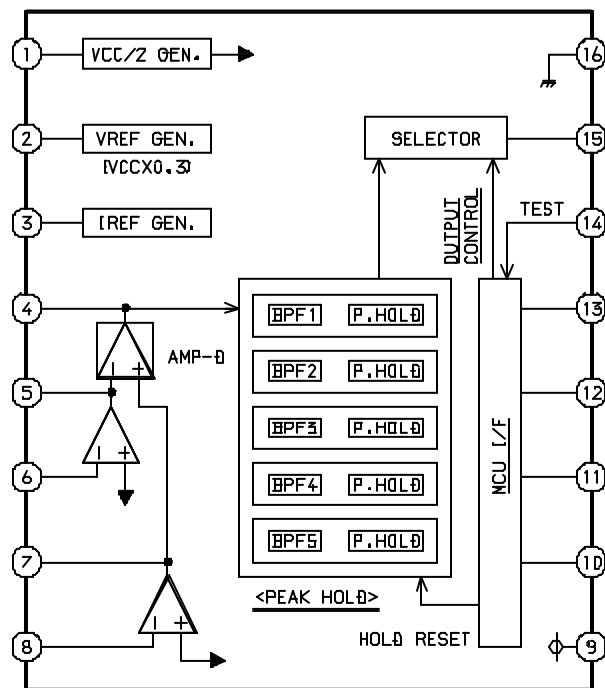
IC, LC72131D



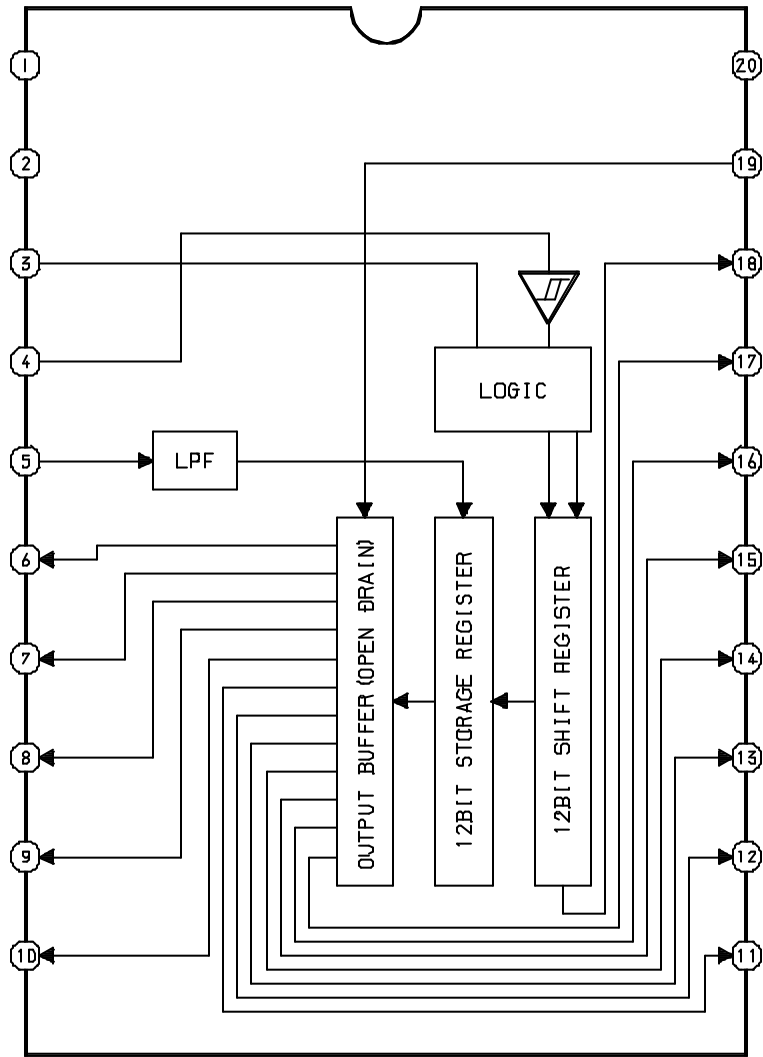
IC, BU2092F



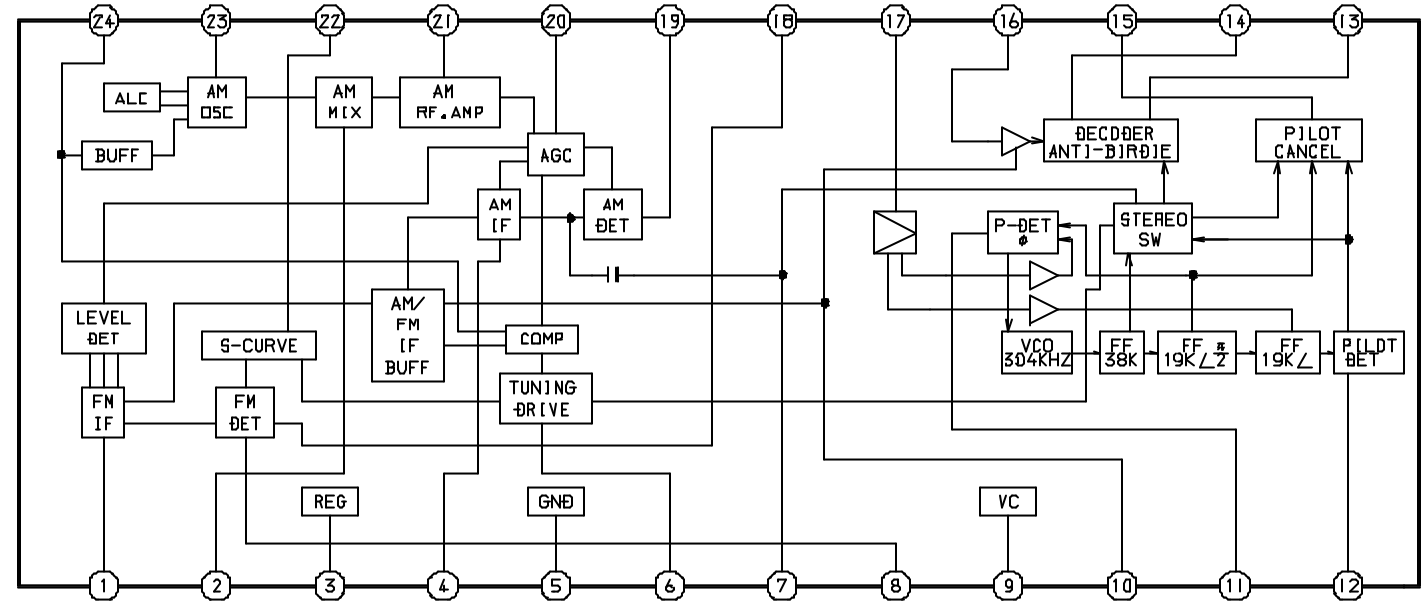
IC, M61506FP



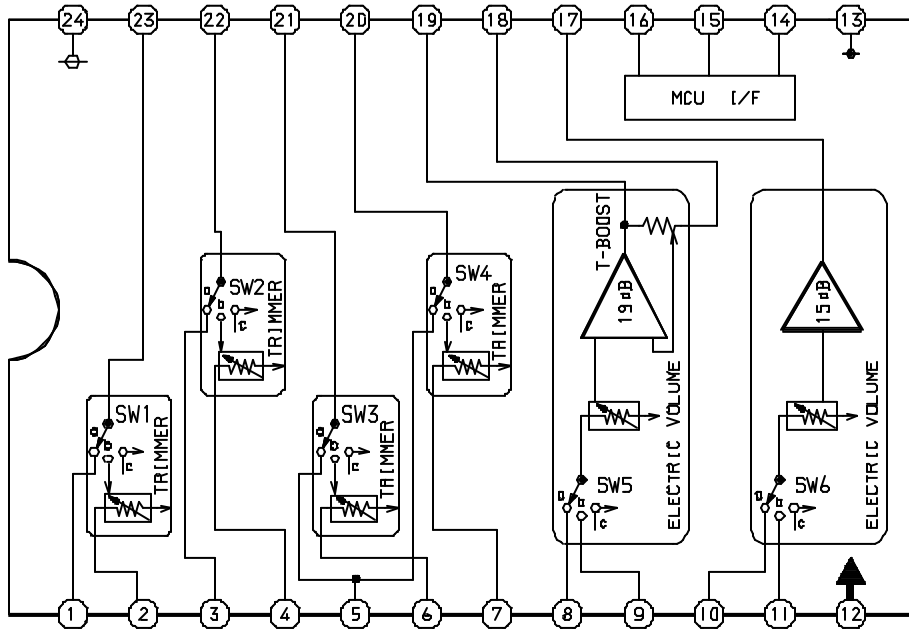
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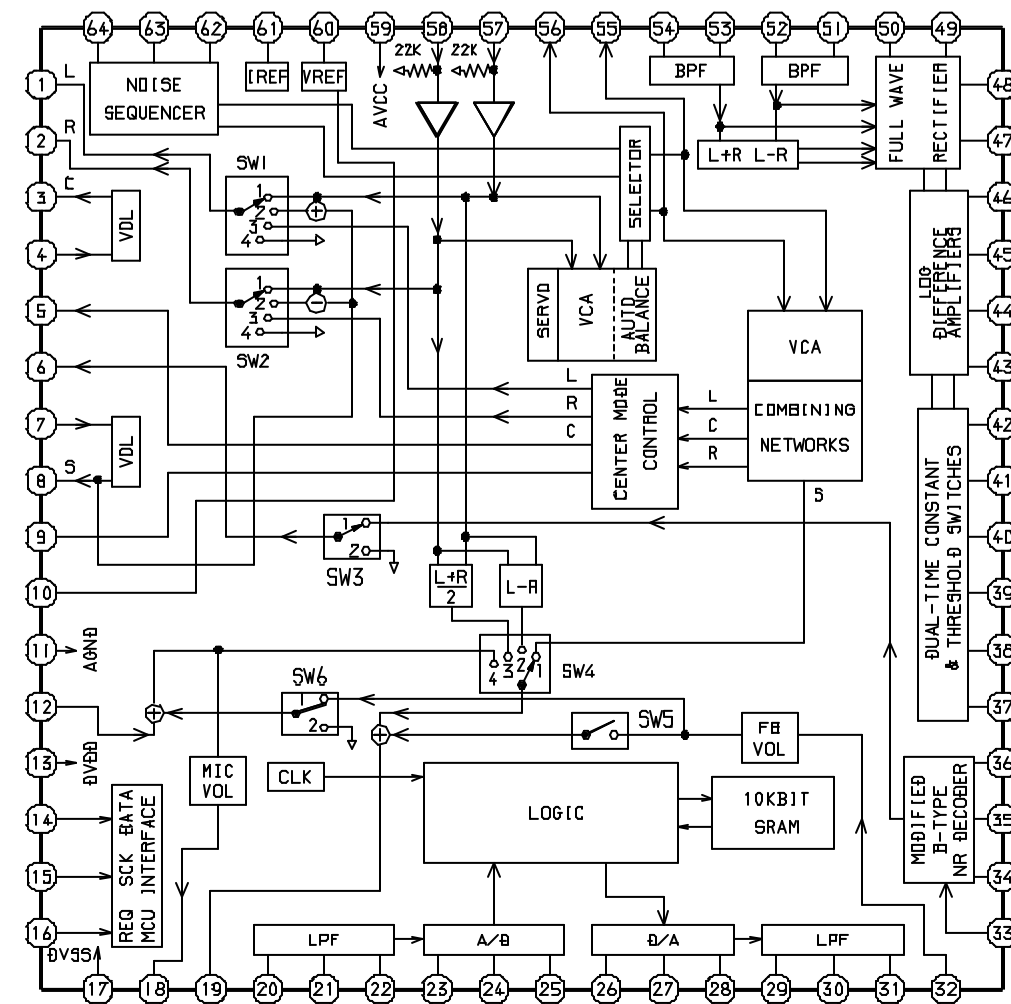
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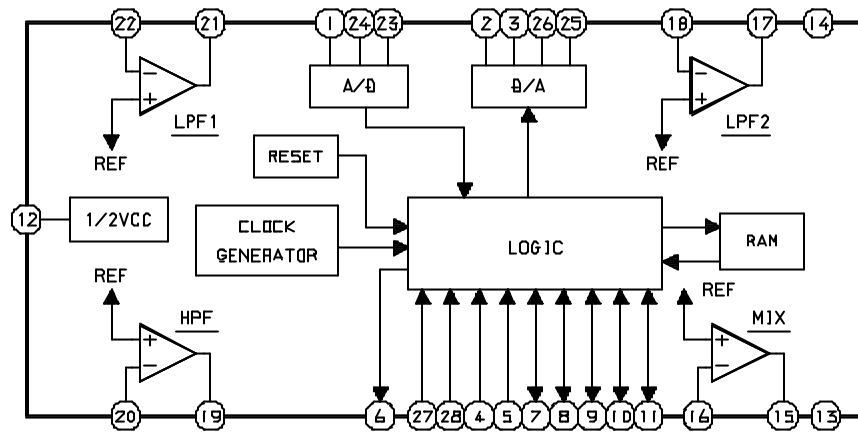
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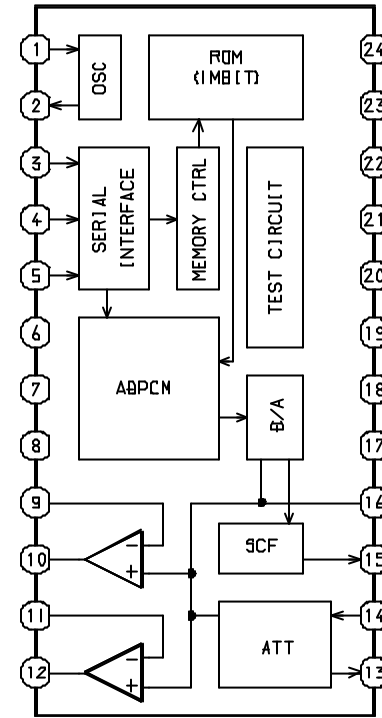
IC: M62463AFP



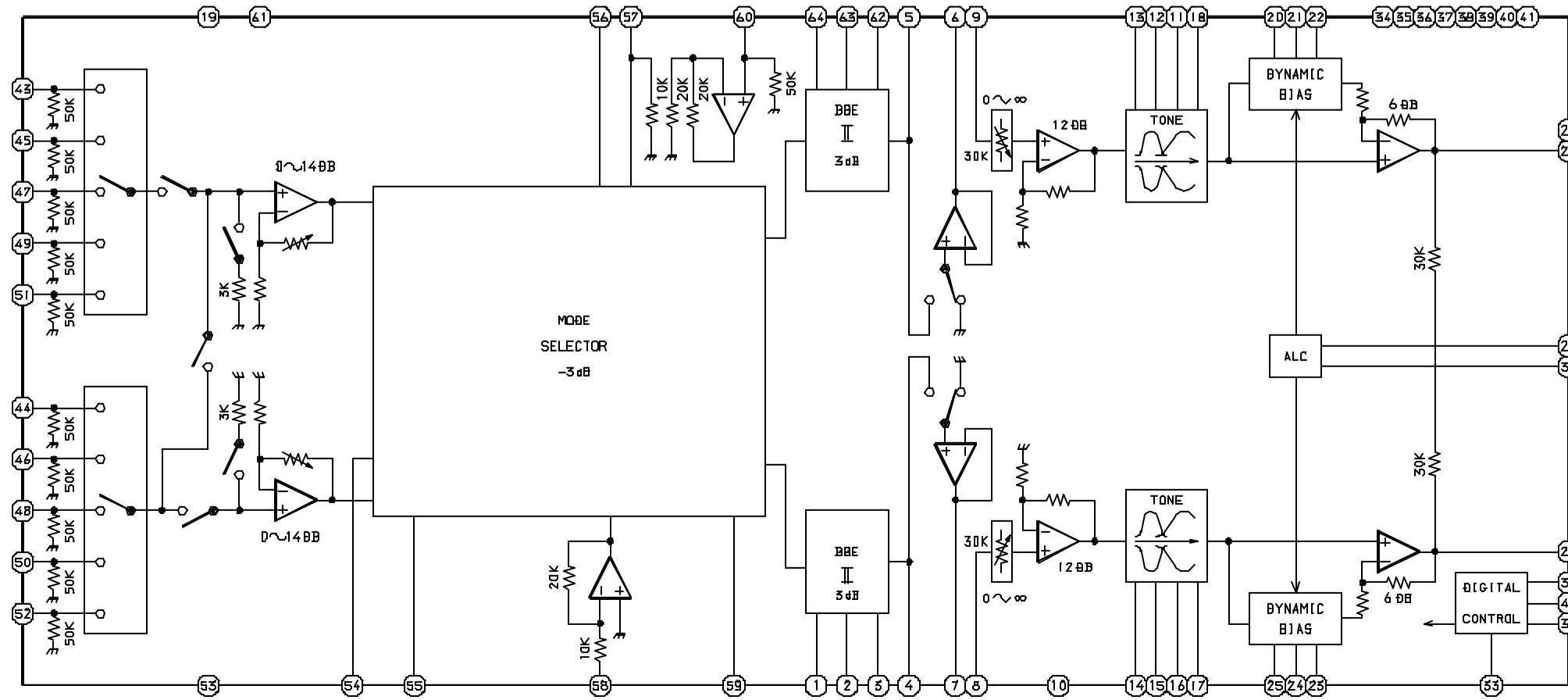
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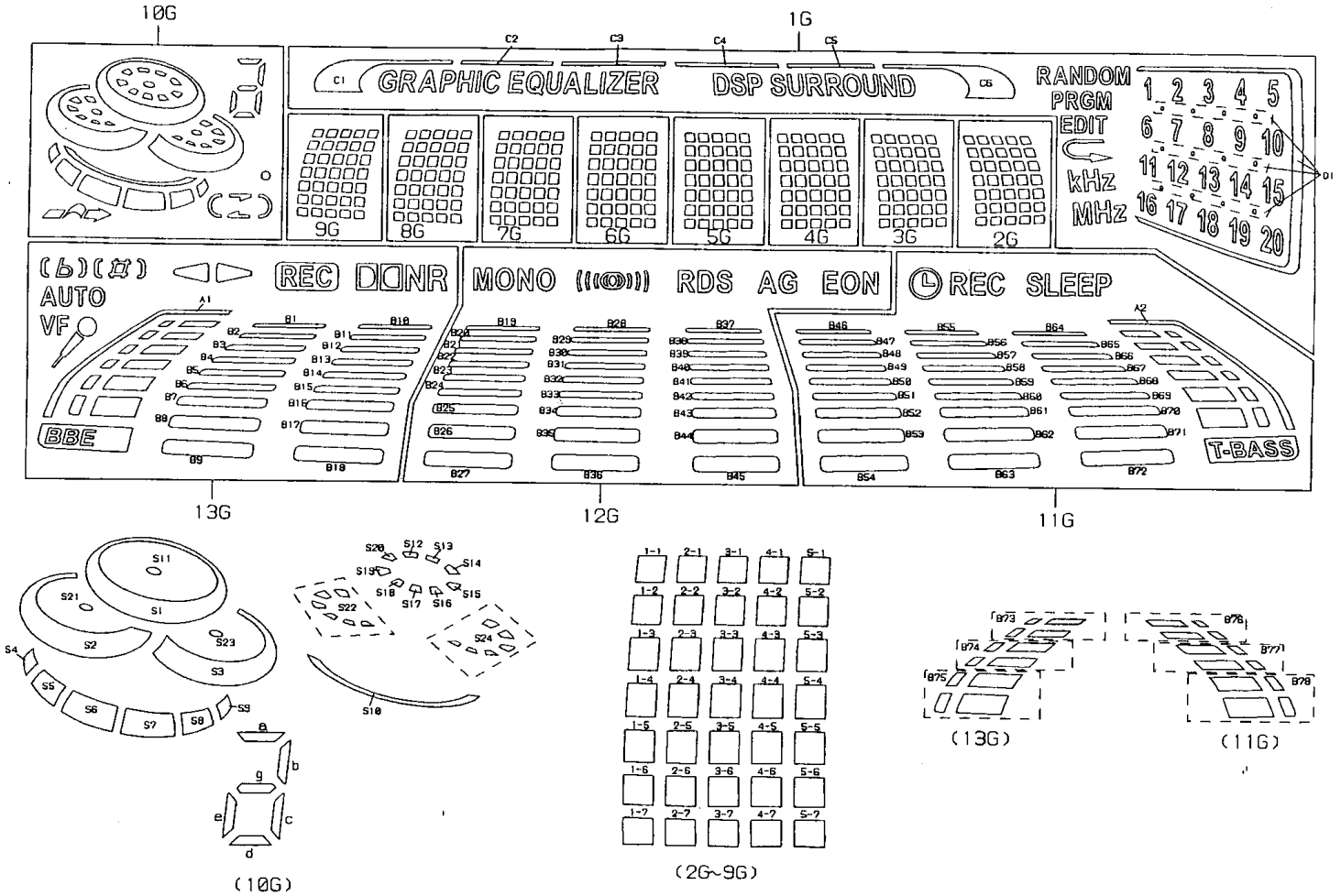
IC, BU9990-03F5



IC, B83876K52



FL (BJ750GNK 13G-35S) GRID ASSIGNMENT & ANODE CONNECTION
 GRID ASSIGNMENT



ANODE CONNECTION

	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1		B27	B54	b	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	DSP SURROUND
P2		B36	B63	c	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	GRAPHIC EQUALIZER
P3		B45	B72	a, d, g	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	C6
P4		B26	B53	e	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	C5
P5		B35	B62	S1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	C4
P6		B44	B71	S12	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	C3
P7		B25	B52	S13	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	C2
P8		B34	B61	S20	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	C1
P9		B43	B70	S14	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	RANDOM
P10	A1	B24	B51	S11	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	PRGM
P11		B33	B60	S19	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	EDIT
P12	B75	B42	B69	S15	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	
P13	B74	B23	B50	S18	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	kHz
P14	B73	B32	B59	S16	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	MHz
P15	B9	B41	B68	S17	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	16
P16	B18	B22	B49	S3	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	11
P17	B8	B31	B58	S24	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	6
P18	B17	B40	B67	S23	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	1
P19	B7	B21	B48	S2	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	17
P20	B16	B30	B57	S22	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	12
P21	B6	B39	B66	S21	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	7
P22	B15	B20	B47	S10	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2
P23	B5	B29	B56	S9	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	18
P24	B14	B38	B65	S8	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	13
P25	B4	B19	B46	S7	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	8
P26	B13	B28	B55	S6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	3
P27	B3	B37	B64	S5	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	19
P28	B12	MONO	T-BASS	S4	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	14
P29	B2		A2		4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	9
P30	B11	RDS	B78		5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	4
P31	B1	AG	B77		1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	20
P32	B10	EON	B76		2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	15
P33	-	-	SLEEP		3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	10
P34	-	-	REC	-	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	5
P35	-	-		-	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	D1

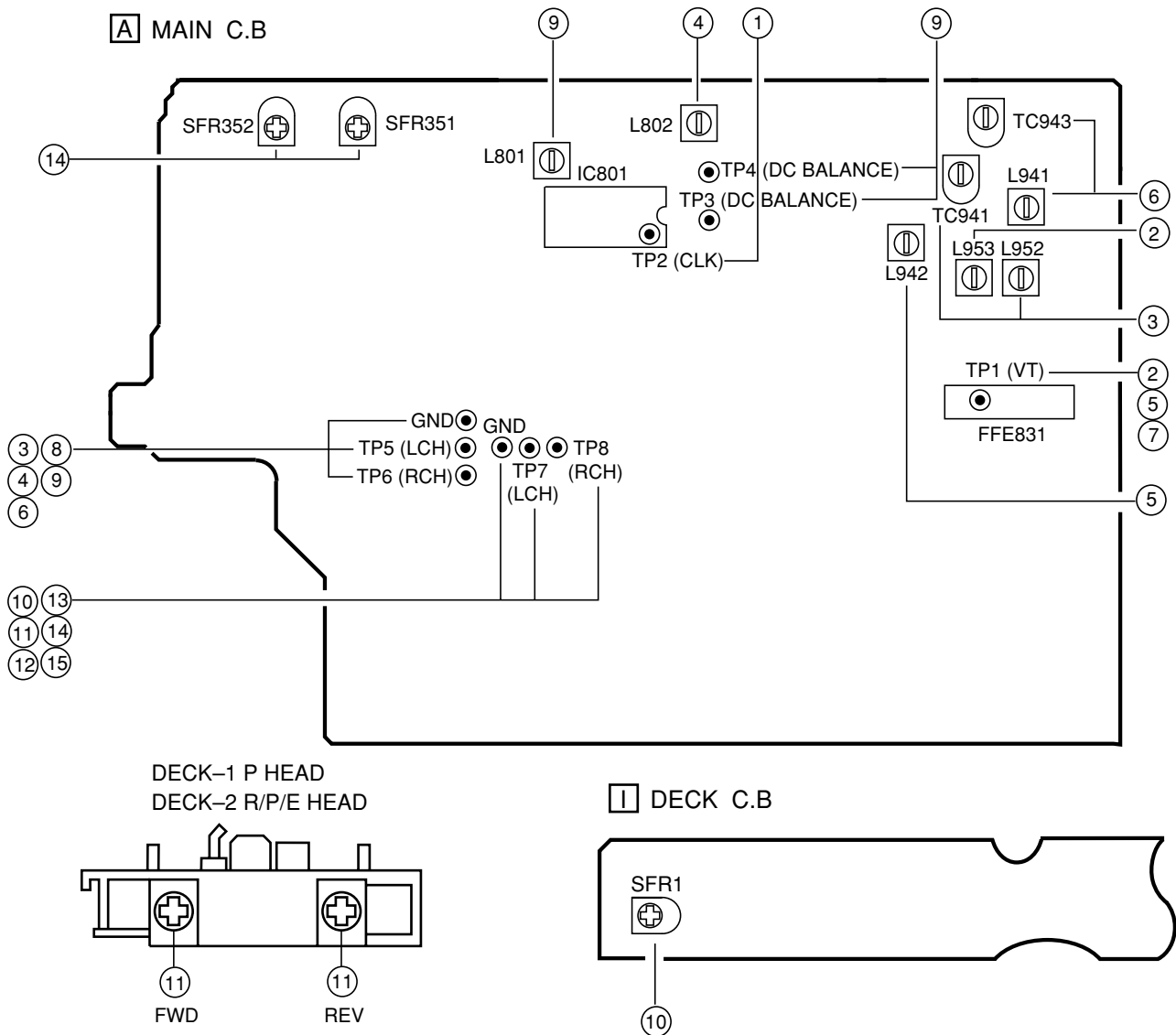
IC DESCRIPTION

IC, LC876572V-5R25

Pin No.	Pin Name	I/O	Description
1	O-CLK	O	CLOCK output for FRONT and MAIN C.B.
2	O-DATA	O	DATA output for FRONT and MAIN C.B.
3	O-STB(M)	O	Strobe output for MAIN C.B.
4	O-POWER	O	System power ON/OFF output.
5	O-STB(SHIFT)	O	Strobe output for shift register.
6	O- $\overline{\text{RYM-CS}}$	O	Chip select output for RHYTHM IC.
7	O-PLL-CE	O	Chip enable output for PLL.
8	I-STEREO	I	Stereo detect input.
9	O- $\overline{\text{CLK SHIFT}}$	O	Tuner clock shift output (active L).
10	I- $\overline{\text{HP-MUTE}}$	I	Head phones connect detect input.
11	$\overline{\text{RESET}}$	I	Reset input for MICON.
12	I-DISH	I	CD turntable photo sensor input.
13	I-SPEANA	I	Spectrum analyzer level AD input.
14	VSS1	-	Connected to GND.
15	CF1	-	To oscillator circuit.
16	CF2	-	To oscillator circuit.
17	VDD1	-	Power supply.
18	I-HOLD	I	HOLD input .
19	I-KEY1	I	Key-1 AD input.
20	I-KEY2	I	Key-2 AD input.
21	I-KEY3	I	Key-3 AD input.
22	I-CDSW	I	CD mechanical switch input.
23	I-RTVR	I	Rotary encoder AD input for VOLUME.
24	I-JOG	I	Rotary encoder AD input for MULTI JOG.
25	I-MIC	I	MIC input for AUTO VOCAL FADER.
26	I- $\overline{\text{MS}}$ /I-TU-SIG	I	DECK MS detect input/RDS signal level input during tuner function (Not used).
27	I-TM-BASE	I	Standard time input (8Hz).
28	I-WRQ/RDS-CLK	I	CD WRQ input/RDS serial clock input during tuner function (Not used).
29	I-RMC	I	System remote controller input.
30 ~ 42	G13 ~ G1	O	FL grid output (G13 ~ G1).
43 ~ 45	P35 ~ P33	O	FL segment output (P35 ~ P33).
46	VDD3	-	Power supply.
47	P32/SPEANA-A	O	FL segment output (P32)/Spectrum analyzer band change output (A).
48	P31/SPEANA-B	O	FL segment output (P31)/Spectrum analyzer band change output (B).
49	P30/SPEANA-C	O	FL segment output (P30)/Spectrum analyzer band change output (C).
50	P29/ $\overline{\text{BEAT-M}}$	O/I	FL segment output (P29)/BEAT MASTER diode input (Not used).
51	-VP	-	Connected to -VFL .
52	P28/AM-ST	O/I	FL segment output (P28)/AM-STEREO diode input (Not used).
53	P27/LW	O/I	FL segment output (P27)/LW diode input (Not used).
54	P26/SW	O/I	FL segment output (P26)/SW diode input.
55	P25/FM1	O/I	FL segment output (P25)/FM1 diode input (Not used).
56	P24/CASINO DEMO	O/I	FL segment output (P24)/Initial CASINO DEMO diode input.

Pin No.	Pin Name	I/O	Description
57	P23/ECO MODE \bar{E}	O/I	FL segment output (P23)/Initial ECO MODE diode input.
58	P22/DSP	O/I	FL segment output (P22)/DSP diode input (Not used).
59	P21/PRO/5.1	O/I	FL segment output (P21)/PRO-LOGIC 5.1CH diode input.
60	P20/KEY-CON	O/I	FL segment output (P20)/KEY CONTROL diode input.
61	P19/DOLBY	O/I	FL segment output (P19)/DECK DOLBY diode input (Not used).
62	P18/PRO	O/I	FL segment output (P18)/PROLOGIC diode input (Not used).
63	P17/AM10K	O/I	FL segment output (P17)/AM10K change diode input (Not used).
64	P16/CST2	O/I	FL segment output (P16)/DECK 2 cassette detect SW input.
65	P15/REB	O/I	FL segment output (P15)/DECK side B record permission SW input.
66	P14/CAM2	O/I	FL segment output (P14)/DECK 2 CAM SW input.
67	P13/AUTO1	O/I	FL segment output (P13)/DECK 1 auto stop input.
68	P12/AUTO2	O/I	FL segment output (P12)/DECK 2 auto stop input.
69	P11/CAM1	O/I	FL segment output (P11)/DECK 1 CAM SW input.
70	P10/CST1	O/I	FL segment output (P10)/DECK 1 cassette detect SW input.
71	P9/REA	O/I	FL segment output (P9)/DECK side A record permission SW input.
72	VDD4	–	Power supply.
73	P8 /AC DEMO	O/I	FL segment output (P8)/DEMO (on the shop) diode input (Not used).
74~80	P7~P1	O	FL segment output (P7~P1).
81	NC	–	Not connected.
82	O-TRAY CLOSE	O	CD tray close output.
83	O-TRAY-OPEN	O	CD tray open output.
84	I-SUBQ	I	CD SUBQ detect input.
85	O-DISH-FWD	O	CD turntable forward revolution output.
86	O-DISH-REV	O	CD turntable reverse revolution output.
87	O-DATA	O	CD data output.
88	O-LED-STBY	O	STBY LED on output (STBY LED on during O-POWER OFF).
89	VSS2	–	Connected to GND.
90	VDD2	–	Power supply.
91	O-MOTOR	O	DECK motor output.
92	O-MUTE	O	System mute ON/OFF output.
93	O-SOL1	O	DECK 1 plunger ON/OFF output.
94	O-SOL2	O	DECK 2 plunger ON/OFF output.
95	I-DRF	I	CD DRF input.
96	I-IFC	I	TUNER IFC input.
97	I-RDS-DATA	I	RDS serial data input during tuner function (Not used).
98	O-CD CLK	O	CD CLK output.
99	O-CD-CE	O	CD CE output.
100	O-KSCAN	O	Key scan timing output.

ADJUSTMENT <TUNER / DECK / FRONT>



< TUNER SECTION >

1. Clock frequency Check
 Settings : • Test point : TP2 (CLK)
 Method : Set to MW 1602kHz and check that the test point is $2052\text{kHz} \pm 45\text{Hz}$.
2. MW VT Adjustment
 Settings : • Test point : TP1 (VT)
 • Adjustment location : L953
 Method : Set to MW 1602kHz and adjust L953 so that the test point becomes $8.0\text{V} \pm 0.05\text{V}$. Then set to MW 531kHz and check that the test point is more than 0.3V.
3. MW Tracking Adjustment
 Settings : • Test point : TP5(Lch), TP6(Rch)
 • Adjustment location :
 L952 603kHz
 TC941 1404kHz
 Method : Set up TC941 to center before adjustment.
 The level at 603kHz is adjust to max. by L952.
 Then the level at 1404kHz is adjust to max. by TC941.
4. AM IF Adjustment
 Settings : • Test point : TP5(Lch), TP6(Rch)
 • Adjustment location :
 L802 450kHz
5. SW VT Adjustment
 Settings : • Test point : TP1(VT)
 • Adjustment location : L942
 Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes $8.0\text{V} \pm 0.05\text{V}$. Then set to SW 5.73MHz and check that the test point is more than 0.3V.
6. SW Tracking Adjustment
 Settings : • Test point : TP5(Lch), TP6(Rch)
 • Adjustment location :
 L941 5.73MHz
 TC943 17.9MHz
 Method : Set up TC943 to center before adjustment.
 The level at 5.73MHz is adjust to max. by L941.
 Then the level at 17.9MHz is adjust to max. by TC943.
7. 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).
8. FM Tracking Check
 Settings : • Test point : TP5(Lch), TP6(Rch)
 Method : Set to FM 98.0MHz and check that the test point is less than $9\text{dB}\mu\text{V}$.

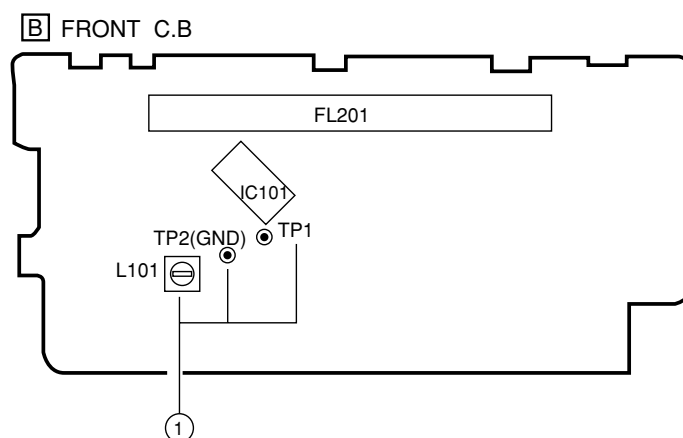
9. DC Balance / Mono Distortion Adjustment
 Settings : • Test point : TP3, TP4 (DC Balance)
 : TP5(Lch), TP6(Rch) (Distortion)
 • Adjustment location : L801
 • Input level : 60dB μ V
 Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 is 0V \pm 300mV with minimum distortion.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 2)
 Settings : • Test tape : TTA-100
 • Test point : TP7(Lch), TP8(Rch)
 • Adjustment location : SFR1
 Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz \pm 5Hz (FWD) and \pm 45Hz (REV) with respect to forward speed.
11. Head Azimuth Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP7(Lch), TP8(Rch)
 • Adjustment location : Head azimuth adjustment screw
 Method : Play back (FWD) the 10kHz 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 : TP7(Lch), TP8(Rch)
 Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is 0dB \pm 3dB.
13. PB Sensitivity Check (DECK 1, DECK 2)
 Settings : • Test tape : TTA-200
 • Test point : TP7(Lch), TP8(Rch)
 Method : Play back the test tape and check that the output level of the test point is 280mV \pm 3dB.
14. REC/PB Frequency Response Adjustment (DECK 2)
 Settings : • Test tape : TTA-602
 • Test point : TP7(Lch), TP8(Rch)
 • Input signal : 1kHz / 10kHz (LINE IN)
 • Adjustment location : SFR351 (Lch)
 SFR352 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP7, TP8 becomes 28mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB \pm 1.0dB with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 2)
 Settings : • Test tape : TTA-602
 • Test point : TP7(Lch), TP8(Rch)
 • Input signal : 1kHz (LINE IN)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP7, TP8 becomes 280mV. Record and play back the 1kHz signals and check that the output is -1dB \pm 2.5dB.

< FRONT SECTION >



1. μ -CON OSC Adjustment
 Settings : • Test point : TP1 and TP2 (GND)
 • Adjustment location : L101
 Method : Insert AC plug while pressing TUNER function key. Adjust L101 so that the frequency at the test point is 208.80Hz \pm 0.2Hz.

CD TEST MODE

1. How to Activate CD Test Mode

Insert the AC plug while pressing the function CD button.
All FL display tubes will light up, and the test mode will be activated.

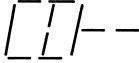


2. How to Cancel CD Test Mode

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

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

3. CD Test Mode Functions

When test mode is activated, the following mode functions from No.1 to No.5 can be used by pressing the operation keys.

Mode/No.	Operation	FL display	Operation	Contents
Start mode No.1	Activation	All lamps light	<ul style="list-style-type: none"> • Test mode is activated. • CD block power is ON. 	<ul style="list-style-type: none"> • FL display check (All displays light.)
Search mode No.2	■ key		<ul style="list-style-type: none"> • Laser diode turns always ON. • Continual focus search (The pickup lens repeats the full-swing up-down motion.) * Avoid continual searches that last for more than 10 minutes. <p style="text-align: right;">* NOTE 1</p>	<ul style="list-style-type: none"> • APC circuit check • Laser current measurement (Laser current control. Across a resistor connected between emitter and GND.) <p>FOCUS SERVO</p> <ul style="list-style-type: none"> • Check focus search waveform • Check focus error waveform (FOK/FZC are not monitored in the search mode)
Play mode No.3	◀▶ key		<ul style="list-style-type: none"> • Normal playback • Focus search is continued if TOC cannot be read. <p style="text-align: right;">* NOTE 1</p>	FOCUS SERVO/TRACKING SERVO CLV SERVO/SLED SERVO Check DRF
Traverse mode No.4	key		<ul style="list-style-type: none"> • During normal disc playback Press once; tracking servo OFF Press twice; tracking servo ON <p style="text-align: right;">* NOTE 2</p>	TRACKING SERVO ON/OFF Tracking balance (traverse) check
Sled mode No.5	⏪ key ⏩ key	All lamps light	<ul style="list-style-type: none"> • Pickup moves to the outermost track • Pickup moves to the innermost track <p style="text-align: right;">* NOTE 3</p> <p>(During playback, machine operates normally.)</p>	SLED SERVO Check SLED mechanism operation

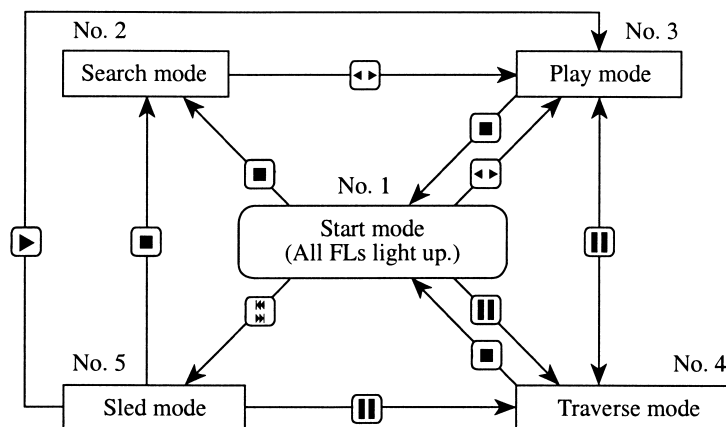
* NOTE 1: There are cases when the tracking servo cannot be locked owing to the protection circuit being operated when heat builds up in the driver IC if the focus search is operated continually for more than 10 minutes. In these cases the power supply should be switched off for 10 minutes until heat has been reduced and then re-started.

* NOTE 2: Do not press the ⏪ or ⏩ keys when the machine is in the || status is active. If they are pressed, playback will not be possible after the || status has been canceled. If the ⏪ or ⏩ keys are pressed in the || status, press the ■ key and return to the start mode (No.1).

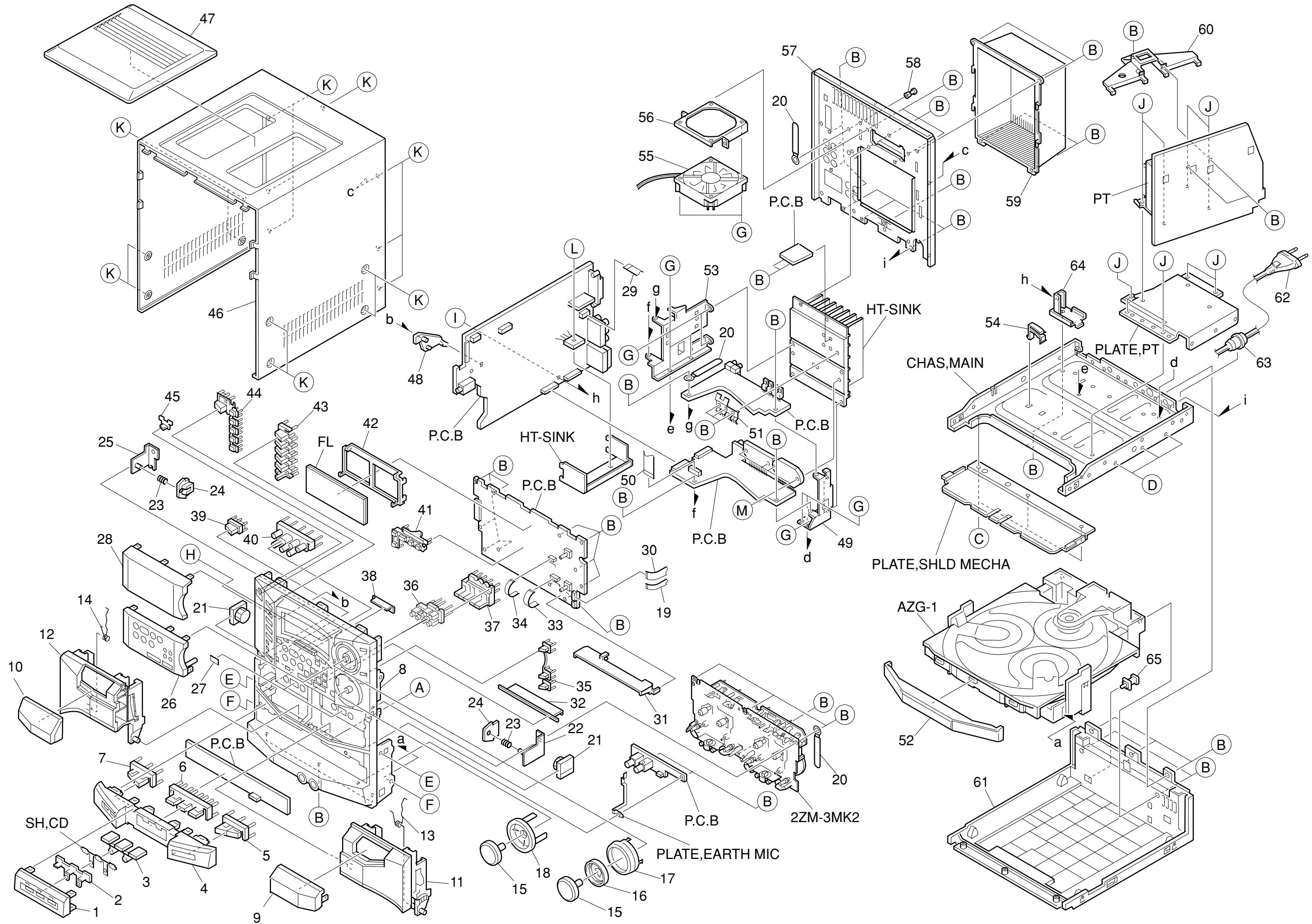
* NOTE 3: When pressing the ⏪ or ⏩ keys, take care to avoid damage to the gears. Because the sled motor is activated when the ⏪ or ⏩ keys are pressed, even when the pick-up is at the outermost or innermost track.

4. Operation Outline

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



If the DISC DIRECT PLAY button is pressed, the machine performs the same operation as the PLAY button is pressed as shown. If the tray is opened by pressing OPEN/CLOSE button during Play mode or Traverse mode, the machine returns to the Start mode.



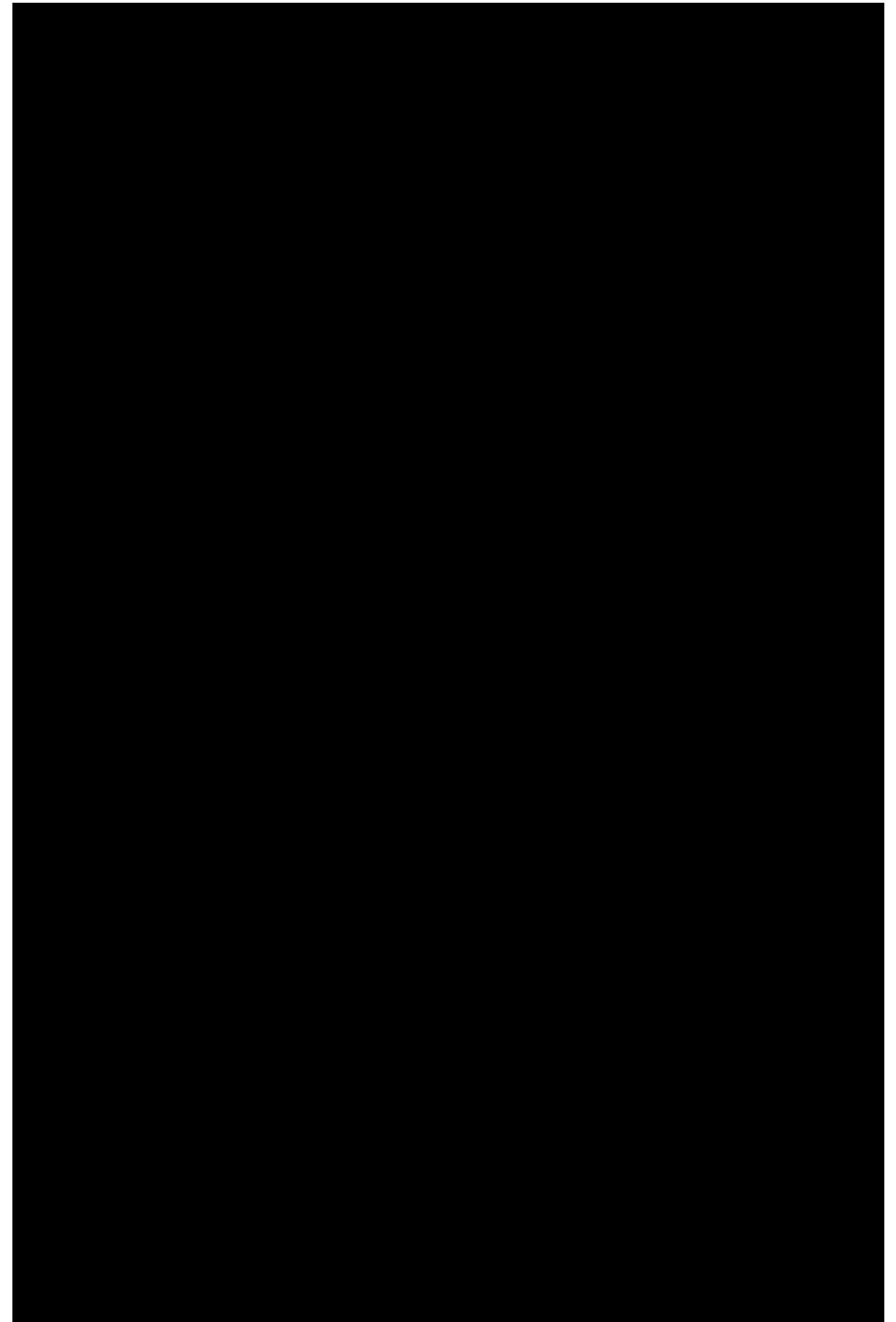
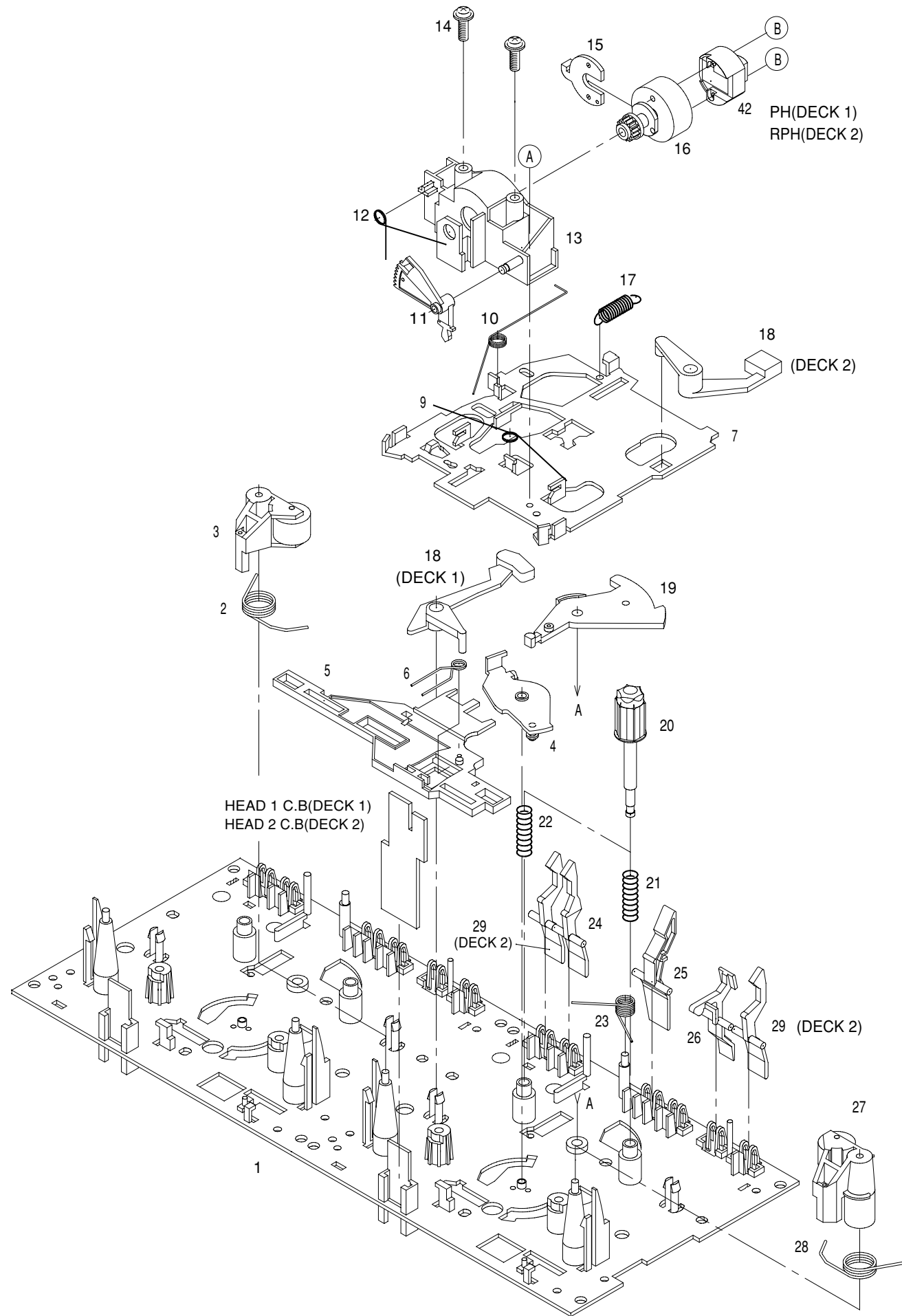
MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF6-010-010		PANEL, DIRECT	41	8A-NF6-203-010		GUIDE, OPE
2	8A-NF6-044-010		REFLECTOR, CD	42	8A-NF6-201-010		GUIDE, FL
3	8A-NF6-205-010		GUIDE, CD	43	8A-NF6-023-010		KEY, ASSY FUN
4	8A-NF6-009-010		PANEL, CD	44	8A-NF6-045-010		KEY, ASSY POWER
5	8A-NF6-036-010		KEY, CD EDIT	45	8A-NF6-042-010		REFLECTOR, ECO
6	8A-NF6-035-010		KEY, CD DIRECT	46	8A-NF6-058-010		CABI, STEEL HR
7	8A-NF6-037-010		KEY, CD OPEN	47	8A-NF6-005-010		PANEL, TOP
8	8A-NHT-001-010		CABI, FR H	48	8A-NF8-206-010		HLDR, PWB M
9	8A-NF6-019-010		WINDOW, CASS 2	49	8A-NF6-214-010		HLDR, HT-SINK R
10	8A-NF6-018-010		WINDOW, CASS 1	50	88-906-151-110		FF-CABLE, 6P 1.25
11	8A-NF6-007-010		BOX, CASS 2	51	8A-NF6-210-010		HLDR, IC6
12	8A-NF6-006-010		BOX, CASS 1	52	8A-NH6-002-010		PANEL, TRAY H
13	82-NF5-219-010		SPR-T, EJECT 2 (SIN)	53	8A-NF6-213-010		HLDR, HT-SINK L
14	82-NF5-218-010		SPR-T, EJECT 1 (SIN)	54	87-NF4-221-010		HLDR, CABLE
15	8A-NF6-030-010		KNOB, RTRY JOG	55	87-A91-711-010		FAN, 3110GL-B4W-B34-H02 -400MM
16	8A-NF6-040-010		REFLECTOR, VOL	56	8A-NF6-219-010		HLDR, FAN
17	8A-NF6-041-010		RING, VOL	57	8A-NHT-005-010		PANEL, REAR HR
18	8A-NF6-029-010		KEY, GEQ	58	87-084-077-010		NYLON RIVET, 3.5-4.5
19	88-905-281-110		FF-CABLE, 5P 1.25 280MM	59	8A-NHT-003-010		COVER, REAR HRJSM
20	87-064-185-010		HLDR, WIRE	60	8A-NF6-228-010		HLDR, PWB PT 96-75
21	8Z-NF6-210-010		DMPR, 150 N	61	8A-NH6-007-010		CABI, BOTTOM VCD
22	87-NF4-217-110		HLDR, LOCK 2	62	87-A80-157-010		AC CORD ASSY, E BLK CC
23	86-NF9-224-010		SPR-C, LOCK	63	87-085-185-010		BUSHING, AC CORD (E)
24	82-NF5-229-010		PLATE, LOCK	64	8A-NF7-209-010		HLDR, PWB-M BTM
25	87-NF4-216-010		HLDR, LOCK 1	65	84-ZG1-245-210		CAP, OPTICAL
26	8A-NHT-006-010		PANEL, FR H	A	87-067-758-010		BVT2+3-12 W/O SLOT
27	81-532-080-010		LABEL, CASS. COMPT	B	87-067-703-010		TAPPING SCREW, BVT2+3-10
28	8A-NHT-002-010		WINDOW, DISPLAY H	C	87-067-688-010		BVTT+3-6
29	88-906-621-110		FF-CABLE, 6P 1.25 620MM	D	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
30	88-913-521-110		FF-CABLE, 13P 1.25 520MM	E	87-591-094-410		TAPPING SCREW, QIT+3-6
31	8A-NF6-204-010		GUIDE, DECK	F	87-721-097-410		QT2+3-12 GLD
32	8A-NF6-039-010		REFLECTOR, DECK	G	87-067-579-010		TAPPING SCREW, BVT2+3-8
33	88-915-111-110		FF-CABLE, 15P 1.25	H	87-723-096-410		QT2+3-10W/O SLOT BL
34	88-907-421-110		FF-CABLE, 7P 1.25 420MM	I	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
35	8A-NF6-022-010		KEY, ECHO	J	87-067-975-010		S-SCREW, IT+4-8
36	8A-NH6-001-010		KEY, BBE ANH-6	K	87-B10-091-010		UTT2+3-10 W/O BLK
37	8A-NF6-034-010		KEY, SPICE	L	87-067-001-010		FW, 3.1-5.4-1
38	8A-NF6-038-010		REFLECTOR, FL	M	87-067-581-010		TAPPING SCREW, BVT2+3-15
39	8A-NFT-007-010		KEY, ASSY PRO				
40	8A-NF6-026-010		KEY, ASSY OPE				

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

TAPE MECHANISM EXPLODED VIEW 1 / 1



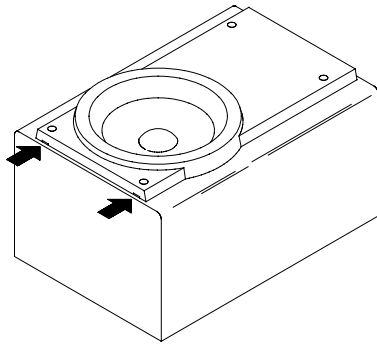
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-619		CHAS ASSY,M2	35	82-ZM1-265-310		SPR-E, TRIG
2	82-ZM1-258-219		SPR-T, PINCH L	36	82-ZM1-236-019		CAPSTAN N 2-41.5
3	82-ZM1-341-219		LVR ASSY, PINCH L2	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
4	82-ZM1-333-110		PLATE, LINK 2	38	82-ZM1-322-019		SPR-T, FR60
5	82-ZM1-266-310		LVR, DIR	39	82-ZM1-220-219		GEAR, IDLER
6	82-ZM1-214-919		SPR-T, DIR	40	82-ZM3-616-019		RING MAGNET 4
7	82-ZM1-206-81K		CHAS, HEAD	41	82-ZM1-216-519		GEAR, REEL
8	82-ZM3-307-019		CUSH-G, DIA3.7-8-3.2	42	87-A91-196-010		HEAD, PH KP9142
9	82-ZM1-269-219		SPR-T, BRG	42	87-A91-195-010		HEAD, RPH KC9142
10	82-ZM1-219-119		SPR-T, LINK	43	82-ZM1-225-21K		GEAR, FR
11	82-ZM1-210-119		GEAR, H T	44	82-ZM1-226-019		GEAR, REW
12	82-ZM3-353-010		SPR-T, HEAD	45	82-ZM3-333-310		SLIP DISK ASSY 2
13	82-ZM1-207-919		GUIDE, TAPE	46	82-ZM1-338-110		BELT FR4
14	86-ZM4-206-110		S-SCREW, AZIMUTH	47	82-ZM1-349-110		FLY-WHL, R W (DECK 2)
15	82-ZM1-314-119		PLATE, HEAD	47	82-ZM3-338-310		FLY-WHL, R3 W (DECK 1)
16	82-ZM1-208-319		HLDR, HEAD	48	82-ZM1-348-110		FLY-WHL, L W (DECK 2)
17	82-ZM1-218-019		SPR-E, HB	48	82-ZM1-348-110		FLY-WHL, L W (DECK 1)
18	82-ZM1-263-110		LVR, EJECT L (DECK 1)	49	82-ZM3-329-410		BELT, SBU R2
18	82-ZM1-264-010		LVR, EJECT R (DECK 2)	50	82-ZM1-245-210		HLDR, IC
19	82-ZM1-222-21K		LVR, PLAY	51	87-045-347-019		MOT, SHU2L 70 (M1)
20	82-ZM1-217-419		REEL TABLE	52	82-ZM3-221-210		PULLEY, MOT 2M
21	82-ZM1-244-510		SPR-C, BT	53	82-ZM1-288-019		SH, 1.63-3.2-0.5 SLT
22	82-ZM1-285-410		SPR-C, BT L	54	80-ZM6-243-019		SH, 1.75-3.6-0.5 SLT
23	82-ZM1-257-019		SPR-T, CAS	55	82-ZM3-335-310		PULLEY, COUPLER M3 (DECK 1)
24	82-ZM1-241-319		LVR, MC	56	82-ZM3-342-010		BELT, SBU MOT 2
25	82-ZM1-242-019		LVR, CAS	57	82-ZM3-339-110		SHAFT, COUPLER N3 (DECK 1)
26	82-ZM1-243-019		LVR, STOP	58	86-ZM1-206-010		BELT, MAIN L
27	82-ZM1-344-219		LVR ASSY, PINCH R2	A	85-ZM3-202-010		S-SCREW, TG
28	82-ZM1-259-219		SPR-T, PINCH R	B	80-ZM6-207-110		V+1.6-7
29	82-ZM1-240-119		LVR, REC (DECK 2)	C	82-ZM3-318-110		S-SCRW MOTOR M2
30	82-ZM3-340-010		SH, BELT D2	D	87-B10-043-010		W-P, 0.99-4-0.25 SLT
31	82-ZM1-255-319		SPR-E, LVR DIR	E	82-ZM3-334-010		PW, 2.16-6-0.4
32	82-ZM3-305-310		GEAR, CAM M2				
33	82-ZM1-227-319		LVR, TRIG				
34	82-ZM3-306-11K		LVR, FR M2				

SPEAKER DISASSEMBLY INSTRUCTIONS

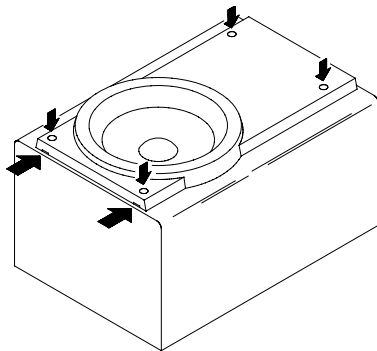
Type.1

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.



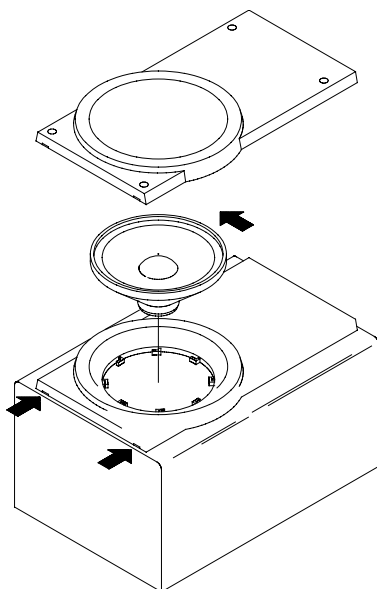
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole 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.

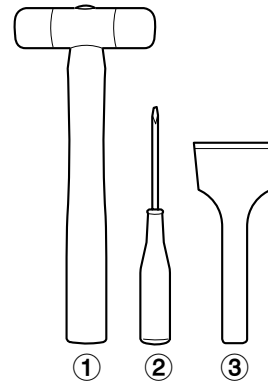


Type.3

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 (⊖) 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.

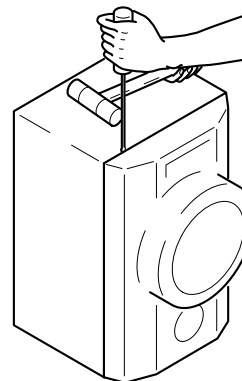


Fig-1

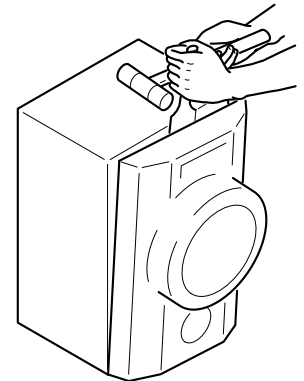


Fig-2

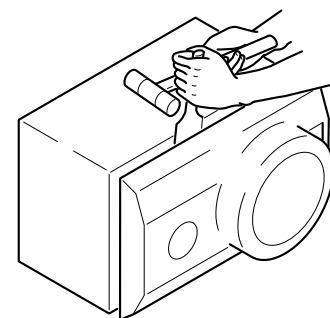


Fig-3

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 SX-NDP84 (YJBL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSV-001-010		PANEL, FR R
2	8A-NSV-002-010		PANEL, FR L
3	8A-NSV-004-010		GRILLE, FRAME ASSY R
4	8A-NSV-008-010		GRILLE, FRAME ASSY L
5	8A-NSV-012-010		PROTECTOR, TW
6	87-NS4-602-010		SPKR, W 160
7	88-SSM-603-010		SPKR, TW 60
8	8Z-CL5-543-010		CORD, SPKR
9	88-NSV-601-010		TERMINAL, ASSY

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NHT-901-010		IB, H (ECA)M
2	8Z-NHT-702-010		RC UNIT, RC-ZAS08
3	87-006-226-010		ANT, LOOP AM
4	87-043-115-010		ANT, FEEDER FM
△	87-A91-017-010		PLUG, CONVERSION JT-0476
6	87-A90-119-010		ANT, WIRE SW (5M)
7	87-050-103-010		CORD, PIN 1PY1.5M

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