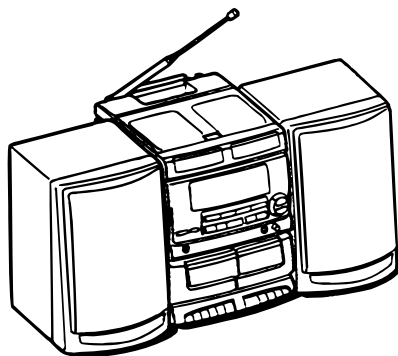




SERVICE MANUAL

CD CARRING
COMPONENT SYSTEM

BASIC TAPE MECHANISM : TN-21ZSW-1691
BASIC CD MECHANISM : 5ZG-3 D2NC

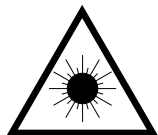
This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
(S/M Code No. 09-994-329-2T1).

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 ylitävälle 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

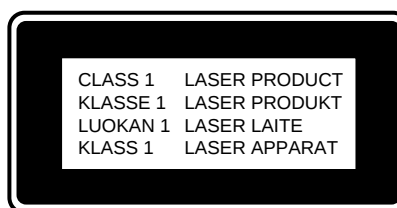
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.

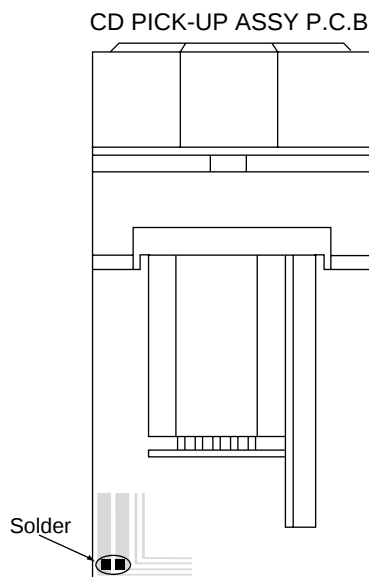
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block

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.



SPECIFICATIONS

Tuner section

FM:	87.5 - 108.0 MHz (50 kHz steps) Antenna: FM antenna
AM:	530 - 1,710 kHz (10 kHz steps) 531 - 1,602 kHz (9 kHz steps) Antenna: Ferrite bar antenna

Amplifier section

Power output:	5 W + 5 W (4 ohms, EIAJ) FTC rule 4 Watts per channel, Min. RMS at 4 ohms from 65 Hz to 15,000 Hz, with no more than 1% distortion
Power requirements:	DC 12 V using eight size D (R20) batteries AC 120 V, 60 Hz
Power consumption:	25 W

CD player section

Disc:	Compact disc
Scanning method:	Non-contact optical laser (semiconductor laser application)
Laser:	Semiconductor laser $\lambda = 780 \text{ nm}$
Rotation speed:	Approx. 500 - 200 rpm/CLV
Error correction:	Cross Interleave, Reed Solomon code
Number of channels:	2 channels
D/A conversion:	1-bit dual

Cassette deck section

Track format:	4 tracks, 2 channels
Frequency response:	Normal tape: 50 - 12,000 Hz (EIAJ)
Recording system:	AC bias
Erase system:	Magnet erase
Motor:	DC motor (1)
Heads:	Deck 1 Recording/playback head (1) Erasure head (1) Deck 2 Playback head (1)

Common section

Dimensions (W x H x D):	274 x 301.2 x 281.6 mm (10 $\frac{7}{8}$ x 11 $\frac{7}{8}$ x 11 $\frac{1}{8}$ in.)
Weight:	4.15 kg (9.13 lbs.) (not including batteries)

Speaker

Cabinet type:	2-way bass reflex type
Speaker:	120 mm cone type woofer 27 mm ceramic type tweeter
Impedance:	4 ohms
Allowable max. input:	10 W
Dimensions (W x H x D):	211.5 x 292 x 210.8 mm x 2 (8 $\frac{3}{8}$ x 11 $\frac{1}{2}$ x 8 $\frac{3}{8}$ in.)
Weight:	1.55 kg (3.41 lbs.) x 2

• Design and specifications are subject to change without notice.

ACCESSORIES LIST

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

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-CT4-915-010		IB,U(ESF)FM
2	86-CT4-951-010		RC UNIT, RC-6AT01
△ 3	87-A80-027-010		AC CORD SET,U BLK SPT2

ELECTRICAL MAIN PARTS LIST

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

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C16	87-A10-163-010		CAP,CER 82P-50 K SL
	87-A20-459-010		C-IC,LC78622ED	C17	87-A10-182-010		CAP,CER 0.01-50 Z F
	86-CT4-638-010		IC,LC867120W-5E13	C18	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-A20-042-010		IC,BA178M05T	C21	87-A10-176-010		CAP,CER 1000P-50 M D
	87-070-282-010		IC,BU2092	C22	87-018-108-080		CAP,TC-U 20P-50 SL
	87-070-083-010		IC,GP1U281X				
	87-A20-186-010		IC,LA9240M	C23	87-A10-170-010		CAP,CER 330P-50 K B
	87-070-417-010		IC,NJM4558 DD	C24	87-A10-177-010		CAP,CER 1500P-50 M D
	87-070-416-010		IC,NJU7201 L55	C31	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-A20-157-010		IC,TA2092N	C32	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-017-680-010		IC,TA8176SN	C41	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-017-916-010		IC,BU4066BC				
	87-001-176-010		IC,TA8102P	C58	87-A10-171-010		CAP,CER 390P-50 K B
	87-002-268-010		IC,LA1851N	C60	87-018-173-080		CAP,TC-U 15P-50 UJ
	87-001-376-010		IC,LC7218	C61	87-A10-128-010		CAP,CER 2P-50 K CH
	87-017-681-010		IC,TA8126S	C64	87-010-544-080		CAP, ELECT 0.1-50V
	87-020-828-010		IC,BA3416BL	C74	87-A10-175-010		CAP,CER 820P-50 K B
	87-017-914-010		IC,BU4094 BCP				
	87-017-804-010		IC,BU4052BC	C101	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-017-947-010		IC,M62412P	C103	87-010-248-080		CAP, ELECT 220-10V
	87-017-564-010		IC,LC7533	C104	87-010-402-080		CAP, ELECT 2.2-50V
	87-002-848-010		IC,TA8229K	C105	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-A20-558-040		C-IC,MM1354AJ	C106	87-A10-181-010		CAP,CER 6800P-50 M D
	87-001-440-010		IC,BA15218N				
TRANSISTOR				C107	87-A10-168-010		CAP,CER 220P-50 K B
	89-213-702-010		TR,2SB1370E(1.8W)	C108	87-010-401-080		CAP, ELECT 1-50V
	87-026-291-080		TR,DTC124XS	C109	87-010-401-080		CAP, ELECT 1-50V
	89-501-614-080		FET,2SK161Y	C110	87-010-401-080		CAP, ELECT 1-50V
	87-026-463-080		TR,2SA933SRS(0.3W)	C111	87-010-546-080		CAP, ELECT 0.33-50V
	89-319-233-080		TR,2SC1923 (0.1W)				
	89-112-965-080		TR,2SA1296GR(0.75W)	C113	87-010-404-080		CAP, ELECT 4.7-50V
	87-026-464-080		TR,DTC114TS (0.3W)	C114	87-A10-172-010		CAP,CER 470P-50 K B
	87-026-572-080		TR,DTA114TS	C115	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-026-462-080		TR,2SC1740 S(RS 0.3W)	C116	87-010-405-080		CAP, ELECT 10-50V
	87-026-287-080		TR,DTC143ES	C117	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-026-286-080		TR,DTA143ES				
	89-502-464-080		TR,2SK246Y	C131	87-010-545-080		CAP, ELECT 0.22-50V
	89-318-154-080		TR,2SC1815Y(0.4W)	C132	87-010-545-080		CAP, ELECT 0.22-50V
	87-026-214-080		TR,DTA114YS (0.3W)	C141	87-A10-182-010		CAP,CER 0.01-50 Z F
	89-320-011-080		TR,2SC2001K(15W)	C142	87-010-221-080		CAP, ELECT 470-10V
	89-322-405-680		TR,2SC2240GR/BL	C151	87-A10-157-010		CAP,CER 27P-50 K SL
	89-414-683-080		TR,2SD1468S 150MHZ 0.4				
	89-113-187-080		TR,2SA1318TU	C152	87-A10-157-010		CAP,CER 27P-50 K SL
	89-109-521-080		TR,2SA952K(0.6W)	C157	87-A10-176-010		CAP,CER 1000P-50 M D
	87-026-290-080		TR,DTA124XS	C158	87-A10-176-010		CAP,CER 1000P-50 M D
DIODE				C159	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-070-345-080		DIODE,IN4148	C160	87-010-263-080		CAP, ELECT 100-10V
	87-A40-156-010		DIODE,1N5392				
	87-017-164-080		ZENER,HZS9A2L	C161	87-A10-182-010		CAP,CER 0.01-50 Z F
	87-017-148-080		ZENER,HZS6A1L	C162	87-A10-177-010		CAP,CER 1500P-50 M D
	87-017-139-080		ZENER,HZS15-2	C163	87-A10-182-010		CAP,CER 0.01-50 Z F
				C164	87-A10-163-010		CAP,CER 82P-50 K SL
				C165	87-A10-182-010		CAP,CER 0.01-50 Z F
MAIN C.B							
C2	87-A10-131-010		CAP,CER 5P-50 K CH	C166	87-A10-182-010		CAP,CER 0.01-50 Z F
C3	87-A10-136-010		CAP,CER 10P-50K CH	C167	87-015-243-080		CAP,E 3.3-50 LL
C4	87-A10-172-010		CAP,CER 470P-50 K B	C168	87-A10-182-010		CAP,CER 0.01-50 Z F
C5	87-A10-132-010		CAP,CER 6P-50 K CH	C171	87-A10-182-010		CAP,CER 0.01-50 Z F
C6	87-A10-136-010		CAP,CER 10P-50K CH	C191	87-A10-177-010		CAP,CER 1500P-50 M D
C7	87-A10-182-010		CAP,CER 0.01-50 Z F				
C8	87-A10-182-010		CAP,CER 0.01-50 Z F	C192	87-A10-169-010		CAP,CER 270P-50 K B
C10	87-A10-133-010		CAP,CER 7P-50 K CH	C194	87-010-263-080		CAP, ELECT 100-10V
C11	87-A10-138-010		CAP,CER 15P-50 K CH	C195	87-010-374-080		CAP, ELECT 47-10V
C12	87-A10-173-010		CAP,CER 560P-50 K B	C301	87-018-130-080		CAP,TC-U 820P-50 B
C13	87-A10-182-010		CAP,CER 0.01-50 Z F	C302	87-018-130-080		CAP,TC-U 820P-50 B
C15	87-A10-138-010		CAP,CER 15P-50 K CH				
				C303	87-A10-175-010		CAP,CER 820P-50 K B
				C304	87-A10-175-010		CAP,CER 820P-50 K B
				C305	87-010-374-080		CAP, ELECT 47-10V
				C306	87-010-374-080		CAP, ELECT 47-10V
				C307	87-010-382-080		CAP, ELECT 22-25V
				C308	87-010-405-080		CAP, ELECT 10-50V
				C309	87-010-545-080		CAP, ELECT 0.22-50V
				C310	87-010-545-080		CAP, ELECT 0.22-50V
				C311	87-010-248-080		CAP, ELECT 220-10V
				C312	87-010-374-080		CAP, ELECT 47-10V
				C315	87-010-401-080		CAP, ELECT 1-50V
				C316	87-010-401-080		CAP, ELECT 1-50V
				C317	87-010-382-080		CAP, ELECT 22-25V
				C318	87-010-382-080		CAP, ELECT 22-25V
				C319	87-010-405-080		CAP, ELECT 10-50V

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C521	87-010-374-080		CAP, ELECT 47-10V	C37	87-010-404-080		CAP, ELECT 4.7-50V
C522	87-010-374-080		CAP, ELECT 47-10V	C40	87-A10-127-010		CAP,CER 1P-50 K CH
CN501	87-009-878-010		CONN,6P TKC-T H (M)	C42	87-A10-140-010		CAP,CER 22P-50 K CH
CN502	87-009-879-010		CONN,8P TKC-TH(M)	C48	87-A10-157-010		CAP,CER 27P-50 K SL
CN503	87-009-879-010		CONN,8P TKC-TH(M)	C50	87-A10-172-010		CAP,CER 470P-50 K B
CON902	86-CT4-641-010		CONN,1P PIN	C54	87-A10-168-010		CAP,CER 220P-50 K B
D514	87-A40-162-010		LED,L-1154SRD	C57	87-A10-140-010		CAP,CER 22P-50 K CH
D519	87-A40-162-010		LED,L-1154SRD	C58	87-A10-140-010		CAP,CER 22P-50 K CH
D520	87-A40-162-010		LED,L-1154SRD	C59	87-010-263-080		CAP, ELECT 100-10V
D521	87-A40-162-010		LED,L-1154SRD	C62	87-010-374-080		CAP, ELECT 47-10V
D522	87-A40-162-010		LED,L-1154SRD	C63	87-010-405-080		CAP, ELECT 10-50V
D523	87-A40-162-010		LED,L-1154SRD	C64	87-010-405-080		CAP, ELECT 10-50V
D524	87-A40-162-010		LED,L-1154SRD	C65	87-A10-170-010		CAP,CER 330P-50 K B
D525	87-A40-162-010		LED,L-1154SRD	C66	87-A10-170-010		CAP,CER 330P-50 K B
D526	87-A40-162-010		LED,L-1154SRD	C68	87-010-401-080		CAP, ELECT 1-50V
D527	87-A40-162-010		LED,L-1154SRD	C69	87-A10-166-010		CAP,CER 150P-50 K B
D528	87-A40-162-010		LED,L-1154SRD	C76	87-A10-102-080		CAP,E 1000-10 REA
D529	87-A40-161-010		LED,L-1154SGD	C77	87-010-263-080		CAP, ELECT 100-10V
D530	87-A40-161-010		LED,L-1154SGD	C81	87-010-404-080		CAP, ELECT 4.7-50V
D531	87-A40-161-010		LED,L-1154SGD	C82	87-010-221-080		CAP, ELECT 470-10V
D532	87-A40-161-010		LED,L-1154SGD	C84	87-010-263-080		CAP, ELECT 100-10V
D533	87-A40-161-010		LED,L-1154SGD	C89	87-010-263-080		CAP, ELECT 100-10V
D534	87-A40-161-010		LED,L-1154SGD	CON1	86-CT4-623-010		CONN ASSY,6P CD 1
D535	87-A40-161-010		LED,L-1154SGD	CON2	88-802-082-220		CONN ASSY,8P
D536	87-A40-161-010		LED,L-1154SGD	CON3	88-802-092-230		CONN ASSY,9P
D537	87-A40-161-010		LED,L-1154SGD	CON6	88-802-062-660		CONN ASSY,6P
D550	87-A40-161-010		LED,L-1154SGD	FB1	87-008-474-080		F-BEAD,EMI BL02RN1
J401	82-NF7-630-010		JACK,3.5 MO	FB2	87-008-372-080		FILTER,EMI BL OIRNI
L401	87-A50-067-080		COIL,1.00UH (CECS)	FB3	87-008-372-080		FILTER,EMI BL OIRNI
L500	87-003-171-010		COIL,15UH TROIDAL	PIN4	87-A60-109-010		CONN,2P V S2M-2W
L501	87-005-849-080		COIL,10UH(CECS)	X1	81-592-641-080		CERALOCK 16.93MHZ
L502	87-003-171-010		COIL,15UH TROIDAL				
LCD501	86-CT4-601-010		LCD,6CT-4	POWER C.B			
SW570	87-A90-483-080		SW,TACT TS2101	△FC701	87-035-488-010		FUSE,3.15A 125V D UL
SW571	87-A90-483-080		SW,TACT TS2101	△FC701	87-A90-160-080		FUSE CLAMP,FC 51F
SW572	87-A90-483-080		SW,TACT TS2101	△FC702	87-A90-160-080		FUSE CLAMP,FC 51F
SW573	87-A90-483-080		SW,TACT TS2101	DRIVE C.B			
SW574	87-A90-483-080		SW,TACT TS2101	M3	87-045-356-010		MOT,RF-310A 30
SW575	87-A90-483-080		SW,TACT TS2101	PIN3	87-009-352-010		CONN,9P PH H
SW576	87-A90-483-080		SW,TACT TS2101	SW1	87-036-110-010		PUSH SWITCH
SW577	87-A90-483-080		SW,TACT TS2101	SW2	87-036-110-010		PUSH SWITCH
SW581	87-A90-483-080		SW,TACT TS2101	DOOR SW C.B			
SW582	87-A90-483-080		SW,TACT TS2101	SW3	87-036-292-010		SW,LEAF LSA-1135FAU
SW583	87-A90-483-080		SW,TACT TS2101	Q-SOUND C.B			
SW584	87-A90-483-080		SW,TACT TS2101	C901	87-010-382-080		CAP, ELECT 22-25V
SW585	87-A90-483-080		SW,TACT TS2101	C902	87-010-382-080		CAP, ELECT 22-25V
SW586	87-A90-483-080		SW,TACT TS2101	C907	87-010-374-080		CAP, ELECT 47-10V
SW587	87-A90-483-080		SW,TACT TS2101	C909	87-010-263-080		CAP, ELECT 100-10V
SW588	87-A90-483-080		SW,TACT TS2101	C910	87-010-405-080		CAP, ELECT 10-50V
SW589	87-A90-483-080		SW,TACT TS2101				
VR401	86-NFA-607-010		VR,RTRY 10K15AX1 1 V XV0121PVN				
X501	87-030-273-010		VIB,XTAL 32.768K5PPM				
X502	87-A70-018-080		VIB,CER 6.00MHZ MG200				
CD C.B							
C1	87-010-403-080		CAP, ELECT 3.3-50V				
C4	87-010-248-080		CAP, ELECT 220-10V				
C6	87-010-374-080		CAP, ELECT 47-10V				
C9	87-010-263-080		CAP, ELECT 100-10V				
C10	87-010-263-080		CAP, ELECT 100-10V				
C12	87-010-401-080		CAP, ELECT 1-50V				
C14	87-010-405-080		CAP, ELECT 10-50V				
C16	87-010-545-080		CAP, ELECT 0.22-50V				
C17	87-A10-170-010		CAP,CER 330P-50 K B				
C30	87-A10-168-010		CAP,CER 220P-50 K B				
C31	87-010-400-080		CAP, ELECT 0.47-50V				
C32	87-010-263-080		CAP, ELECT 100-10V				
C33	87-010-402-080		CAP, ELECT 2.2-50V				
C36	87-010-374-080		CAP, ELECT 47-10V				

TRANSISTOR ILLUSTRATION



E C B

2SA952
2SA1296
2SA1318
2SC1815
2SC1923
2SC2001
2SC2240



E C B

2SA933S
2SC1740S
2SD1468
DTA114TS
DTA114YS
DTA124XS
DTA143ES
DTC114TS
DTC124XS
DTC143ES



B C E

2SB1370



D S G

2SK161

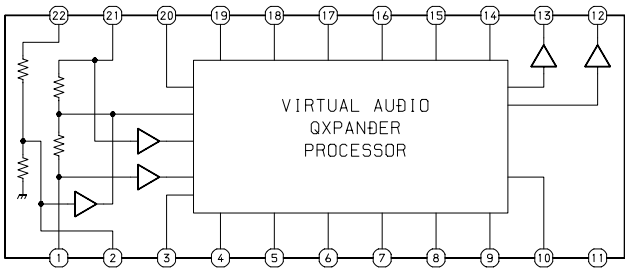


S G D

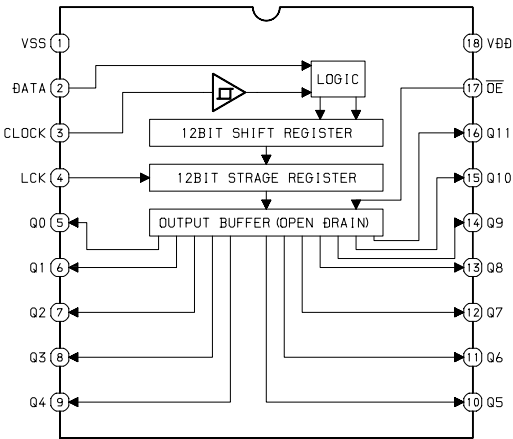
2SK246

IC BLOCK DIAGRAMS

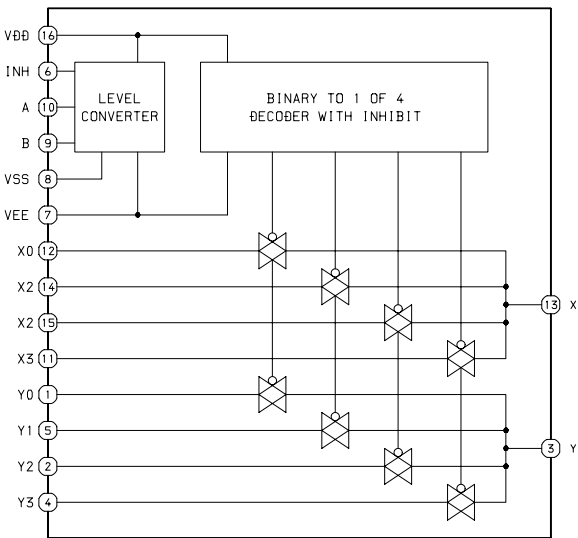
IC, MM1354AJ



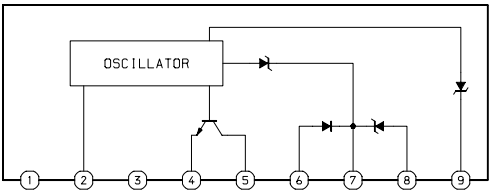
IC, BU2092



IC,BU4052BC



IC, TA8162S

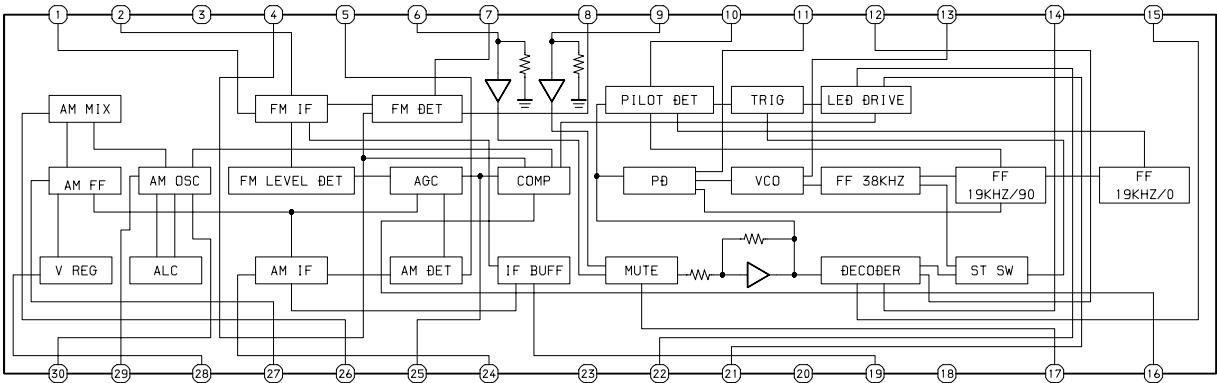


TRUTH TABLE

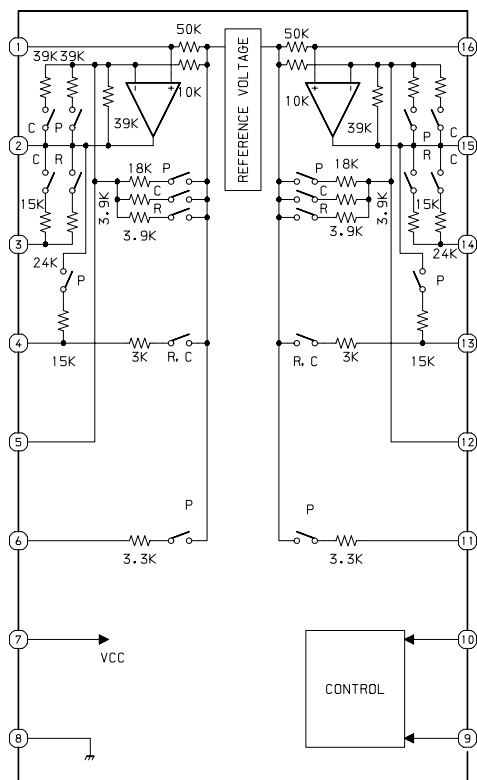
INHIBIT	A	B	NO SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

X: DON'T CARE.

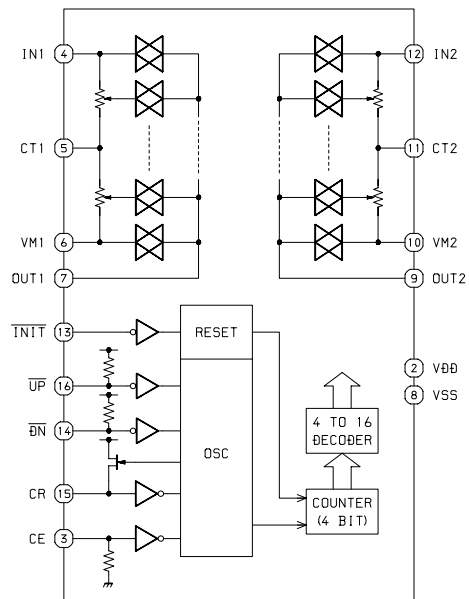
IC, LA1851N



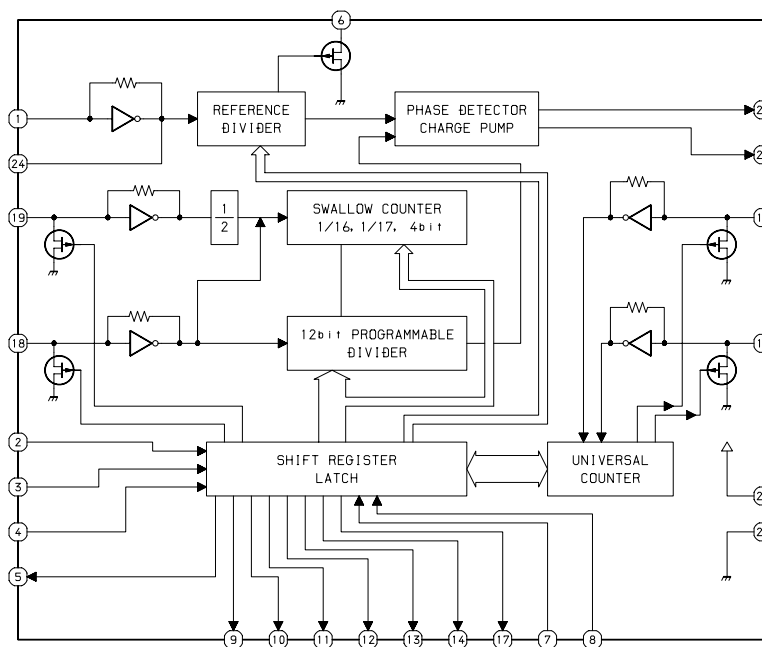
IC, M62412P



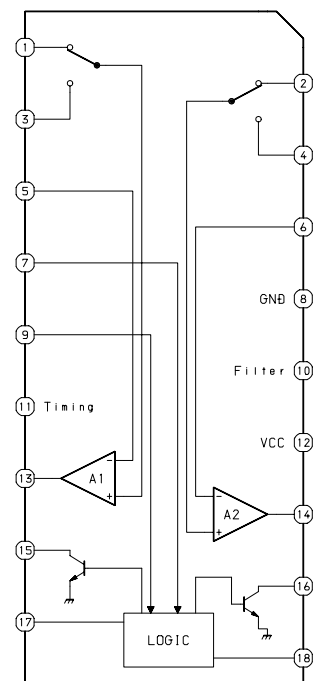
IC, LC7533



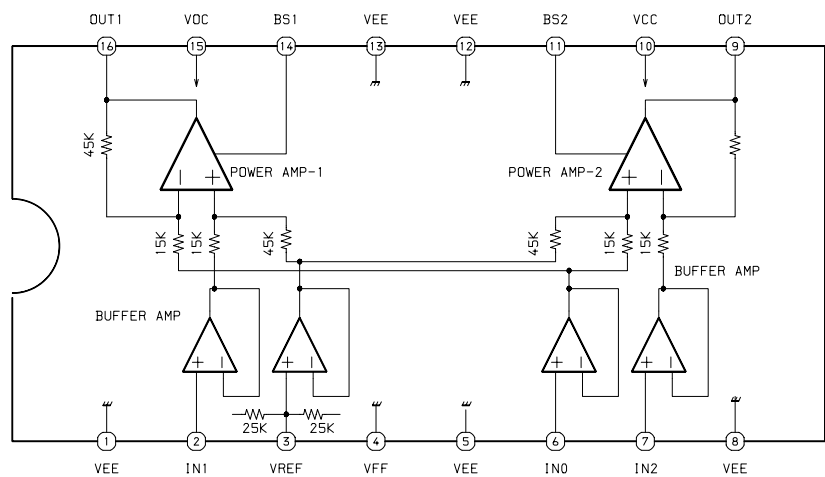
IC, LC7218



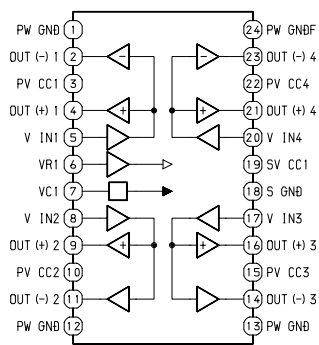
IC, BA3416BL



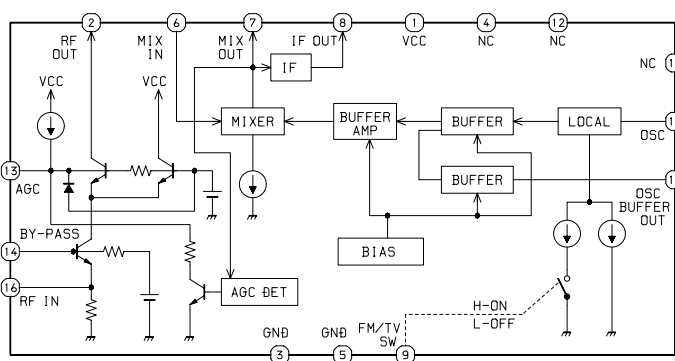
IC, TA8102P



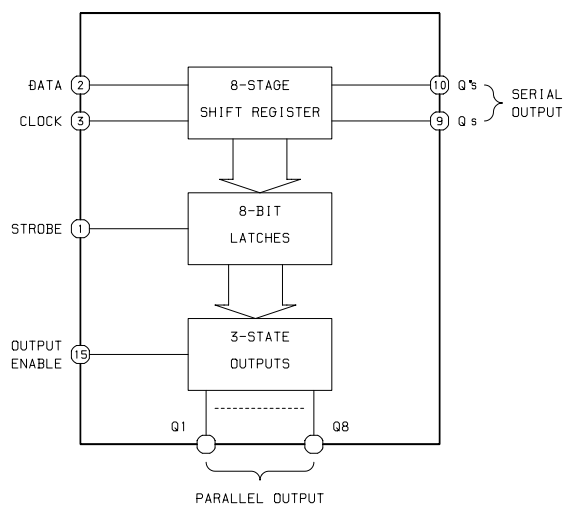
IC, TA2092N



IC, TA8176SN/F



IC, BU4094BCP

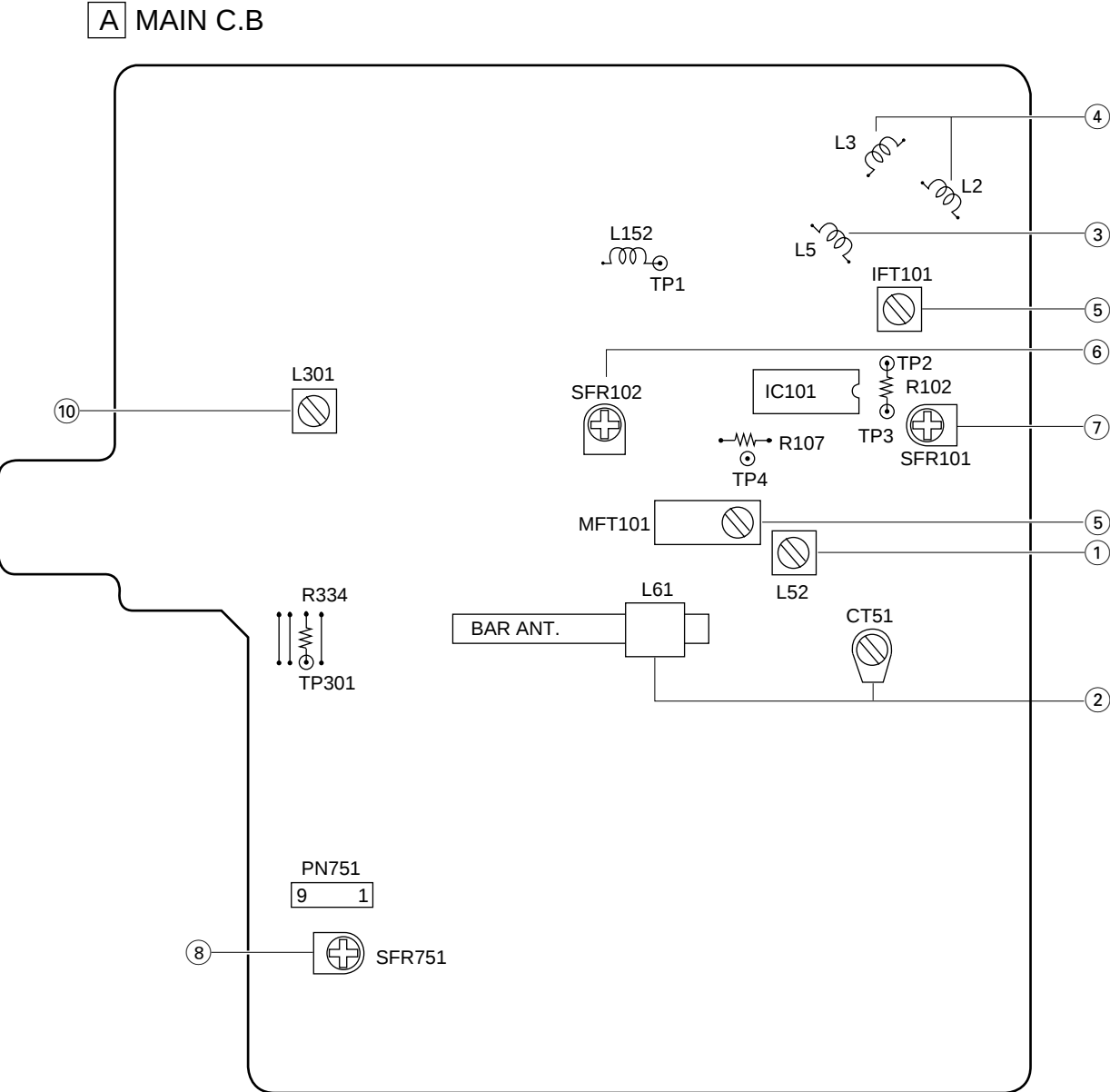


TRUTH TABLE

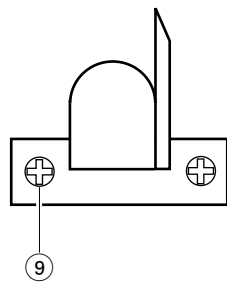
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
	L	X	X	Z	Z	Q7	NO Chg.
	L	X	X	Z	Z	No Chg.	Qs
	H	L	X	No Chg.	No Chg.	Q7	No Chg.
	H	H	L	L	Qn-1	Q7	No Chg.
	H	H	H	H	Qn-1	Q7	No Chg.
	H	X	X	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance
X=Don't Care

ADJUSTMENT



RPH (DECK1)/PH(DECK2)



<TUNER SECTION>

1. AM VT Adjustment

Settings: • Test point: TP1
• Adjustment location: L52

Method: Set to AM 530 kHz adjust L52 so that the test point becomes 1.3 V ± 0.05 V.
2. AM Tracking Adjustment

L61 600 kHz
CT51 1400 kHz
3. FM VT Adjustment

Settings: • Test point: TP1
• Adjustment location: L5

Method: Set to FM 87.5 MHz adjust L5 so that the test point becomes 4.0 V ± 0.3 V.
4. FM Tracking Adjustment

L2, L3 87.5 kHz
5. DC balance/ MONO Distortion Adjustment

Settings: • Test point: TP2, TP3
• Adjustment location: IFT101
• Input level: 60 dB

Method: Set to FM 98.0 MHz and adjust IFT101 so that the voltage between TP2 and TP3 becomes 0 V ± 0.02 V.
6. AM tuning Adjustment

Settings: • Adjustment location: SFR102

Method: Make setup for AM 1400 kHz. Adjust SFR102 so that the machine performs Auto Stop when 50 ± 2 dB is input.

* Confirm that TP4 is “L” at this time.
7. FM tuning Adjustment

Settings: • Adjustment location: SFR101

Method: Make setup for FM 98.0 MHz. Adjust SFR101 so that the machine performs Auto Stop when 33 ± 2 dB is input.

* Confirm that TP4 is “L” at this time.

<TAPE SECTION>

8. Tape Speed Adjustment (DECK1)

Settings: • Test tape: TTA-100
• Adjustment location: SFR751

Method: Play back the test tape with DECK1 and adjust SFR751 so that the output frequency is 3000 Hz. After the adjustment, check that the frequency of DECK2 is 3000 ± 45 Hz.
9. Azimuth Adjustment (DECK1, DECK2)

Settings: • Test tape: TTA-320
• Adjustment location: Head azimuth adjustment screw

Method: Play back the 10 kHz signal of test tape and adjust screw so that the output becomes maximum.
10. Bias OSC Fequency Adjustment

Settings: • Test tape: TTA-601
• Adjustment location: L301
• Test point: TP301

Method: Set to the REC mode. Adjust L301 so that thr frequency counter of the test point becomes 71.5 kHz ± 0.5 kHz

PRACTICAL SERVICE FIGURE

<RADIO SECTION>

<FM>

Frequency range:	87.5 ~ 108.0 MHz
IHF Sensitivity:	18.0 ± 5.0 dB (at 87.5 MHz)
(Distortion 3%):	19.0 ± 5.0 dB (at 98.0, 108.0 MHz)
S/N ratio:	60 ± 5.0 dB (at 98.0 MHz)
Intermediate frequency:	10.7 MHz
Stereo separation:	More than 20 dB

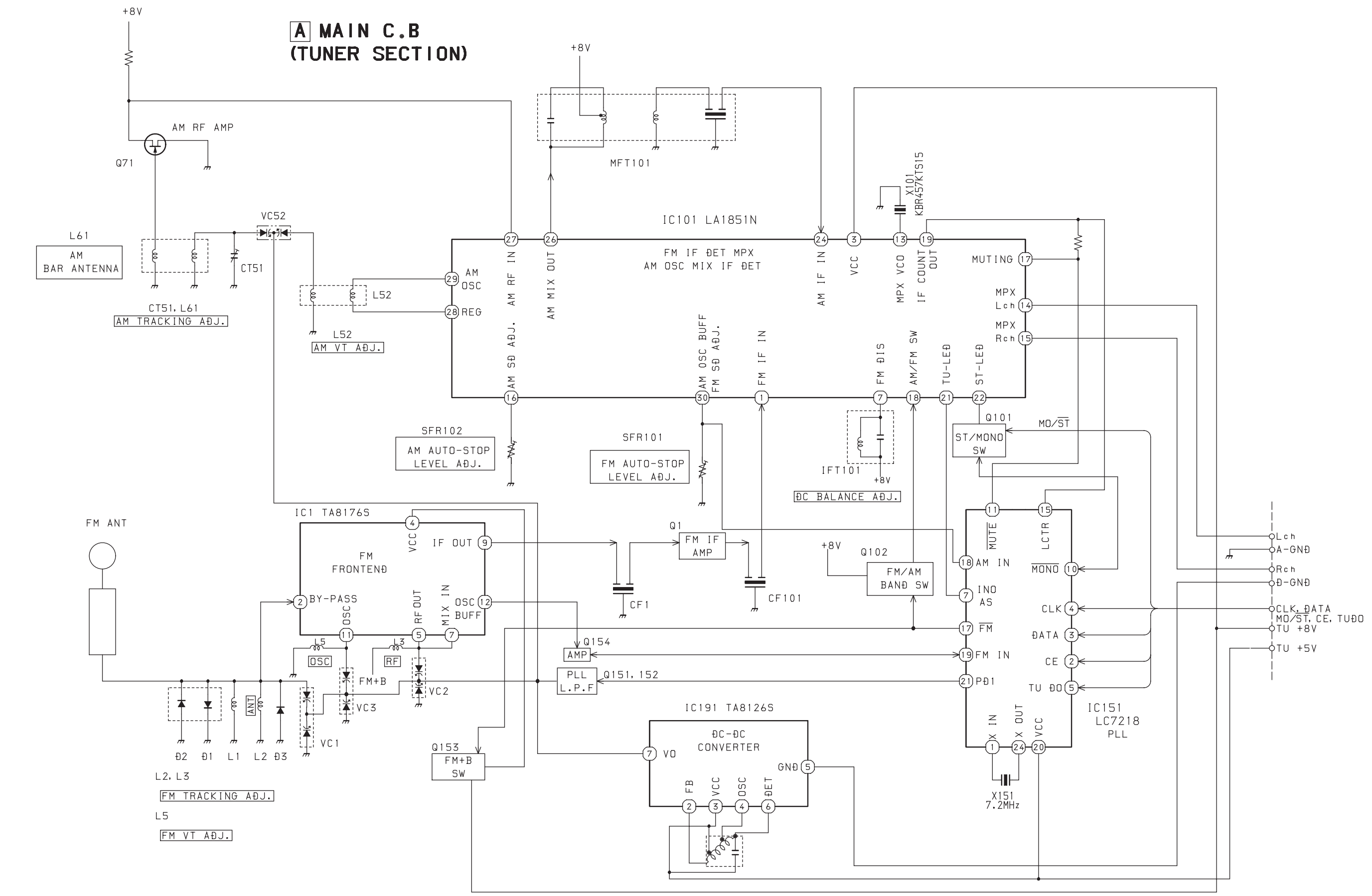
<AM>

Frequency range:	530 ~ 1710 kHz
Sensitivity:	50 ± 5 dB (at 600 kHz) 45 ± 5 dB (at 1000 kHz) 43 ± 5 dB (at 1400 kHz)
Intermediate frequency:	450 kHz

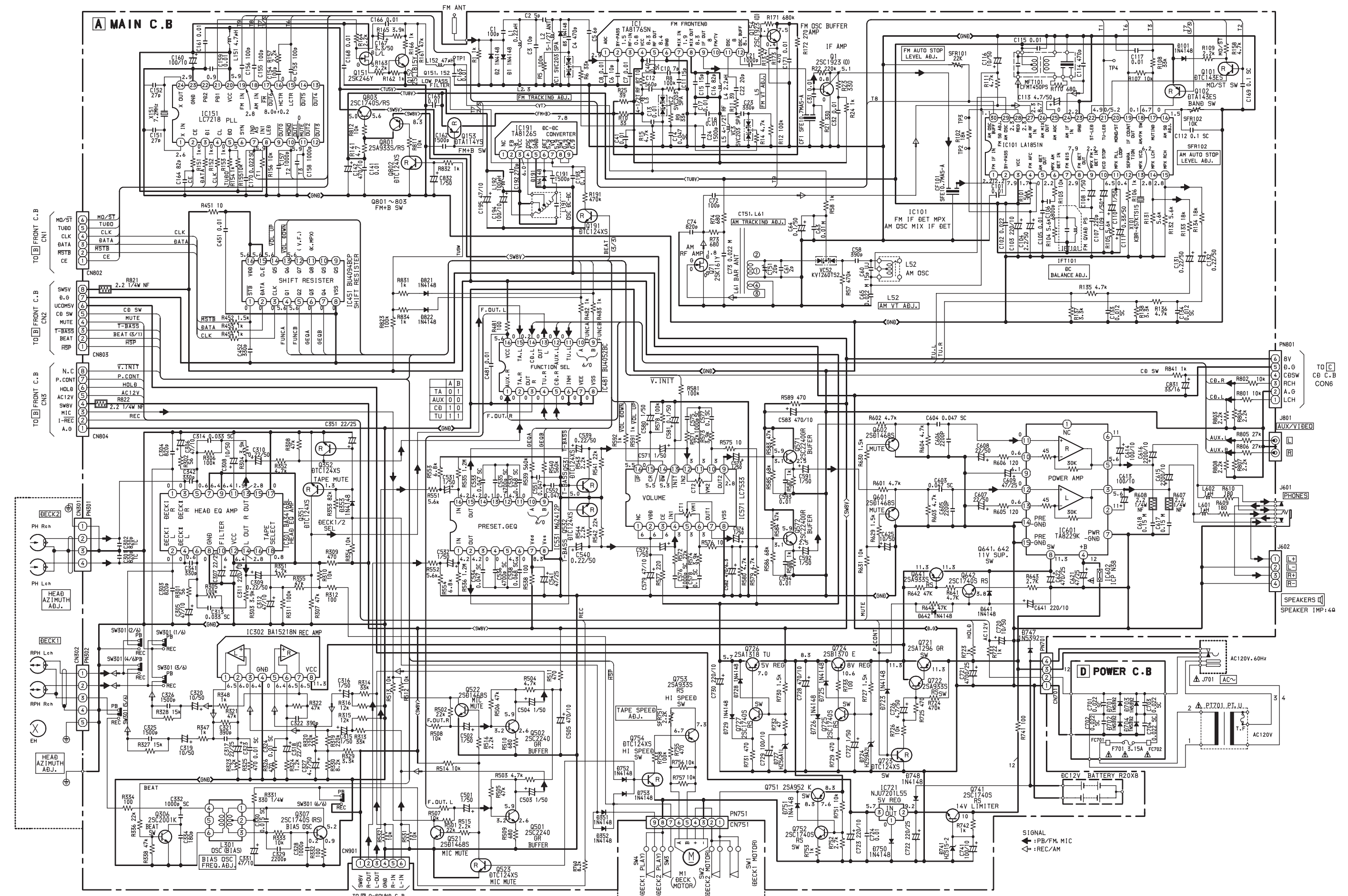
<TAPE RECORDER SECTION>

Recording bias frequency:	71.5 ± 0.5 kHz
Erasing ratio (400 Hz, 0 dB):	More than 60 dB
Distortion (T. H. D 10%):	Less than 3.0% (PB)
S/N ratio:	More than 40 dB (AC/DC, PB) More than 37 dB (AC, REC/PB)
Noise (PB)	Less than 1 mV/0.6 mV (AC/DC, MIN)
Tape speed:	3000 ± 90 Hz
Wow & flutter:	Less than 0.4% (JIS UN WTD)
Take-up torque:	45 ± 15 g-cm
F.F & REW torque	100 ⁺⁴⁰ ₋₄₅ g-cm

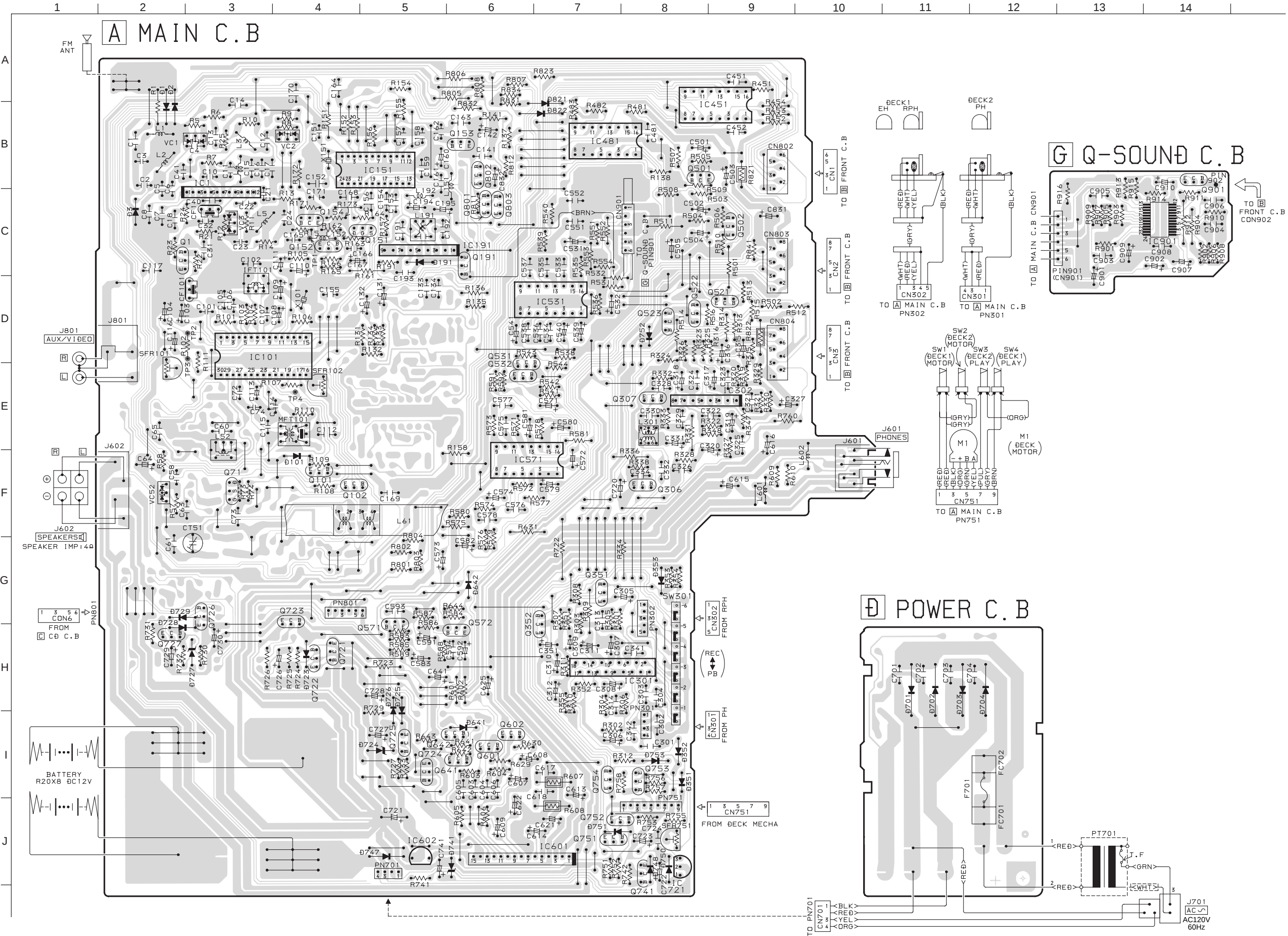
BLOCK DIAGRAM-1 (TUNER SECTION)



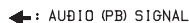
SCHEMATIC DIAGRAM-1 (MAIN SECTION)



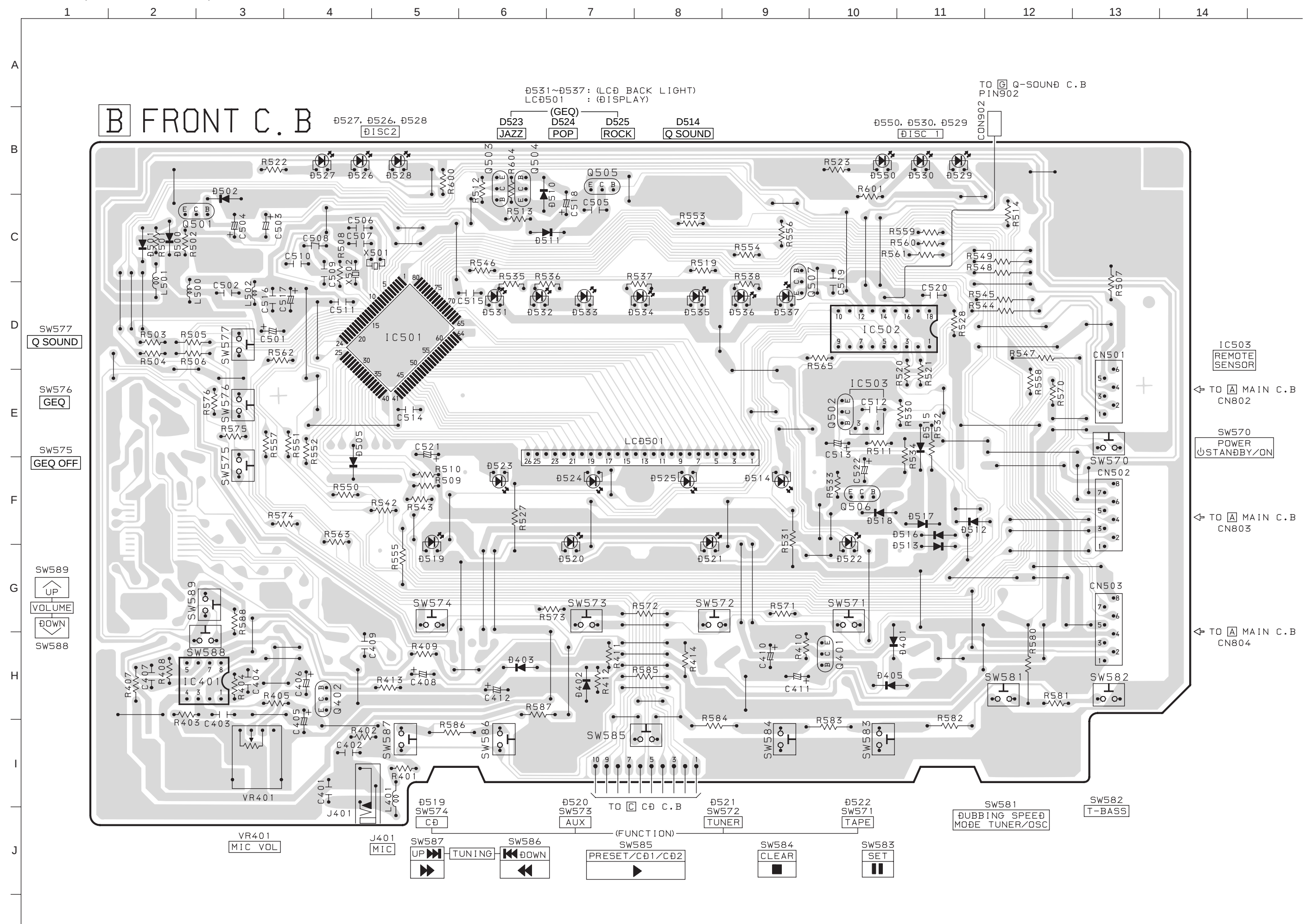
WIRING-1 (MAIN SECTION)



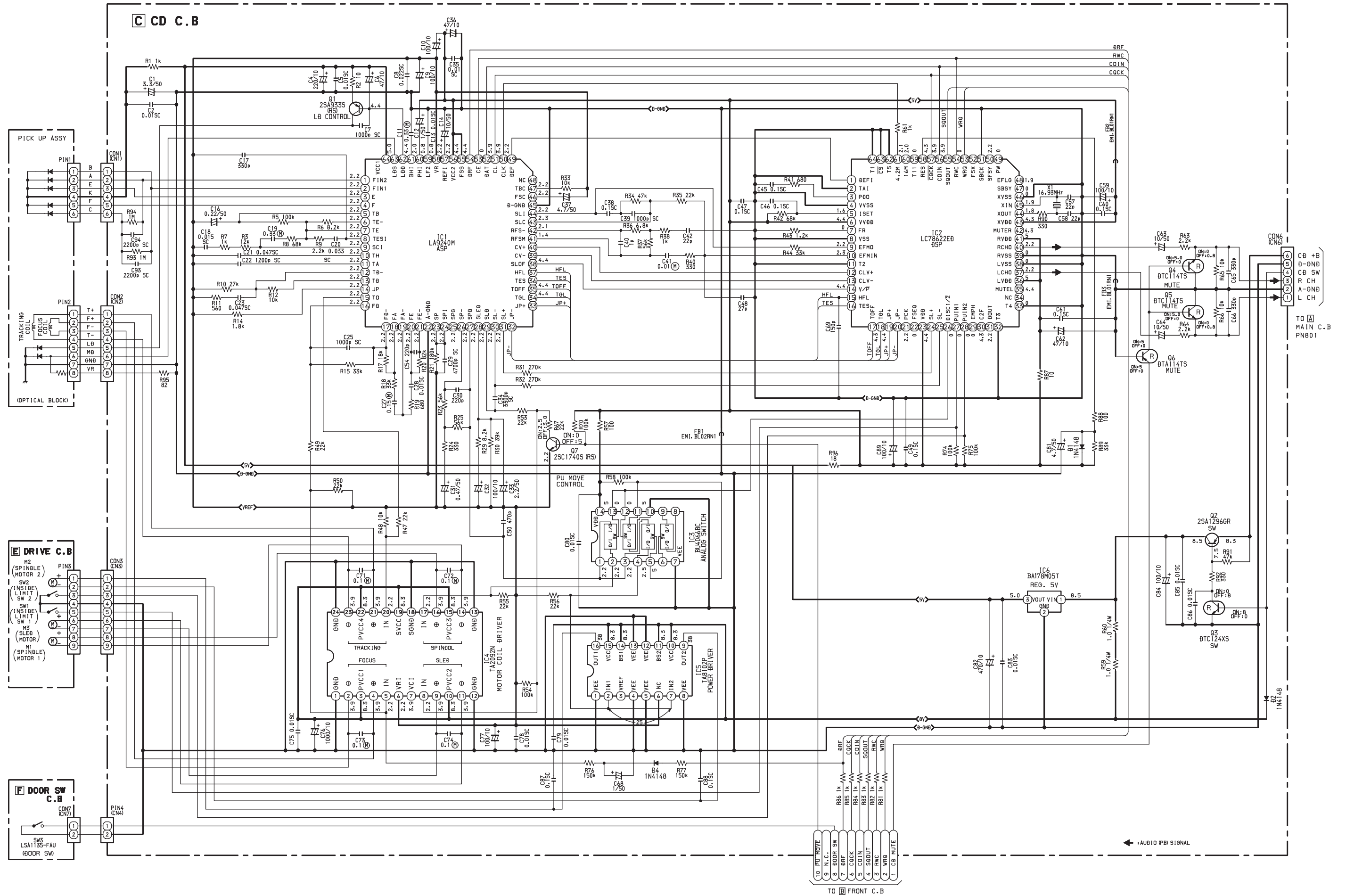
TO G
Q-SOUND
C.B
PIN902

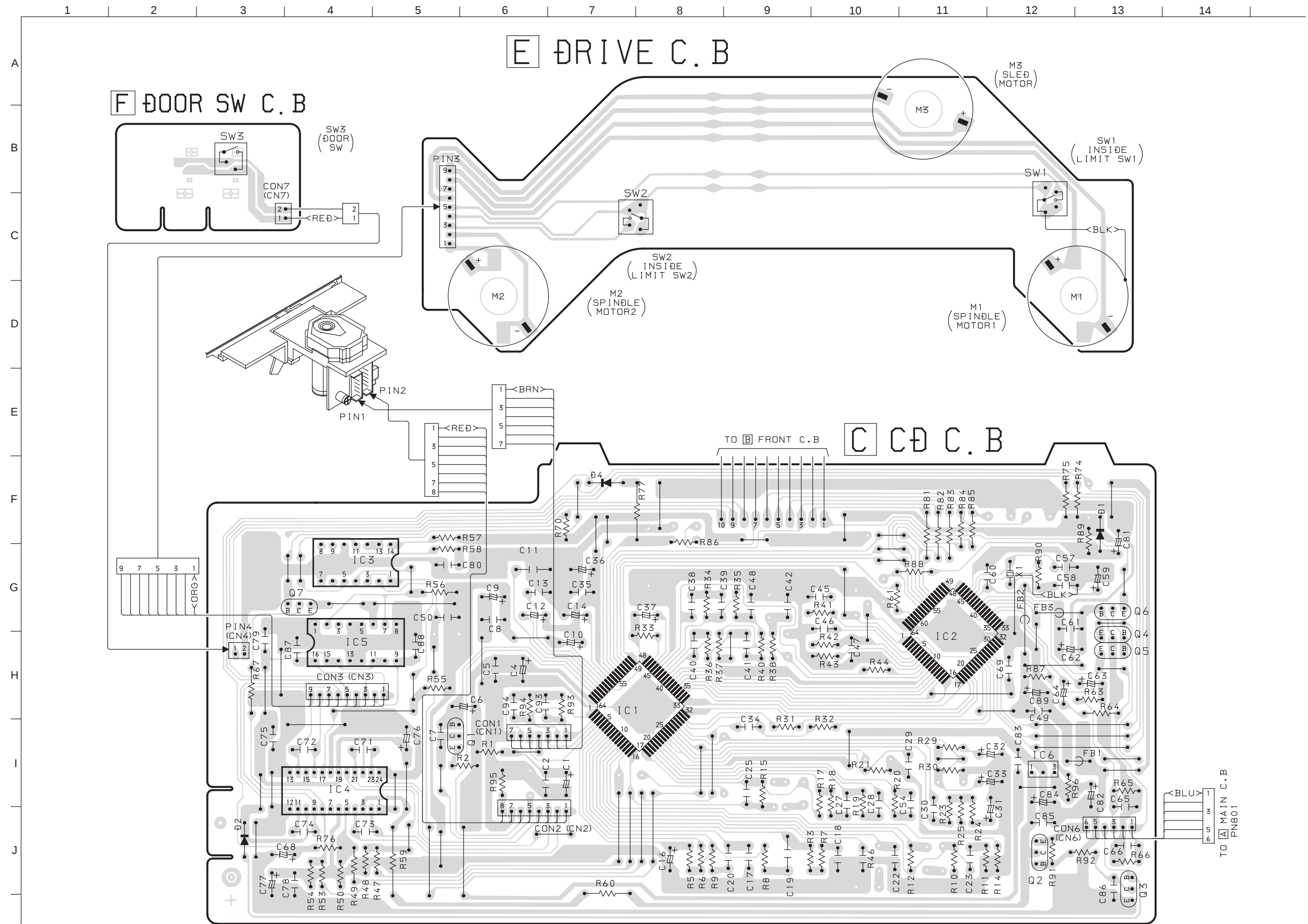


WIRING-2 (FRONT SECTION)

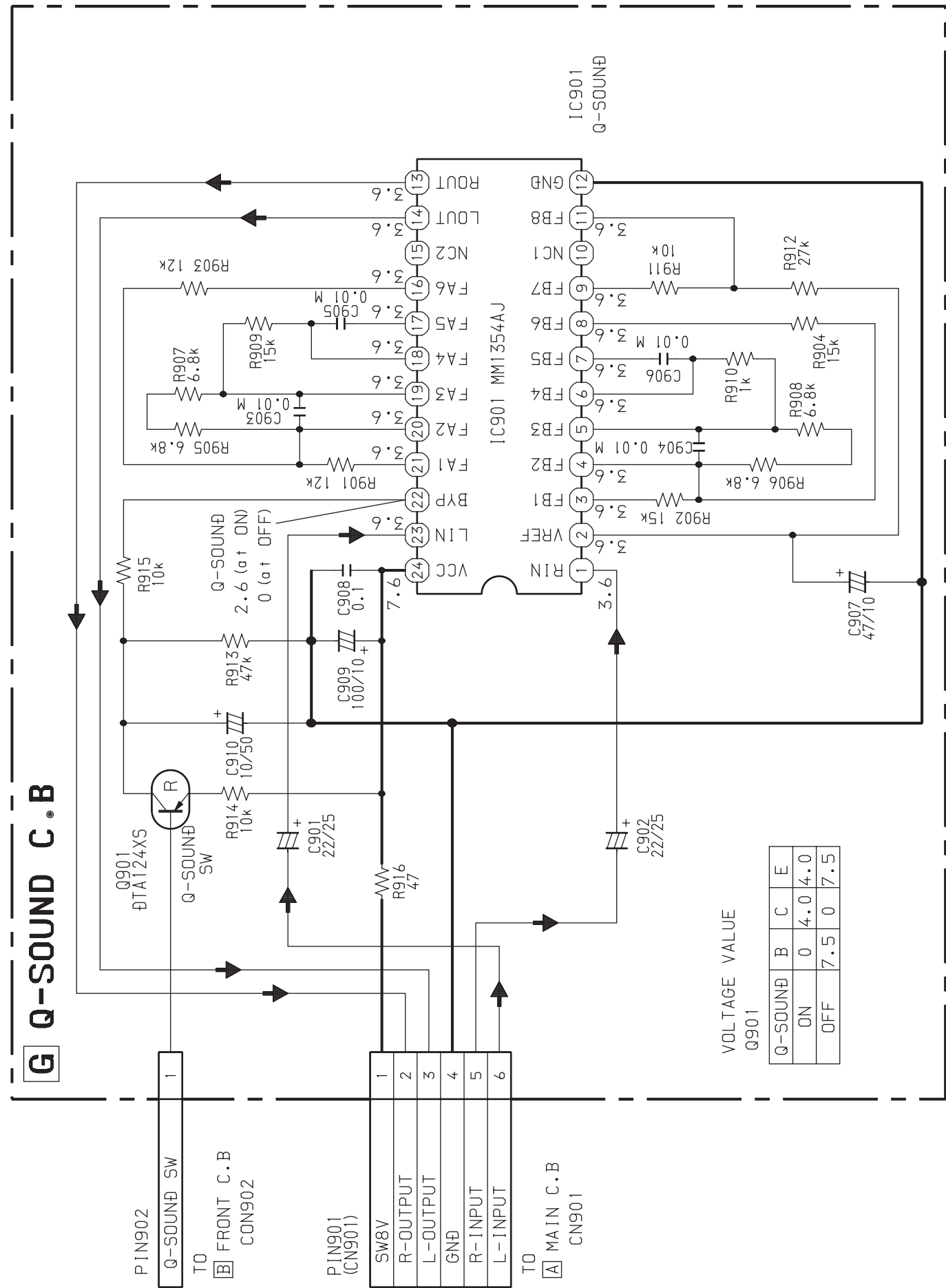


SCHEMATIC DIAGRAM-3 (CD SECTION)





SCHEMATIC DIAGRAM-4 (Q-SOUND SETION)



IC DESCRIPTION
IC, LA9240M

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE-	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES "Track Error Sense" comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD-	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD-	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD- and FA- pins.
19	FA-	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	A-GND	—	Analog signal GND.
23	SP	O	Single ended output of the CV+ and CV- pin input signal.
24	SPI	O	Single ended output of the CV+ and CV- pin input signal.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP-	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL-, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP-, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS–	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	D–GND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode ($\pm$ search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

IC, LC78622D

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISSET	I		Pin to which external resistor adjusting the PDO output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	TEST2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLK–	O	Disc motor control output. Three level output is possible using command.	
14	V/P	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP–	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and the sync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24-28	CONT1-CONT5	I/O	General purpose input/output pin 1 to 5.	The pin is controlled by the serial data command from microprocessor. When the pin is not used, set the pin to the input terminal and connect to 0V, or alternately set the pin to output terminal and leave the pin open.
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.	
30	C2F	O	C2 flag output pin.	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).	
32, 33	TEST3, TEST4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	$\overline{\text{RES}}$	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	TST11	O	Test signal output pin. Use this pin as open (normally L output).
60	16M	O	16.9344 MHz output pin.
61	4.2M	O	4.2336 MHz output pin.
62	TEST5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	TEST1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

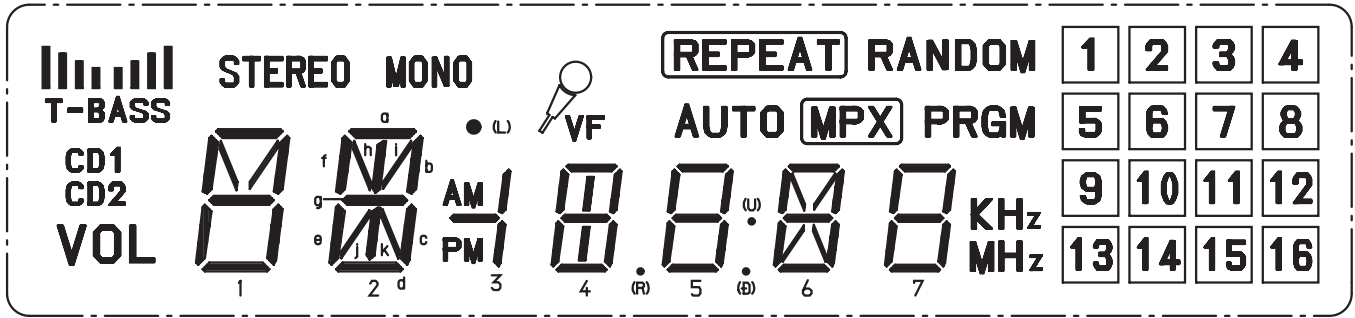
IC DESCRIPTION

IC, LC867120W-5E13

Pin No.	Pin Name	I/O	Description
1	RWC	O	CD read, write control output
2, 3	P14, P15	-	N. C
4	V. INITIAL	O	Volume initial output
5	CKSFT	O	Clock shift output
6	HOLD	I	Hold input
7	RST	I	Microprocessor reset
8	XT1	I	Connected to 32.768 kHz crystal
9	XT2	O	Connected to 32.768 kHz crystal
10	VSS1	-	GND
11	CF1	I	Connected to 6 MHz ceramic lock
12	CF2	O	Connected to 6 MHz ceramic lock
13	VDD1	-	Microprocessor power supply (5V)
14, 15	KEY0, KEY1	I	Key A/D input
16	MIC LEV	I	Mic level detection
17	DOOR	I	CD door sw input
18	P84	I	Bit input
19	WRQ	I	CD sub code input
20	DRF	I	CD detect RF level input
21	MONO/ST	I	FM mono stereo rejection
22	BEAT	O	BEAT sift SW output
23	T-BASS	O	T-BASS on off SW output
24	HSP	O	High speed dubbing selector output
25	INITIAL	O	Initial setting data
26	TURDO	I	PLL IC tuner data input
27	REC	I	Recording SW input
28	RMT	I	Remote control input
29	PAO	I	Initial setting input
30~40	S0~S10	-	N. C
41	VDD3	-	Microprocessor power supply
42	VSS3	-	GND
43, 44	S12, S13	O	LCD segment output
45~60	S16~S31	O	LCD segment output
61~63	V3~V1	-	N. C
64~67	COM0~COM3	O	LCD common output
68	VSS2	-	GND
69	VDD2	-	Microprocessor power supply (5 V)
70	FSTB	O	Shift register clock output
71	MSTB	O	Shift register data latch strobe output
72	CLK	O	PLL shift register data output
73	DATA	O	PLL shift register data output
74	CDSW	O	CD SW output

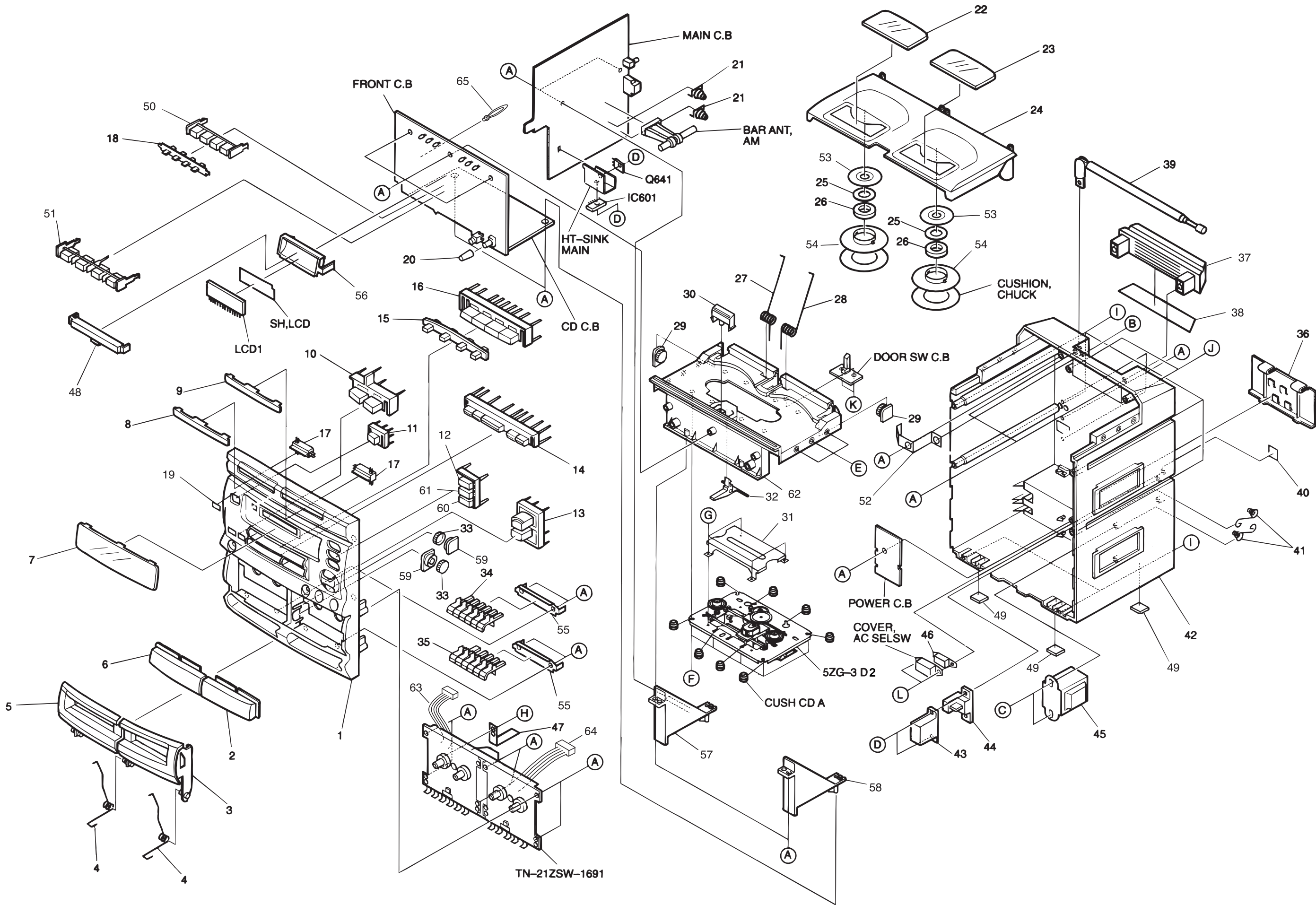
Pin No.	Pin Name	I/O	Description
75	PCONT	O	Power supply control output
76	MUTE	O	Main mute output
77	CD MUTE	O	CD mute output
78	COIN	O	CD command output
79	SQOUT	I	CD sub code Q input
80	CQCK	O	CD command clock output

FL DISPLAY



NC.	COM. 1	COM. 2	COM. 3	COM. 4
1	COM. 1			
2		COM. 2		
3			COM. 3	
4				COM. 4
5	T-BASS	CD1	CD2	VOL
6	1a	1h	1f	1e
7	STEREO	1b	1g	1d
8	2a	2f	2e	1c
9	2h	2g	2j	2d
10	2i	2b	2c	2m
11	AM	3b, 3c	3g	PM
12		4f	4g	4e
13	•(L)	4a	4i, 4k	4d
14	MONO	4b	4c	•(R)
15	5f	5g	5e	5d
16	5b	•(U)	5c	•(D)
17	5a	6f	6g	6e
18	VF	6a	6h, 6j	6d
19	AUTO	6b	6c	7e
20	REPEAT	7f	7g	7d
21	MPX	7a	7b	7c
22	RANDOM	PRGM	KHZ	MHZ
23	1	5	9	13
24	2	6	10	14
25	3	7	11	15
26	4	8	12	16

- (L) : LEFT
- (R) : RIGHT
- (U) : UPPER
- (D) : DOWN



MECHANICAL MAIN PARTS LIST

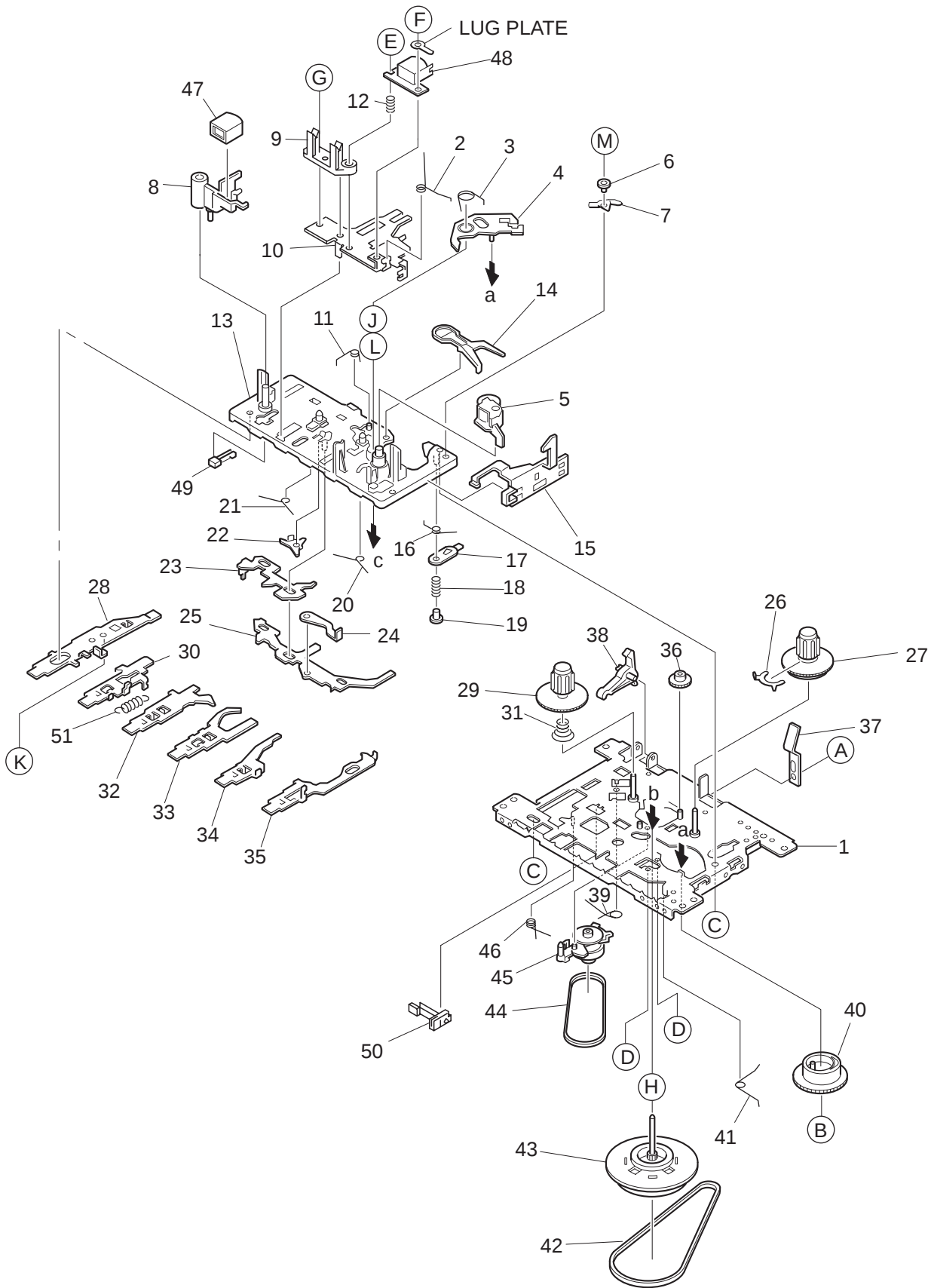
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-CT4-151-010		CABI,FR NE	41	86-CT4-212-010		SPR-C,BATT A
2	86-CT4-011-010		WINDOW,CASS 2	42	86-CT4-152-010		CABI,REAR NE
3	86-CT4-157-010		BOX,CASS 2 NE	43	87-A90-086-010		COVER,AC-SOCKET
4	86-CT4-209-010		SPR-T,CASS	44	87-A60-177-010		JACK AC E W/SW
5	86-CT4-156-010		BOX,CASS 1 NE	45	86-CT4-612-010		PT,U
6	86-CT4-010-010		WINDOW,CASS 1	46	87-A90-089-010		SW,SL1-6-2
7	86-CT4-161-010		WINDOW,DISP NE	47	86-CT4-214-010		SPR-P,REC
8	86-CT4-159-010		WINDOW,DISC 1 NE	48	86-CT4-207-010		COVER,LED
9	86-CT4-160-010		WINDOW,DISC 2 NE	49	86-CT4-218-010		CUSHION,FOOT/PORON
10	86-CT4-026-010		BTN,DSL	50	86-CT4-206-010		GUIDE,EQ-LED
11	86-CT4-167-010		BTN,PWR NE	51	86-CT4-205-010		GUIDE,FUNC-LED
12	86-CT4-168-010		BTN,Q SOUND	52	86-CT4-203-010		HLDR,ANT
13	86-CT4-171-010		BTN,VOL NE	53	86-CT4-222-010		HLDR,CHUCK A
14	86-CT4-166-010		BTN,CONT NE	54	86-CT4-223-010		HLDR,CHUCK B
15	86-CT4-031-010		LENS,FUNC	55	86-CT4-208-010		HLDR,KEY-CASS
16	86-CT4-165-010		BTN,FUNC NE	56	86-CT4-204-010		HLDR,LCD
17	86-CT4-033-010		LENS,DISC	57	86-CT4-201-010		HLDR,PCB A
18	86-CT4-032-010		LENS,EQ	58	86-CT4-202-010		HLDR,PCB B
19	86-CT4-035-010		BADGE,AIWA 30N	59	86-CT4-221-010		OIL-DMPR,BRACKET
20	86-CT4-172-010		KNOB,RTRY MIC NE	60	86-CT4-170-010		BTN,GEQ OFF
21	86-CT4-213-010		SPR-C,BATT B	61	86-CT4-169-010		BTN,GEQ
22	86-CT4-014-010		WINDOW,CD 1	62	86-CT4-153-010		CHAS,CD NE
23	86-CT4-015-010		WINDOW,CD 2	63	86-CT4-620-010		CONN ASSY,5P RPH
24	86-CT4-158-010		BOX,CD NE	64	86-CT4-621-010		CONN ASSY,9P DECK
25	86-CT4-224-010		PLATE,MAGNET	65	86-CT4-641-010		CONN,1P PIN
26	87-036-368-010		MAGNET	A	87-751-097-410		SCREW 3X12
27	86-CT4-210-010		SPR-T,CD 1	B	87-493-100-410		VWWS+3-16 BLK
28	86-CT4-227-010		SPR-T,CD 2A	C	87-661-100-410		VFT1+3-16
29	87-063-165-010		OIL-DMPR 150	D	87-651-075-410		VT1 +2.6-10
30	86-CT4-164-010		BTN,CD OPEN NE	E	87-623-097-410		QT1+3-12 B
31	86-CT4-041-110		PANEL,CD	F	81-CD5-204-110		SCREW,CD
32	86-CT4-217-010		LEVER,EJECT	G	87-067-520-010		TAPPING SCREW, VFTT+2-6
33	86-CT4-220-010		OIL-DMPR,GEAR	H	87-571-032-410		VIT+2-3
34	86-CT4-162-010		KEY,CASS 1 NE	I	87-651-104-410		VT1+3-30
35	86-CT4-163-010		KEY,CASS 2 NE	J	87-651-100-410		VT1+3-16
36	86-CT4-154-010		LID,BATT NE	K	87-661-097-410		TAPPING SCREW, VFT1+3-12
37	86-CT4-155-010		HANDL,GLIP NE	L	87-067-579-010		TAPPING SCREW, BVT2+3-8
38	86-CT4-216-110		PLATE,HANDLE				
39	86-CT4-616-010		ANT,ROD				
40	86-CT4-043-010		PLATE,VOLTAGE				

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		

TAPE MECHANISM EXPLODED VIEW 1/2

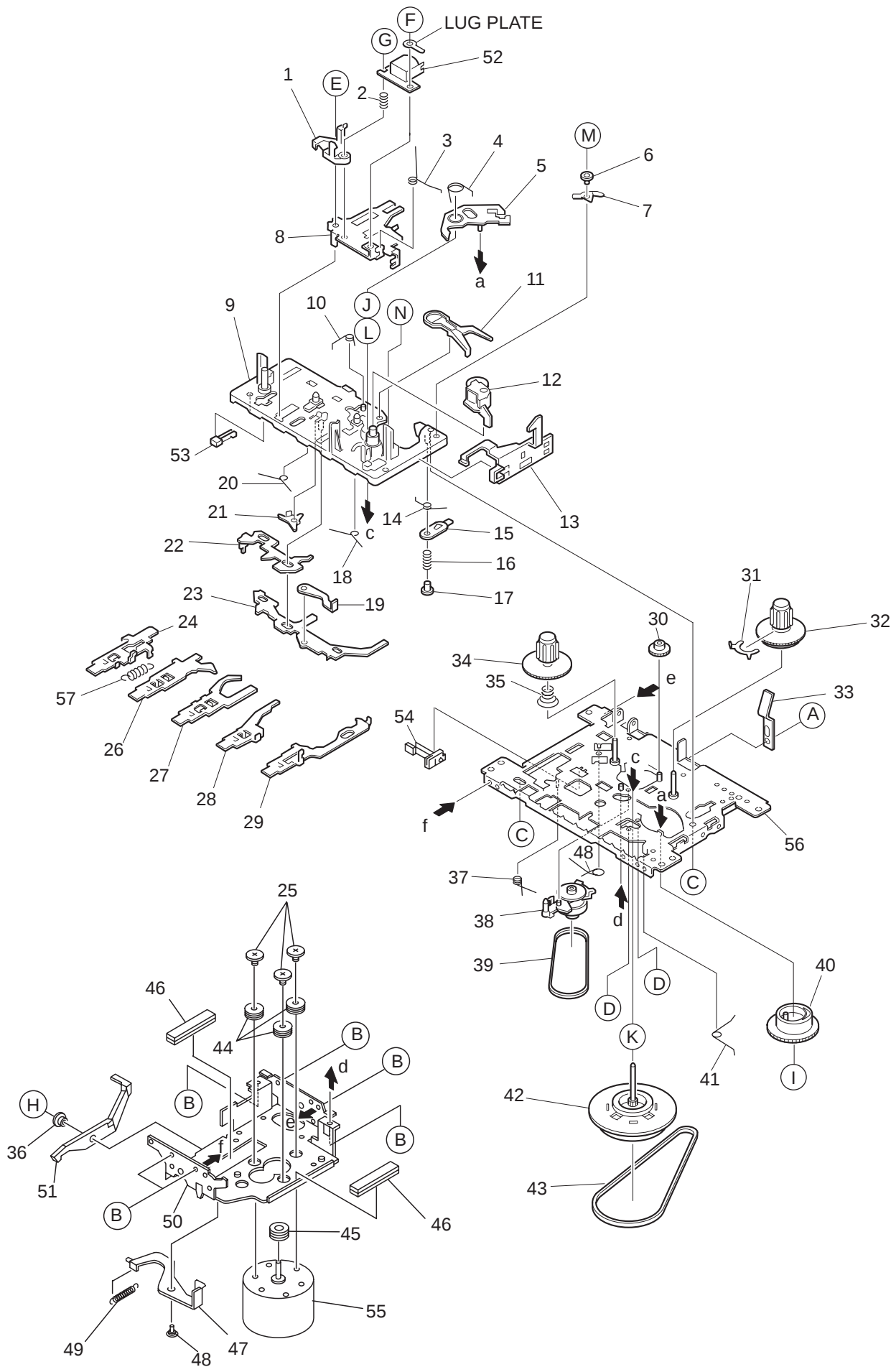


TAPE MECHANISM PARTS LIST 1/2

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

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-015-010		CHASSIS ASSY	36	S1-821-100-700		FF GEAR
2	S1-921-030-030		PANEL P SPRING	37	S1-829-100-010		PACK SPRING
3	S1-921-260-050		GEAR PLATE SPRING	38	S1-821-100-690		RECORD SAFETY LEVER
4	S1-921-265-020		GEAR PLATE ASSY	39	S1-921-140-210		REC BUTTON LEVER SPRING
5	S1-921-043-090		PINCH ROLLER ARM ASY	40	S1-921-260-020		CAM GEAR
6	S1-921-140-370		P ARM COLLER	41	S1-921-140-160		E ACTUATOR SPRING
7	S1-921-140-340		P ARM	42	S1-921-090-240		MAIN BBELT
8	S1-921-030-050		MG ARM	43	S1-921-093-030		FLYWHEEL ASSY
9	S1-921-030-4A0		HEAD BASE	44	S1-921-070-030		RF BELT
10	S1-921-030-110		HEAD PANEL	45	S1-921-073-080		RF CLUTCH ASSY
11	S1-921-141-8A0		M CONTROL SPRING	46	S1-921-140-170		P.S.LEVER SPRING
12	S1-821-030-070		AZIMUTH SPRING	47	S6-209-100-100		E HEAD PH-K380-MS1
13	S1-921-143-010		BASE ASSY	48	S6-201-011-110		HEAD,RP7442ES-0951
14	S1-921-260-4A0		SENSING LEVER	49	S6-401-011-520		LEAF SW MSW-1541F
15	S1-921-130-020		EJECT SLIDE LEVER	50	S6-401-011-610		LEAF SW MSW-17820MVEI
16	S1-921-141-3A0		P CONTROL SPRING	51	S1-821-010-500		PLAY BUTTON LEVER SPRING
17	S1-921-140-820		PAUSE LEVER(F)	A	S9-P33-200-320		DEL TITE SCREW M2-3
18	S1-921-140-120		PAUSE LEVER SPRING	B	S9-422-000-000		P WASHER CUT 1.2-3.8-0.3
19	S1-921-140-110		PAUSE STOPPER	C	S9-679-000-000		P TAP SCREW M2-5
20	S1-921-140-150		BUTTON LEVER SPRING(B)	D	S9-999-180-090		TAP SCREW M2-4.5
21	S1-921-140-140		BUTTON LEVER SPRING(A)	E	S9-922-000-000		AZIMUTH SCREW M2-8
22	S1-921-140-200		PR STOPPER	F	S9-P01-200-310		SCREW,M2-3
23	S1-921-140-090		SWITCH ACTUATOR	G	S9-004-000-000		SCREW M2-6
24	S1-821-011-590		E KICK LEVER	H	S9-882-000-000		P WASHER 2-3.5-0.4
25	S1-921-140-080		PUSH BUTTON ACTUATOR	I	S9-999-200-410		P TAP SCREW M2-3
26	S1-921-050-060		SENSOR	J	S9-999-030-130		P WASHER CUT 1.45-3.8-0.5
27	S1-921-053-030		TAKE UP REEL ASSY	K	S9-179-000-000		C TAP SCREW M2-3
28	S1-921-140-220		REC BUTTON LEVER	L	S9-999-000-030		P WASHER2.1-4-0.13
29	S1-921-053-040		SUPPLY REEL ASSY				
30	S1-921-140-230		PLAY BUTTON LEVER				
31	S1-829-100-100		BACK TENSION SPRING				
32	S1-921-140-240		REW BUTTON LEVER				
33	S1-921-140-250		FF BUTTON LEVER				
34	S1-921-140-260		STOP BUTTON LEVER				
35	S1-921-140-610		PAUSE BUTTON LEVER				

TAPE MECHANISM EXPLODED VIEW 2/2

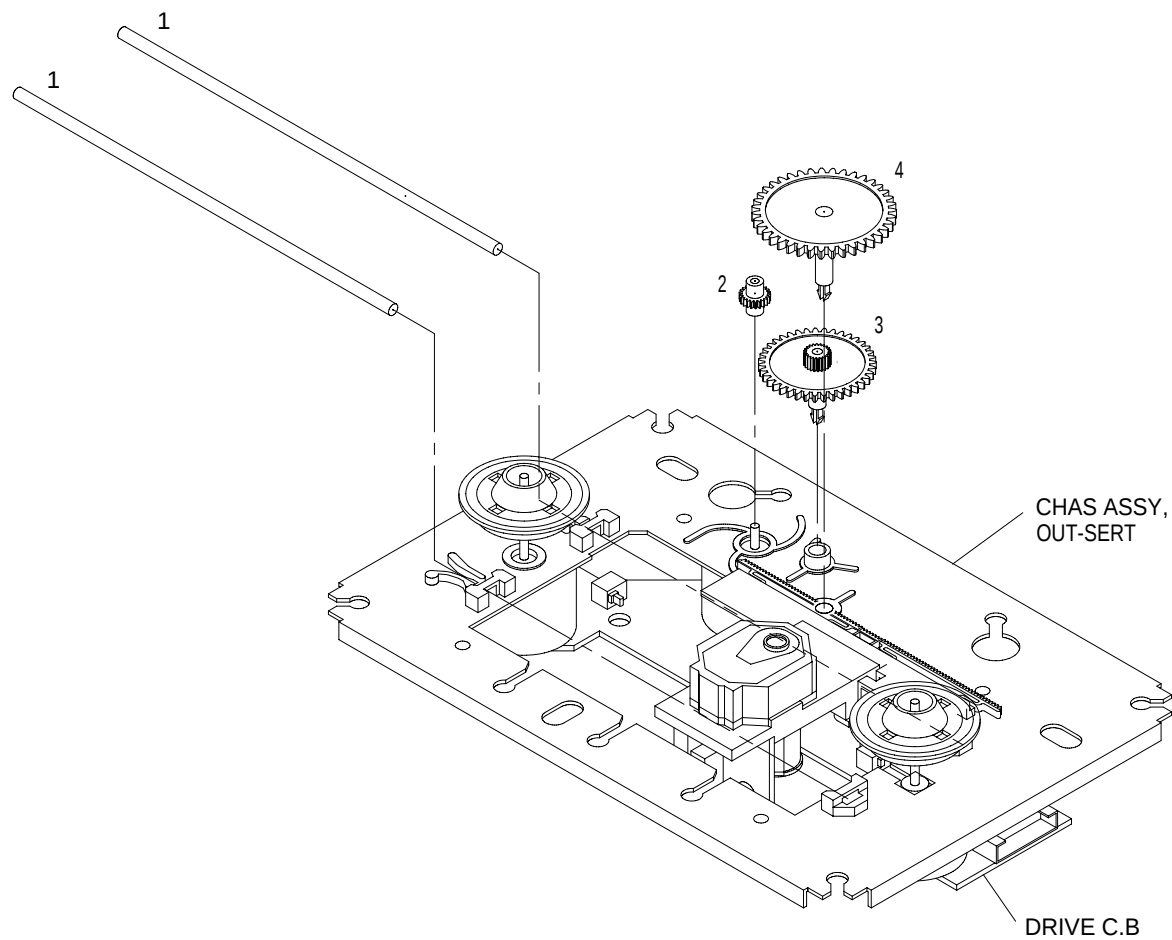


TAPE MECHANISM PARTS LIST 2/2

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-030-4A0		HEAD BASE	41	S1-921-140-160		E ACTUATOR SPRING
2	S1-821-030-070		AZIMUTH SPRING	42	S1-921-093-030		FLYWHEEL ASSY
3	S1-921-030-030		PANEL P SPRING	43	S1-921-090-240		MAIN BBELT
4	S1-921-260-050		GEAR PLATE SPRING	44	S1-820-130-060		MOTOR RUBBER
5	S1-921-265-020		GEAR PLATE ASSY	45	S1-921-120-130		MOTOR PULLEY
6	S1-921-140-370		P ARM COLLER	46	S1-921-120-120		ANTI VIBR FELT MAT
7	S1-921-140-340		P ARM	47	S1-821-120-680		P KICK LEVER (A)
8	S1-921-030-110		HEAD PANEL	48	S1-821-120-230		PK COLLER SCREW A
9	S1-921-143-010		BASE ASSY	49	S1-821-120-250		P KICK LEVER SPRING
10	S1-921-141-8A0		M CONTROL SPRING	50	S1-921-120-110		MOTOR BRACKET
11	S1-921-260-4A0		SENSING LEVER	51	S1-921-120-090		P KICK LEVER
12	S1-921-043-090		PINCH ROLLER ARM ASSY	52	S6-201-011-110		HEAD,RP7442ES-0951
13	S1-921-130-020		EJECT SLIDE LEVER	53	S6-401-011-520		LEAF SW MSW-1541F
14	S1-921-141-3A0		P CONTROL SPRING	54	S6-401-011-610		LEAF SQ MSW-17820MVE1
15	S1-921-140-820		PAUSE LEVER(F)	55	S6-002-030-290		MOTOR EG530YD-2BH
16	S1-921-140-120		PAUSE LEVER SPRING	56	S1-921-015-010		CHASSIS ASSY
17	S1-921-140-110		PAUSE STOPPER	57	S1-821-010-500		PLAY BUTTON LEVER SPRING
18	S1-921-140-150		BUTTON LEVER SPRING(B)	A	S9-P33-200-320		DEL TITE SCREW M2-3
19	S1-821-011-590		E KICK LEVER	B	S9-180-000-000		C TAP SCREW M2-4
20	S1-921-140-140		BUTTON LEVER SPRING(A)	C	S9-679-000-000		P TAP SCREW M2-5
21	S1-921-140-200		PR STOPPER	D	S9-999-180-090		TAP SCREW M2-4.5
22	S1-921-140-090		SWITCH ACTUATOR	E	S9-004-000-000		SCREW,M2-6
23	S1-921-140-080		PUSH BUTTON ACTUATOR	F	S9-P01-200-310		SCREW,M2-3
24	S1-921-140-230		PLAY BUTTON LEVER	G	S9-922-000-000		AZIMUTH SCREW M2-7
25	S1-821-120-020		MOTOR OLLER SCREW	H	S9-182-000-000		C TAP SCREW M2-6
26	S1-921-140-240		REW BUTTON LEVER	I	S9-422-000-000		P WASHER CUT 12-3.8-0.3
27	S1-921-140-250		FF BUTTON LEVER	J	S9-999-030-130		P WASHER CUT 1.45-3.8-0.5
28	S1-921-140-260		STOP BUTTON LEVER	K	S9-882-000-000		P WASHER 2-3.5-0.4
29	S1-921-140-610		PAUSE BUTTON LEVER	L	S9-999-000-030		P WASHER 2.1-4-0.13
30	S1-821-100-700		FF GEAR	M	S9-999-200-410		P TAP SCREW M2-3
31	S1-921-050-060		SENSOR	N	S9-P05-200-810		SCREW,S TAP 2-8
32	S1-921-053-030		TAKE UP REEL ASSY				
33	S1-829-100-010		PACK SPRING				
34	S1-921-053-040		SUPPLY REEL ASSY				
35	S1-829-100-100		BACK TENSION SPRING				
36	S1-921-120-650		COLLER B				
37	S1-921-140-170		P.S.LEVER SPRING				
38	S1-921-073-080		RF CLUTCH ASSY				
39	S1-921-070-030		RF BELT				
40	S1-921-260-020		CAM GEAR				

CD MECHANISM EXPLODED VIEW

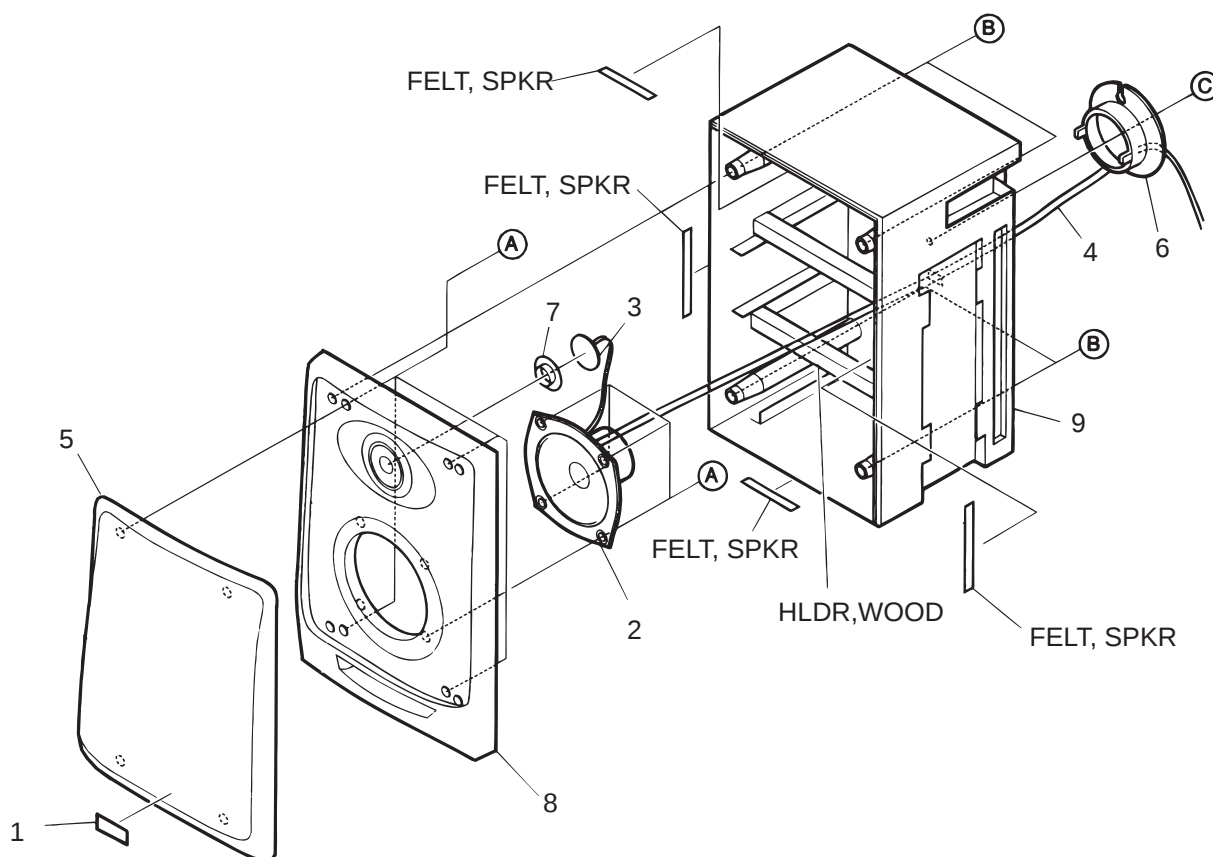


CD MECHANISM PARTS LIST 1/1

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	85-ZG3-215-010		SHAFT, GUIDE
2	85-ZG3-210-010		GEAR, MOTOR
3	85-ZG3-211-010		GEAR, A
4	85-ZG3-212-010		GEAR, B
AL	M8-5ZG-393-070		5ZG-3 D2

SPEAKER EXPLODED VIEW



SPEAKER PARTS LIST 1/1

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-CT4-036-010		BADGE, AIWA	A	87-661-097-410		TAPPING SCREW, VFT1+3-12
2	86-CT4-625-010		SPKR, W 120 40HM 10W 6CT-4	B	87-651-100-410		VT1+3-16
3	86-CT4-626-010		SPKR, T	C	87-751-097-410		SCREW 3X12
4	86-CT4-627-010		CORD, 2PSPKR				
5	86-CT4-144-010		FRAME, SPKR NE				
6	86-CT4-143-010		HLDR, CORD NE				
7	86-CT4-110-010		CAP, SPKR				
8	86-CT4-141-010		CABI, SPKR-FR NE				
9	86-CT4-147-010		CABI, SPKR-REAR L NE				
9	86-CT4-146-010		CABI, SPKR-REAR R NE				



サービス技術ニュース	
番号	連絡内容
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