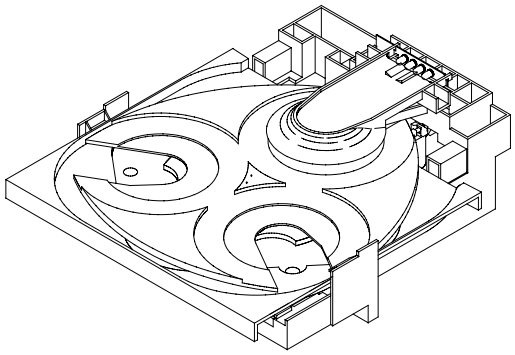
aiwa SERVICE

AZG-1

English



SERVICE MANUAL

CD-R/RW MECHANISM

BASIC CD MECHANISM :ZA3:3ZG-2[E3]
ZA4:KSM-2131FAM
ZA8:KSM-880CAB

TYPE	BASIC CD MECHANISM
ZA3RDM	3ZG-2 E3
YZA3RDM	3ZG-2 E3
ZA3RNDM	3ZG-2 E3
YZA3RNDM	3ZG-2 E3
ZA3RN1DM	3ZG-2 E3
YKZA3RDF	3ZG-2 E3
YKZA3RNDF	3ZG-2 E3
ZA3RNM	3ZG-2 E3
YZA3RDCM	3ZG-2 E3
YZA3RNDCM	3ZG-2 E3
ZA4RDC	KSM-2131 FAM
ZA4RNDC	KSM-2131 FAM
ZA8RDC	KSM-880CAB

aiwa

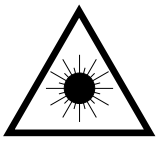
S/M Code No. 09-001-335-3NC

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

VAROITUS!

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

VARNING!

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

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 figure below.

CAUTION

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

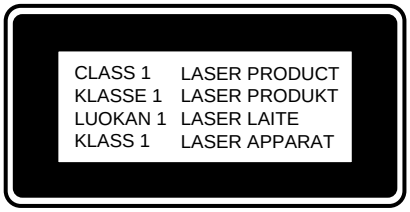
ATTENTION

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

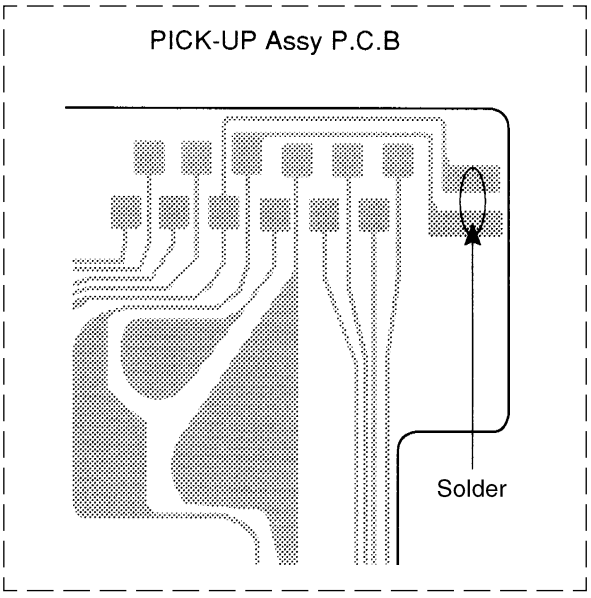
ADVARSEL!

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

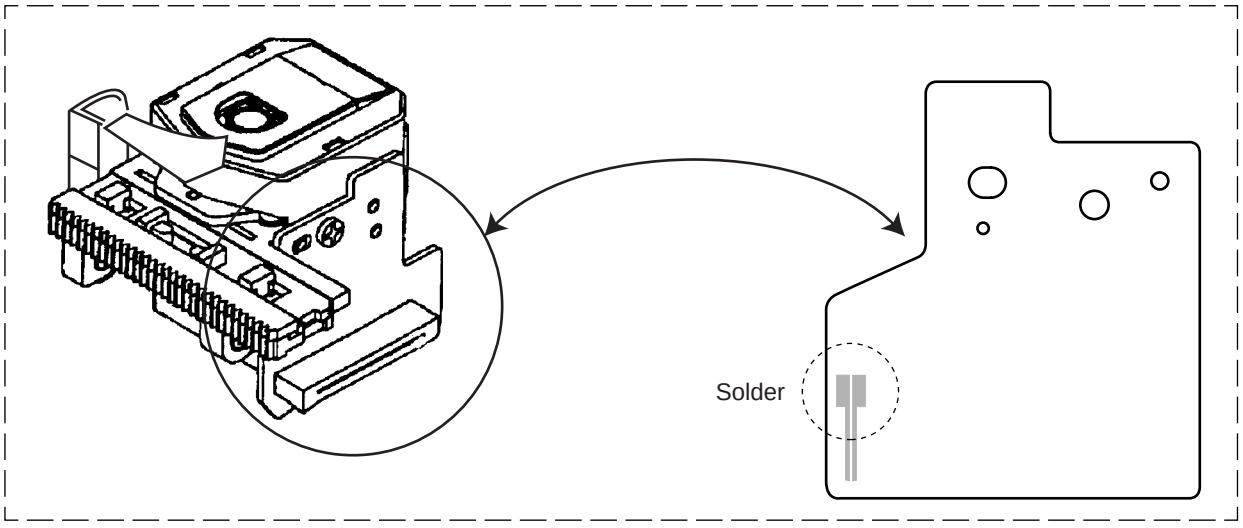
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



ZA3/ZA4 MODEL (KSS-213F)



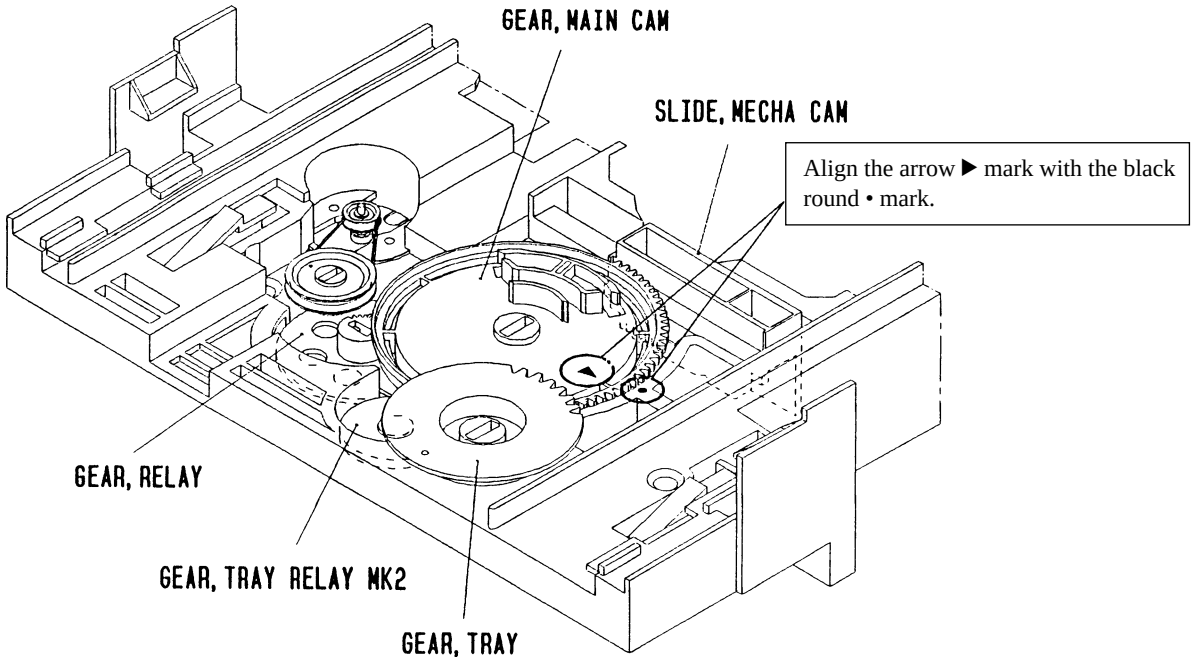
ZA8 MODEL



How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



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
IC			
	87-A20-446-010		C-IC,LA9241ML
	87-017-917-080		IC,BU4066BCF
	87-A21-319-010		C-IC,LC78622NE
	87-A20-445-010		IC,BA5936
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-026-239-080		TR,DTC114TK (0.2W)
	87-026-295-080		TR,DTC144TK
	87-A30-515-080		
	87-A30-087-080		C-FET,2SK2158
	87-026-237-080		CHIP-TR,DTC124XK <ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM,YZA3RDM>
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F<EXCEPT ZA3RNM>
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-020-331-080		CHIP-DIODE,DAN202K
	87-A40-337-080		ZENER,MTZJ 6.8B
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-620-080		ZENER,MTZJ6.2A
3CD C.B			
C11	87-012-393-080		C-CAP,S 0.22-16 R K
C12	87-012-157-080		C-CAP,S 330P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C12	87-012-157-020		C-CAP,S 330P-50 CH <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM>
C13	87-016-369-080		C-CAP,S 0.033-25 B K <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C13	87-016-369-020		C-CAP,S 0.033-25 B K <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C14	87-A10-201-080		C-CAP,S0.33-16 KB
C15	87-010-213-020		C-CAP,S 0.015-25 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C15	87-010-213-080		C-CAP,S 0.015-50 B <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C16	87-010-992-080		C-CAP,S 0.047-25 B
C17	87-010-184-020		C-CAP,S 3300P-50 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C17	87-010-184-080		CHIP CAPACITOR 3300P(K) <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C18	87-A11-177-080		C-CAP,S 0.15-16 K B
C19	87-010-992-080		C-CAP,S 0.047-25 B<ZA8RDC>
C19	87-010-198-080		CAP, CHIP 0.022<EXCEPT ZA8RDC>
C20	87-010-178-020		C-CAP,S 1000P-50 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C20	87-010-178-080		CHIP CAP 1000P <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C21	87-012-393-080		C-CAP,S 0.22-16 R K
C22	87-016-083-080		C-CAP,S 0.15-16 RK
C23	87-010-197-020		C-CAP,S 0.01-25 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C23	87-010-197-080		CAP, CHIP 0.01 DM <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C24	87-010-186-020		C-CAP,S 4700P-50 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C24	87-010-186-080		CAP,CHIP 4700P <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C25	87-010-400-040		CAP,E 0.47-50
C26	87-010-322-080		C-CAP,S 100P-50 CH<ZA8RDC>
C26	87-010-176-020		C-CAP,S 680P-50 J SL <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C26	87-010-176-080		C-CAP,S 680P-50 SL <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA3RDCM,ZA3RNDCM>
C27	87-010-382-040		CAP,E 22-25 SME
C28	87-010-545-040		CAP,E 0.22-50 SME
C29	87-010-184-020		C-CAP,S 3300P-50 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C29	87-010-184-080		CHIP CAPACITOR 3300P(K) <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C31	87-010-186-020		C-CAP,S 4700P-50 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C31	87-010-186-080		CAP,CHIP 4700P <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C32	87-010-315-020		C-CAP,S 27P-50 CH <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C32	87-010-315-080		C-CAP,S 27P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C33	87-016-081-080		C-CAP,S 0.1-16 RK
C35	87-010-196-020		C-CAP,S 0.1-25 Z F GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C35	87-010-196-080		CHIP CAPACITOR,0.1-25 <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C37	87-010-405-080		CAP, ELECT 10-50V
C38	87-010-263-080		CAP, ELECT 100-10V
C39	87-010-992-080		C-CAP,S 0.047-25 B<EXCEPT ZA8RDC>
C39	87-010-197-080		CAP, CHIP 0.01 DM<ZA8RDC>
C40	87-010-401-080		CAP, ELECT 1-50V
C41	87-016-081-080		C-CAP,S 0.1-16 RK
C42	87-010-263-080		CAP, ELECT 100-10V
C43	87-010-197-020		C-CAP,S 0.01-25 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C43	87-010-197-080		CAP, CHIP 0.01 DM <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C44	87-010-263-080		CAP, ELECT 100-10V
C46	87-010-196-020		C-CAP,S 0.1-25 Z F GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C46	87-010-196-080		CHIP CAPACITOR,0.1-25 <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C47	87-010-260-080		CAP, ELECT 47-25V
C48	87-010-196-020		C-CAP,S 0.1-25 Z F GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C48	87-010-196-080		CHIP CAPACITOR,0.1-25 <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C49	87-010-404-080		CAP, ELECT 4.7-50V
C50	87-010-197-020		C-CAP,S 0.01-25 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C50	87-010-197-080		CAP, CHIP 0.01 DM <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C51	87-010-263-040		CAP,E 100-10
C52	87-012-156-020		C-CAP,S 220P-50 CH <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C52	87-012-156-080		C-CAP,S 220P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C53	87-010-381-080		CAP, ELECT 330-16V <EXCEPT ZA4RNDC>
C71	87-012-393-080		C-CAP,S 0.22-16 R K<ZA8RDC>
C80	87-010-196-020		C-CAP,S 0.1-25 Z F GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C80	87-010-196-080		CHIP CAPACITOR,0.1-25 <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C101	87-016-369-020		C-CAP,S 0.033-25 B K <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C101	87-016-369-080		C-CAP,S 0.033-25 B K <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C102	87-016-081-080		C-CAP,S 0.1-16 RK
C103	87-010-318-080		C-CAP,S 47P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C103	87-010-318-020		C-CAP,S 47P-50 CH <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C104	87-012-154-080		C-CAP,S 150P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C104	87-012-154-020		C-CAP,S 150P-50 J CH GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C105	87-010-196-020		C-CAP,S 0.1-25 Z F GRM <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C105	87-010-196-080		CHIP CAPACITOR,0.1-25 <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C109	87-010-197-020		C-CAP,S 0.01-25 B <ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C109	87-010-197-080		CAP, CHIP 0.01 DM <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C111	87-010-312-080		C-CAP,S 15P-50 CH <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C111	87-010-312-020		C-CAP,S 15P-50 J CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C112	87-010-154-020		C-CAP,S 10P-50 CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C112	87-010-154-080		CAP CHIP 10P
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C113	87-010-178-020		C-CAP,S 1000P-50 B
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C113	87-010-178-080		CHIP CAP 1000P
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C115	87-010-404-080		CAP, ELECT 4.7-50V
C116	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C116	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C117	87-010-263-040		CAP,E 100-10
C118	87-010-178-020		C-CAP,S 1000P-50 B
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C118	87-010-178-080		CHIP CAP 1000P
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C119	87-010-194-080		CAP, CHIP 0.047<ZA3RN1DM>
C121	87-010-403-080		CAP, ELECT 3.3-50V
C122	87-010-403-080		CAP, ELECT 3.3-50V
C123	87-010-180-080		C-CER 1500P
C124	87-010-180-080		C-CER 1500P
C132	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C132	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C135	87-010-314-020		C-CAP,S 22P-50 CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C135	87-010-314-080		C-CAP,S 22P-50V
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C191	87-010-263-040		CAP,E 100-10
C192	87-010-178-020		C-CAP,S 1000P-50 B
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C192	87-010-178-080		CHIP CAP 1000P
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C193	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C193	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C201	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C201	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C204	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C204	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C205	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C205	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C206	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C206	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C207	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C207	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C208	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C208	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C211	87-010-405-040		CAP,E 10-50
C212	87-010-405-040		CAP,E 10-50
C213	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C213	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C251	87-010-322-020		C-CAP,S 100P-50 CH
			<ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C251	87-010-322-080		C-CAP,S 100P-50 CH
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C252	87-010-322-080		C-CAP,S 100P-50 CH
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C252	87-010-322-020		C-CAP,S 100P-50 CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C253	87-010-322-020		C-CAP,S 100P-50 CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C253	87-010-322-080		C-CAP,S 100P-50 CH
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C254	87-010-322-020		C-CAP,S 100P-50 CH
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C254	87-010-322-080		C-CAP,S 100P-50 J GH GRM
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C281	87-010-382-040		CAP,E 22-25 SME
C402	87-010-197-020		C-CAP,S 0.01-25 B
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C402	87-010-197-080		CAP, CHIP 0.01 DM
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C403	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C403	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C404	87-010-260-040		CAP,E 47-25 SME
C405	87-010-382-080		CAP, ELECT 22-25V
C421	87-010-382-080		CAP, ELECT 22-25V
C422	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,ZA3RNM,YZA3RNDM,YZA3RDM>
C422	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
C901	87-010-260-080		CAP, ELECT 47-25V<EXCEPT ZA3RNM>
C902	87-010-196-020		C-CAP,S 0.1-25 Z F GRM
			<ZA3RN1DM,ZA3RDM,ZA3RNDM,YZA3RNDM,YZA3RDM>
C902	87-010-196-080		CHIP CAPACITOR,0.1-25
			<ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC,ZA3RDCM,ZA3RNDCM>
CN1	87-A60-429-010		CONN,16P H TOC-A
CN2	87-A60-081-010		CONN,06P H 9604S-06F
CN104	8A-ZA5-610-010		CONN ASSY,2P
CN201	87-099-030-010		CONN,13P 6216H
CN203	87-099-212-010		CONN,5P 6216 V
CN204	84-ZG1-648-010		CONN ASSY,6P
			<ZA4RDC,ZA4RNDC,ZA8RDC>
CN204	87-099-199-010		CONN,6P 6216 H
			<EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
L11	87-005-849-080		COIL,10UH(CECS)
L101	87-005-614-080		COIL 100UH LAV35 J
L102	87-005-602-080		COIL,10UH LAV35 J
LED901	87-A40-558-010		LED,SLZ-8128A-01-A<EXCEPT ZA3RNM>
M201	87-045-383-010		MOT,M9I50T28-2
			<ZA4RDC,ZA4RNDC,ZA8RDC>
M201	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
			<EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
SFR101	87-A90-787-080		SFR,100K H HOKU
SW201	87-036-109-010		PUSH SWITCH
SW202	87-036-109-010		PUSH SWITCH
X101	87-A70-046-010		VIB,XTAL 16.934MHZ
LED C.B	<ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM,YZA3RDM>		
LED302	87-A40-263-080		LED,SLH-56PCT31 GRN
			<ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM,YZA3RDM>
LED303	87-A40-268-080		LED,SLH-56DCT31 ORN
			<ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM,YZA3RDM>
T-T C.B			
C401	87-A11-148-080		CAP,TC U 0.1-50 Z F
CN401	87-A60-082-010		CONN,05P H 9604S-05F
			<ZA3RN1DM,ZA3RDM,ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,YZA3RDM>
CN401	86-NFZ-675-010		CONN,5P H 6216-11H
			<ZA3RNDM,ZA3RNM,ZA8RDC,ZA3RDCM,ZA3RNDCM,YZA3RNDM>
M401	87-045-364-010		MOTOR(BCH3B14)
PS401	87-026-573-010		SNSR,PHOTO GP1S53V
			<EXCEPT ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA3RNDF,YZA3RDM>
PS401	87-A90-156-010		SNSR,SG-240
			<ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA3RNDF,YZA3RDM>

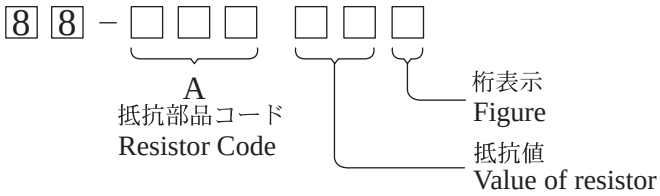
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
DRIVE C.B<EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>			
M1	87-045-358-010		MOT,RF-310TA 43 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
M2	87-045-356-010		MOT,RF-310TA 30 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
PIN3	87-A60-086-010		CONN,6P H6216-11 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
SW1	87-A90-042-010		SW,LEAF MSW-17310MVP0 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
MOTOR C.B<ZA4RDC,ZA4RNDC>			
M2	9X-262-513-210		SLED MOTOR<ZA4RDC,ZA4RNDC>
PIN3	91-564-722-110		CONNECTOR 6P<ZA4RDC,ZA4RNDC>
SW1	91-572-085-110		LEAF SW<ZA4RDC,ZA4RNDC>
MOTOR C.B<ZA8RDC>			
PIN3	91-564-722-110		CONN,PIN 6P<ZA8RDC>
SW1	91-572-085-110		LEAF SWITCH<ZA8RDC>

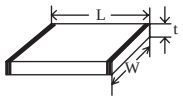
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

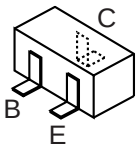


チップ抵抗
Chip resistor

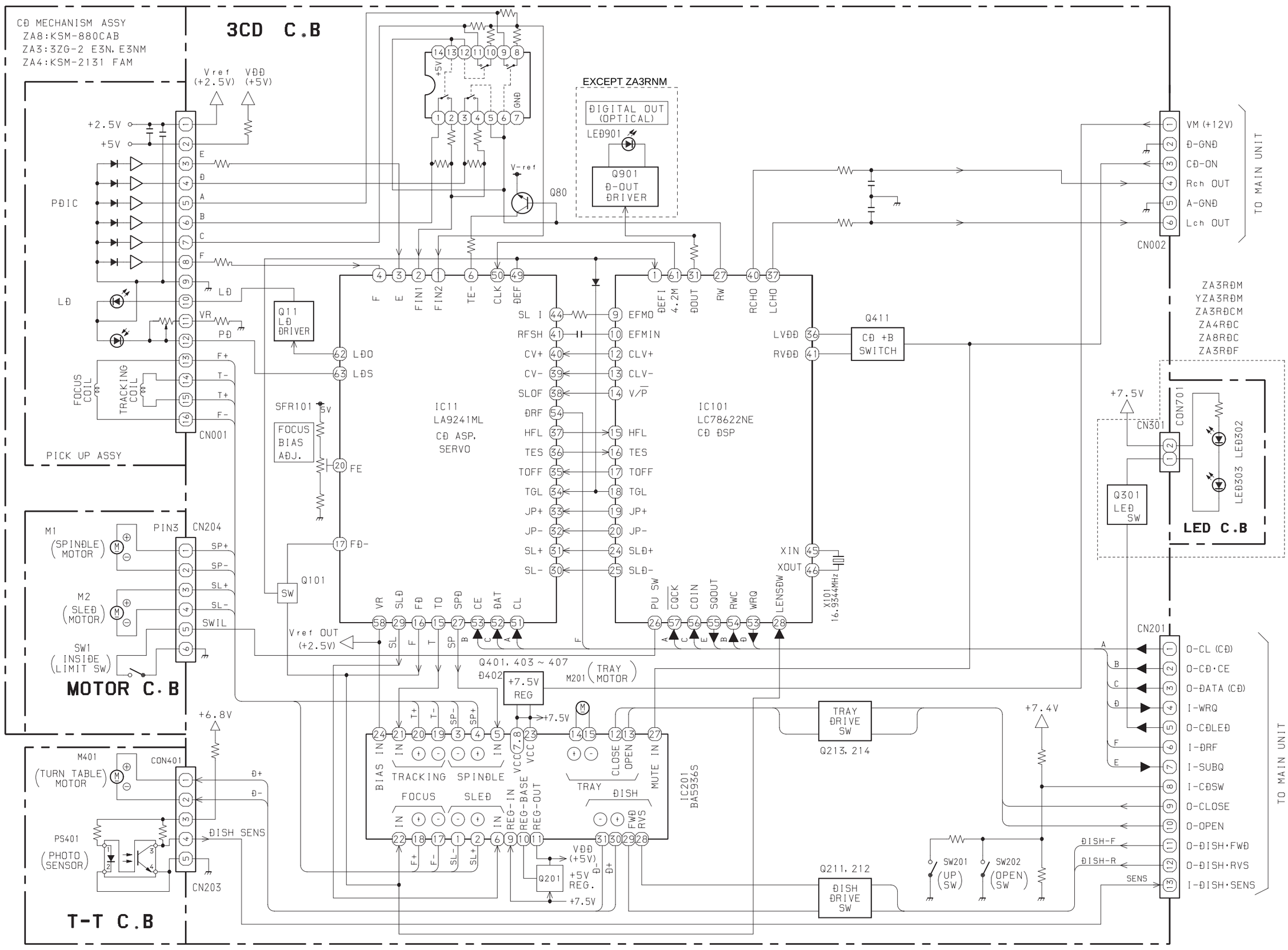
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code ：A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

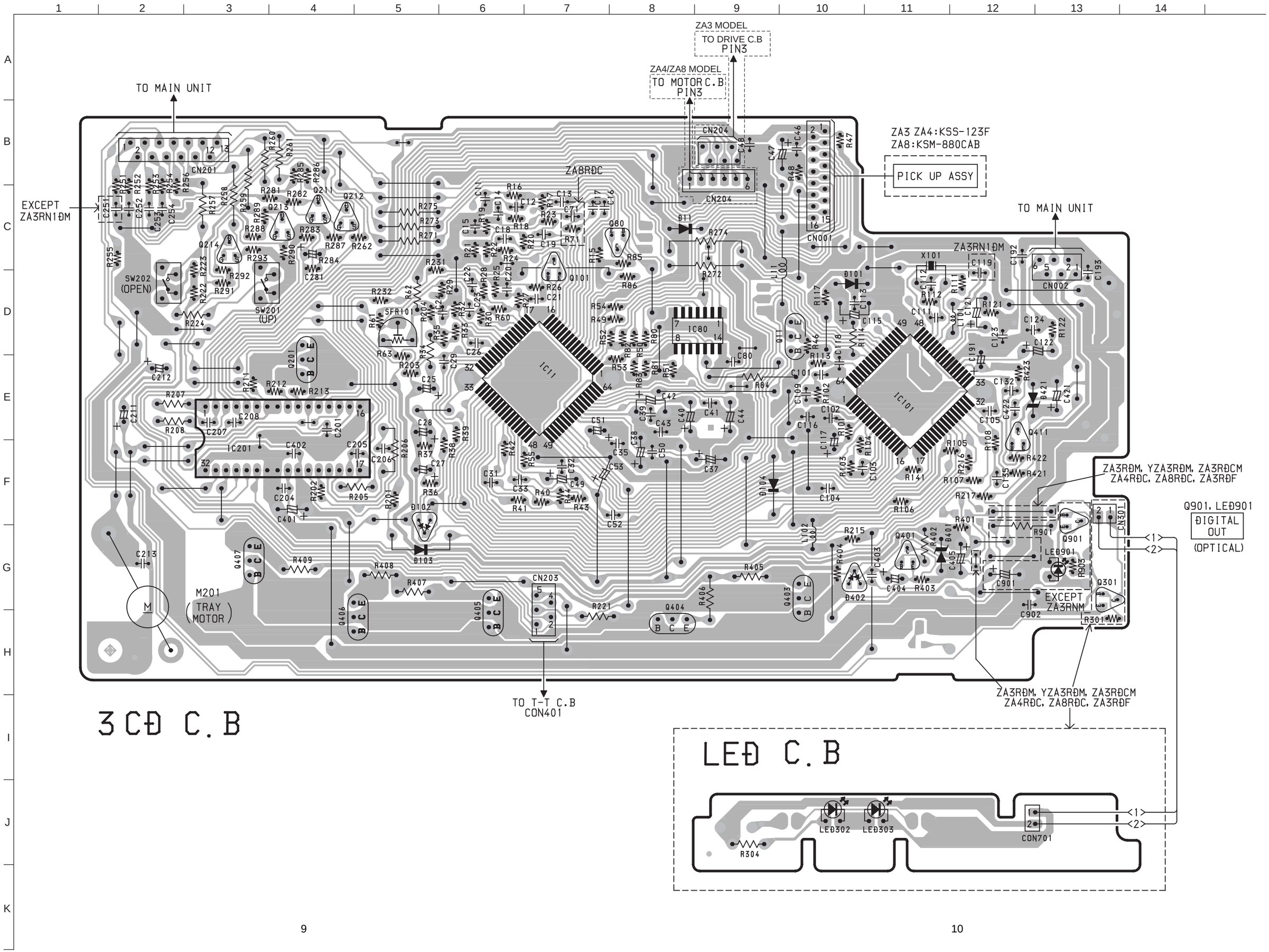
TRANSISTOR ILLUSTRATION

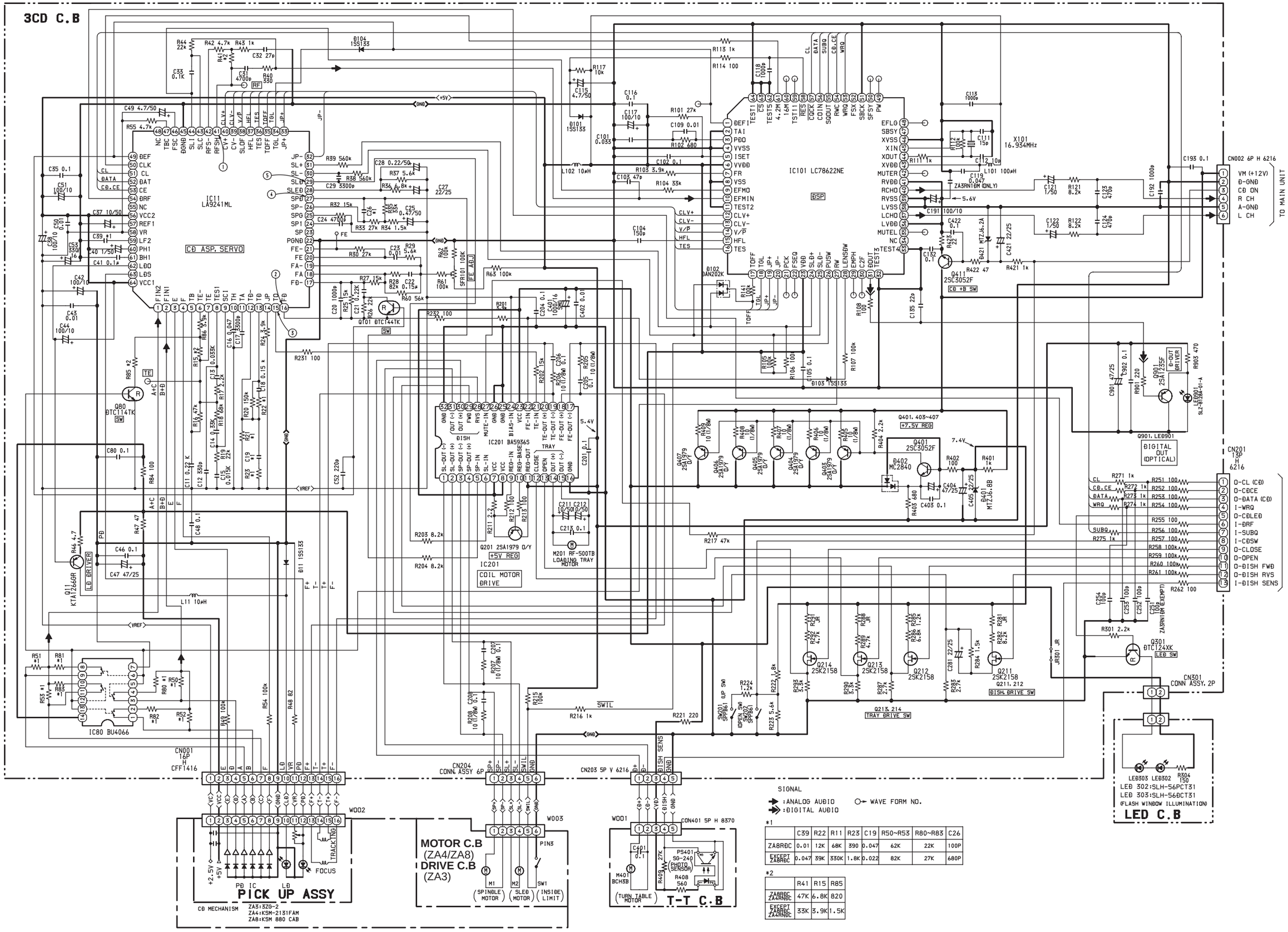
KTA1266



2SA1235
2SC3052
2SK2158
DTC114TK
DTC124XK
DTC144TK


CD MECHANISM ASSY
ZA8:KSM-880CAB
ZA3:3ZG-2 E3N, E3NM
ZA4:KSM-2131 FAM
3CD C.B
Vref (+2.5V)
VDD (+5V)
+2.5V
+5V
PDIC
LD
FOCUS COIL
TRACKING COIL
VR
PD
F+
T-
T+
F-
CN001
PICK UP ASSY
Q11 LD DRIVER
LDO
LDS
SFR101
FOCUS BIAS ADJ.
FE
FD-
Q101
SW
EXCEPT ZA3RNM
DIGITAL OUT (OPTICAL)
LED901
Q901 D-OUT DRIVER
V-ref
Q80
IC11
LA9241ML
CD ASP, SERVO
IC101
LC78622NE
CD DSP
SL I
RFSH
CV+
CV-
SLOF
DRF
HFL
TES
TOFF
TGL
JP+
JP-
SL+
SL-
EFMO
EFMIN
CLV+
CLV-
V/P
HFL
TES
TOFF
TGL
JP+
JP-
SLD+
SLD-
F
E
FIN1
FIN2
TE-
CLK
DEF
DEFI 4.2M
DOUT
RW
RCHO
LCHO
LVDD
RVDD
Q411
CD +B SWITCH
VM (+12V)
D-GND
CD-ON
Rch OUT
A-GND
Lch OUT
CN002
TO MAIN UNIT
ZA3RDM
YZA3RDM
ZA3RDCM
ZA4RDC
ZA8RDC
ZA3RDF
+7.5V
CN301
CON701
Q301 LED SW
LED303 LED302
LED C.B
M1 (SPINDLE MOTOR)
M2 (SLED MOTOR)
SW1 (INSIDE LIMIT SW)
PIN3
CN204
SP+
SP-
SL+
SL-
SWIL
MOTOR C.B
VR
SLD
FD
TO
SPD
CE
DAT
CL
PU SW
CQCK
COIN
SQOUT
RWC
WRQ
LENSDW
XIN
XOUT
X101
16.9344MHz
Vref OUT (+2.5V)
Q401, 403 ~ 407
D402
+7.5V REG
M201 (TRAY MOTOR)
TRAY DRIVE SW
Q213, 214
+7.4V
+6.8V
M401 (TURN TABLE MOTOR)
CON401
D+
D-
DISH SENS
PS401 (PHOTO SENSOR)
CN203
T-T C.B
BIAS IN
TRACKING
SPINDLE
FOCUS
SLED
TRAY
DISH
REG-IN
REG-BASE
REG-OUT
CLOSE
OPEN
MUTE IN
IC201
BA5936S
VDD (+5V)
Q201
+5V REG.
Q211, 212
DISH DRIVE SW
SW201 (UP SW)
SW202 (OPEN SW)
CN201
O-CL (CD)
O-CD·CE
O-DATA (CD)
I-WRQ
O-CDLED
I-DRF
I-SUBQ
I-CDSW
O-CLOSE
O-OPEN
O-DISH·FWD
O-DISH·RVS
I-DISH·SENS
DISH-F
DISH-R
SENS
TO MAIN UNIT

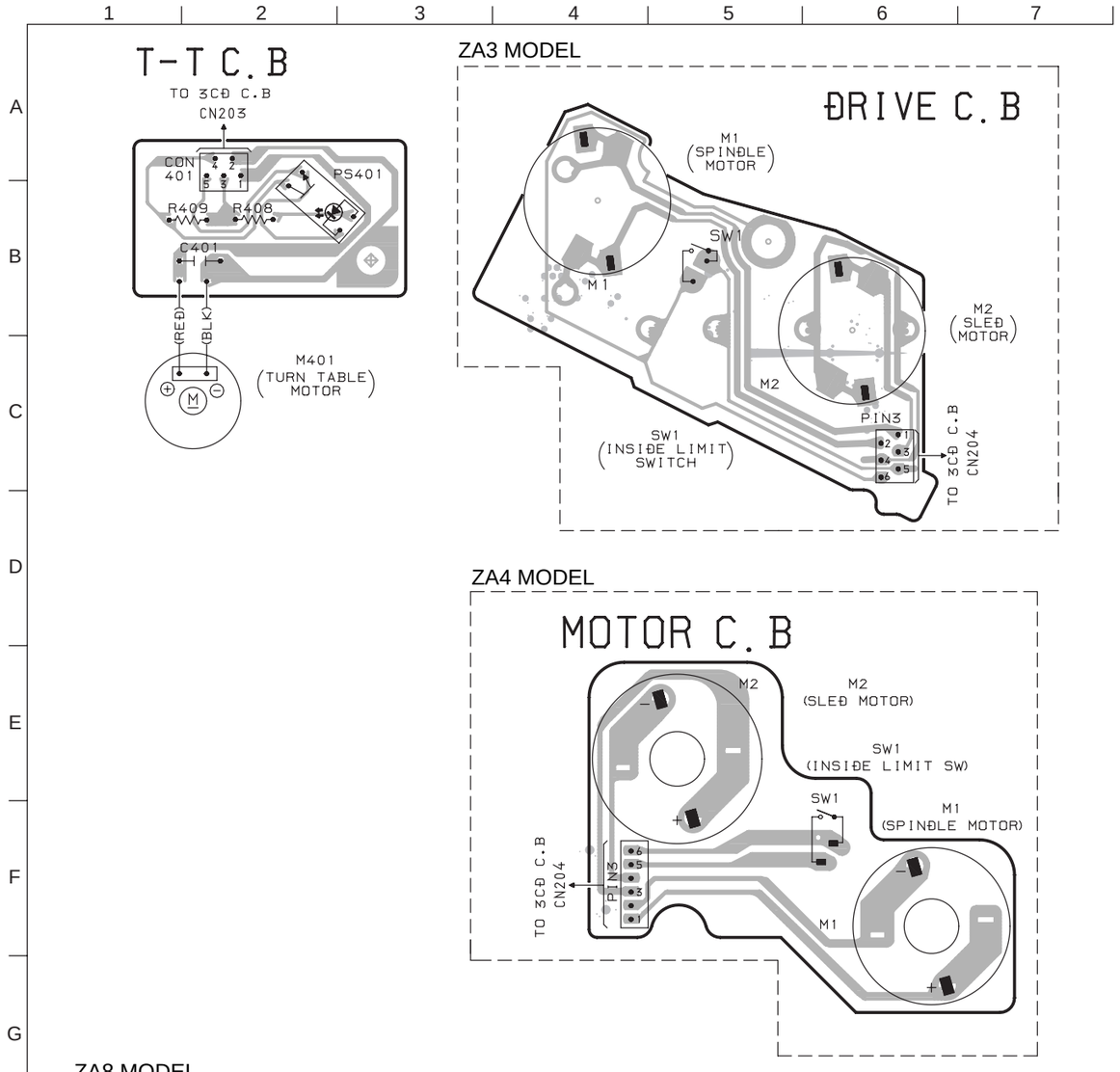

ZA3 MODEL
TO DRIVE C.B
PIN3
ZA4/ZA8 MODEL
TO MOTOR C.B
PIN3
TO MAIN UNIT
EXCEPT
ZA3RN1ĐM
ZA3 ZA4:KSS-123F
ZA8:KSM-880CAB
PICK UP ASSY
TO MAIN UNIT
ZA8RĐC
ZA3RN1ĐM
SW202
(OPEN)
SW201
(UP)
IC11
IC80
IC101
IC201
M201
TRAY
MOTOR
ZA3RĐM, YZA3RĐM, ZA3RĐCM
ZA4RĐC, ZA8RĐC, ZA3RĐF
Q901, LEĐ901
ĐIGITAL
OUT
(OPTICAL)
EXCEPT
ZA3RNM
ZA3RĐM, YZA3RĐM, ZA3RĐCM
ZA4RĐC, ZA8RĐC, ZA3RĐF
TO T-T C.B
CON401
3CĐ C.B
LEĐ C.B
LEĐ302
LEĐ303
CON701



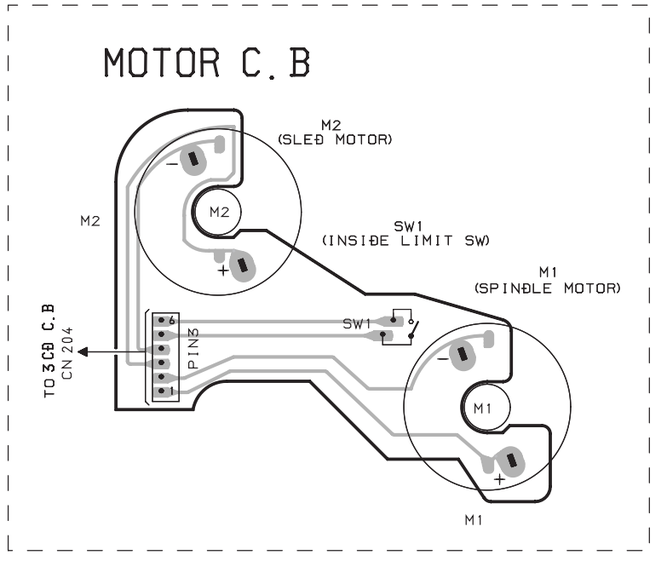
	C39	R22	R11	R23	C19	R50~R53	R80~R83	C26
ZA8RDC	0.01	12K	68K	390	0.047	62K	22K	100P
EXCEPT ZA8RDC	0.047	39K	330K	1.8K	0.022	82K	27K	680P

	R41	R15	R85
ZA8RDC ZA4RNDC	47K	6.8K	820
EXCEPT ZA8RDC ZA4RNDC	33K	3.9K	1.5K

WIRING-2 (T-T/MOTOR)

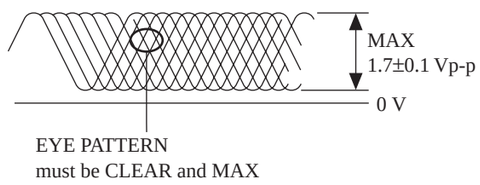


ZA8 MODEL

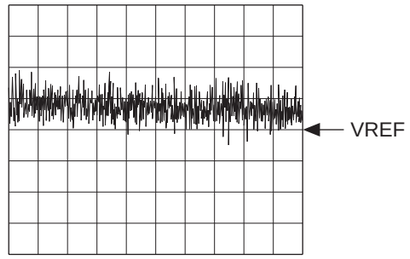


WAVE FORM

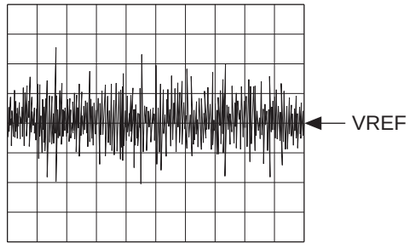
① IC11 Pin ㊶ (RFSH) VOLT/DIV: 0.5V TIME/DIV: 1μS



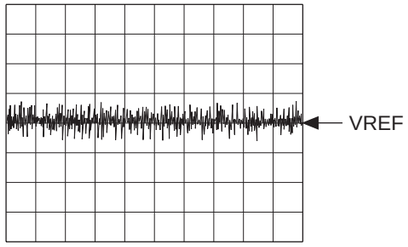
② IC11 Pin ⑯ (FD) VOLT/DIV: 100mV TIME/DIV: 1mS



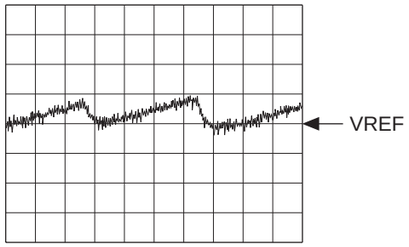
③ IC11 Pin ⑮ (TO) VOLT/DIV: 100mV TIME/DIV: 1mS



④ IC11 Pin ㉗ (SPD) VOLT/DIV: 100mV TIME/DIV: 1mS

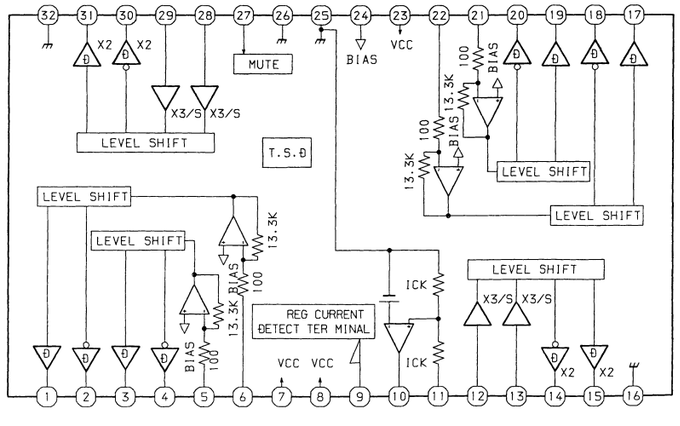


⑤ IC11 Pin ㉙ (SLD) VOLT/DIV: 200mV TIME/DIV: 2S



IC BLOCK DIAGRAM

IC, BA5936S

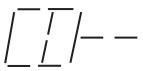


TEST MODE

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.

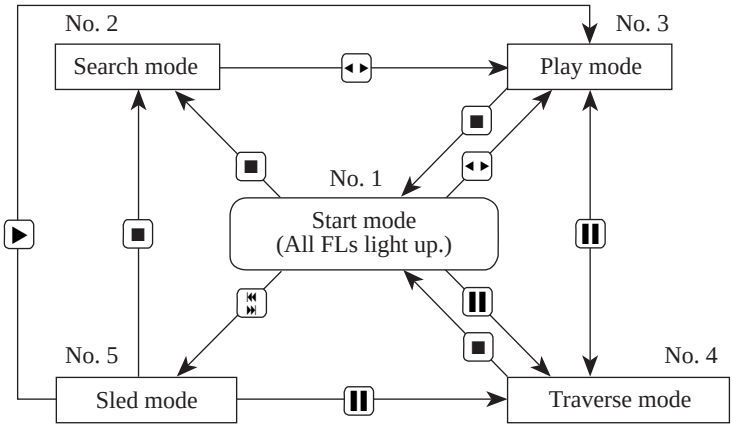
2. How to Cancel CD Test Mode
   Either one of the following operations will cancel the CD test mode.
   - Press the function button. (except CD function button)
   - Press the power switch button.
   - Disconnect the AC plug

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	• Test mode is activated. • CD block power is ON.	• FL display check (All displays light.)
Search mode No.2	■ key		• 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. * NOTE 1	• APC circuit check • Laser current measurement (Laser current control. Across a resistor connected between emitter and GND.) FOCUS SERVO • Check focus search waveform • Check focus error waveform (FOK/FZC are not monitored in the search mode)
Play mode No.3	◄ ► key		• Normal playback • Focus search is continued if TOC cannot be read. * NOTE 1	FOCUS SERVO/TRACKING SERVO CLV SERVO/SLED SERVO Check DRF
Traverse mode No.4	❚❚ key		• During normal disc playback Press once; tracking servo OFF Press twice; tracking servo ON * NOTE 2	TRACKING SERVO ON/OFF Tracking balance (traverse) check
Sled mode No.5	⏮ key ⏭	All lamps light	• Pickup moves to the outermost track • Pickup moves to the innermost track * NOTE 3 (During playback, machine operates normally.)	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.

IC DESCRIPTION

IC, LC78622NE

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	ISET	I		Pin to which external resistor adjusting the PD0 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+, CLV–	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	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 thesync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24	SLD+	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.
25	SLD-	I/O		
26	PUSW	I/O		
27	RW	I/O		
28	LENSDW	I/O		
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.

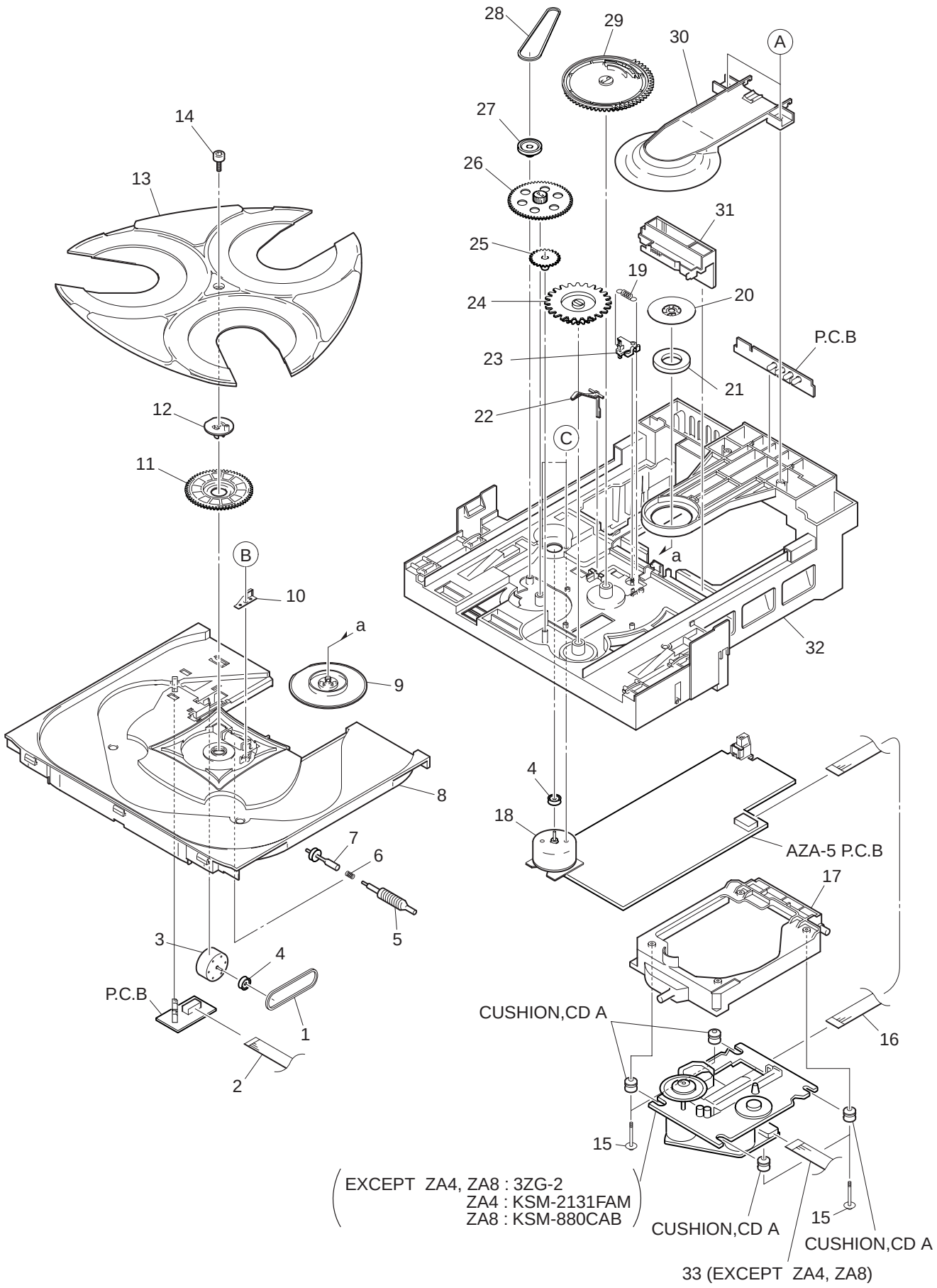
Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

IC, LA9241ML

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	PGND	—	Analog signal GND.
23	SP	—	No connection.
24	SP1	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	SLED	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	RFSH	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	DGND	—	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	NC	I	No connection.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REF1	—	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	LDO	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

MECHANICAL EXPLODED VIEW 1/1



MECHANICAL PARTS LIST 1/1

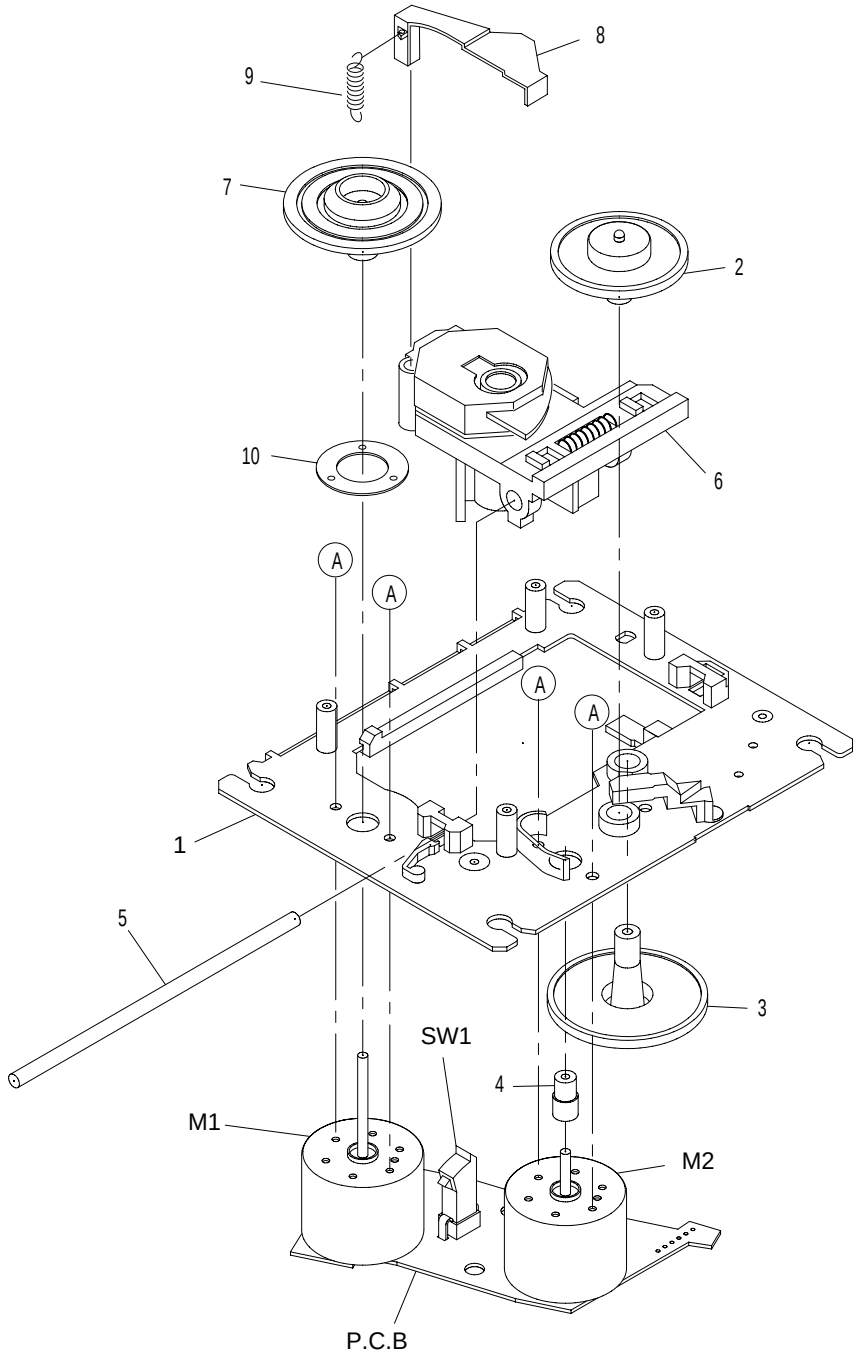
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-225-010		BELT,SQ1.0-63.3
2	84-ZG1-672-010		F-CABLE,5P 1.25 210MM WHITE N
3	87-045-364-010		MOTOR(BCH3B14)
4	84-ZG1-267-010		PULLEY,LOAD MO 8 <EXCEPT ZA3RDF,ZA3RNDF>
4	81-ZG1-212-010		PULLY,LOAD MO<ZA3RDF,ZA3RNDF>
5	84-ZG1-238-010		GEAR,WORM N
6	84-ZG1-248-010		SPR-C,WORM
7	84-ZG1-273-010		PULLEY,WORM 4 <ZA4RDC,ZA4RNDC,ZA8RDC>
7	84-ZG1-239-210		PULLY,WORM N <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
8	8A-ZG1-001-010		TRAY,NO3 BLU
9	84-ZG1-291-110		HLDR,MAGNET 4 NAT <ZA3RNDM,ZA4RNDC,ZA3RNDF,ZA3RNM,ZA3RNDCM>
9	84-ZG1-272-110		HLDR,MAGNET N 4 <ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
10	84-ZG1-259-010		SPR-P,WORM
11	84-ZG1-221-010		GEAR,MAIN TT<ZA3RDF,ZA3RNDF>
11	84-ZG1-269-010		GEAR,MAIN TT 4 <EXCEPT ZA3RDF,ZA3RNDF>
12	84-ZG1-224-010		LEVER,TT <ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
12	84-ZG1-288-010		LEVER,TT NAT <ZA3RNDM,ZA4RNDC,ZA3RNDF,ZA3RNM,ZA3RNDCM>
13	8A-ZG1-002-010		TURN TABLE,NO1 BLU
14	81-ZG1-239-010		S-SCREW,TT
15	81-ZG1-271-010		S-SCREW MECH REAR<EXCEPT ZA8RDC>
15	8A-ZG1-201-010		S-SCREW,MECH 880<ZA8RDC>
16	85-NFT-611-110		FF-CABLE 16P-1.0
17	84-ZG1-287-010		HLDR,MECHA NAT <ZA3RNDM,ZA4RNDC,ZA3RNDF,ZA3RNM,ZA3RNDCM>
17	84-ZG1-212-210		HLDR,MECHA NO2 <ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA3RDCM>
17	84-ZG1-299-310		HLDR,MECHA NO3<ZA8RDC>
18	87-045-383-010		MOT,M9I50T28-2 <ZA4RDC,ZA4RNDC,ZA8RDC>
18	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA) <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
19	84-ZG1-211-010		SPR-E CAM S
20	84-ZG1-285-010		PLATE,MAGNET BLK<ZA3RN1DM>
20	81-ZG1-255-110		PLATE,MAGNET MK2<EXCEPT ZA3RN1DM>
21	83-ZG3-604-010		RING,MAG 2
22	83-ZG3-213-010		LVR,SW
23	84-ZG1-208-210		LEVER,CAM <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC>
23	84-ZG1-266-010		LEVER,CAM 8 <EXCEPT ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC>
24	84-ZG1-205-210		GEAR,TRAY (*)
25	81-ZG1-250-110		GEAR,TRAY RELAY MK2* <ZA4RDC,ZA4RNDC,ZA8RDC>
25	81-ZG1-291-110		GEAR,TRAY RELAY NO3 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
26	84-ZG1-206-110		GEAR,RELAY <ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC>
26	84-ZG1-274-010		GEAR,RELAY 8 <EXCEPT ZA4RDC,ZA4RNDC,ZA3RDF,ZA3RNDF,ZA8RDC>
27	84-ZG1-207-010		PULLEY,RELAY <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
27	84-ZG1-271-010		PULLEY,RELAY 8 <ZA4RDC,ZA4RNDC,ZA8RDC>
28	84-ZG1-209-010		BELT,SQ1.8-117.7
29	84-ZG1-203-410		GEAR,MAIN CAM <ZA3RNDM,ZA4RNDC,ZA3RNDF,ZA3RNM,ZA3RNDCM>
29	84-ZG1-215-410		GEAR,MAIN CAM BLU <ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
30	84-ZG1-011-010		REFLECTOR,CD <ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
31	84-ZG1-216-310		SLIDE,MECHA CAM YEL <ZA3RN1DM,ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
31	84-ZG1-204-310		SLIDER,MECHA CAM <ZA3RNDM,ZA4RNDC,ZA3RNDF,ZA3RNM,ZA3RNDCM>
32	84-ZG1-201-410		CHAS,MECHA <ZA3RN1DM,ZA3RDM,ZA3RDF,ZA3RDCM>
32	84-ZG1-232-210		CHAS,MECHA N<ZA4RDC,ZA8RDC>
32	84-ZG1-292-010		CHAS,MECHA N NAT<ZA4RNDC>
32	84-ZG1-286-010		CHAS,MECHA NAT <ZA3RNDM,ZA3RNDF,ZA3RNM,ZA3RNDCM>
33	84-ZG1-630-010		CABLE FFC 6P-1.25 <EXCEPT ZA4RDC,ZA4RNDC,ZA8RDC>
A	87-067-703-010		TAPPING SCREW, BVT2+3-10 <ZA3RDM,ZA4RDC,ZA3RDF,ZA8RDC,ZA3RDCM>
B	87-067-981-010		BVT2+3-6 BLK
C	87-251-070-410		U+2.6-3<ZA4RDC,ZA4RNDC,ZA8RDC>

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		

CD MECHANISM EXPLODED VIEW 1/1 (3ZG-2E3)

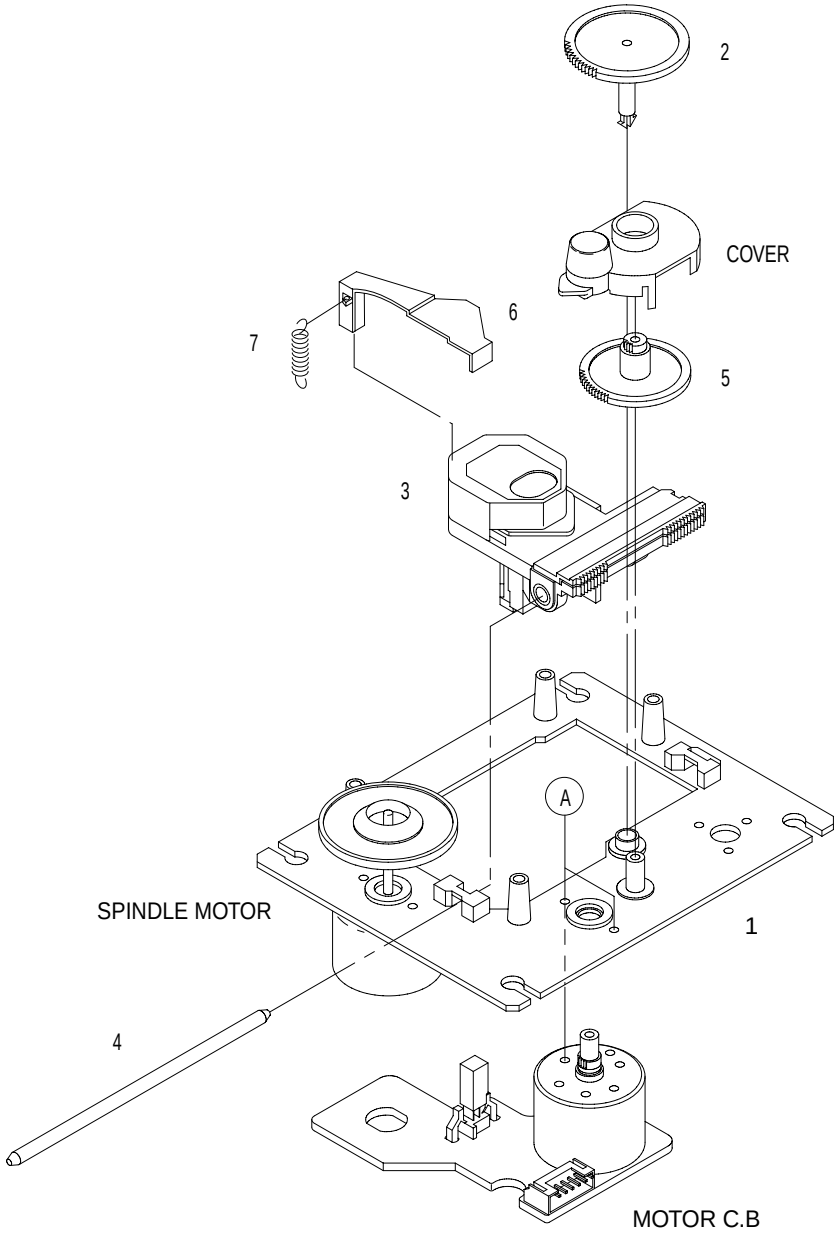


CD MECHANISM PARTS LIST 1/1 (3ZG-2E3)

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	83-ZG2-243-310		CHAS ASSY,SHT
2	83-ZG2-235-010		GEAR,A3
3	83-ZG2-205-210		GEAR,B
4	83-ZG2-236-010		GEAR,MOTOR 3
5	83-ZG2-253-110		SHAFT,SLIDE 5
6	87-A90-836-010		PICKUP,KSS-213F
7	83-ZG2-227-310		TURN TABLE,C1
8	83-ZG2-245-510		LEVER,SHUTTER(*)
9	83-ZG2-250-110		SPR-E,SHT 2
10	83-ZG2-241-110		PLATE,C2
A	87-261-032-210		V+2-3

CD MECHANISM EXPLODED VIEW 1/1 (KSM-2131 FAM)

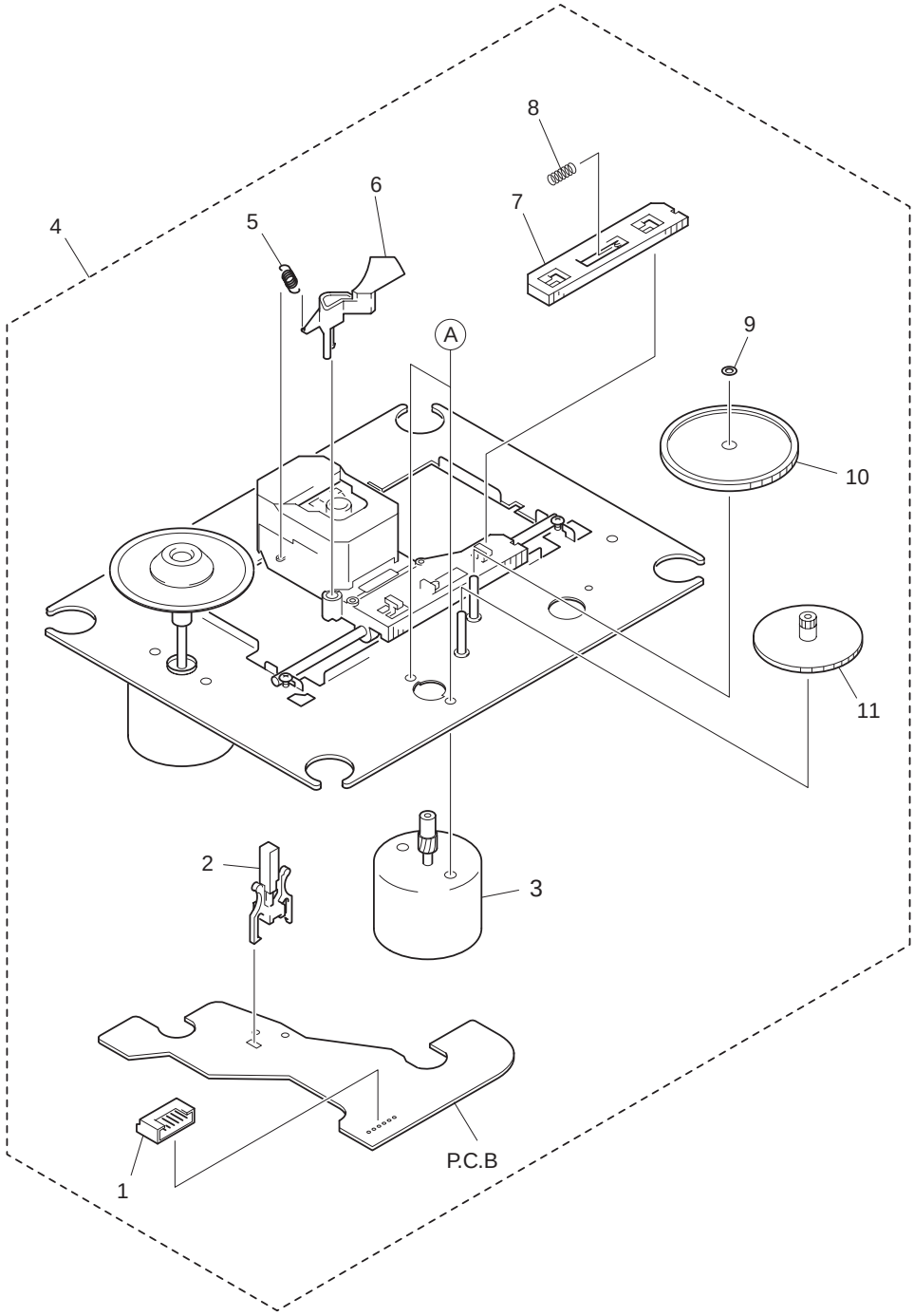


CD MECHANISM PARTS LIST 1/1 (KSM-2131 FAM)

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	9X-264-629-220		MOTOR CHASSIS ASSY(MB)(FR)
2	92-626-907-010		GEAR(A)(S)
3	87-A90-836-010		OPTICAL PICK UP KSS-213F
4	92-626-908-020		SHAFT SLED
5	92-627-003-010		GEAR(B)
6	92-646-697-020		LENS SHUTTER(F)
7	92-646-702-010		SPRIG EXTENSION
A	97-621-255-150		SCREW+P2-3

CD MECHANISM EXPLODED VIEW 1/1 (KSM-880CAB)



CD MECHANISM PARTS LIST 1/1 (KSM-880CAB)

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	91-564-722-110		CONN,PIN 6P
2	91-572-085-110		LEAF SWITCH
3	9X-264-655-010		SL MOTORR ASSY
4	M8-ZZK-C90-070		KSM-880CAB
5	92-647-416-020		SPRING EXTENSION
6	92-647-595-020		SHUTTER B
7	92-647-732-010		NS SLIDE RACK
8	92-647-742-010		SPRING COMPRESSION
9	93-321-813-110		POLI WASHER
10	92-647-407-010		GEAR A
11	92-647-408-020		GEAR B
A	93-713-786-510		SCREW,+P2-3

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

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