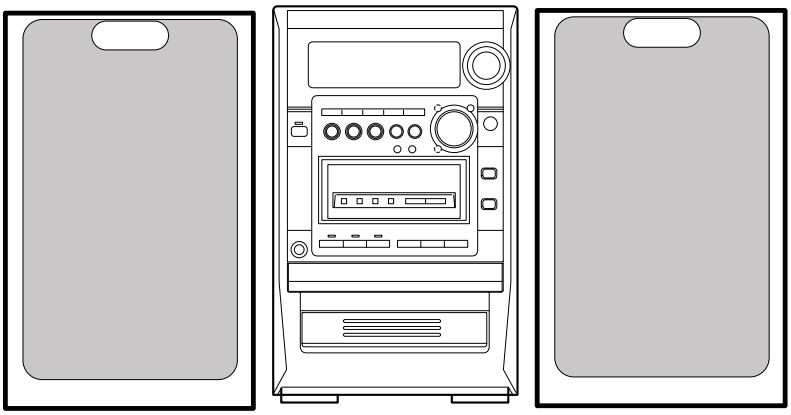
aiwa SERVICE

XR-M700 K



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : 2ZM-1 R9NM
BASIC CD MECHANISM : ZZG-4 YB

- This Service Manual does not include " TEST MODE". This item will be issued in the next supplement.
- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" XR-M700 (K), (S/M Code No. 09-003-430-8T1).

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S/M Code No. 09-006-430-8R1

REVISION DATA

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-021-040		C-IC,BU2099FV
	8A-CL3-701-010		C-IC,LC876580W
	87-A20-914-010		IC,SPS-442-1-F
	87-A20-455-010		IC,HA12211
	87-A20-355-010		IC,CXA1553P
	87-A21-452-010		C-IC,BD3876KS2
	87-A21-103-040		C-IC,MM1454XFBE
	87-017-825-010		IC,GP1F32T
	87-020-454-010		IC,DN6851
	87-070-127-110		IC,LC72131D
	87-A20-913-010		IC,LA1837NL
	87-A20-446-010		C-IC,LA9241ML
	87-A20-459-010		C-IC,LC78622ED
	87-A20-445-010		IC,BA5936S
	87-017-917-080		C-IC,BU4066BCF
TRANSISTOR			
	87-A30-073-080		CHIP-TR,RT1N141C
	87-A30-076-080		C-TR,2SC3052F
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-610-080		TR,KTC3198GR
	87-A30-075-080		C-TR,2SA1235F
	87-A30-234-080		TR,CSC4115BC
	87-A30-107-070		C-TR,CMBT5401
	87-A30-087-080		C-FET,2SK2158
	87-A30-074-080		C-TR,RT1P 141C
	87-026-609-080		TR,KTA1266GR
	87-A30-190-080		TR,CC5551
	87-A30-106-070		C-TR,CMBT5551
	87-A30-105-080		C-TR,RT1P 441C
	87-A30-137-010		TR,2SD2494
	87-A30-138-010		TR,2SB1625
	87-A30-257-080		C-TR,2SD1306E
	87-A30-240-080		TR,CSA1585BC
	87-A30-047-080		TR,CSD655E
	87-A30-159-080		C-TR,KTA1298Y
	87-A30-084-080		TR,CSB1058B
	87-026-580-080		C-TR,DTA123JK
	87-026-235-080		CHIP-TR,DTC114EK
	89-505-434-540		C-FET,2SK543(4/5)
	89-327-143-080		C-TR,2SC27140
	87-A30-086-080		C-TR,CSD1306E
	87-A30-072-080		C-TR,RT1P144C
	87-A30-047-080		TR,CSD655E
	87-026-463-080		TR,2SA933SRS
	87-026-239-080		C-TR,DTC114TK
	89-113-187-080		TR,2SA1318T
	87-026-237-080		C-TR,DTC124XK
	89-327-125-080		C-TR,2SC2712GR
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-070-274-080		DIODE,1N4003 SEM
	87-070-022-010		DIODE,IN5402 (RECT)
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-650-080		ZENER,MTZJ6.8A
	87-A40-291-080		DIODE,1N4148 (CPT)
	87-A40-004-080		ZENER,MTZJ16A
	87-070-322-080		ZENER,MTZJ 36D
	87-A40-341-080		ZENER,MTZJ 36 A
	87-A40-003-080		ZENER,MTZJ4.3A
	87-A40-250-040		C-DIODE,DAN217
	87-A40-488-080		DIODE,1SS244
	87-A40-437-080		ZENER,MTZJ4.3B
	87-A40-002-080		ZENER,MTZJ5.1C
	87-A40-234-080		ZENER,MTZJ5.6A
	87-070-136-080		ZENER,MTZJ5.1B
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C104	87-012-368-080		C-CAP,S 0.1-50 F
C105	87-012-368-080		C-CAP,S 0.1-50 F
C106	87-010-196-080		CHIP CAPACITOR,0.1-25
C107	87-010-196-080		CHIP CAPACITOR,0.1-25
C108	87-010-196-080		CHIP CAPACITOR,0.1-25
C109	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-010-928-000		CAP,E 4700-25 M SMG
C111	87-010-197-080		CAP, CHIP 0.01 DM
C113	87-010-408-080		CAP, ELECT 47-50V
C114	87-010-112-080		CAP, ELECT 100-16V
C115	87-010-235-080		CAP,E 470-16 SME
C116	87-012-368-080		C-CAP,S 0.1-50 F
C117	87-012-368-080		C-CAP,S 0.1-50 F
C118	87-016-658-000		CAP,E 4700-35 M SMG
C119	87-016-658-000		CAP,E 4700-35 M SMG
C131	87-010-263-080		CAP, ELECT 100-10V
C132	87-010-405-080		CAP, ELECT 10-50V
C133	87-010-194-080		CAP, CHIP 0.047
C134	87-010-194-080		CAP, CHIP 0.047
C161	87-010-260-080		CAP, ELECT 47-25V
C162	87-010-403-080		CAP, ELECT 3.3-50V
C163	87-010-197-080		CAP, CHIP 0.01 DM
C171	87-010-260-080		CAP, ELECT 47-25V
C172	87-010-260-080		CAP, ELECT 47-25V
C173	87-010-260-080		CAP, ELECT 47-25V
C174	87-010-260-080		CAP, ELECT 47-25V
C175	87-A12-323-090		CAP,E 100-63 M SMG
C176	87-010-263-080		CAP, ELECT 100-10V
C181	87-010-196-080		CHIP CAPACITOR,0.1-25
C182	87-A11-233-090		CAP,E 4700-16 105 KMG
C183	87-010-196-080		CHIP CAPACITOR,0.1-25
C186	87-016-080-090		CAP,E3300-16 SMG
C191	87-010-196-080		CHIP CAPACITOR,0.1-25
C192	87-010-196-080		CHIP CAPACITOR,0.1-25
C193	87-010-196-080		CHIP CAPACITOR,0.1-25
C194	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-260-080		CAP, ELECT 47-25V
C202	87-010-260-080		CAP, ELECT 47-25V
C203	87-A10-946-080		C-CAP,S 220P-100 J CH
C204	87-A10-946-080		C-CAP,S 220P-100 J CH
C209	87-010-178-080		CHIP CAP 1000P
C210	87-010-178-080		CHIP CAP 1000P
C211	87-012-368-080		C-CAP,S 0.1-50 F
C212	87-012-368-080		C-CAP,S 0.1-50 F
C213	87-010-195-080		C-CAP,S 0.068-25 F
C214	87-010-195-080		C-CAP,S 0.068-25 F
C215	87-012-368-080		C-CAP,S 0.1-50 F
C216	87-012-368-080		C-CAP,S 0.1-50 F
C217	87-010-182-080		C-CAP,S 2200P-50 B
C218	87-010-182-080		C-CAP,S 2200P-50 B
C219	87-012-368-080		C-CAP,S 0.1-50 F
C220	87-012-368-080		C-CAP,S 0.1-50 F
C221	87-010-186-080		CAP,CHIP 4700P
C222	87-010-186-080		CAP,CHIP 4700P
C223	87-010-401-080		CAP, ELECT 1-50V
C224	87-010-401-080		CAP, ELECT 1-50V
C225	87-010-197-080		CAP, CHIP 0.01 DM
C226	87-010-197-080		CAP, CHIP 0.01 DM
C261	87-010-197-080		CAP, CHIP 0.01 DM
C262	87-010-197-080		CAP, CHIP 0.01 DM
C265	87-010-546-080		CAP, ELECT 0.33-50V
C266	87-010-546-080		CAP, ELECT 0.33-50V
C267	87-010-260-080		CAP, ELECT 47-25V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C277	87-010-197-080		CAP, CHIP 0.01 DM
C281	87-012-157-080		C-CAP,S 330P-50 CH
C282	87-012-157-080		C-CAP,S 330P-50 CH
C283	87-010-184-080		CHIP CAPACITOR 3300P(K)
C284	87-010-184-080		CHIP CAPACITOR 3300P(K)
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-012-365-080		C-CAP,S 0.027-25VBK
C312	87-012-365-080		C-CAP,S 0.027-25VBK
C315	87-010-181-080		CAP,CHIP S 1800P
C316	87-010-181-080		CAP,CHIP S 1800P
C317	87-A10-201-080		C-CAP,S0.33-16 KB
C318	87-A10-201-080		C-CAP,S0.33-16 KB
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		CAP 560P
C355	87-010-178-080		CHIP CAP 1000P
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C371	87-010-179-080		CAP,CHIP S B1200P
C372	87-010-179-080		CAP,CHIP S B1200P
C373	87-010-185-080		C-CAP,S 3900P-50 B
C374	87-010-185-080		C-CAP,S 3900P-50 B
C375	87-010-545-080		CAP, ELECT 0.22-50V
C376	87-010-545-080		CAP, ELECT 0.22-50V
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-402-080		CAP, ELECT 2.2-50V
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C388	87-012-156-080		C-CAP,S 220P-50 CH
C389	87-010-380-080		CAP, ELECT 47-16V
C401	87-010-401-080		CAP, ELECT 1-50V
C402	87-010-263-080		CAP, ELECT 100-10V
C403	87-010-260-080		CAP, ELECT 47-25V
C410	87-010-260-080		CAP, ELECT 47-25V
C461	87-010-402-080		CAP, ELECT 2.2-50V
C462	87-010-400-080		CAP, ELECT 0.47-50V
C501	87-010-374-080		CAP, ELECT 47-10V
C502	87-010-374-080		CAP, ELECT 47-10V
C503	87-010-178-080		C-CAP,S 1000P-50KB
C504	87-018-209-080		CAP, TC U 0.1-50 ZF
C511	87-010-180-080		C-CER 1500P
C512	87-010-180-080		C-CER 1500P
C515	87-010-318-080		C-CAP,S 47P-50 CH
C516	87-010-318-080		C-CAP,S 47P-50 CH
C517	87-010-318-080		C-CAP,S 47P-50 CH
C518	87-010-318-080		C-CAP,S 47P-50 CH
C521	87-010-956-080		CHIP-CAP,S 0.068-25B
C522	87-016-369-080		C-CAP,S 0.033-25 B K
C524	87-010-401-080		CAP, ELECT 1-50V
C525	87-016-081-080		C-CAP,S 0.1-16 RK
C526	87-016-081-080		C-CAP,S 0.1-16 RK
C527	87-010-197-080		CAP, CHIP 0.01 DM
C528	87-010-197-080		CAP, CHIP 0.01 DM
C531	87-010-404-080		CAP, ELECT 4.7-50V
C532	87-010-404-080		CAP, ELECT 4.7-50V
C535	87-A11-590-080		C-CAP,S 0.047-16 K B
C536	87-A11-590-080		C-CAP,S 0.047-16 K B
C537	87-010-400-080		CAP, ELECT 0.47-50V
C538	87-010-400-080		CAP, ELECT 0.47-50V
C539	87-010-185-080		C-CAP,S 3900P-50 B
C540	87-010-185-080		C-CAP,S 3900P-50 B
C541	87-A10-307-080		CAP,M 0.1-50 J
C542	87-A10-307-080		CAP,M 0.1-50 J
C543	87-A10-307-080		CAP,M 0.1-50 J
C544	87-A10-307-080		CAP,M 0.1-50 J
C545	87-016-081-080		C-CAP,S 0.1-16 RK
C546	87-016-081-080		C-CAP,S 0.1-16 RK
C547	87-010-401-080		CAP, ELECT 1-50V
C548	87-010-196-080		CHIP CAPACITOR,0.1-25
C549	87-010-401-080		CAP, ELECT 1-50V
C550	87-010-401-080		CAP, ELECT 1-50V
C565	87-010-403-080		CAP, ELECT 3.3-50V
C571	87-012-158-080		C-CAP,S 390P-50 CH
C583	87-012-156-080		C-CAP,S 220P-50 CH
C584	87-012-156-080		C-CAP,S 220P-50 CH
C593	87-012-156-080		C-CAP,S 220P-50 CH
C594	87-012-156-080		C-CAP,S 220P-50 CH
C595	87-010-400-080		CAP, ELECT 0.47-50V
C596	87-010-178-080		CHIP CAP 1000P
C597	87-010-196-080		C-CAP,S 0.1-25 ZF
C603	87-010-544-080		CAP, ELECT 0.1-50V
C604	87-010-544-080		CAP, ELECT 0.1-50V
C605	87-010-408-080		CAP, ELECT 47-50V
C607	87-010-405-080		CAP, ELECT 10-50V
C608	87-010-405-080		CAP, ELECT 10-50V
C609	87-010-196-080		CHIP CAPACITOR,0.1-25
C610	87-010-384-080		CAP, ELECT 100-25V
C611	87-010-197-080		CAP, CHIP 0.01 DM
C612	87-010-197-080		CAP, CHIP 0.01 DM
C901	87-010-196-080		CHIP CAPACITOR,0.1-25
C906	87-010-196-080		CHIP CAPACITOR,0.1-25
CN301	87-A60-624-010		CONN,7P V 2MM JMT
CN401	87-A60-619-010		CONN,2P V 2MM JMT
CN501	87-099-719-010		CONN,30P TYK-B(X)
CN504	87-A60-131-010		CONN,6P V FE
CN571	87-099-570-010		CONN,13P TUC-P13P-B1
CNA101	8A-CJ3-640-010		CONN ASSY,3P V AC1
CNA901	8A-CJ3-648-010		CONN ASSY,2P V DTL SHLD
J201	87-A60-420-010		JACK,3.5 ST (MSC)
J202	87-099-801-010		JACK,PIN 1P BLK
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)
J502	87-099-625-010		JACK PIN 4P,RVS (KM)
JW307	87-008-372-080		FLTR,EMI BL01 RN1
L201	87-003-383-010		COIL,1UH-S
L202	87-003-383-010		COIL,1UH-S
L203	87-003-098-080		COIL,2.2UH K LAL02
L205	87-003-098-080		COIL,2.2UH K LAL02
L206	87-003-098-080		COIL,2.2UH K LAL02
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L590	87-008-372-080		FILTER, EMI BL OIRNI
R215	87-A00-258-080		RES,M/F 0.22-1W J
R216	87-A00-258-080		RES,M/F 0.22-1W J
R217	87-A00-258-080		RES,M/F 0.22-1W J
R218	87-A00-258-080		RES,M/F 0.22-1W J
R219	87-A00-258-080		RES,M/F 0.22-1W J

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R220	87-A00-258-080		RES,M/F 0.22-1W J
R565	87-003-143-080		COIL 4.7 UH
R566	87-003-143-080		COIL 4.7 UH
R591	87-003-143-080		COIL 4.7 UH
R592	87-003-143-080		COIL 4.7 UH
SFR303	87-A90-557-080		SFR,33K H HOKU
SFR304	87-A90-557-080		SFR,33K H HOKU
SFR305	87-024-436-080		SFR,47K RH063MC
SFR306	87-024-436-080		SFR,47K RH063MC
SFR351	87-024-436-080		SFR,47K RH063MC
SFR352	87-024-436-080		SFR,47K RH063MC
TH251	87-A91-042-080		C-THMS,100K 55001
TH252	87-A91-042-080		C-THMS,100K 55001
W101	8Z-CL4-658-010		F-CABLE,10P 2.5 300MM
W506	88-906-221-110		F-CABLE,6P 1.25

FRONT C.B

C161	87-010-196-080		CHIP CAPACITOR,0.1-25
C162	87-010-322-080		C-CAP,S 100P-50 CH
C166	87-010-178-080		C-CAP,S 1000P-50
C167	87-010-196-080		C-CAP,S 0.1-25 ZF
C201	87-010-316-080		C-CAP,S 33P-50 CH
C203	87-010-314-080		C-CAP,S 22P-50V
C204	87-010-196-080		CHIP CAPACITOR,0.1-25
C205	87-010-197-080		CAP, CHIP 0.01 DM
C206	87-010-197-080		CAP, CHIP 0.01 DM
C207	87-018-134-080		CAPACITOR,TC-U 0.01-16
C231	87-010-405-080		CAP, ELECT 10-50V
C232	87-010-178-080		CHIP CAP 1000P
C240	87-010-264-040		CAP,E 100-10 5L
C241	87-010-400-080		CAP, ELECT 0.47-50V
C242	8A-CJ4-635-010		CAP,E 470-10 SRG3.5PITCH
C243	87-010-196-080		CHIP CAPACITOR,0.1-25
C246	87-012-393-080		C-CAP,S 0.22-16 R K
C250	87-010-198-080		CAP, CHIP 0.022
C351	87-010-197-080		CAP, CHIP 0.01 DM
C352	87-010-197-080		CAP, CHIP 0.01 DM
C353	87-010-197-080		CAP, CHIP 0.01 DM
C354	87-010-197-080		CAP, CHIP 0.01 DM
C371	87-010-379-040		CAP,E 22-16 M SME
C372	87-010-379-040		CAP,E 22-16 M SME
C373	87-010-408-080		CAP, ELECT 47-50V
C374	87-010-404-080		CAP, ELECT 4.7-50V
C375	87-010-404-080		CAP, ELECT 4.7-50V
C380	87-010-555-080		CAP, E 100-10V
C382	87-015-819-080		CAPACITOR,0.01
C383	87-015-819-080		CAPACITOR,0.01
C387	87-010-196-080		CHIP CAPACITOR,0.1-25
C901	87-010-264-040		CAP,E 100-10 5L
C902	87-010-264-040		CAP,E 100-10 5L
C936	87-010-197-080		CAP, CHIP 0.01 DM
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN102	87-A60-049-010		CONN,22P V 9604S-22C
CNA301	8A-CJ3-647-010		CONN ASSY,7P V RPH SHILD
CNA304	8A-CL3-642-010		CONN ASSY,2P V KEY
CNA401	88-805-091-420		CONN ASSY,9P
D151	87-A40-317-080		LED,SLR-342VCT31 RED
D152	87-A40-619-040		LED,SLR-56PT-T31-W GRN
D153	87-A40-619-040		LED,SLR-56PT-T31-W GRN
D154	87-A40-619-040		LED,SLR-56PT-T31-W GRN
D155	87-A40-619-040		LED,SLR-56PT-T31-W GRN
D156	87-A40-619-040		LED,SLR-56PT-T31-W GRN
D171	87-A40-317-080		LED,SLR-342VCT31 RED
D172	87-A40-317-080		LED,SLR-342VCT31 RED
D173	87-A40-317-080		LED,SLR-342VCT31 RED
FL301	8A-CJ3-604-010		FL,14-BT-61GNK ACJ-3
L201	87-A50-333-010		COIL,OSC 9.43MHZ
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M
S310	87-A90-095-080		SW,TACT EVQ11G04M
S311	87-A90-095-080		SW,TACT EVQ11G04M
S321	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
S342	87-A90-095-080		SW,TACT EVQ11G04M
S343	87-A90-095-080		SW,TACT EVQ11G04M
S344	87-A90-095-080		SW,TACT EVQ11G04M
S345	87-A90-095-080		SW,TACT EVQ11G04M
S346	87-A90-095-080		SW,TACT EVQ11G04M
S351	87-A91-351-010		SW,RTRY 1-2-12 RE0121PV2B25FIN
S352	87-A91-687-010		SW,RTRY RE012102PV-VOL
W102	8A-CJ3-605-010		FF-CABLE,22P 1.25 350MM

TUNER C.B

C701	87-010-381-080		CAP,ELECT 330-16V
C702	87-010-404-080		CAP,ELECT 4.7-50V
C703	87-012-286-080		CAP,U 0.01-25
C704	87-012-286-080		CAP,U 0.01-25
C709	87-012-195-080		C-CAP,U 100P-50CH
C711	87-010-260-080		CAP,ELECT 47-25V
C712	87-010-831-080		C-CAP,U,0.1-16F
C713	87-012-286-080		CAP,U 0.01-25
C714	87-012-286-080		CAP,U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50CH
C717	87-012-286-080		CAP,U 0.01-25
C719	87-012-286-080		CAP,U 0.01-25
C720	87-012-195-080		C-CAP,U 100P-50CH
C721	87-012-176-080		CAP,15P
C722	87-012-176-080		CAP,15P
C723	87-012-274-080		CHIP CAP,U 1000P-50B
C725	87-018-131-080		CAP,TC U 1000P-50 KB
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-248-080		CAP,ELECT 220-10V
C729	87-012-274-080		CHIP CAP,U 1000P-50B
C731	87-012-286-080		CAP,U 0.01-25
C733	87-012-280-080		C-CAP,U 3300P-50 KB
C734	87-012-280-080		C-CAP,U 3300P-50 KB
C752	87-012-282-080		C-CAP,U 4700P-50 KB
C753	87-012-195-080		C-CAP,U 100P-50 J CH
C755	87-012-286-080		CAP,U 0.01-25
C756	87-012-286-080		CAP,U 0.01-25
C757	87-012-188-080		C-CAP,U 47P-50 CH
C758	87-012-167-080		C-CAP,U 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 ZF
C762	87-012-286-080		CAP,U 0.01-25
C763	87-010-829-080		CAP,U 0.047-16
C765	87-012-286-080		CAP,U 0.01-25
C766	87-010-197-080		C-CAP,S 0.01-25 KB
C768	87-012-286-080		CAP,U 0.01-25
C769	87-010-260-080		CAP,ELECT 47-25V
C770	87-010-829-080		CAP,U 0.047-16
C771	87-010-383-080		CAP,ELECT 33-25V
C772	87-010-829-080		CAP,U 0.047-16
C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP,ELECT 100-10V
C775	87-010-404-080		CAP,ELECT 4.7-50V
C776	87-012-286-080		CAP,U 0.01-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C777	87-010-493-080		CAP,E 0.47-50 M 5L SRE
C778	87-010-401-080		CAP,ELECT 1-50V
C779	87-010-401-080		CAP,ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP,ELECT 10-50V
C782	87-010-405-080		CAP,ELECT 10-50V
C783	87-012-286-080		CAP,U 0.01-25
C784	87-012-286-080		CAP,U 0.01-25
C785	87-010-402-080		CAP, ELECT 2.2-50V
C786	87-010-402-080		CAP,ELECT 2.2-50V
C787	87-012-275-080		C-CAP,U 1200P-50 B
C788	87-012-275-080		C-CAP,U 1200P-50 B
C789	87-012-275-080		C-CAP,U 1200P-50 B
C790	87-012-275-080		C-CAP,U 1200P-50 B
C791	87-010-405-080		CAP,ELECT 10-50V
C793	87-012-273-080		C-CAP,U 820P-50 B
C794	87-010-406-080		CAP,ELECT 22-50
C795	87-010-596-080		CAP,S 0.047-16
C796	87-010-403-080		CAP,ELECT 3.3-50V
C797	87-012-276-080		C-CAP,U 1500P-50 KB
C798	87-012-276-080		C-CAP,U 1500P-50 KB
C799	87-010-829-080		CAP,U 0.047-16
C812	87-012-286-080		CAP,U 0.01-25
C814	87-012-286-080		CAP,U 0.01-25
C820	87-010-260-080		CAP,ELECT 47-25V
C821	87-012-286-080		CAP,U 0.01-25
C822	87-012-286-080		CAP,U 0.01-25
C823	87-012-286-080		CAP,U 0.01-25
C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C940	87-012-286-080		C-CAP,U 0.01-25 KB
C942	87-012-168-080		C-CAP,U 6P-50 D CH
C947	87-012-286-080		C-CAP,U 0.01-25 KB
C949	87-A10-039-080		C-CAP,U 470P-50 J CH
C952	87-012-286-080		C-CAP,U 0.01-25 KB
C958	87-010-197-080		C-CAP,S 0.01-25 KB
C959	87-010-831-080		C-CAP,U 0.1-16 ZF
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP,E 1-50 M 11L SME
CF801	87-008-423-010		FLTR,CF SFE10.7MS3G-A
CF802	82-785-747-010		CF,MS2 GHY R
CN701	87-A60-700-010		CONN,13P H GRY TUC-P13X-C1
FFE801	A8-6ZA-19H-030		6ZA-1 FEMENM
J801	87-033-241-010		TERMINAL,ANT 2P AJ-2039
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A91-110-010		FLTR,PCFJZH-450(TOK)
L781	87-005-847-010		COIL,2.2UH K CECS
L791	87-A50-027-010		COIL,1 POLE MPX(TOK)
L792	87-A50-027-010		COIL,1 POLE MPX(TOK)
L832	87-005-847-080		COIL,2.2UH K CECS
L941	87-A50-020-010		COIL,ANT LW(COI)252KHZ
L942	87-A50-019-010		COIL,OSC LW(COI) 856KHZ
L981	8Z-ZA1-665-010		COIL,AM PACK 2(TOK)
TC942	87-A91-658-010		TRIMMER,30P 4.0X4.5 ECRL
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

REC C.B

CNA302	8A-CL3-641-010		CONN ASSY,5P V LED
D862	87-A40-786-080		LED,SMLS1BE16WTP4 BLU/UMB
D863	87-A40-786-080		LED,SMLS1BE16WTP4 BLU/UMB

KEY C.B

S361	87-A90-095-080		SW,TACT EVQ11GO4M
S362	87-A90-095-080		SW,TACT EVQ11GO4M
S363	87-A90-095-080		SW,TACT EVQ11GO4M
S364	87-A90-095-080		SW,TACT EVQ11GO4M
S365	87-A90-095-080		SW,TACT EVQ11GO4M
S366	87-A90-095-080		SW,TACT EVQ11GO4M

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION

SW C.B

S901	87-A90-117-010		SW,PUSH 1-1-1 MPU103
S902	87-A90-117-010		SW,PUSH 1-1-1 MPU103

PT1 C.B

C1	87-010-388-080		CAP,E 100-25 SME
C3	87-A10-479-080		CAP,CER 2200P-250 M E KH
C5	87-010-403-080		CAP, ELECT 3.3-50V
CN1	87-A60-620-010		CONN,3P V 2MM JMT
⚠ PT1	8A-CJ4-608-010		PT,E ACJ-4
⚠ PT2	8A-NF8-662-010		PT,SUB ANF-8 (E)
⚠ RY1	87-A90-976-010		RELAY,AC12V SDT-S-112LMR
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC

PT2 C.B

⚠ PR51	87-A90-094-080		PROTECTOR,4A 491SERIES 60V
⚠ PR52	87-A90-094-080		PROTECTOR,4A 491SERIES 60V
⚠ PR53	87-026-681-080		PROTECTOR,5A 60V 491
⚠ PR54	87-026-681-080		PROTECTOR,5A 60V 491
⚠ PR55	87-026-681-080		PROTECTOR,5A 60V 491
⚠ PR56	87-026-681-080		PROTECTOR,5A 60V 491

DECK C.B

CON1	87-009-352-010		CONN,9P PH H
SFR1	87-024-581-010		SFR,3.3K H KVSF637A
SOL1	82-ZM1-634-010		SOL ASSY,23K
SW2	87-036-110-010		SW,MICRO SPPB62
SW3	87-036-110-010		SW,MICRO SPPB62
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM1-625-010		RBN-CORD,4P-55

RELAY C.B

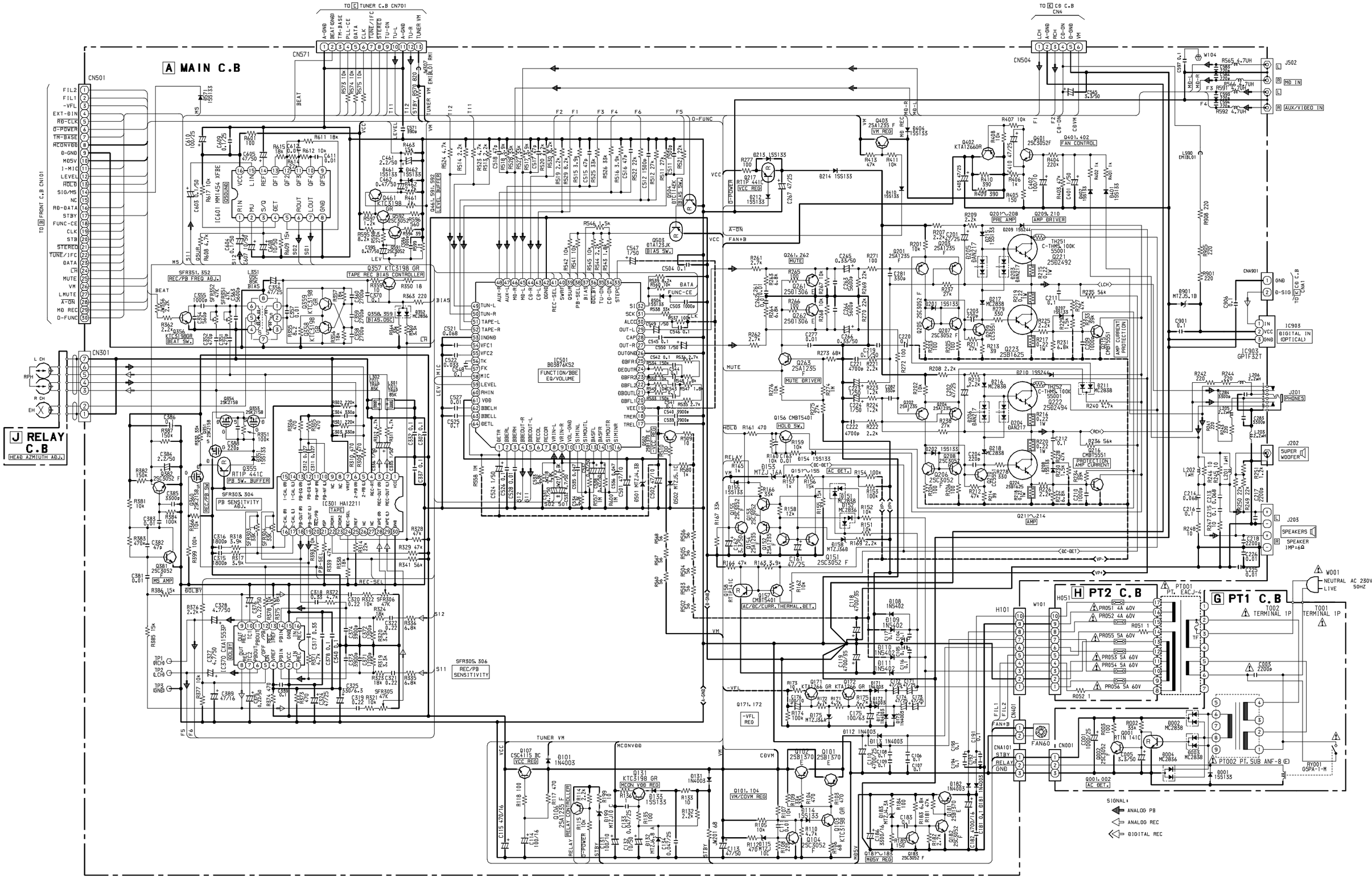
CNA301	8A-CJ3-647-010		CONN ASSY,7P V RPH SHILD

CD C.B

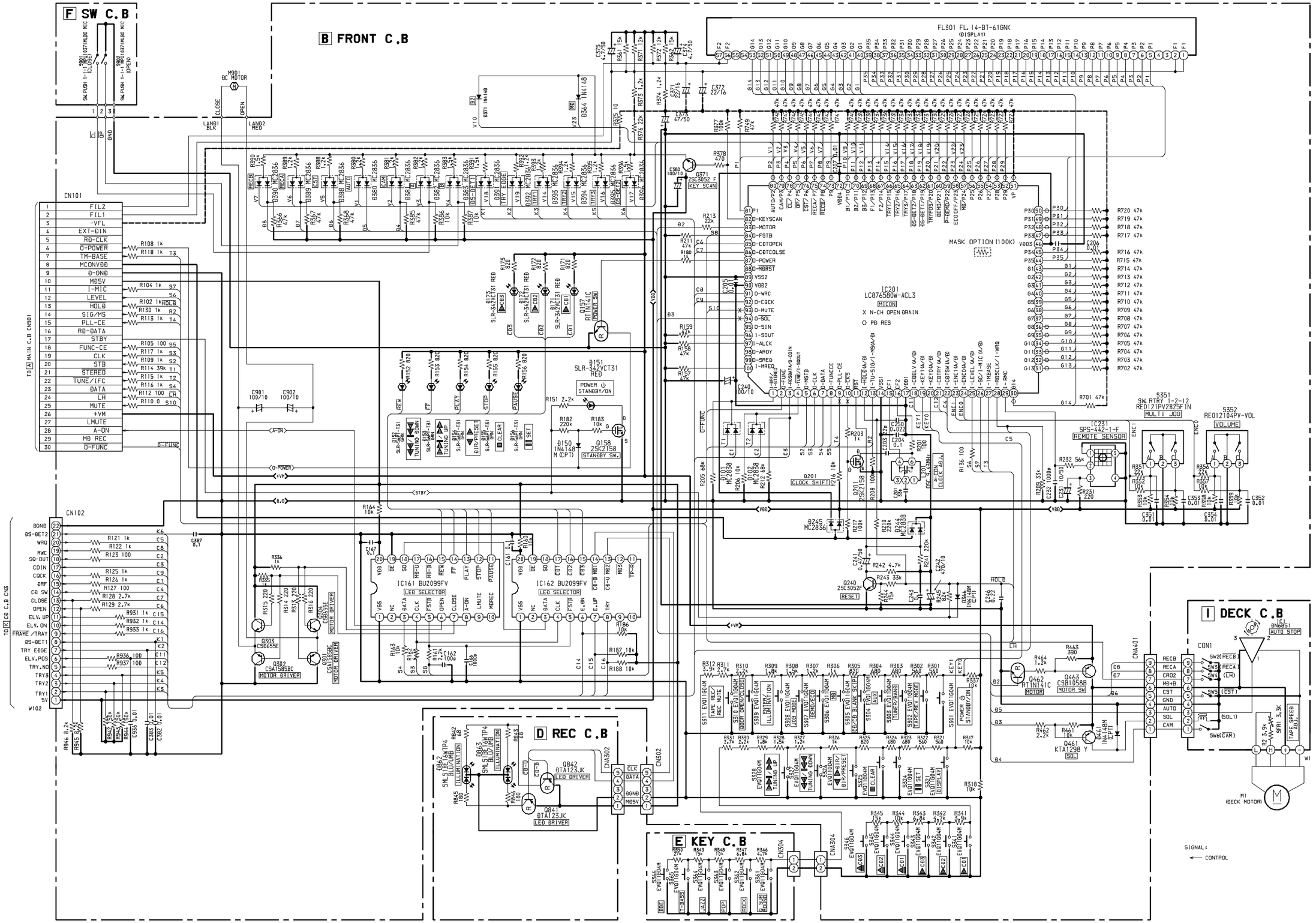
C1	87-010-403-080		CAP,ELECT 3.3-50V
C2	87-010-197-080		CAP,CHIP 0.01 DM
C3	87-010-263-080		CAP,ELECT 100-10V
C4	87-010-248-080		CAP,ELECT 220-10V
C5	87-010-197-080		CAP,CHIP 0.01 DM
C6	87-010-374-080		CAP,ELECT 47-10V
C7	87-012-349-080		C-CAP,S 1000P-50 CH
C8	87-010-198-080		CAP,CHIP 0.022
C9	87-010-248-080		CAP,ELECT 220-10V
C10	87-010-263-080		CAP,ELECT 100-10V
C12	87-010-401-080		CAP,ELECT 1-50V
C13	87-010-193-080		CHIP CAPACITOR,0.033
C14	87-010-405-080		CAP,ELECT 10-50V
C16	87-010-491-040		CAP,E 0.22-50 GAS
C17	87-012-157-080		C-CAP,S 330P-50 CH
C18	87-010-213-080		C-CAP,S 0.015-50 B
C20	87-010-193-080		CHIP CAPACITOR,0.033
C22	87-010-183-080		C-CAP,S 2700P-50 B
C23	87-010-956-080		CHIP-CAP,S 0.068-25B
C25	87-010-994-080		C-CAP,S 680P-50 CH
C29	87-010-186-080		CAP,CHIP 4700P
C30	87-012-156-080		C-CAP,S 220P-50 CH
C31	87-010-400-080		CAP,ELECT 0.47-50V
C32	87-010-374-080		CAP,ELECT 47-10V
C33	87-010-401-080		CAP,ELECT 1-50V
C34	87-010-184-080		CHIP CAPACITOR,3300P(K)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C35	87-010-197-080		CAP,CHIP 0.01 DM
C36	87-010-374-080		CAP,ELECT 47-10V
C37	87-010-404-080		CAP,ELECT 4.7-50V
C38	87-010-196-080		CHIP CAPACITOR,0.1-25
C39	87-010-178-080		C-CAP,S 1000P-50 KB
C40	87-010-145-080		C-CAP,S 1P-50 CH
C42	87-010-314-080		C-CAP,S 22P-50 CH
C45	87-010-196-080		CHIP CAPACITOR,0.1-25
C46	87-010-196-080		CHIP CAPACITOR,0.1-25
C47	87-010-196-080		CHIP CAPACITOR,0.1-25
C48	87-010-315-080		C-CAP,S 27P-50 CH
C50	87-012-140-080		CAP,470P
C51	87-012-156-080		C-CAP,S 220P-50 CH
C55	87-010-263-080		CAP,ELECT 100-10V
C57	87-010-316-080		C-CAP,S 33P-50 CH
C58	87-010-316-080		C-CAP,S 33P-50 CH
C59	87-010-263-080		CAP,ELECT 100-10V
C60	87-010-196-080		CHIP CAPACITOR,0.1-25
C61	87-010-196-080		CHIP CAPACITOR,0.1-25
C62	87-010-221-080		CAP,ELECT 470-10V
C65	87-010-404-080		CAP,ELECT 4.7-50V
C66	87-010-196-080		CHIP CAPACITOR,0.1-25
C67	87-010-263-080		CAP,ELECT 100-10V
C68	87-010-322-080		C-CAP,S 100P-50 CH
C69	87-012-154-080		C-CAP,S 150P-50 CH
C75	87-010-197-080		CAP,CHIP 0.01 DM
C76	87-A10-102-080		CAP,E 1000-10 REA
C77	87-010-197-080		CAP,CHIP 0.01 DM
C78	87-010-221-080		CAP,ELECT 470-10V
C79	87-010-263-080		CAP,ELECT 100-10V
C80	87-010-197-080		CAP,CHIP 0.01 DM
C81	87-010-405-080		CAP,ELECT 10-50V
C82	87-010-405-080		CAP,ELECT 10-50V
C83	87-010-181-080		CAP,CHIP S 1800P
C84	87-010-181-080		CAP,CHIP S 1800P
C90	87-010-196-080		CHIP CAPACITOR,0.1-25
C91	87-010-553-040		CAP,E 47-16 GAS
C92	87-010-552-040		CAP,E 22-16 GAS
C93	87-010-197-080		CAP,CHIP 0.01 DM
C94	87-015-819-080		CAPACITOR,0.01
C95	87-010-197-080		CAP,CHIP 0.01 DM
C96	87-010-196-080		CHIP CAPACITOR,0.1-25
C97	87-010-180-080		C-CAP,S 1500P-50 KB
C98	87-010-197-080		CAP,CHIP 0.01 DM
C101	87-010-322-080		C-CAP,S 100P-50 CH
C102	87-010-322-080		C-CAP,S 100P-50 CH
C103	87-010-322-080		C-CAP,S 100P-50 CH
C104	87-010-322-080		C-CAP,S 100P-50 CH
C105	87-010-322-080		C-CAP,S 100P-50 CH
C110	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-552-040		CAP,E 22-16 GAS
C211	87-010-552-040		CAP,E 22-16 GAS
C221	87-010-196-080		CHIP CAPACITOR,0.1-25
C222	87-010-405-080		CAP,ELECT 10-50V
C223	87-010-405-080		CAP,ELECT 10-50V
C224	87-010-196-080		CHIP CAPACITOR,0.1-25
C225	87-010-405-080		CAP,ELECT 10-50V
C226	87-010-405-080		CAP,ELECT 10-50V
C241	87-010-180-080		C-CAP,S 1500P-50 KB
C243	87-010-180-080		C-CAP,S 1500P-50 KB
C244	87-010-180-080		C-CAP,S 1500P-50 KB
C251	87-010-552-040		CAP,E 22-16 GAS
C495	87-010-196-080		CHIP CAPACITOR,0.1-25
CN1	87-A60-424-010		CONN,16P V TOC-B
CN2	87-A60-081-010		CONN,06P H 9604S-06F
CN3	87-099-760-010		CONN,22P H 9604
CN4	87-A60-081-010		CONN,06P H 9604S-06F
CN7	87-A60-081-010		CONN,06P H 9604S-06F
CN8	87-A60-083-010		CONN,04P H 9604S-04F
CNA1	87-A60-619-010		CONN,2P V 2MM JMT
D221	87-070-288-010		LED,GL380
FC1	8Z-ZG4-610-010		FF-CABLE,16P 1.0 70MM PIC
FC2	88-906-191-110		FF-CABLE,6P 1.25
FC7	88-906-151-110		FF-CABLE,6P 1.25
FC8	84-ZG2-612-110		CABLE,FFC 4P L=225
FC10	8Z-ZG4-614-010		F-CABLE,2P 130MM LED
JW2	87-003-146-080		COIL,15UH
L1	87-003-102-080		COIL,10UH
L4	87-003-152-080		COIL,100UH
PS231	87-A91-378-010		SNSR,SG-267
R68	87-A50-189-080		C-COIL,S BLM21B272S
SFR130	87-021-868-010		SFR,100K V H0614C
SW201	88-ZG5-606-010		SW,MODE MMS00420
SW204	87-A91-040-010		SW,LVR SSCF31P-1
X1	87-A70-046-010		VIB,XTAL 16.934MHZ
SWITCH C.B			
CN201	87-A60-946-010		CONN,4P H 6232
CN207	87-A60-081-010		CONN,06P H 9604S-06F
FC201	8Z-ZG4-613-110		FF-CABLE,4P 1.0 190MM
SW202	87-A90-967-010		SW,PUSH 3-2-1 MPU20160MLB0
SENSOR C.B			
CN202	87-A60-946-010		CONN,4P H 6232
Q202	87-026-674-010		P-TR,PT4850F
Q212	87-026-674-010		P-TR,PT4850F
TRAY C.B			
CN208	87-A60-083-010		CONN,04P H 9604S-04F
SW211	87-A91-333-010		SW,PUSH 1-1-1 MPU11570
SW212	87-A91-333-010		SW,PUSH 1-1-1 MPU11570
SW213	87-A91-333-010		SW,PUSH 1-1-1 MPU11570
LED C.B			
D321	87-070-319-010		LED,GL4800 RED
DRIVE C.B			
CON1	87-A60-086-010		CONN,06P H 6216
M20	87-045-358-010		MOT,RF-310TA 43
M21	87-045-356-010		MOT,RF-310TA 30
SW1	87-A90-042-010		SW,LEAF MSW 17310 MVPO

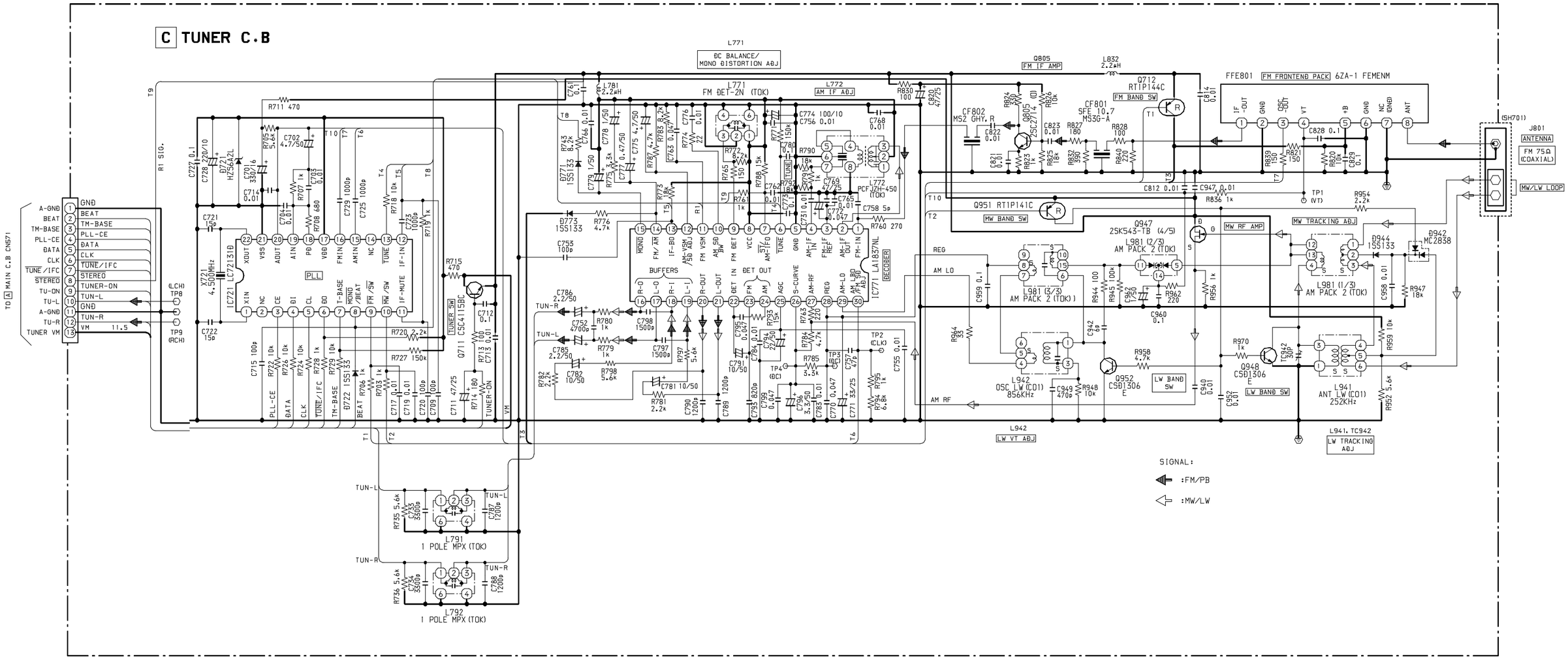
SCHEMATIC DIAGRAM – 1 (MAIN / PT1 / PT2 / RELAY)



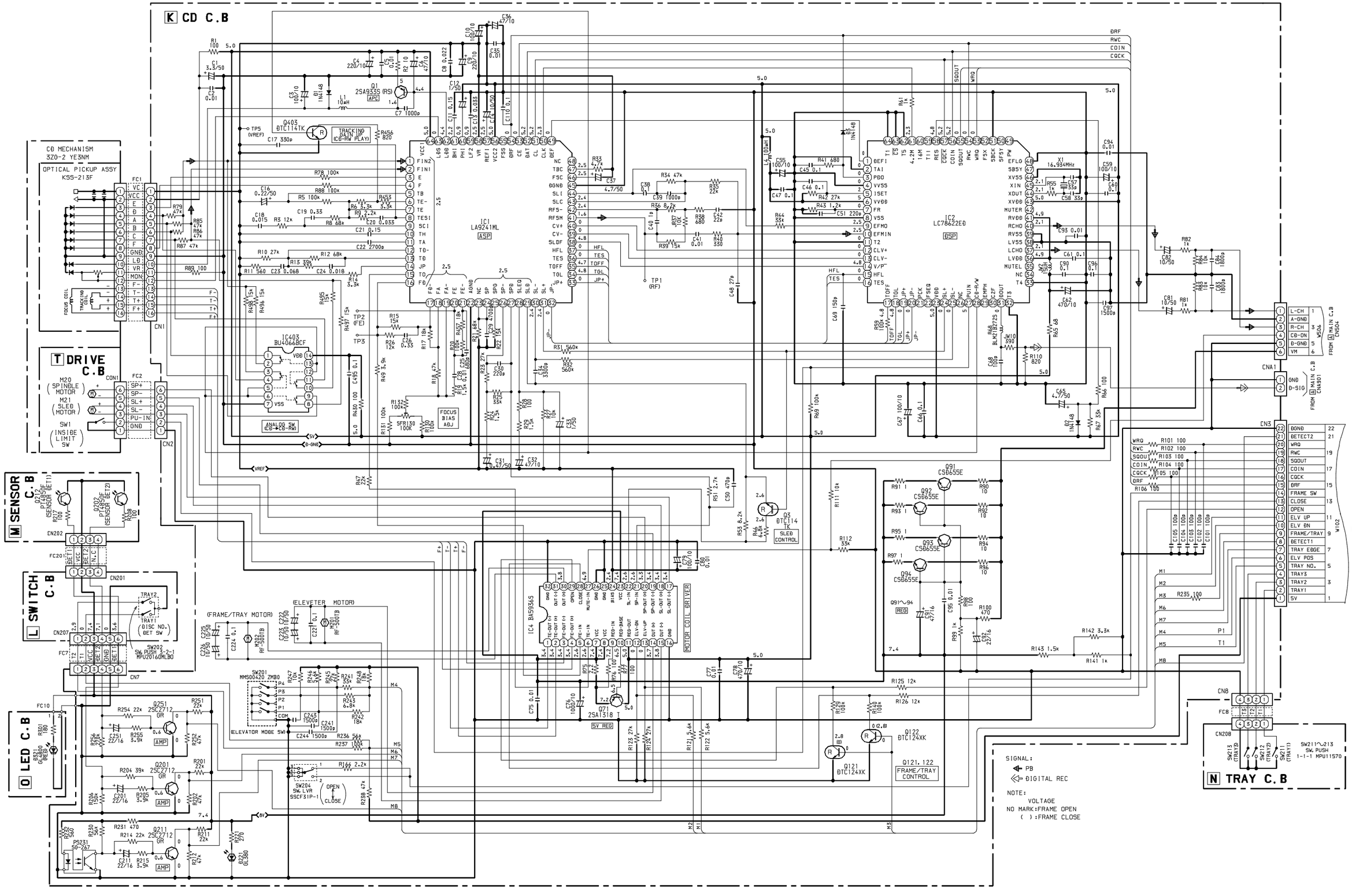
SCHEMATIC DIAGRAM – 2 (FRONT / REC / SW / DECK)



SCHEMATIC DIAGRAM – 3 (TUNER)

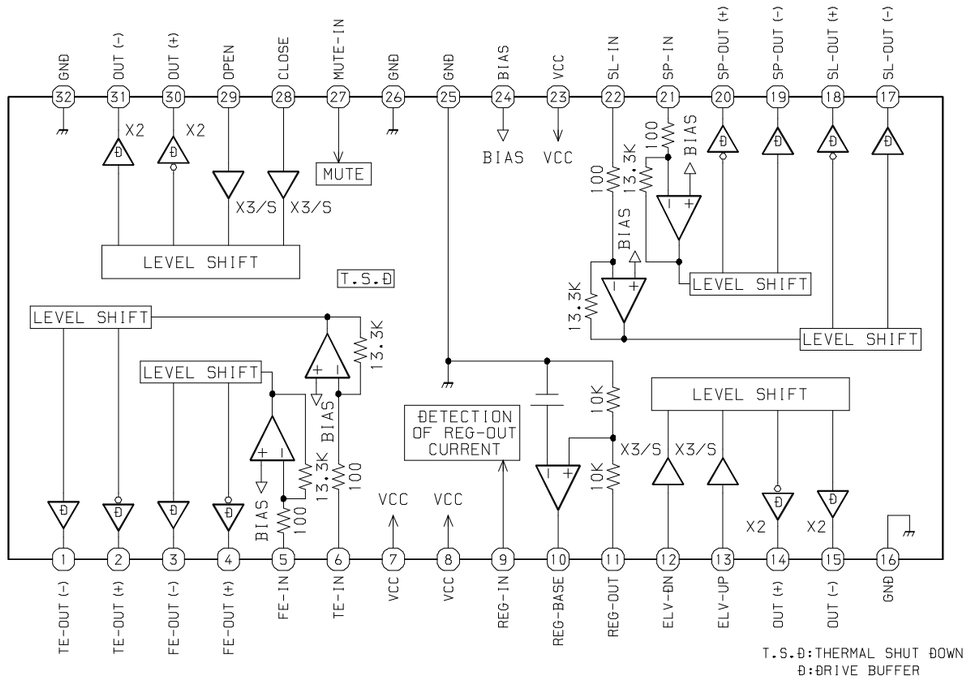


SCHEMATIC DIAGRAM – 4 (CD / SWITCH / SENSOR / TRAY / LED / DRIVE)

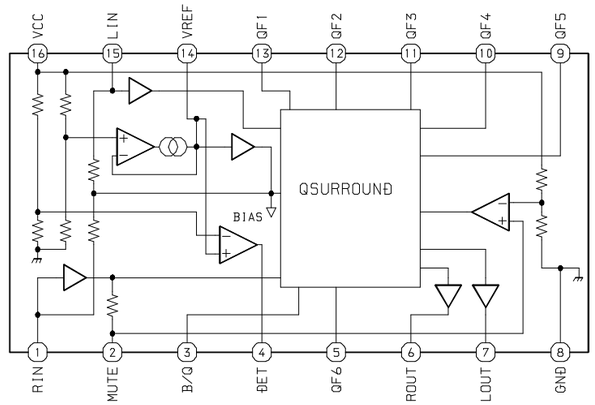


IC BLOCK DIAGRAM

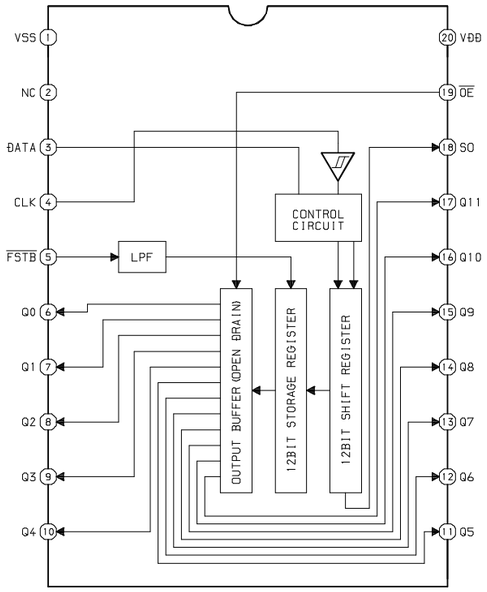
IC, BA5936S



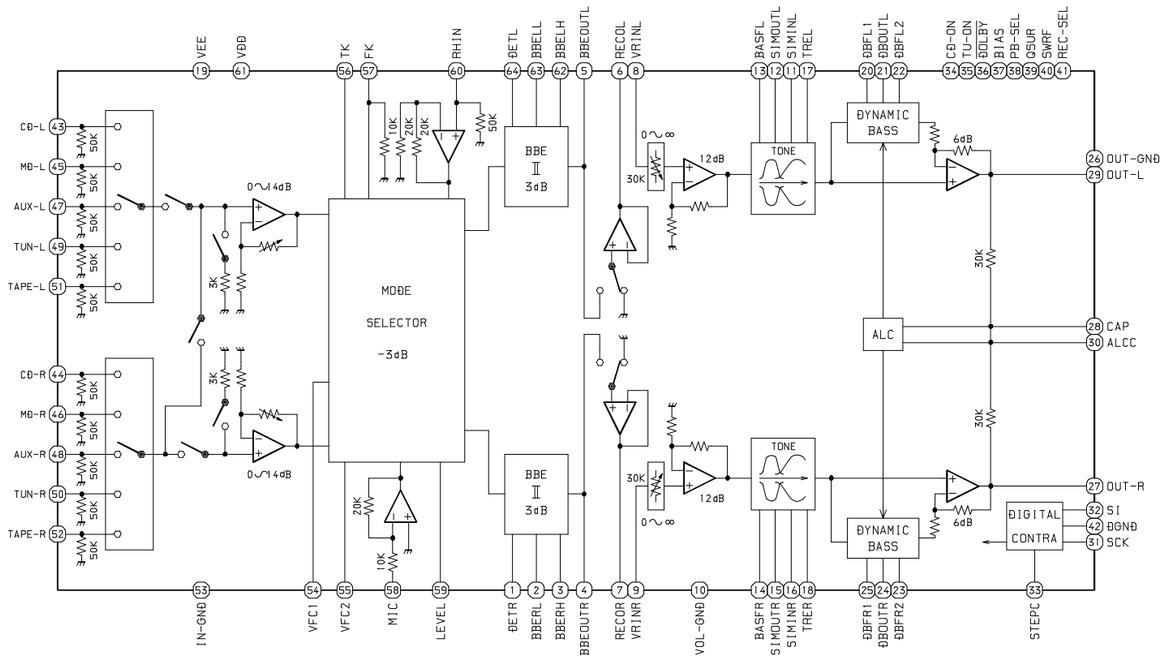
IC, MM1554XFBE



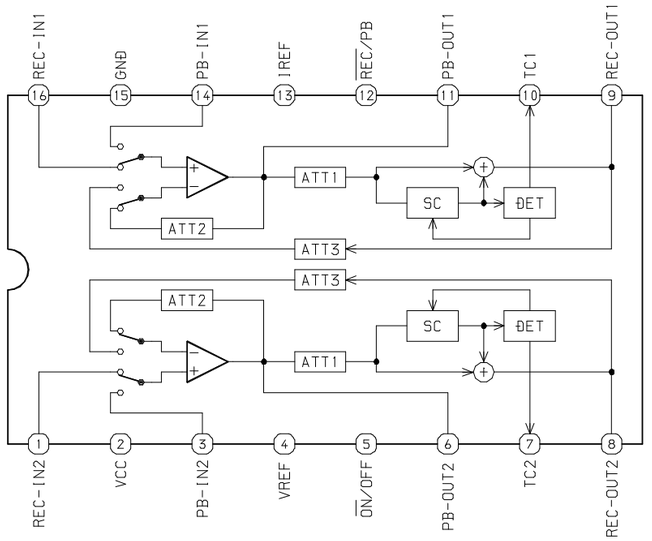
IC, BU2099FV



IC, BD3876KS2

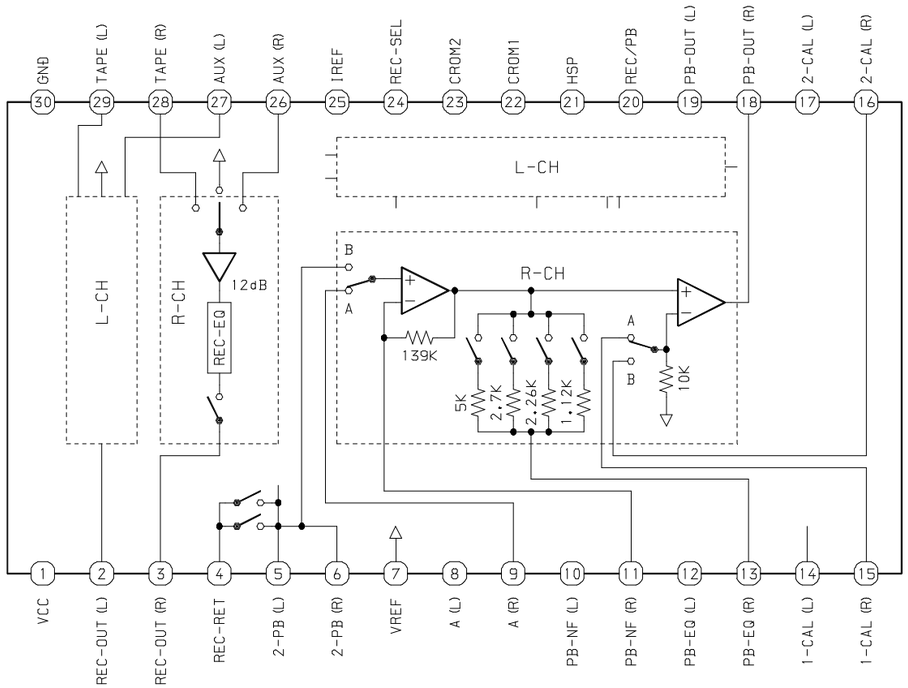


IC, CXA1553P

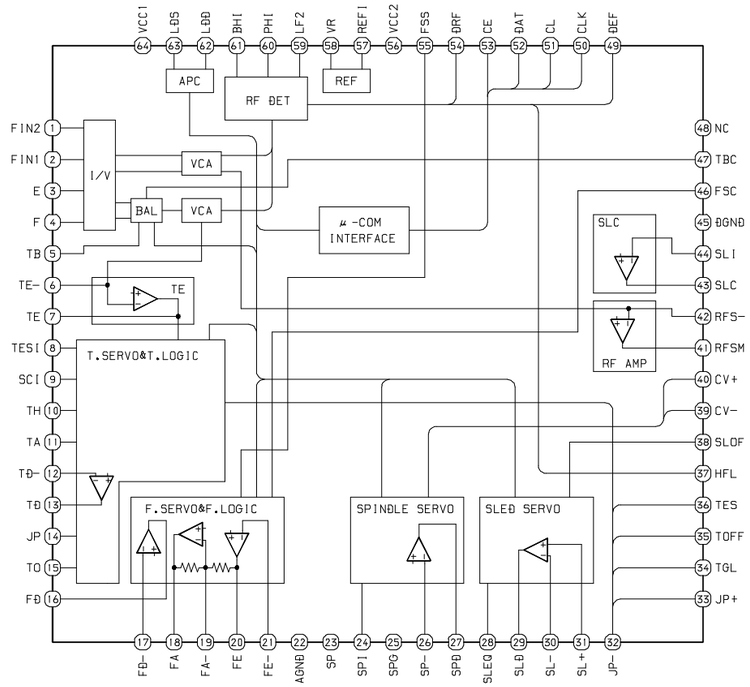


ATT:ATTENUATOR
SC:SIDE CHAIN
DET:DETECTOR

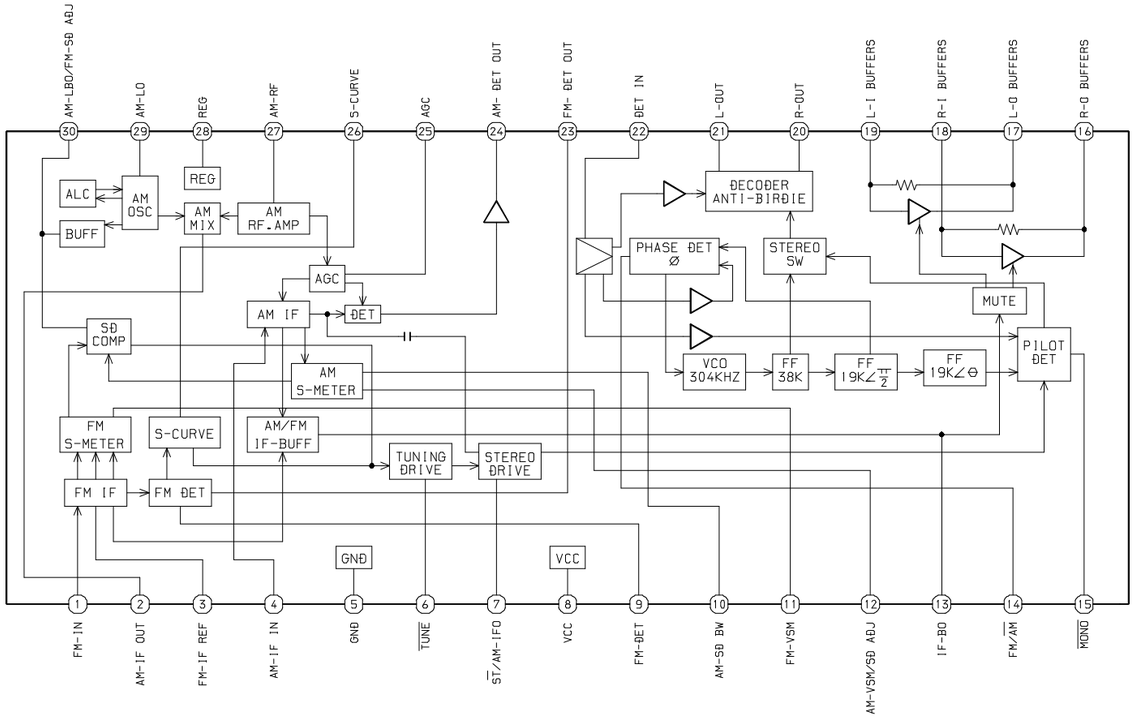
IC, HA12211



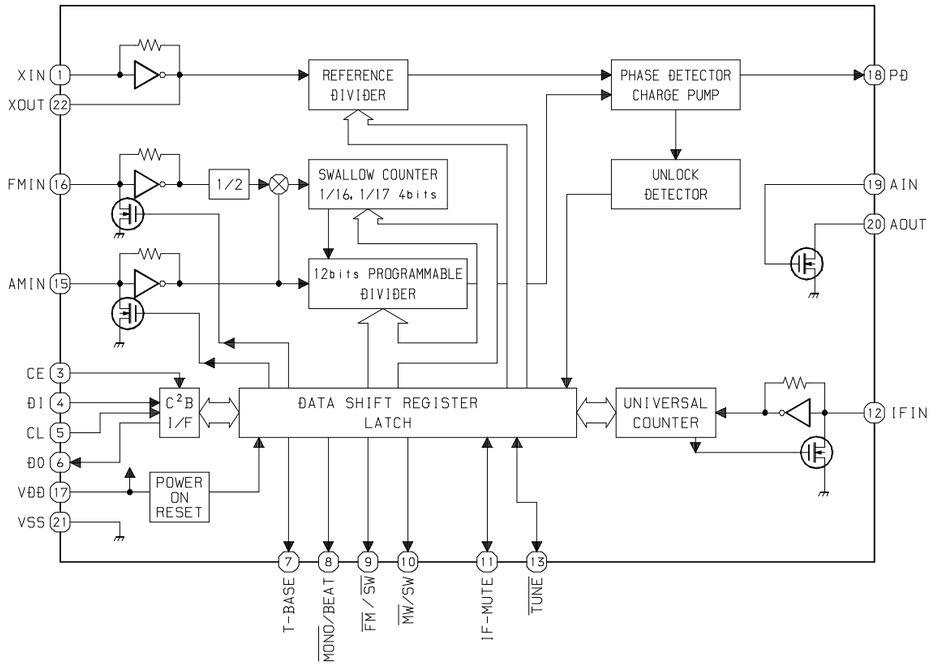
IC, LA9241ML



IC, LA1837NL



IC, LC72131D



IC DESCRIPTION

IC, LC876580W

Pin No.	Pin Name	I/O	Description
1	I-$\overline{\text{STEREO}}$ / I-DRF	I	During TUNER function, TUNER stereo signal input / During CD function, CD ASP IC DRF data input.
2	O-FUNC	O	Function IC expand port pull up VCC switch output.
3	I-RDS-DATA / O-COIN	I/O	During TUNER function, RDS serial data input (not used) / During CD function, CD DSP IC command in data output.
4	I-TUDO / I-SQOUT	I	During TUNER function, TUNER IF count serial data input / During CD function, CD DSP IC sub-code data input.
5	O-MSTB	O	Main IC control serial strobe output.
6	O-CLK	O	IC control serial clock output.
7	O-DATA	O	IC control serial data output.
8	O-FUNC-CE	O	Function IC control chip enable output.
9	O-PLL-CE	O	TUNER PLL IC control chip enable output.
10	O-$\overline{\text{CKS}}$	O	Micom clock chift control output. "L" = Shift up (Initial "H").
11	$\overline{\text{RESET}}$	I	Reset input.
12	I-$\overline{\text{HOLD}}$	I	Power failure overcharge detection input.
13	I-TU-SIG / I-$\overline{\text{MS}}$	I	During TUNER function, TUNER signal level input / During TAPE function, music sensor detection input.
14	VSS1	–	Ground.
15	CF1	I	Oscillator input for system clock (9.43MHz)
16	CF2	O	Oscillator output for system clock (9.43MHz).
17	VDD1	–	Power supply. Basis on A/D input level. Back up VDD.
18	I-CDELV	I	CD evelater position detection input.
19 ~ 20	I-KEY1 ~ I-KEY0	I	Tact key A/D level input.
21	I-CDTRAY	I	CD tray position detection input.
22	I-CDTSW	I	CD mecha switch detetion input.
23	I-ENC1	I	Waveform input for jog rotary encoder.
24	I-ENC0	I	Waveform input for volume rotary encoder.
25	I-LEVEL	I	Audio signal level detection input (For level bar, CD blank skip).
26	I-SC / I-MIC	I	CD serial clock input / MIC level detection input. (Not used)
27	I-TMBASE	I	Reference signal input for clock.
28	I-RDS-CLK I-WRQ	I	During TUNER function, RDS serial clock input (not used) / During CD function, CD DSP IC WRQ input.
29	I-RMC	I	Remote control signal input.
30 ~ 43	G14 ~ G01	O	FL grid output.
44 ~ 45	P35 ~ P334	O	FL segment output.
46	VDD3	–	Power supply. Connected to VDD4.
47 ~ 50	P33 ~ P30	O	FL segment output.
51	VP	–	Power supply for FL input.
52 ~ 56	P29 ~ P25	O	FL segment output.
57	P24 / $\overline{\text{MD}}$	O/I	FL segment output / No MD setting switch input (not used).
58	P23 / ECO OFF	O/I	FL segment output / ECO off setting switch input (not used).

Pin No.	Pin Name	I/O	Description
59	P22 / P-DEMO	O/I	FL segment output / DEMO with panel setting switch input (not used).
60	P21 / $\overline{\text{DEMO}}$	O/I	FL segment ouptut / No DEMO (initial clock) setting switch input (not used).
61	P20 / $\overline{\text{TRAYPOS}}$	O/I	FL segment output / Tray position switching input.
62	P19 / $\overline{\text{DS-DET1}}$	O/I	FL segment output / CD DSIC detection switch 1 input.
63	P18 / $\overline{\text{DS-DET2}}$	O/I	FL segment output / CD DISC detection switch 2 input.
64	P17 / $\overline{\text{TRAY3}}$	O/I	FL segment output / CD tray 3 switching input.
65	P16 / $\overline{\text{TRAY2}}$	O/I	FL segment output / CD tray 2 switching input.
66	P15 / $\overline{\text{TRAY1}}$	O/I	FL segment output / CD tray 1 switching input.
67	P14 / F2	O/I	FL segment output / Feature select switch 2 input (not used).
68	P13 / F1	O/I	FL segment output / Feature select switch 1 input (not used).
69	P12 / B3	O/I	FL segment output / TUNER band switch 3 input (not used).
70	P11 / B2	O/I	FL segment output / TUNER band switch 2 input (not used).
71	P10 / B1	O/I	FL segment output / TUNER band switch 1 input (not used).
72	VDD4	–	Power supply. Connected to VDD3.
73	P9	O	FL segment output.
74	P8 / $\overline{\text{RECB}}$	O/I	FL segment output / Deck side B recording able or disable detection switch input.
75	P7 / $\overline{\text{RECA}}$	O/I	FL segment output / Deck side A recording able or disable detection switch input.
76	P6 / $\overline{\text{CST}}$	O/I	FL segment output / Deck cassette existence detection switch input.
77	P5 / $\overline{\text{OP}}$	O/I	FL segment output / MD door open switch detection input.
78	P4 / $\overline{\text{CL}}$	O/I	FL segment output / MD dooe close switch detection input.
79	P3 / $\overline{\text{CAM}}$	O/I	FL segment output / Deck cam-operation detection swutch input.
80	P2 / AUTO	O/I	FL segment output / Deck reel-rotation detection switch input.
81	P1	O	FL segment output.
82	O-KEYSCAN	O	Segment input timing output. "H" = Input timing.
83	O-MOTOR	O	Deck mecha motor control output.
84	O-FSTB	O	Shift register IC control serial strobe output.
85	O-CDTOPEN	O	CD tray control output. "H" = Open.
86	O-CDTCLOSE	O	CD tray control output. "H" = Close.
87	O-POWER	O	System power control output.
88	O-MDRST	O	MD reset output.
89	VSS2	–	Ground.
90	VDD2	–	Power supply. Connected to VDD1.
91	O-RWC	O	CD DSP IC RWC control output.
92	O-CQCK	O	CD DSP IC CQCK control output.
93	O-MUTE	O	Audio signal line mute control output.
94	O-SOL	O	Deck mecha plunger control output.
95	O-SIN	O	MD serial data output.
96	I-SOUT	I	MD serial data input.
97	I-ACLK	I	MD unit latch clock input.
98	ARDY	O	MD unit serial data ready port control output.
99	O-SREQ	O	From MD unit serial data transfer request control output.
100	I-MREQ	I	To MD unit serial data transfer request control input.

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Connects to the pickup's photo diode; adding this pin to pin FIN1 generates RF signal, and subtracting it generates FE signal.
2	FIN1	I	Connects to the pickup's photo diode.
3	E	I	Connects to the pickup's photo diode; subtracting this pin from pin F generates TE signal.
4	F	I	Connects to the pickup's photo diode.
5	TB	I	Input for DC component of TE signal.
6	TE–	I	Connects to the resistor between this pin and TE pin for setting the gain of TE signal.
7	TE	O	Output for TE signal.
8	TESI	I	Input for TES (Track Error Sense) comparator, TE signal is band-passed and inputted.
9	SCI	I	Input for shock detection.
10	TH	I	For setting tracking gain time constant.
11	TA	O	TA amplifier output pin.
12	TD–	I	For constructing tracking phase compensation constant between TD and VR pins.
13	TD	O	For setting tracking phase compensation.
14	JP	I	For setting the amplifier of tracking jump signal (kick pulse).
15	TO	O	Output for tracking control signal.
16	FD	O	Output for focusing control signal.
17	FD–	I	For constructing focusing phase compensation constant between FD and FA pins.
18	FA	O	For constructing focusing phase compensation constant between FD– and FA– pins.
19	FA–	I	For constructing focusing phase compensation constant between FA and FE pins.
20	FE	O	Output for FE signal.
21	FE–	I	Connects to the gain-setting resistor of FE signal between this pin and FE pin.
22	A-GND	–	GND for analog signals.
23	NC	–	Not used.
24	SP	I	Single end output of CV+ and CV– pin input signal.
25	SPG	I	Connects to the gain-setting resistor during spindle 12cm mode.
26	SP–	I	Connects to spindle phase compensation constant together with SPD pin.
27	SPD	O	Output for spindle control signal.
28	SLEQ	I	Connects to sled phase compensation constant.
29	SLD	O	Output for sled control signal.
30	SL–	I	Input for sled-sending signal from microcontroller.
31	SL+	I	Input for sled-sending signal.
32	JP–	I	Input for tracking-jump signal from DSP.
33	JP+		
34	TGL	I	Input for tracking gain control signal from DSP; gain is low if TGL = "H".
35	TOFF	I	Input for tracking off control signal from DSP; off if TOFF = "H".
36	TES	O	Outputs TES signal to DSP.
37	HFL	O	HIGH FREQUENCY LEVEL; used to determine whether the main beam is on a pit or on a mirror.
38	SLOF	I	Input for sled servo off control.
39, 40	CV–, CV+	I	Input for CLV error signal from DSP.

Pin No.	Pin Name	I/O	Description
41	RFSM	O	Output for RF.
42	RFS–	O	For setting RF gain and 3T compensation constant together with RFSM.
43	SLC	O	SLICE LEVEL CONTROL; output for controlling the data slice level of DSP with RF waveform.
44	SLI	I	Input for controlling the data slice level of DSP.
45	D-GND	–	GND for digital system.
46	FSC	O	Output pin for focus search smoothing capacitor.
47	TBC	I	(Tracking Balance Control) EF balance variable range setting pin.
48	NC	–	Not connected.
49	DEF	O	Output for disk defect detection.
50	CLK	I	Standard clock input; DSP's 4.23MHz is inputted.
51	CL	I	Clock input for microcontroller command.
52	DAT	I	Data input for microcontroller command.
53	CE	I	Chip-enable input for microcontroller command.
54	DRF	O	Detect RF; output for RF level detection.
55	FSS	I	(Focus Search Mode) = search/+search against reference voltage switching pin. (Not used)
56	VCC2	–	VCC pin for servo and digital systems.
57	REFI	I	For connecting pass capacitor to reference voltage.
58	VR	O	Reference voltage output.
59	LF2	–	For setting disk defect-detection time constant.
60	PHI	–	Connects to capacitor for RF signal peak hold.
61	BHI	–	Connects to capacitor for RF signal bottom hold.
62	LDD	O	Output for APC circuit.
63	LDS	I	Input for APC circuit.
64	VCC1	–	VCC pin for RF system.

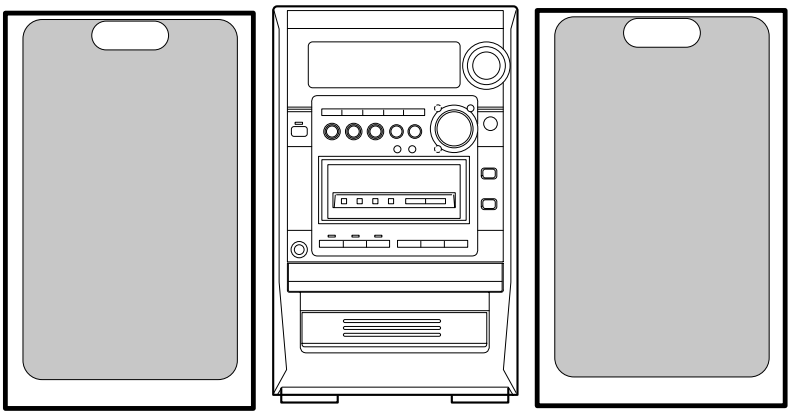
IC, LC78622ED

Pin No.	Pin Name	I/O	Description
1	DEFI	I	Defect detection signal (DEF) input.
2	TAI	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
3	PDO	O	External VCO control phase comparator output.
4	VVSS	–	Internal VCO ground. Must be connected to 0V.
5	ISET	I	PDO output current adjustment resistor connection.
6	VVDD	–	Internal VCO power supply.
7	FR	I	VCO frequency range adjustment.
8	VSS	–	Digital system ground. Must be connected to 0V.
9	EFMO	O	Slice level control; EFM signal output.
10	EFMIN	I	Slice level control; EFM signal input.
11	T2	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
12	CLV+	O	Disc motor control output. Three-value ouput is also possible when specified by microprocessor command.
13	CLV–		
14	$V/\overline{P}$	O	Rough servo/phase control automatic switching monitor output. Outputs a high level during rough servo and a low level during phase control.
15	HFL	I	Track detection signal input. This is a Schmitt input.
16	TES	I	Tracking error signal input. This is a Schmitt input.
17	TOFF	O	Tracking off output.
18	TGL	O	Tracking gain switching output. Increase the gain when low.
19	JP+	O	Track jump output. Three-value output is also possible when specified by microprocessor command.
20	JP–		
21	PCK	O	EFM data playback clock monitor. Outputs 4.3218 MHz when the phase is locked. (Not used)
22	FSEQ	O	Synchronization signal detection ouput. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not used)
23	VDD	–	Digital system power supply.
24	SL+	O	Serial data command sled signal output terminal from microprocessor.
25	SL–		
26	NC	–	Not used.
27	PU IN	I	CD pickup inside limit switch.
28	CD R/W	O	Serial data command sled signal output terminal from microprocessor.
29	EMPH	O	De-emphasis monitor pin. A high level indicates playback of a de-emphasis disk. (Not used)
30	C2F	O	C2 flag output. (Not used)
31	DOUT	O	Digital output (EIAJ format).
32	T3	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
33	T4		
34	NC	–	Unused. Must be left open.
35	MUTEL	O	Left channel one-bit D/A converter mute output. (Not used)
36	LVDD	–	Left channel one-bit D/A converter power supply.
37	LCHO	O	Left channel one-bit D/A converter output.

Pin No.	Pin Name	I/O	Description
38	LVSS	–	Left channel one-bit D/A converter ground. Must be connected to 0V.
39	RVSS	–	Right channel one-bit D/A converter ground. Must be connected to 0V.
40	RCHO	O	Right channel one-bit D/A converter output.
41	RVDD	–	Right channel one-bit D/A converter power supply.
42	MUTER	O	Right channel one-bit D/A converter mute ouput. (Not used)
43	XVDD	–	Crystal oscillator power supply.
44	XOUT	O	Connections for a 16.934MHz crystal oscillator element.
45	XIN	I	
46	XVSS	–	Crystal oscillator ground. Must be connected to 0V.
47	SBSY	O	Subcode block synchronization signal output. (Not used)
48	EFLG	O	C1, C2 single and double error correction monitor pin. (Not used)
49	PW	O	Subcode P, Q, R, S, T, U, V and W output. (Not used)
50	SFSY	O	Subcode frame synchronization signal output. This signal falls when the subcode are in the standby state. (Not used)
51	SBCK	I	Subcode readout clock input. This is a Schmitt input. (Must be connected to 0V when unused)
52	FSX	O	Output for the 7.35 kHz synchronization signal divided from the crystal oscillator. (Not used)
53	WRQ	O	Subcode Q output standby output.
54	RWC	I	Readwrite control input. This is a Schmitt input.
55	SQOUT	O	Subcode Q output.
56	COIN	I	Command input from the control microprocessor.
57	$\overline{\text{CQCK}}$	I	Input for both the command input acquisition clock and the SQOUT pin subcode readout clock input. This is a Schmitt input.
58	$\overline{\text{RES}}$	I	Chip reset pin. This pin must be set low briefly after power is first applied.
59	T11	O	Test output. Leave open. (Normally outputs a low level). (Not used)
60	16M	O	16.9344 MHz output. (Not used)
61	4.2M	O	4.2336 MHz output.
62	T5	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
63	$\overline{\text{CS}}$	I	Chip select input. A pull-down resistor is built in. Must be connected to 0V if not controlled.
64	T1	I	Test input. No pull-down resistor. Must be connected to 0V.

aiwa SERVICE

XR-M700 K



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : 2ZM-1 R9NM
BASIC CD MECHANISM : ZZG-4 YB

- This Service Manual contains the additional information “CD MECHANISM DISASSEMBLY INSTRUCTIONS” and “CD TEST MODE” for the model XR-M700 (K).
  If requiring the other information, see Service Manual of XR-M700 (K), (S/M Code No. 09-006-430-8R1).

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S/M Code No. 09-009-430-8S1

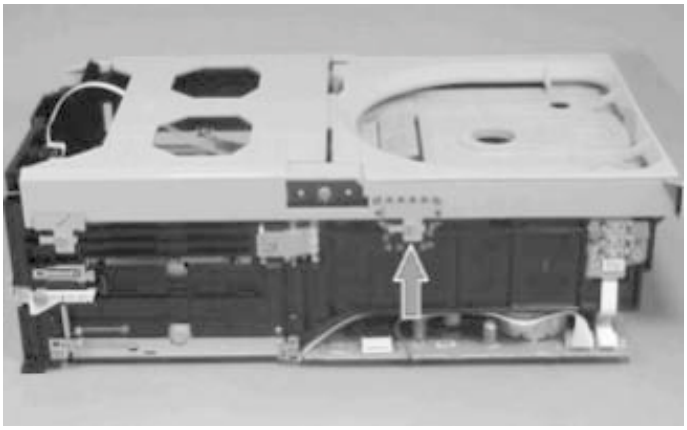
SUPPLEMENT DATA

CD MECHANISM DISASSEMBLY INSTRUCTIONS

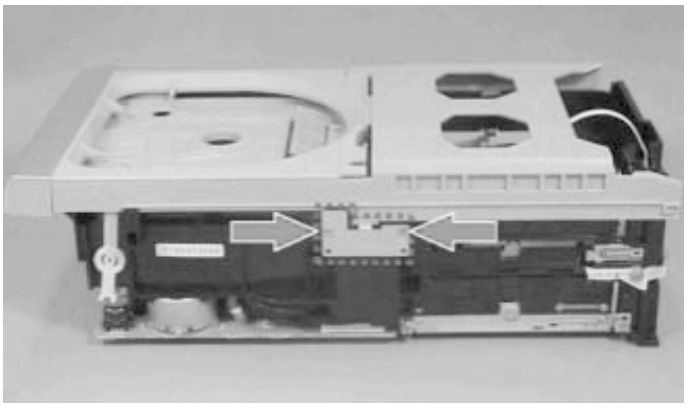
1. Procedure of Disassembling the ZZG-4 Mechanism

1-1. Removing the FRAME, MAIN

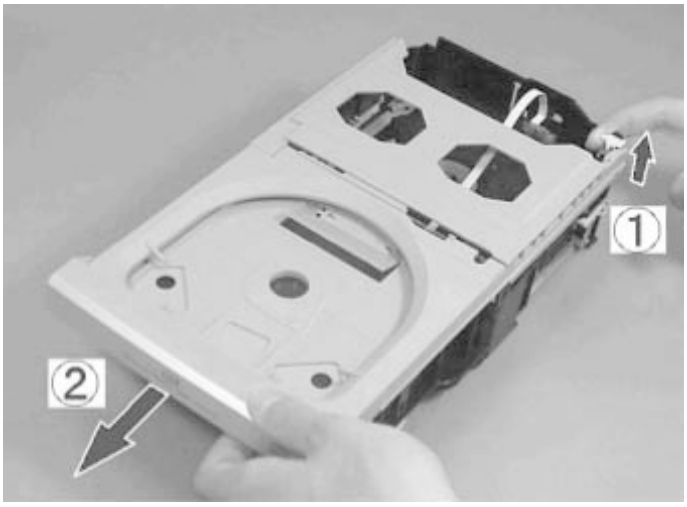
1) Remove a screw and PLATE, FRAME L.



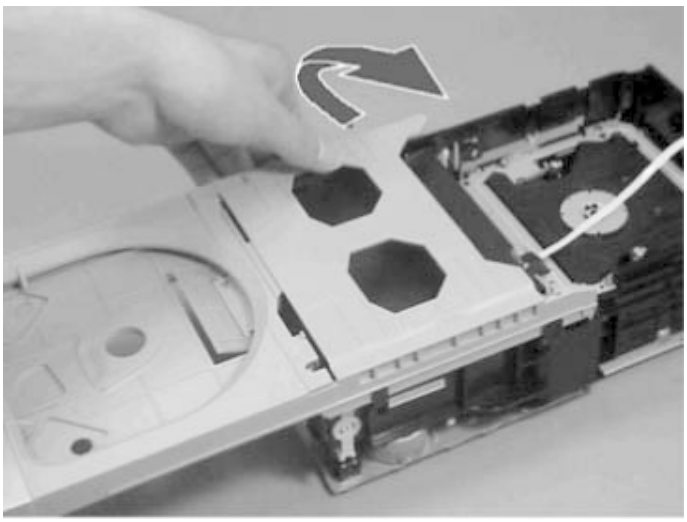
2) Remove the 2 screws and PLATE, FRAME R.



3) Pull up ① LEVER, LOCK F, and pull out ② FRAME, MAIN toward the front. Turn the GEAR, SLIDER B and adjust the ELEVATOR to any position except TOP.

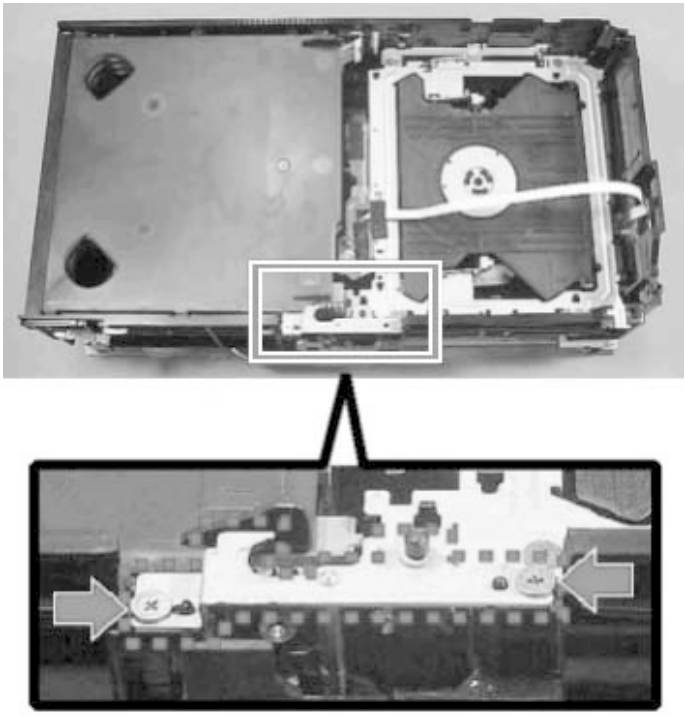


4) Remove the FRAME, MAIN on the L side first. Then lift up toward the direction of the arrow and remove the FRAME, MAIN from the BASE.



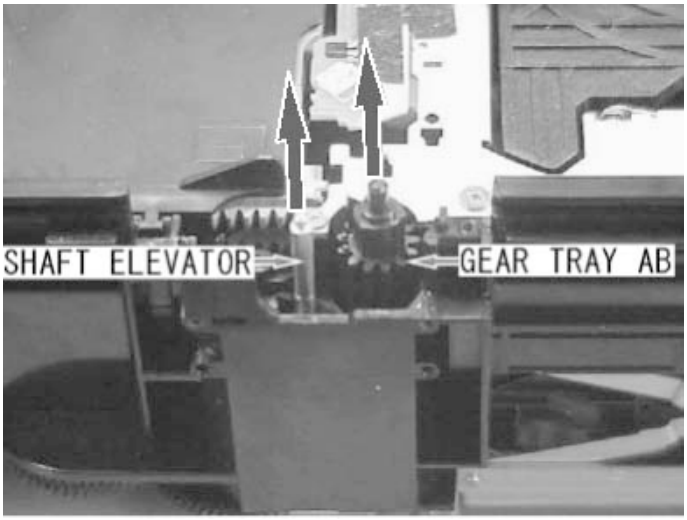
1-2. Removing the GEAR, TRAY AB

1) Remove the 2 screws and HLDR, SHAFT.



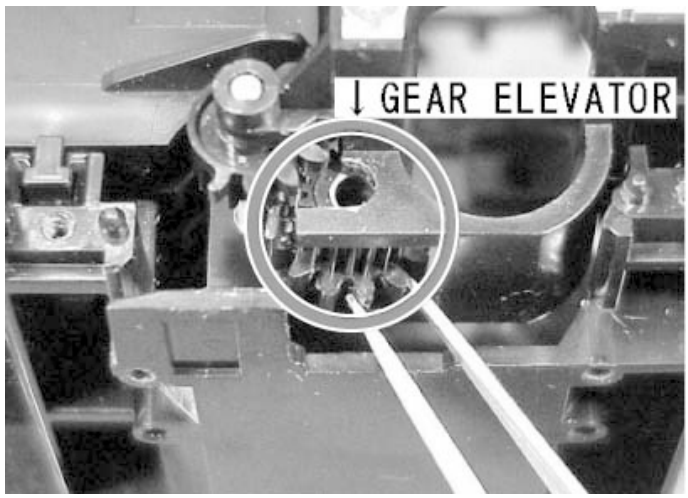
2) Turn the GEAR, SLIDER B and shift the ELEVATOR to the TOP position.

3) Pull out the GEAR, TRAY AB and SHAFT, ELEVATOR.



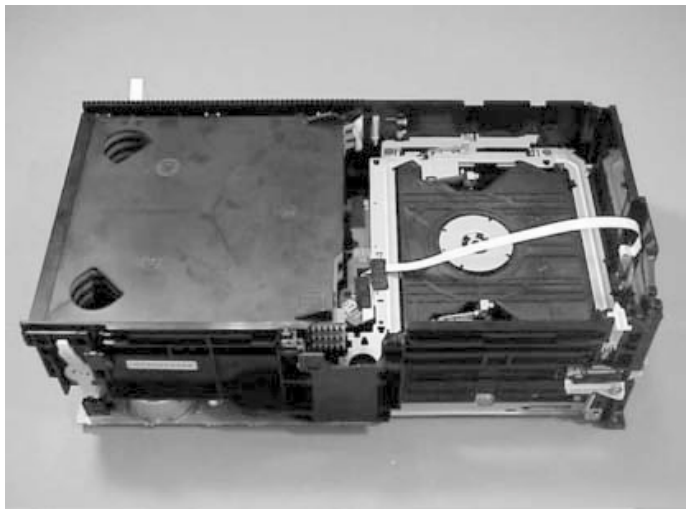
1-3. Removing the GEAR, ELEVATOR

1) Remove the GEAR, ELEVATOR.

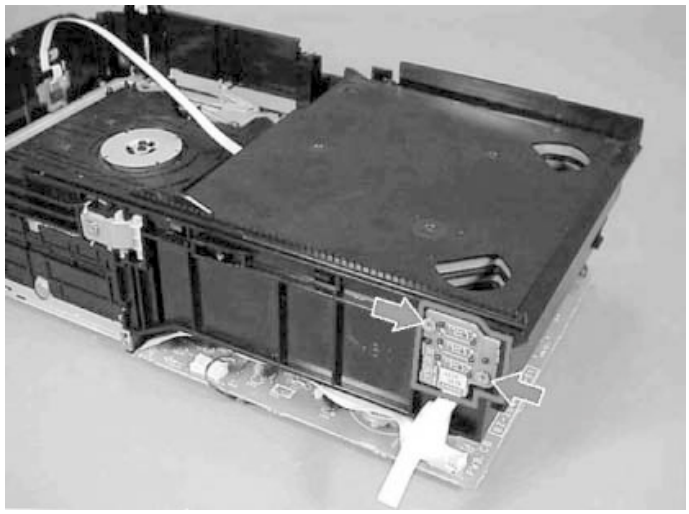


1-4. Removing the CD MAGAZINE Part

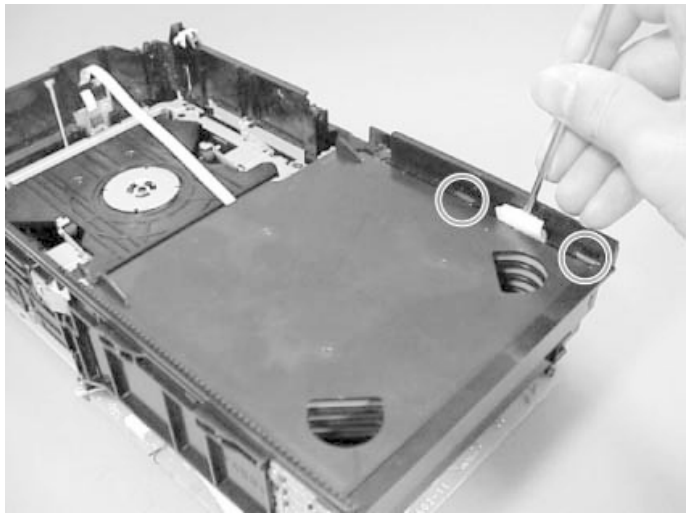
1) Remove the GEAR, TRAY A and B, etc. to make it look like in the photo.



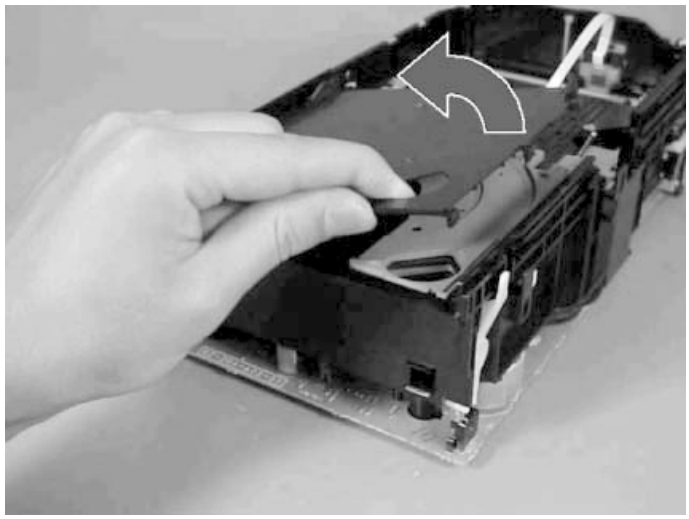
2) Remove the 2 screws and PWB, TRAY.



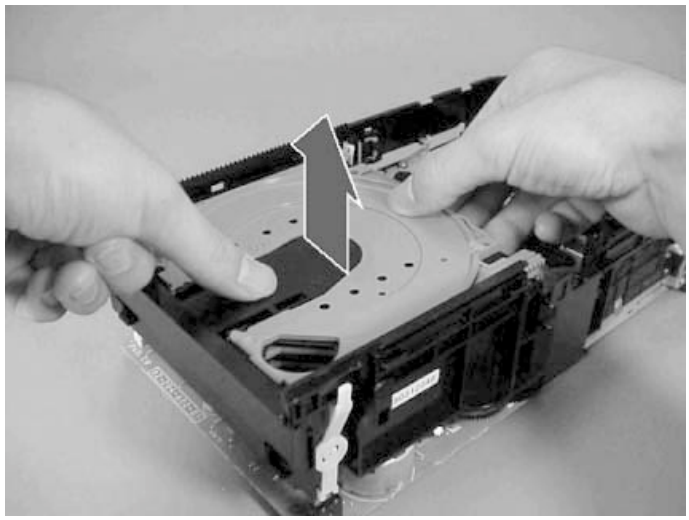
3) Remove the claws indicated by the circles in order to remove the MAGAZINE, TOP. Insert a minus driver into the gap and remove the MAGAZINE, TOP by lifting it upward.



4) Remove the MAGAZINE, TOP.

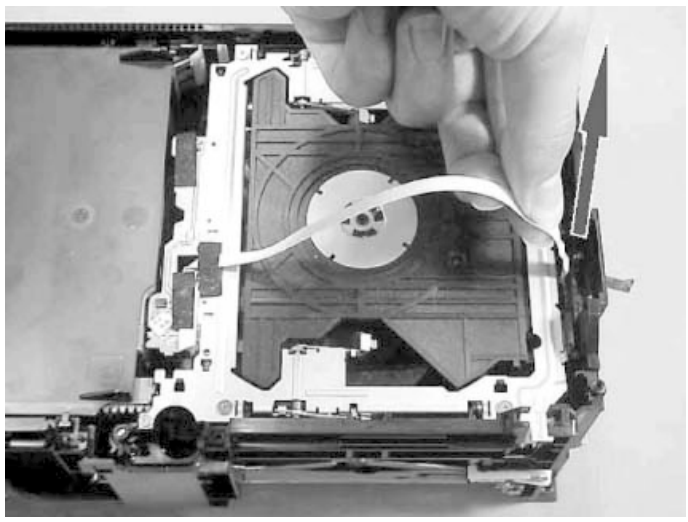


5) Remove the TRAY 1,2,3 and 3 pieces of MAGAZINE by lifting them up.

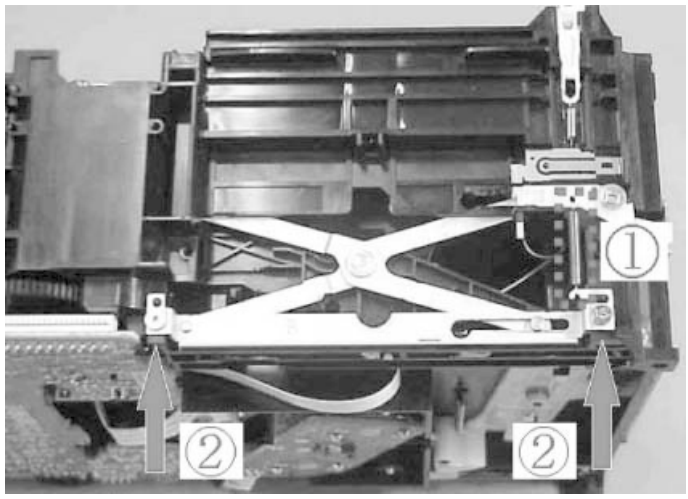


1-5. Removing the ELEVATOR Part

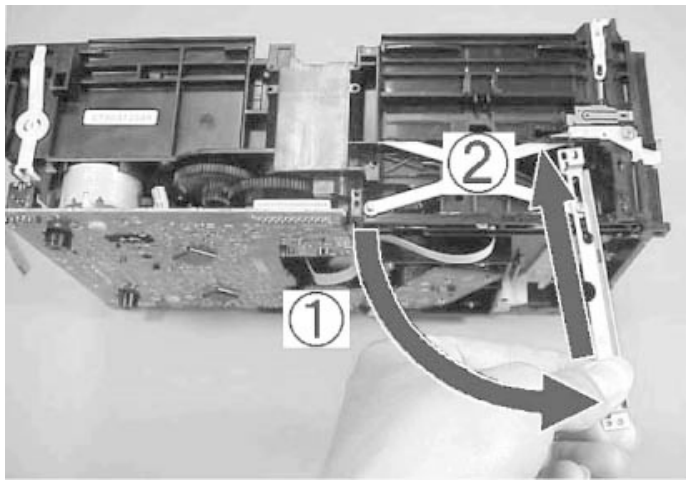
1) Remove the FFC, 4P of the switch circuit board from the BASE rib, and disconnect it from the connector.



2) ① Remove the spring (88-ZG5-292-010).
② Remove the 2 screws.

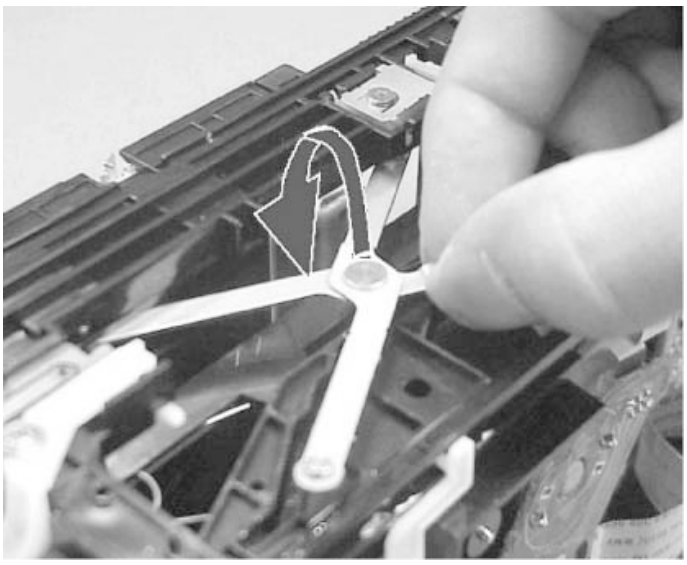


3) ① Remove the front side of the HLDR, LINK R from the boss, rotate it as shown in the photo.
② Shift the HLDR, LINK R toward the direction of the arrow as shown in the photo and remove it.

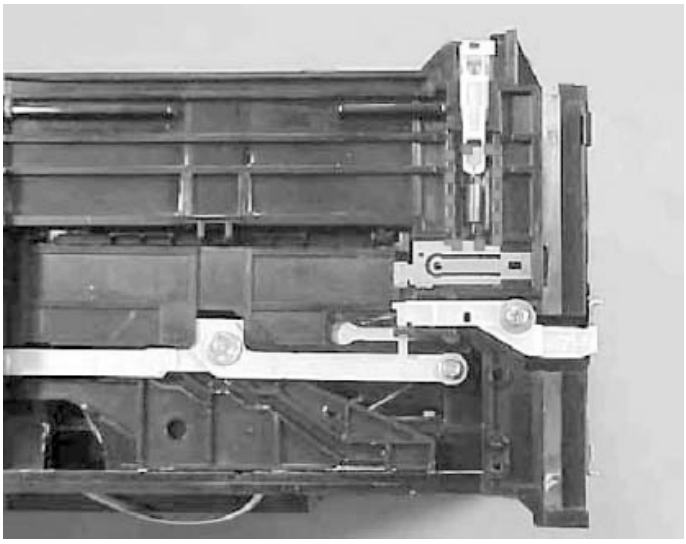


4) Remove the HLDR, LINK L in the same step as R.

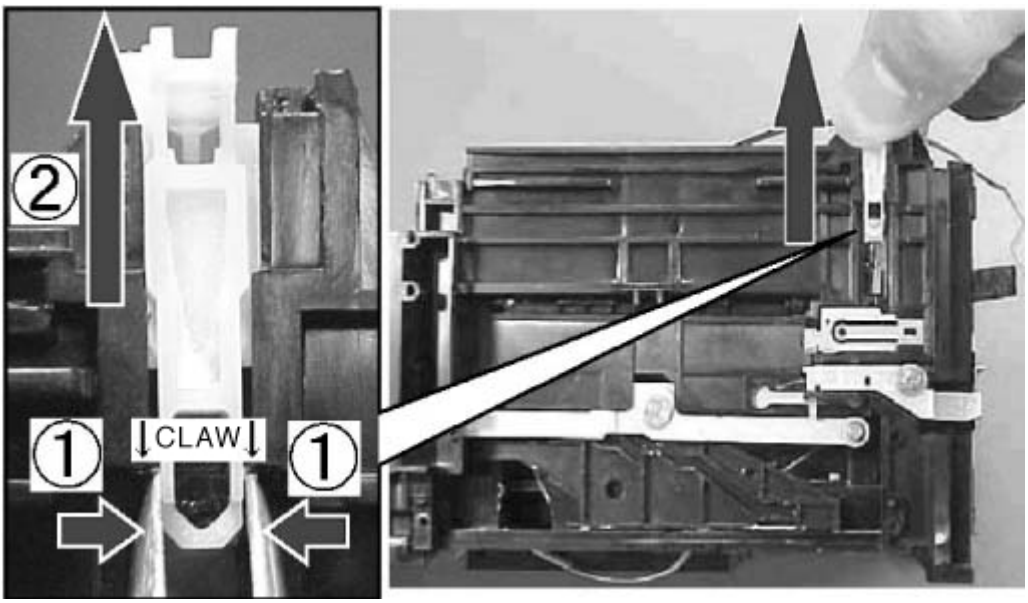
5) Remove the boss of the LEVER, ASSY LINK from the groove of the LEVER SLIDE (both L and R sides).



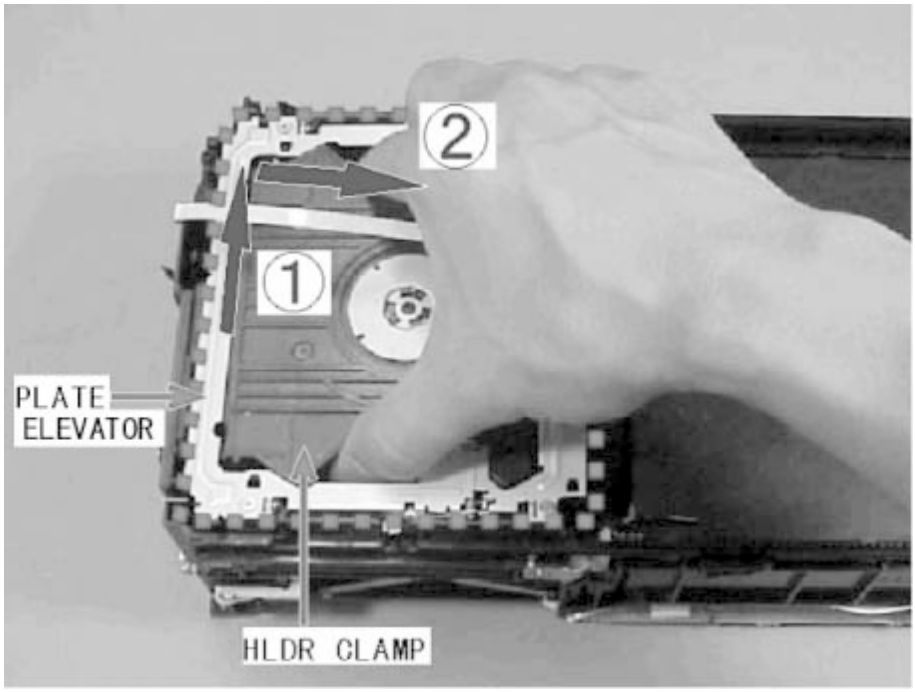
6) Remove the spring (88-ZG5-225-010).



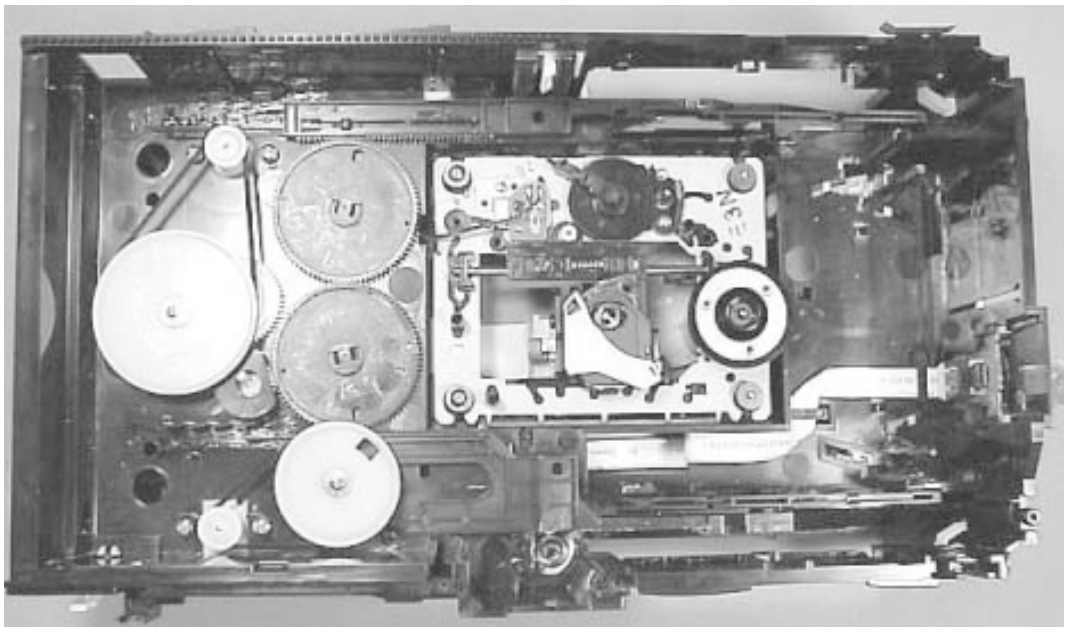
7) ① Use a pair of tweezers to remove the claw below the ② LEVER, LOCK F. Then pull out the LEVER LOCK F.



8) ① Lift up the PLATE, ELEVATOR, together with the HLDR, CLAMP.
② Once lift it up to the TOP position, pull it toward the front side. Then remove the PLATE, ELEVATOR and HLDR, CLAMP.



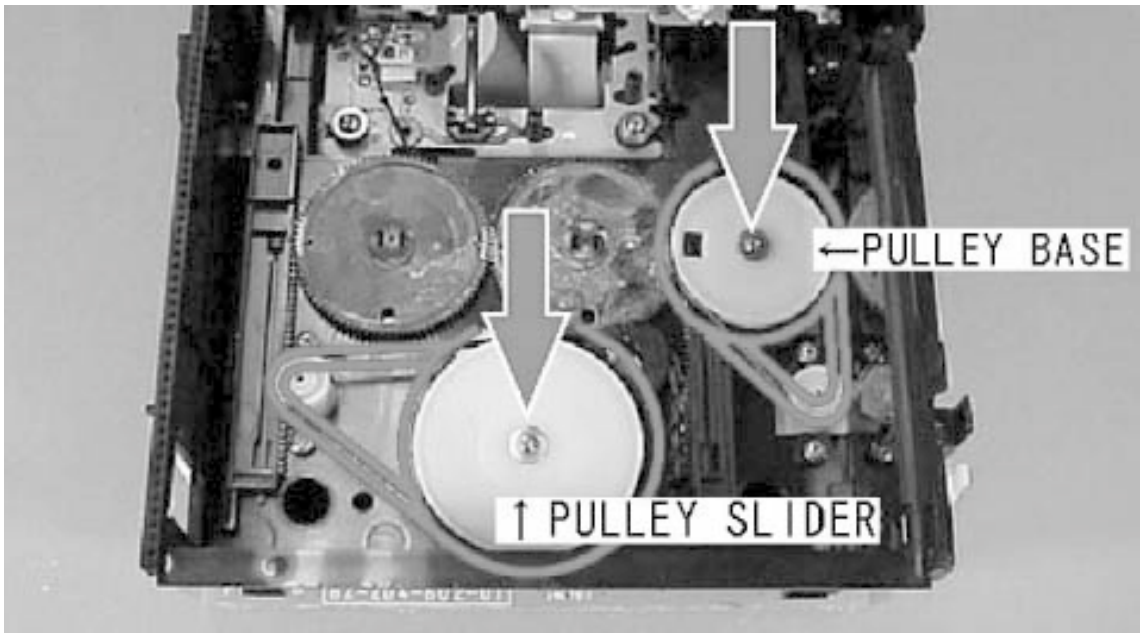
9) Views after removing the ELEVATOR part and MAGAZINE part.



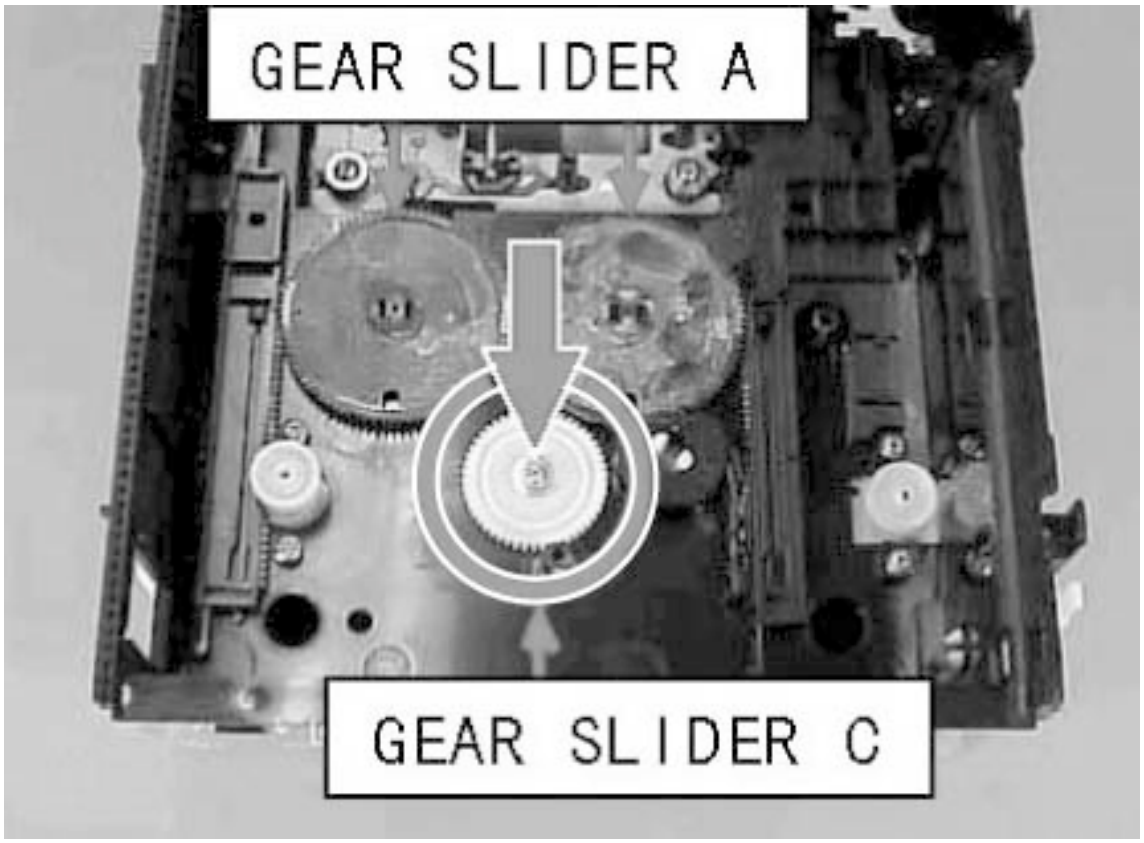
* At this stage, the mechanism's pick-up can be changed. Refer to "5. Procedure of Replacing the Pick-up" for details.

1-6. Removing the ELEVATOR UP/DOWN Components.

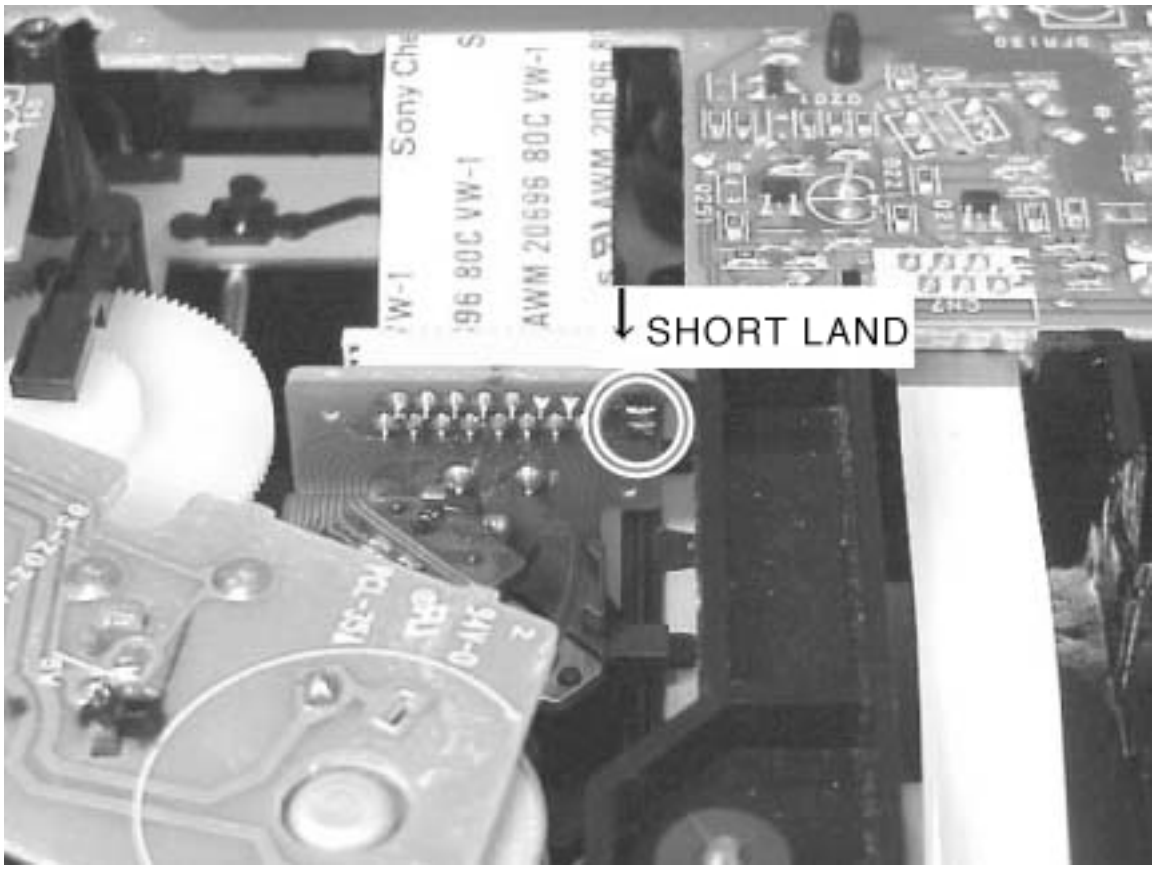
1) Remove the BELT, SLIDER and BELT, BASE. Then remove the 2 screws, the PULLEY, SLIDER and PULLEY, BASE.



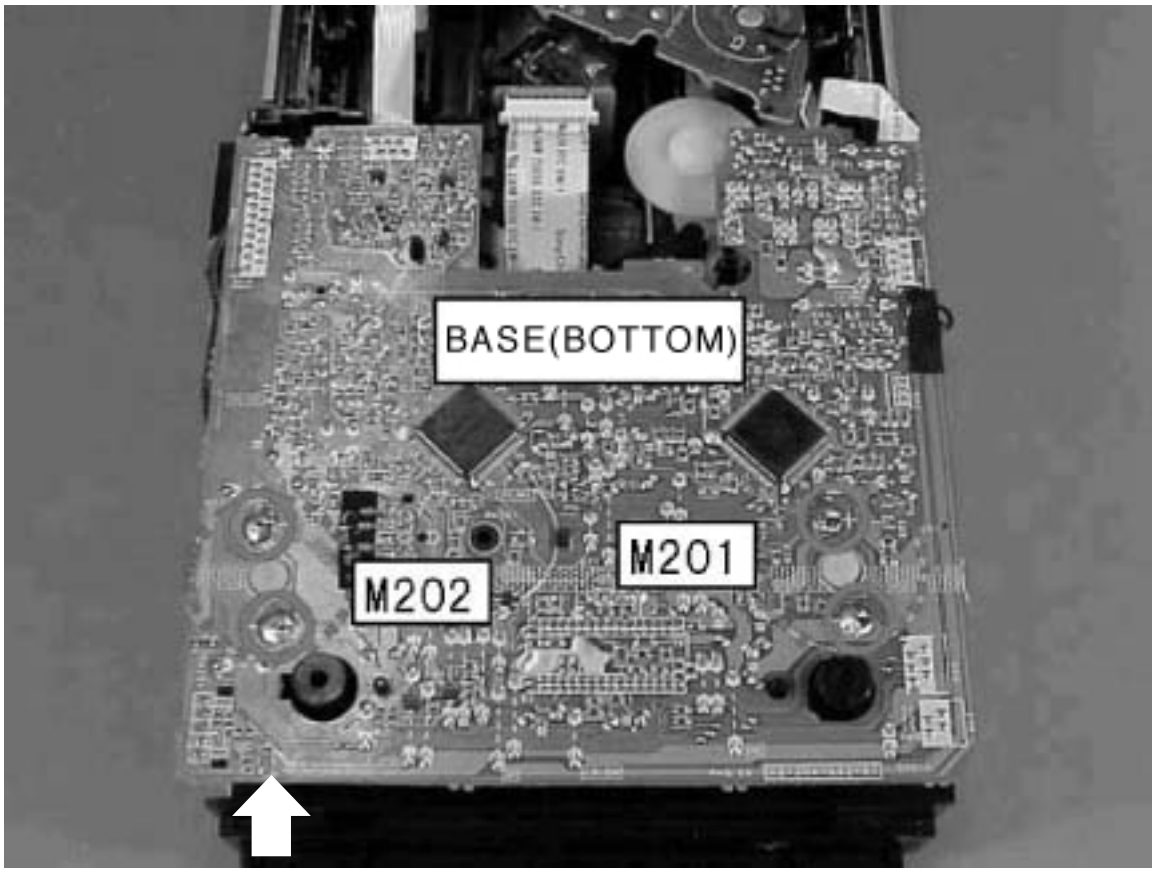
2) Remove the screw and GEAR, SLIDER C.



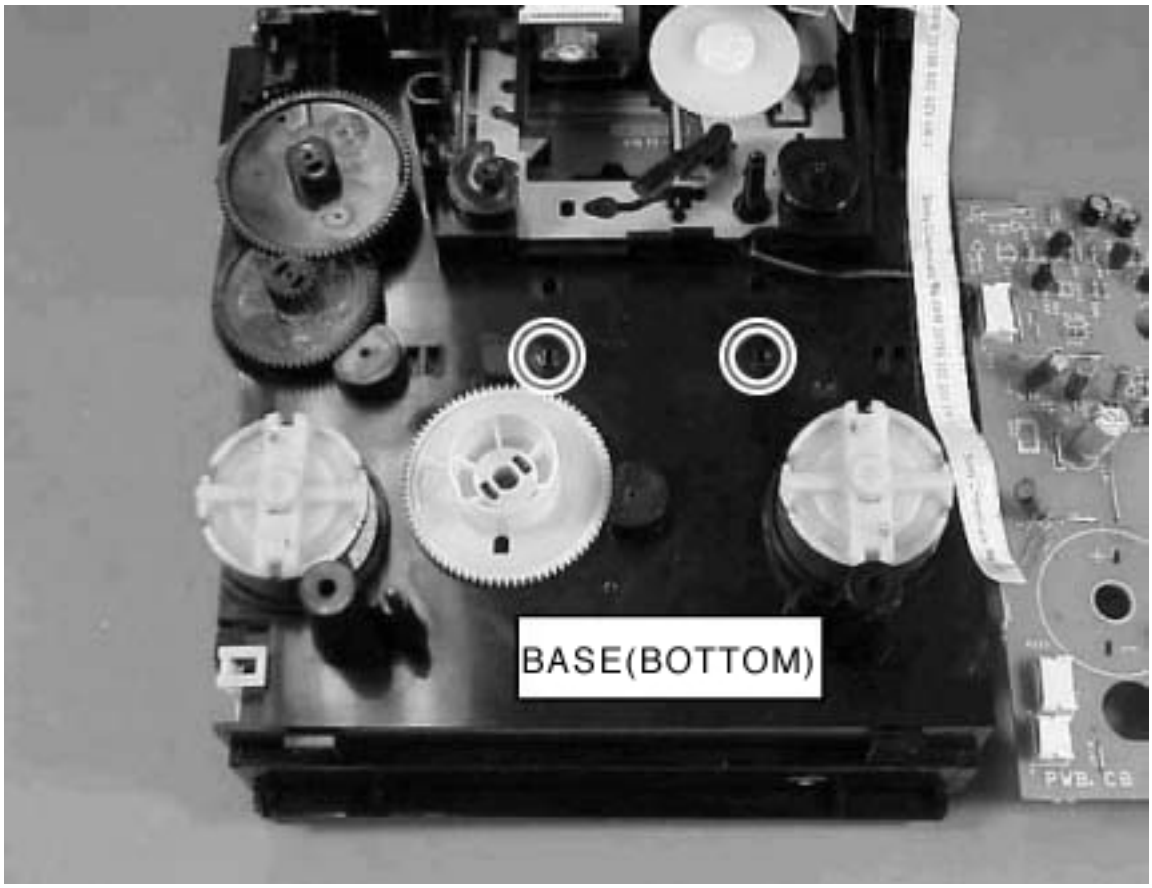
3) Turn over the CD mechanism and short-circuit the shortland of the pick-up.



4) Desolder M201 and M202. And remove the screw.
Disconnect FFC (3 parts) and remove the CD C.B from the BASE.



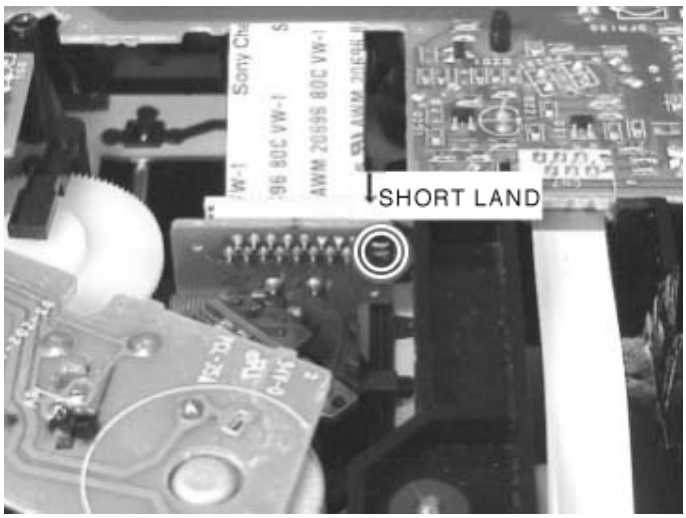
5) Views after removing the CD C.B.
Once the claws (indicated by the circles) are pressed, 2 of the GEAR, SLIDER A will come off.



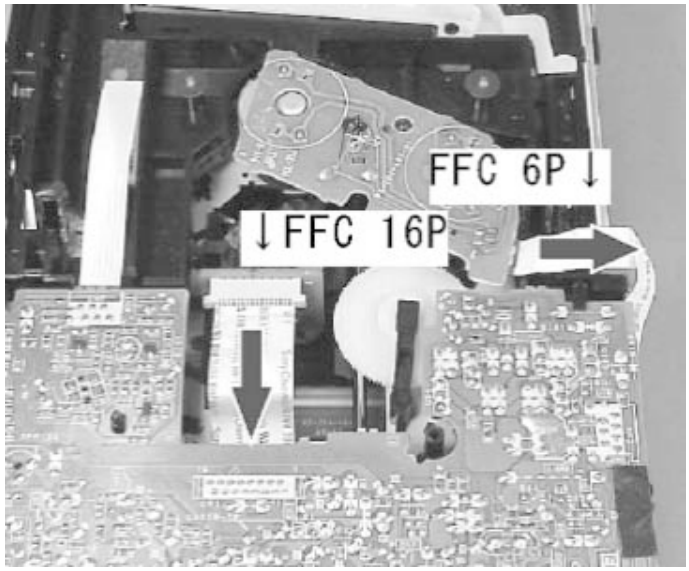
2. Procedure of Replacing the Pick-up

2-1. Removing the Pick-up

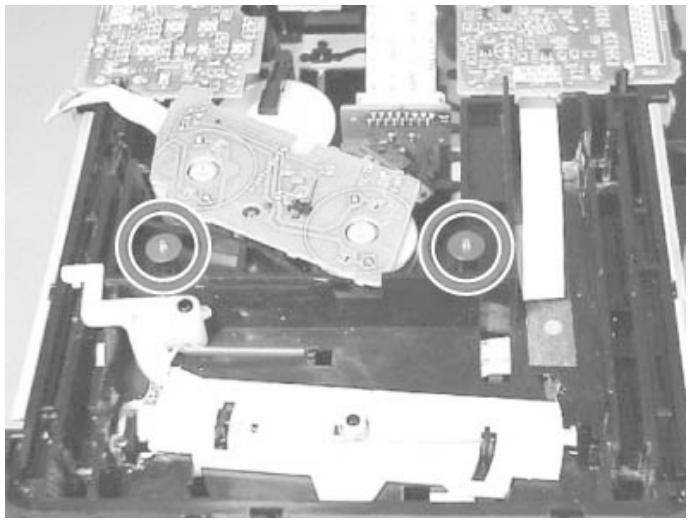
1) Turn over the CD mechanism and short-circuit the shotland (indicated by the circle) at the pick-up.



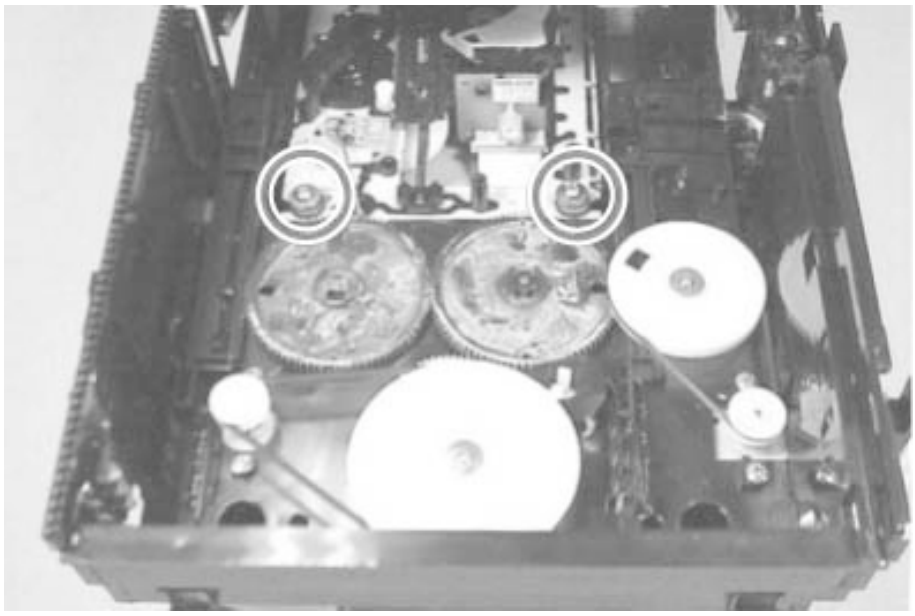
2) Disconnect the FFC, 16P and FFC, 6P.



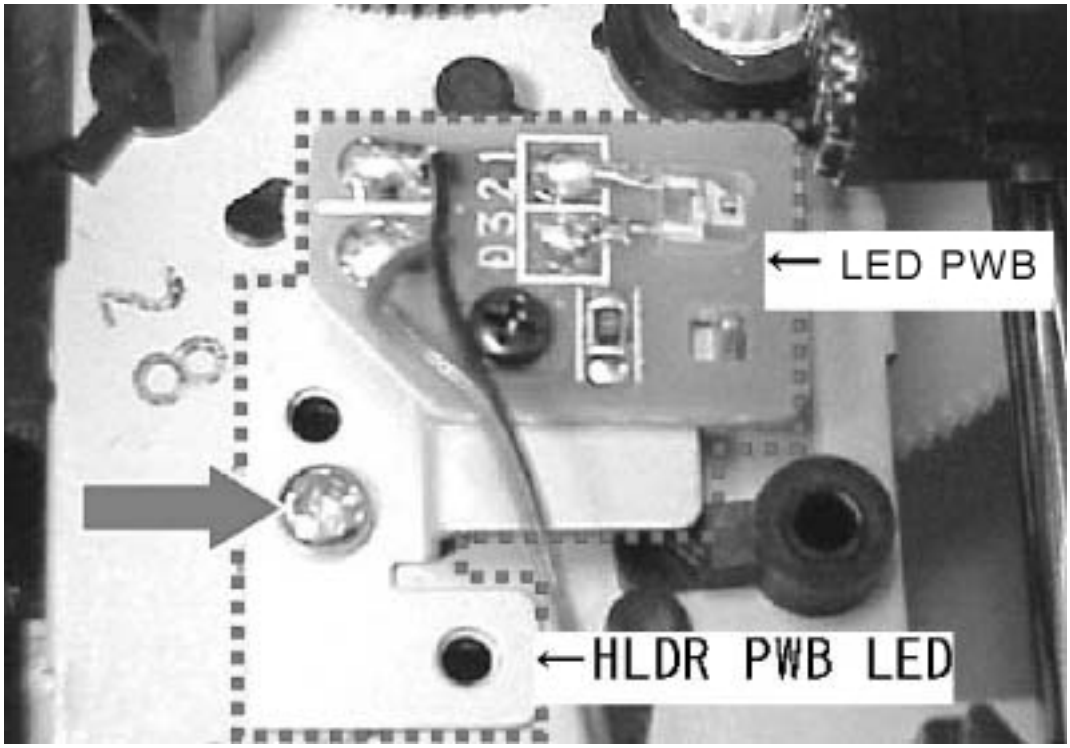
3) Remove the 2 pieces of the Washer W-P, 2.08-8-0.5 (87-B10-273-010).



4) Put back the CD mechanism and remove the 2 screws of S-SCREW, MECH HLDR (81-ZG1-254-010).



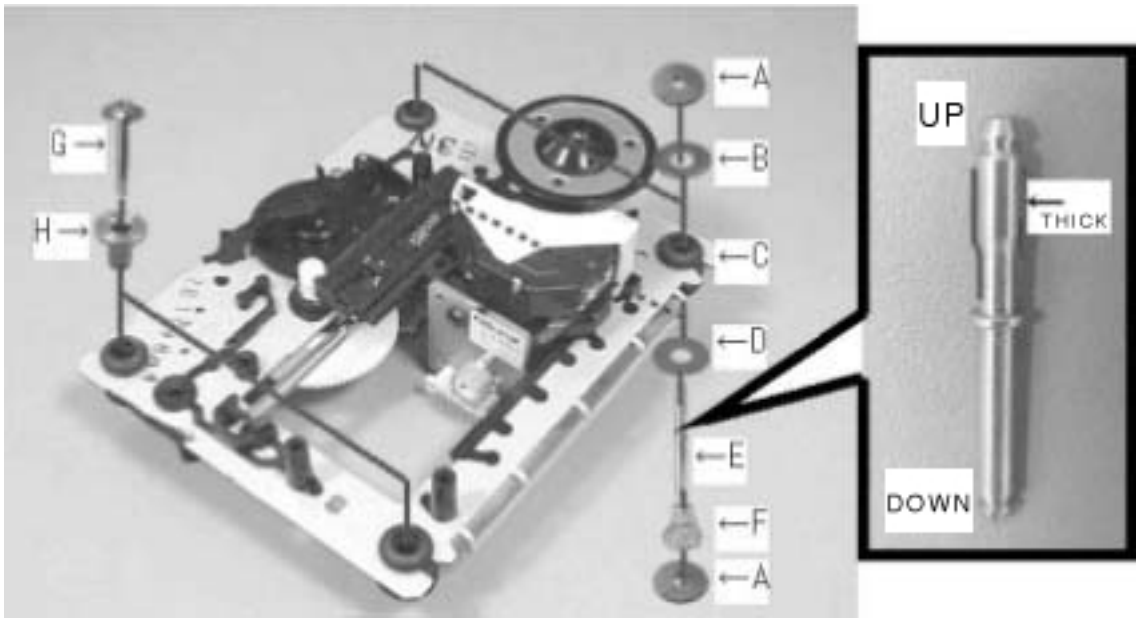
5) Remove the screw VIT+2-3 (87-571-032-410) and LED PWB together with the holder HLDR PWB LED (88-ZG5-305-010).



6) Remove the 3ZG-2 mechanism from the BASE.
   * Make sure that not to lose a spring (SPR-C, MECHA (F)) during this operation.

7) Remove the pick-up.

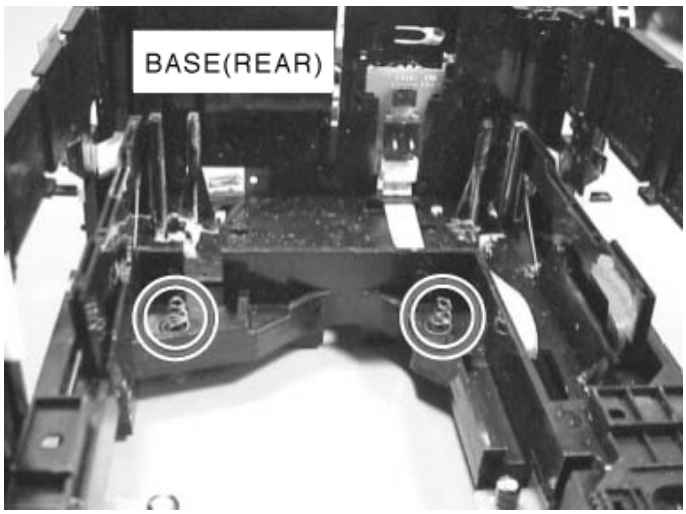
2-2. Peripheral parts of 3ZG-2



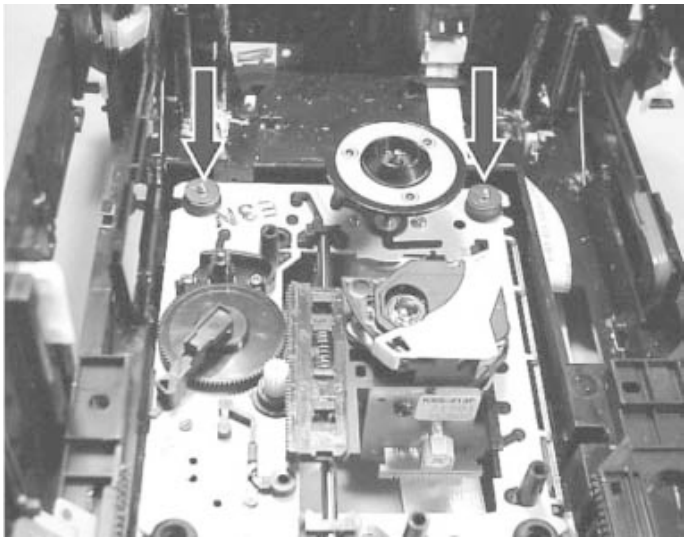
	Parts Name	Parts No.	Usage Number
A	W-P 2.08-8-0.5 SLIT	87-B10-273-010	4
B	W 3-8-0.5	88-ZG5-324-010	2
C	CUSH-G MAIN A	83-ZG3-225-010	4
D	W-L 3.15-8-0.5	88-ZG5-327-010	2
E	SHAFT MECHA	88-ZG5-309-010	2
F	SPR-C MECHA	88-ZG5-310-010	2
G	S-SCREW MECH HLDR	81-ZG1-254-010	2
H	CLR MECH	88-ZG5-320-010	2

2-3. Pick-up installation

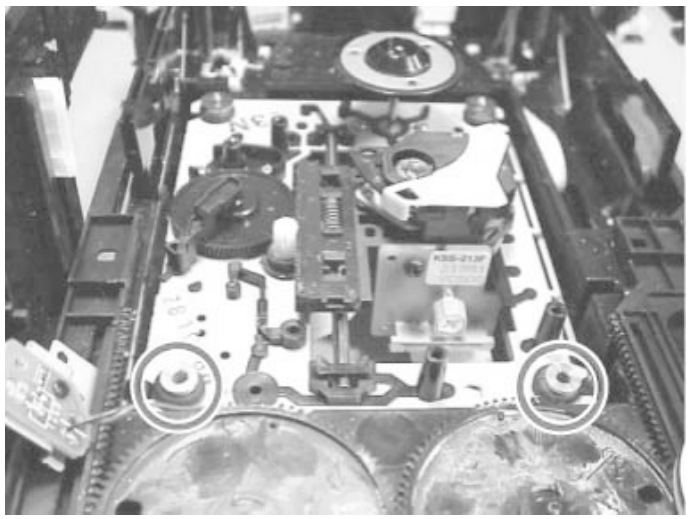
1) Install the pick-up to 3ZG-2.
2) Locate the 2 springs (SPR-C, MECH (F)) on the rear side of the BASE.



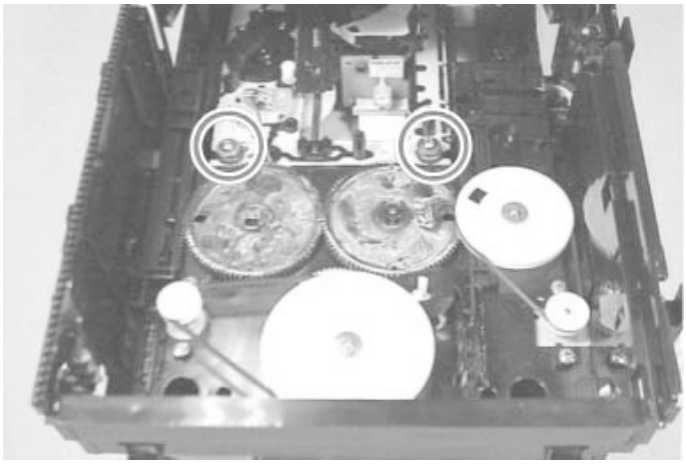
3) Pass the SHAFT, MECH (E) of 3ZG-2 through the above-mentioned springs and insert them into holes.



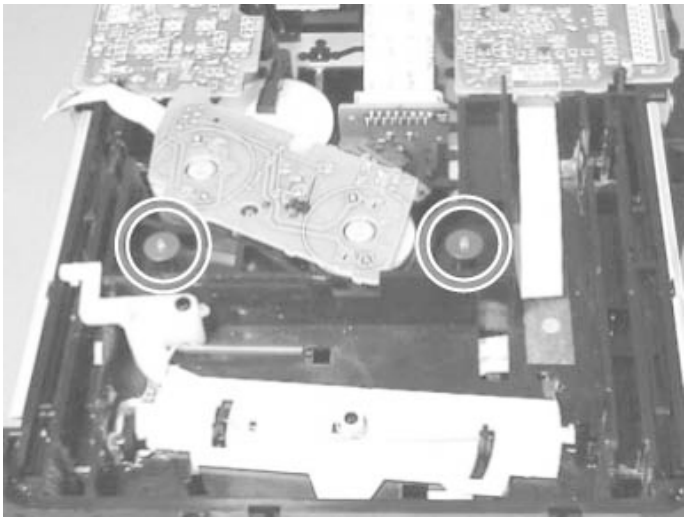
4) Insert the CLR, MECH (H) into the 2 CUSH-G, MAIN A (C) on the front side.



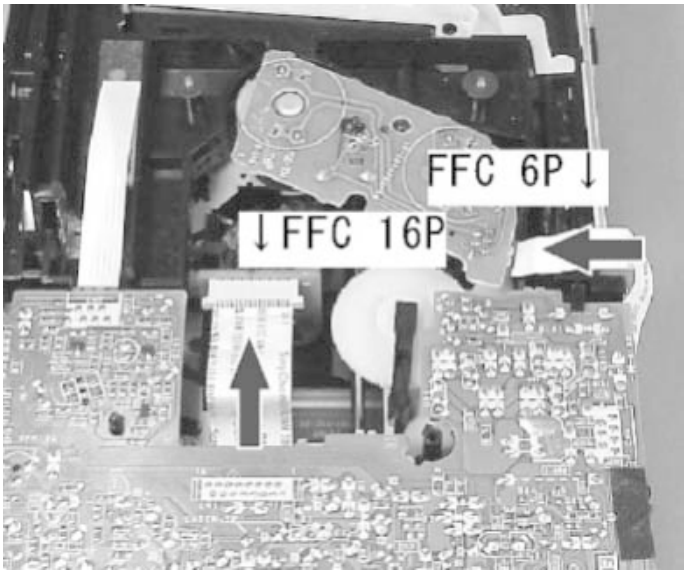
5) Install the 2 screws (G) into the CLR, MECHA(H).



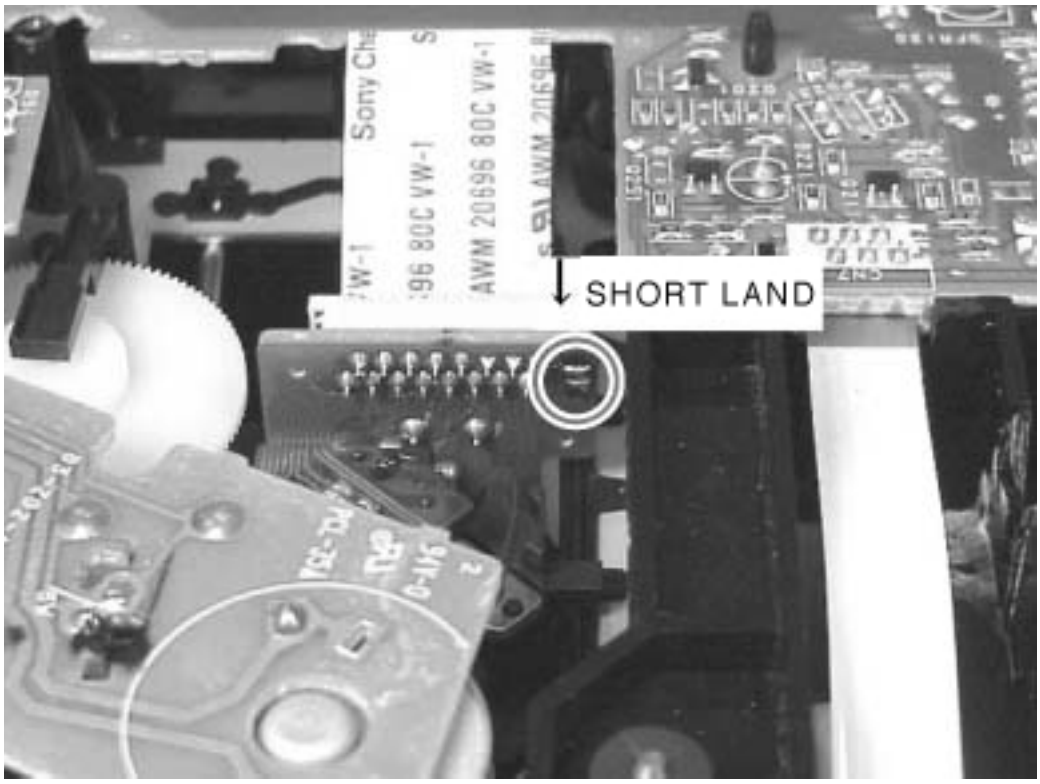
6) Turn over the CD mechanism and fix the SHAFT, MECH (E) with washer.



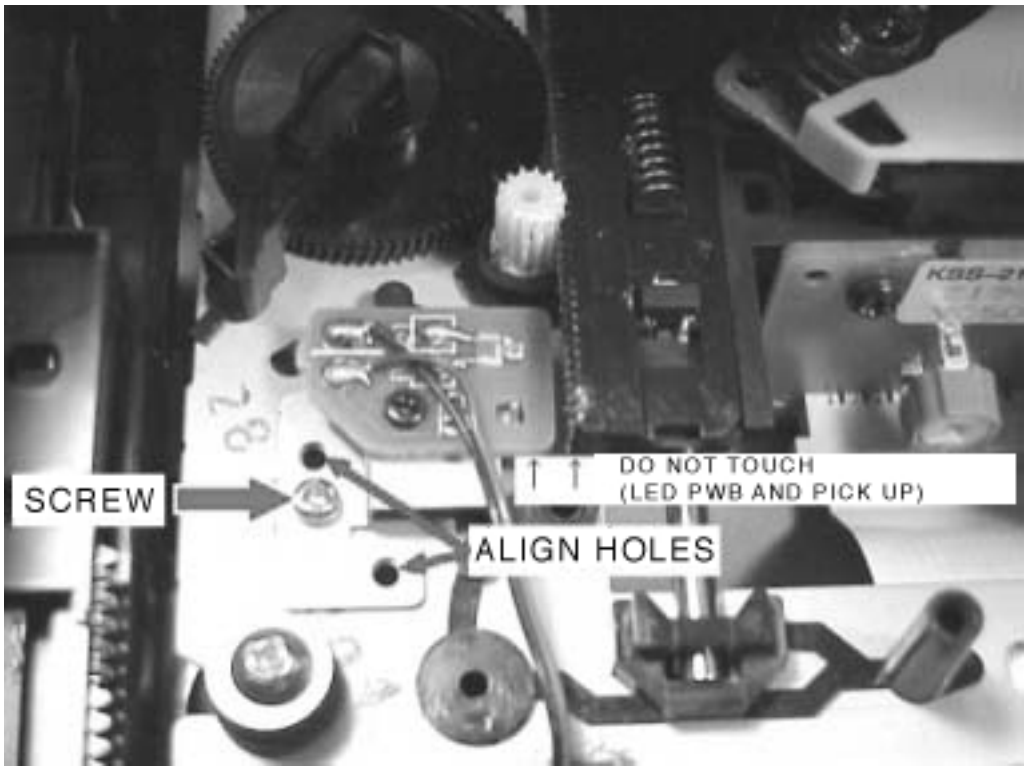
7) Connect the FFC, 16P and FFC, 6P to the connector.



8) Remove the shortland soldering of the pick-up.



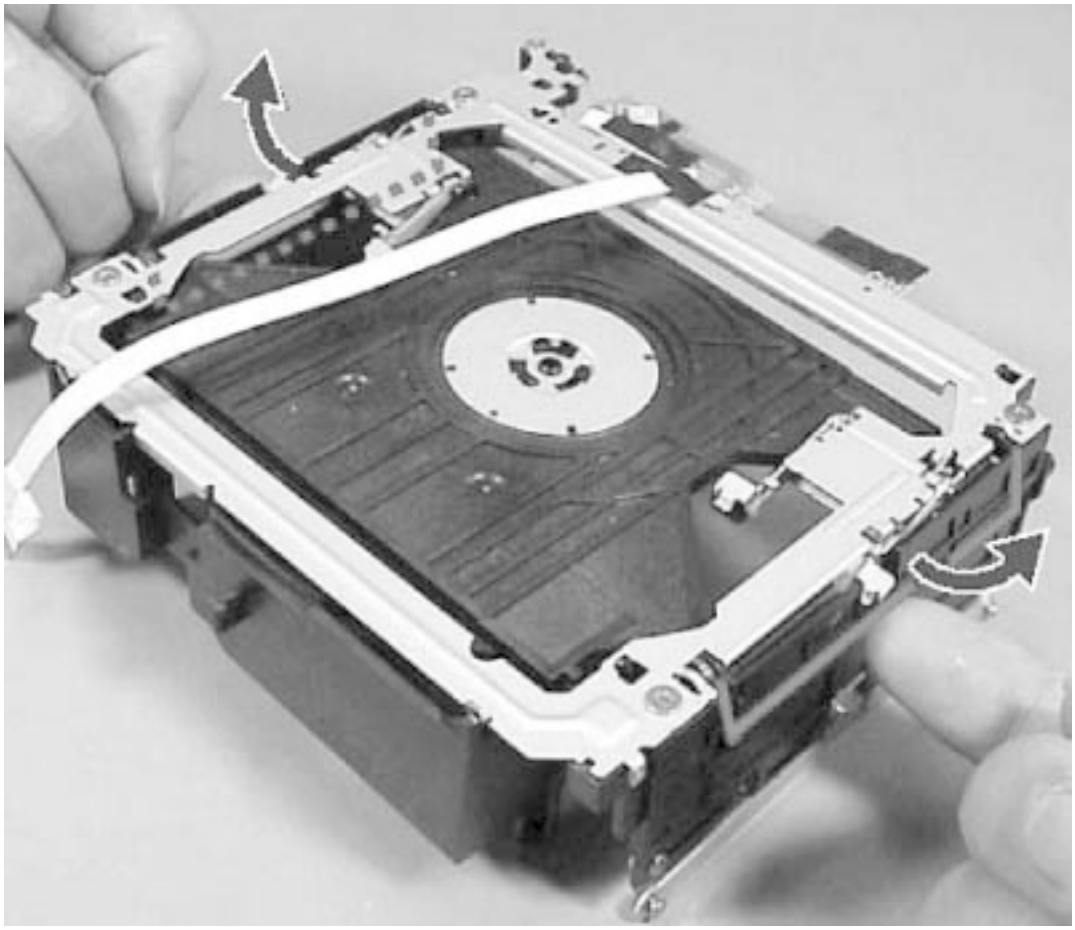
9) Put back the CD mechanism and fixate the holder (with the LED PWB mounted) by screwing it through the holes on the 3ZG-2.
   ∗ Make sure that not to touch the pick-up with the LED circuit board.



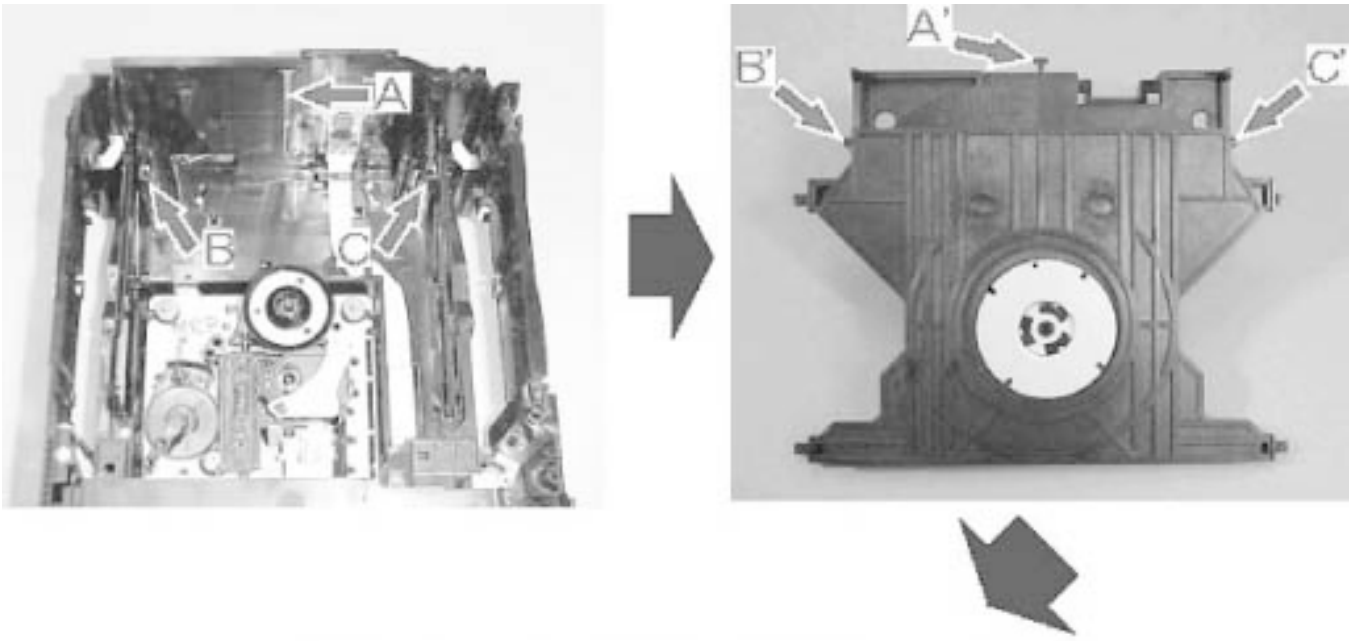
3. ZZG-4 Mechanism Assembly and Phase Adjustment

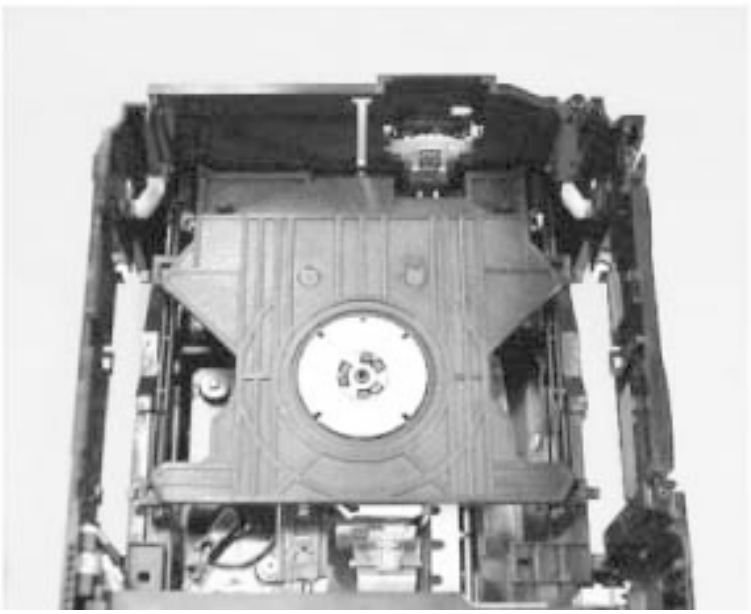
3-1. Assembly the ELEVATOR Part

1) Lift up both the LEVER, CATCHER L (in red solid line) and R (in red dotted line) and remove the HLDR, CLAMP.

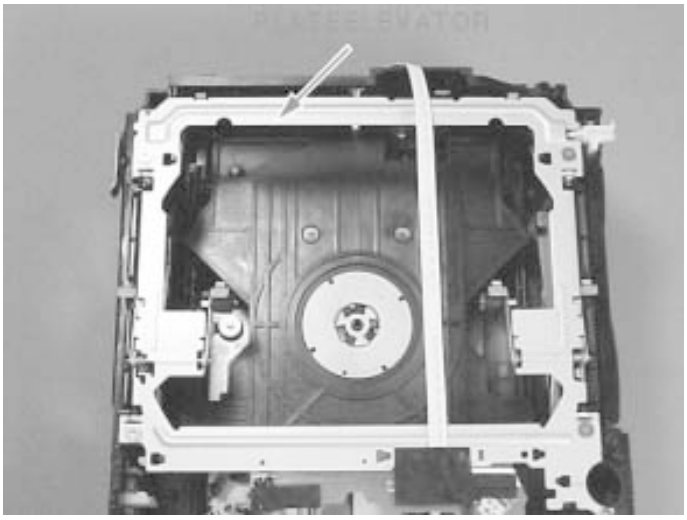


2) Fit the A', B', and C' of the HLDR CLAMP to the A, B, and C of the BASE respectively, and set the HLDR, CLAMP into the BASE. Push the HLDR, CLAMP till it chucks with click.

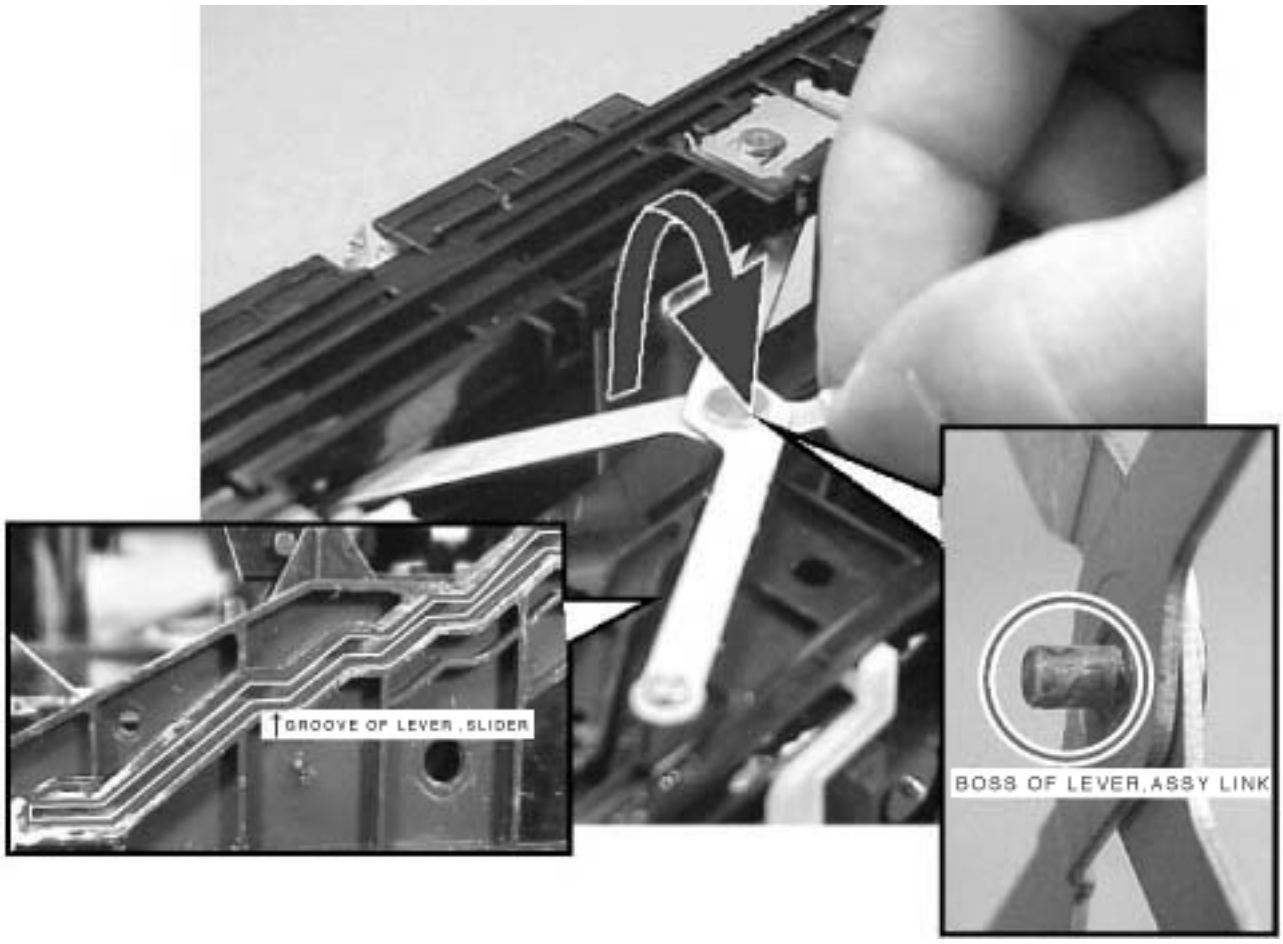




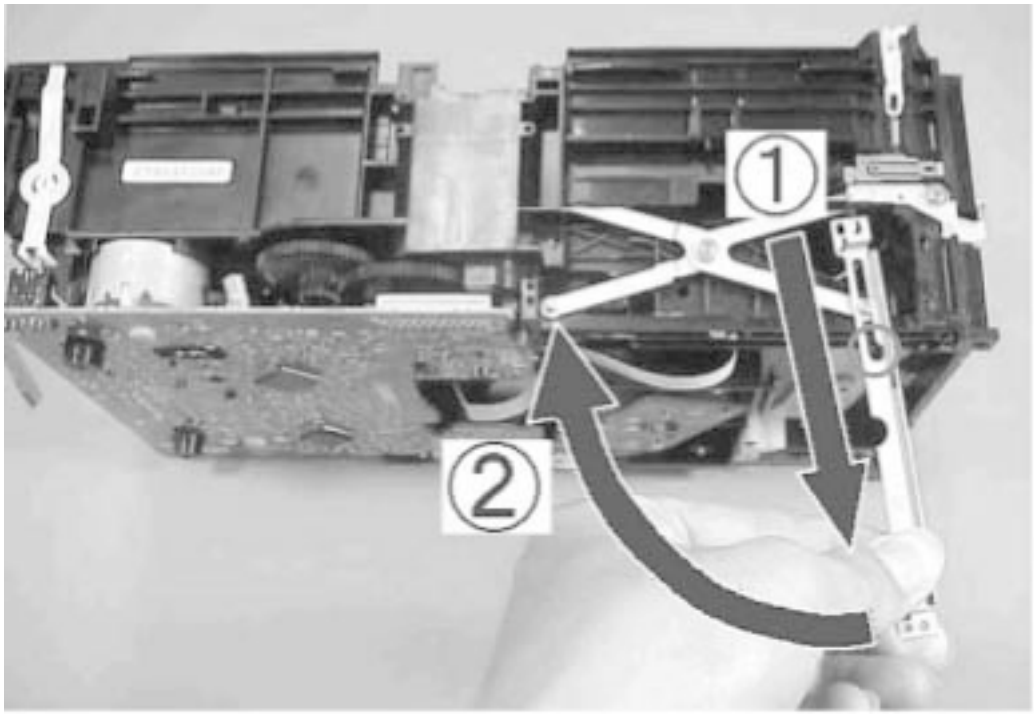
3) Place the PLATE, ELEVATOR on top of the BASE.



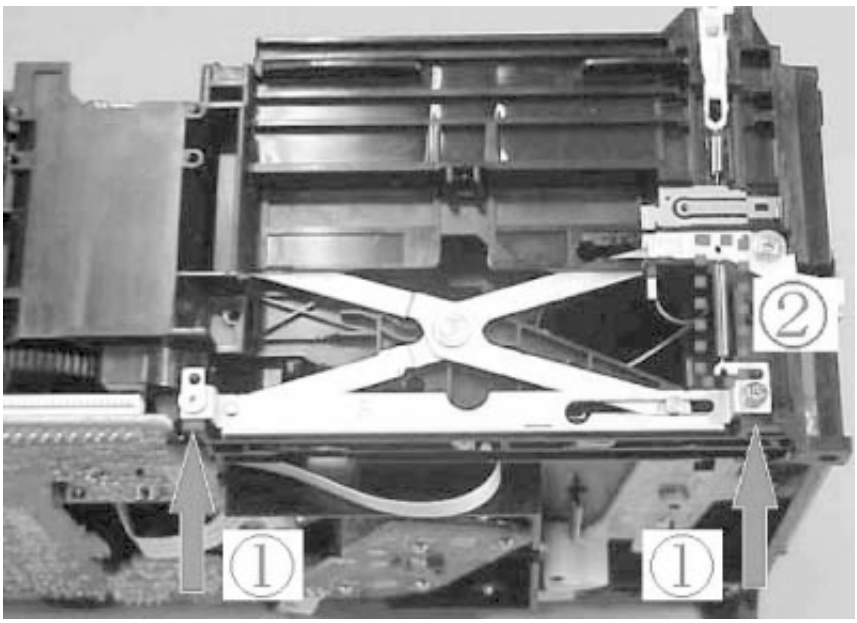
4) Set the boss of the LEVER, ASSY LINK into the groove of the LEVER, SLIDER (on the both sides of L and R).



5) ① Insert the boss of the LEVER, ASSY LINK R into the hole (O) of the HLDR, LINK R and pull it down.
② Then rotate it as shown in the photo, in order to set the boss into the hole on the front side of the HLDR, LINK R.

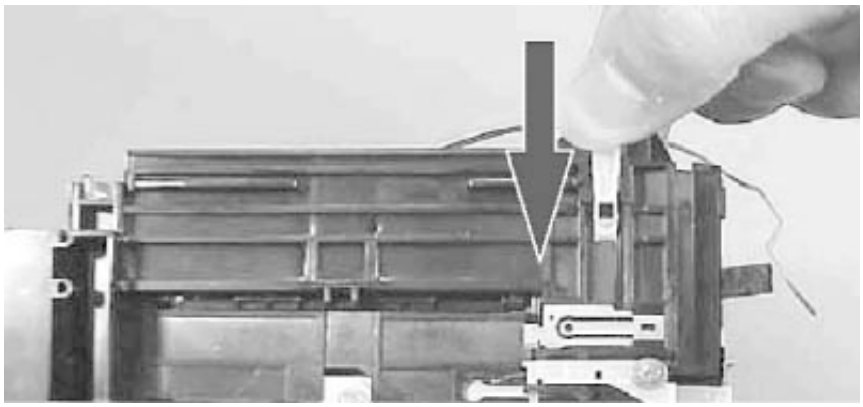


6) Fix the HLDR, LINK R with screws.
Then install the spring (88-ZG5-292-010).

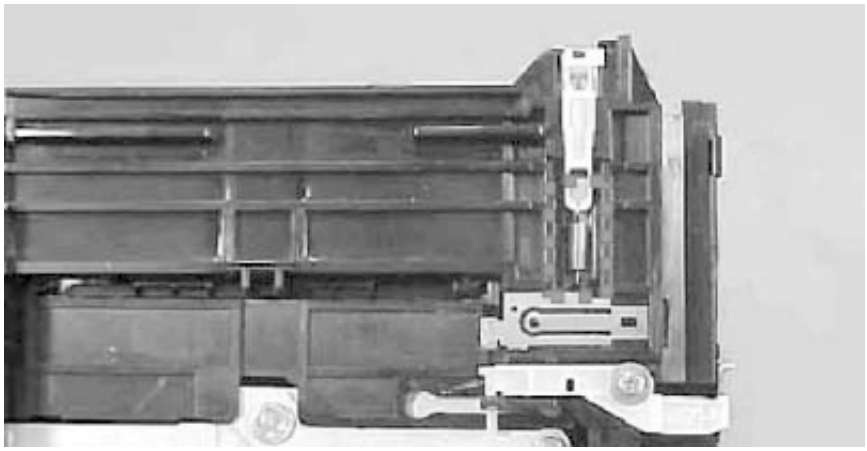


7) Fix the HLDR, LINK L in the same step as R, and then install the spring (88-ZG5-292-010).

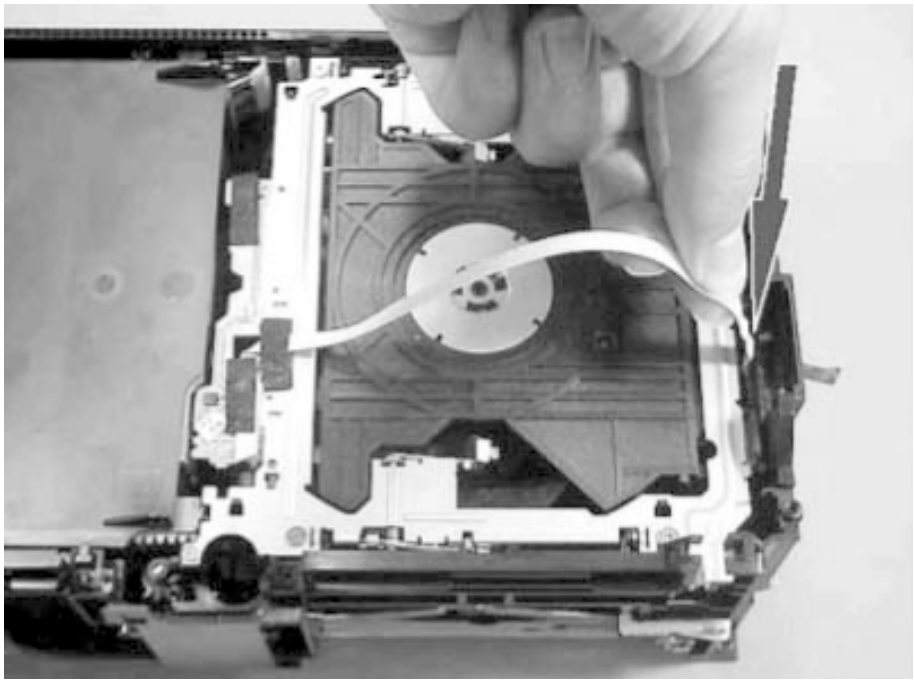
8) Insert the LEVER, LOCK F till the click sound comes out.



9) Install the spring (88-ZG5-225-010).



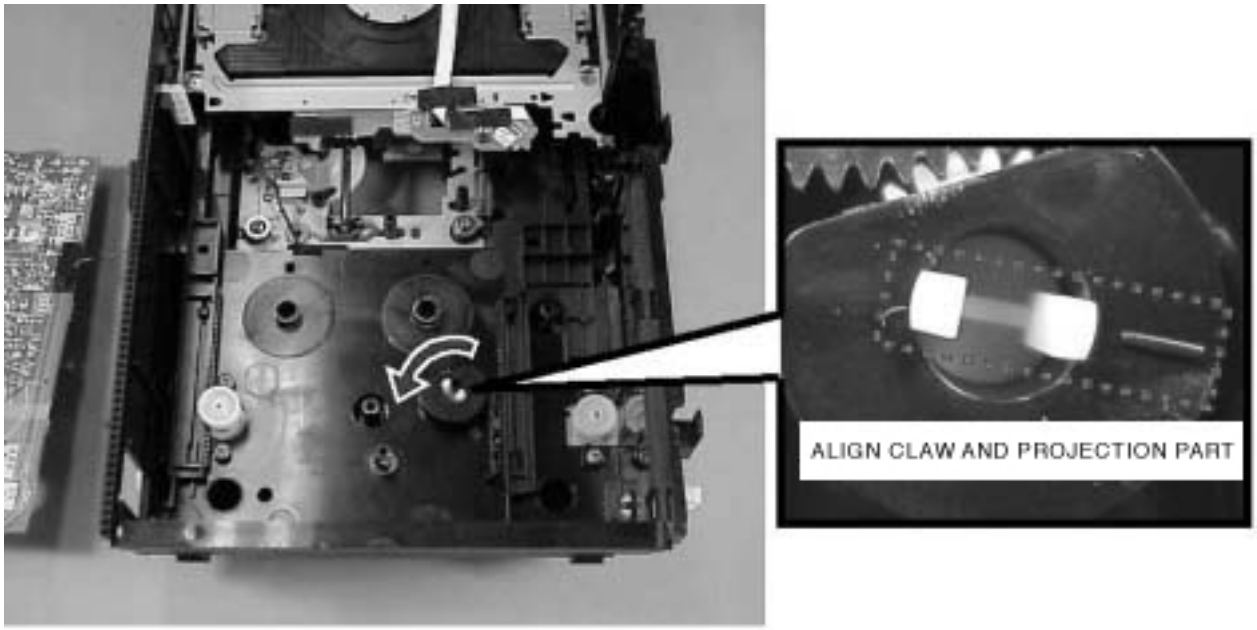
10) Pass the FFC, 4P through the rib of the BASE, and connect it to the connector of the switch circuit board.



Refer to the “6-5. Marking of each GEAR” for the further details.

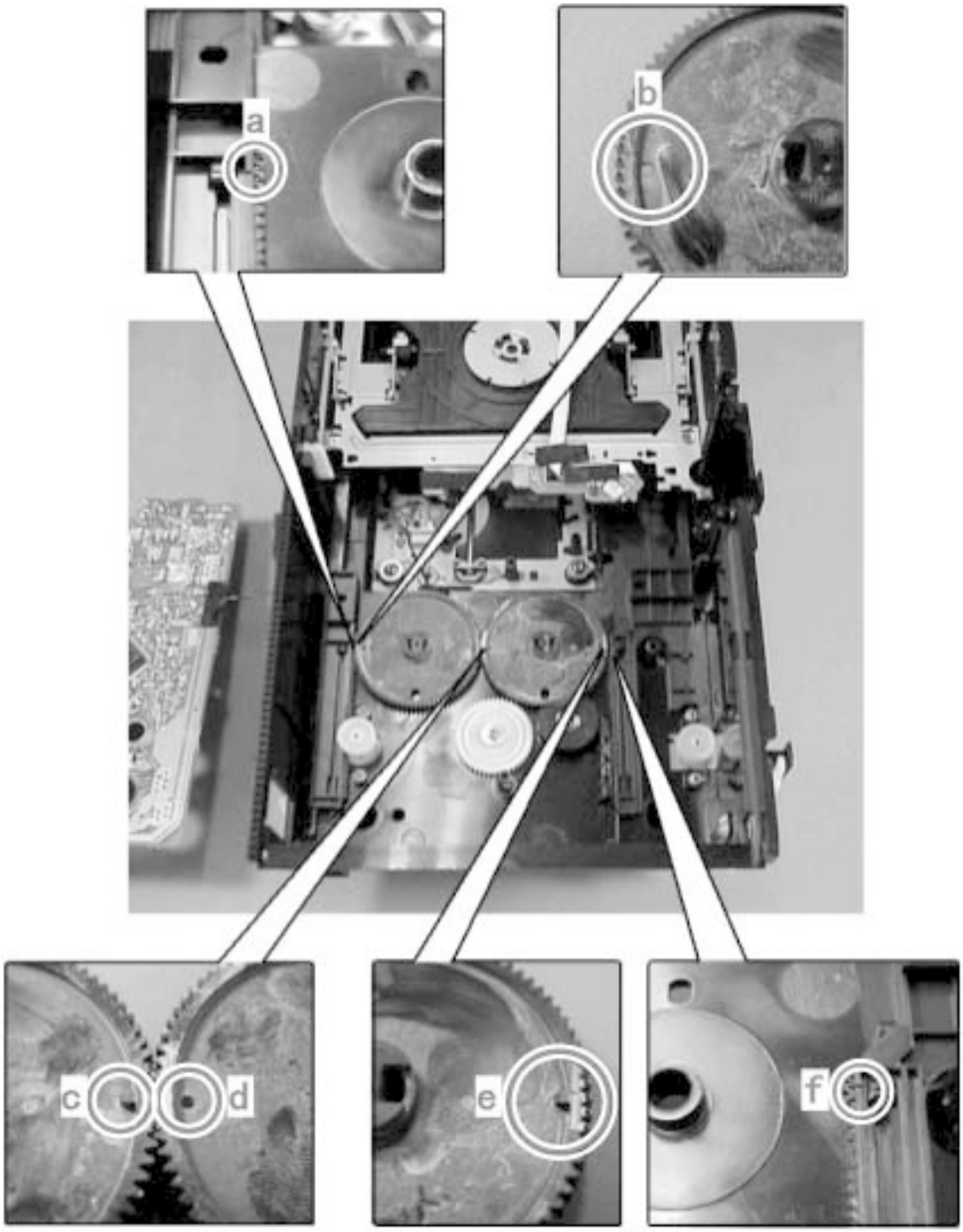
3-2. GEAR, PULLY for the ELEVATOR UP/DOWN Assembly and Phase Adjustment.

1) Rotate the GEAR, SLIDER B fully to the direction of the arrow.
Make sure that the claws of the GEAR, SLIDER B and the projection part is aligned straight.

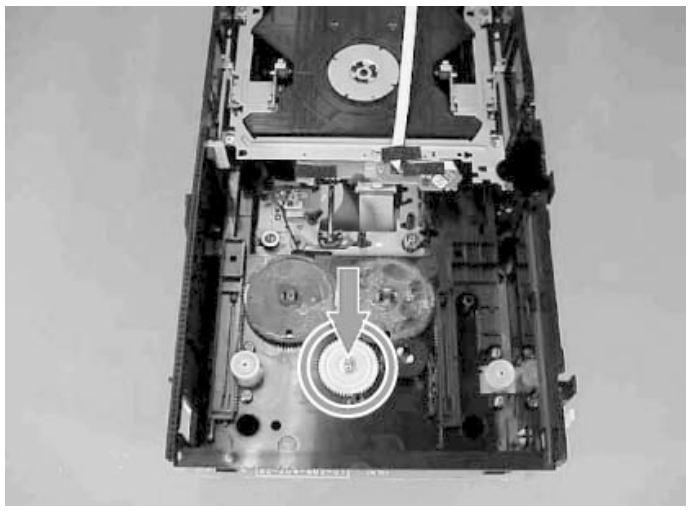


2) Set the 2 GEAR, SLIDER A to the BASE, so as to align the projection “a”, the circle hole “b”, the projection “c”, the circle hole “d”, the projection “e”, and the depression “f” in a straight line.

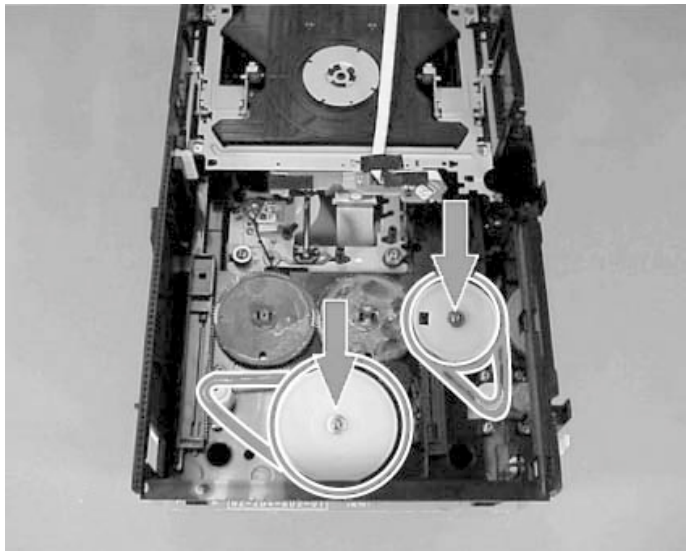
This method differs from the method in the factory.For that with the unit of the unrepair, GEAR SLIDER A is not the direction of a figure.



3) Install the GEAR, SLIDER C with a screw.

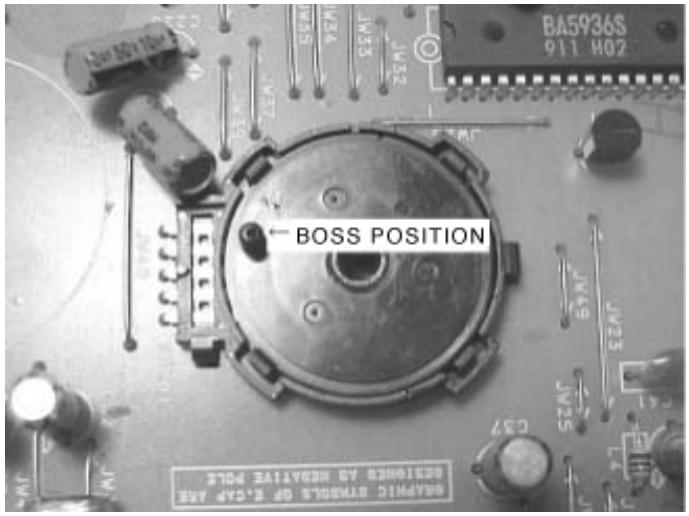


4) Install the PULLEY, SLIDER and PULLEY BASE with 2 screws. Then install the BELT, SLIDER and BELT, PULLEY, BASE.

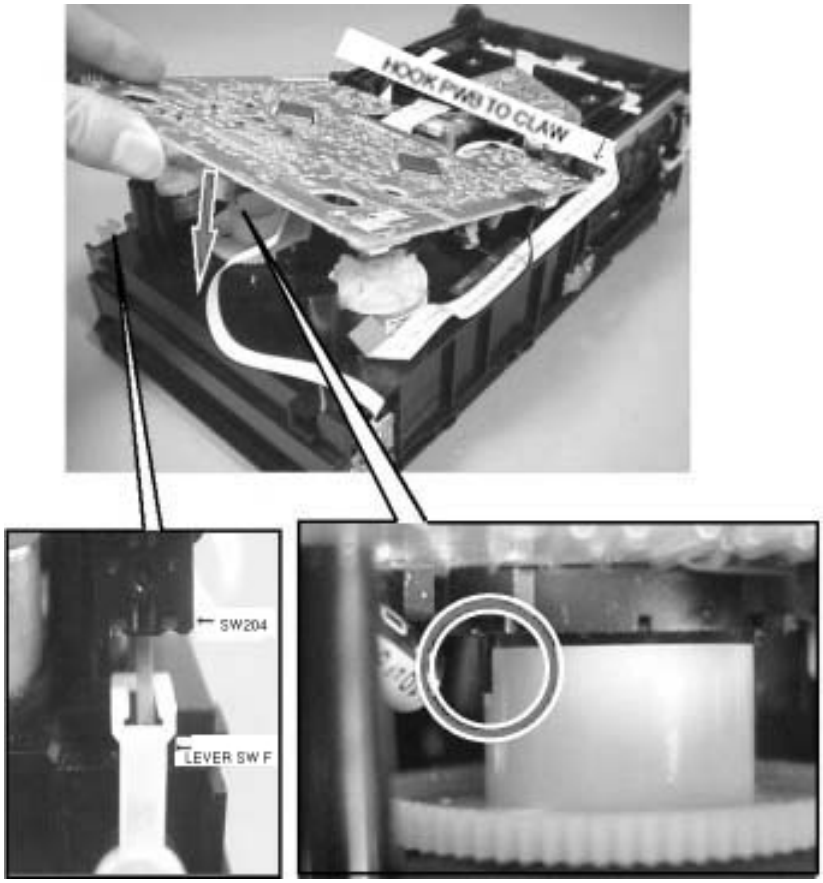


3-3. CD C.B Installation

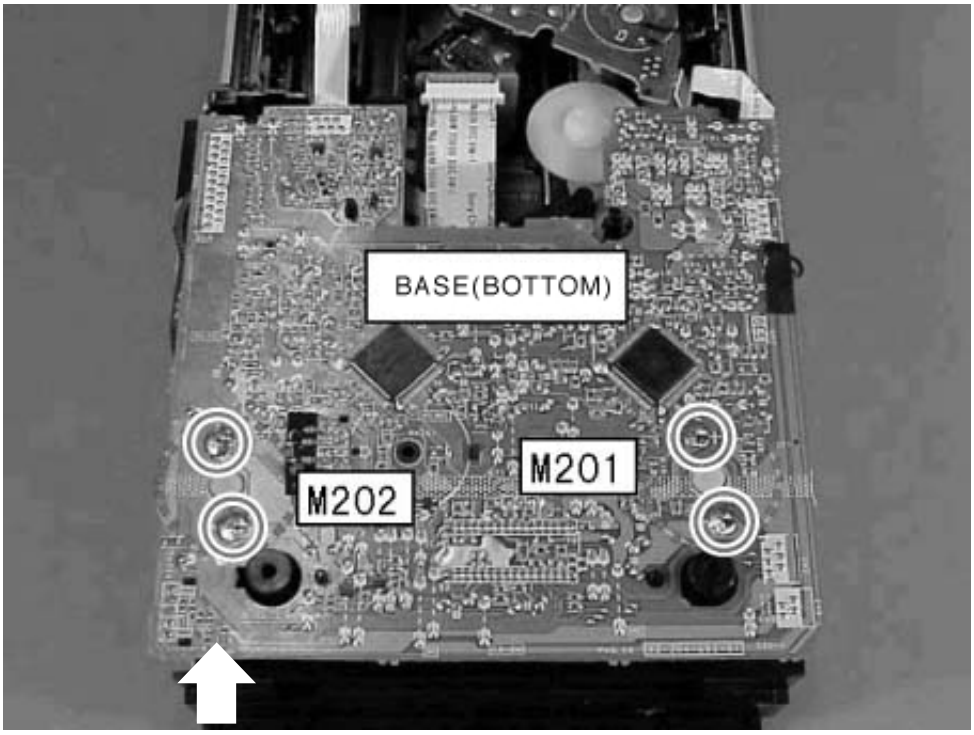
1) Rotate the mode SW (SW201) of the CD C.B to position the boss as shown in the photo.



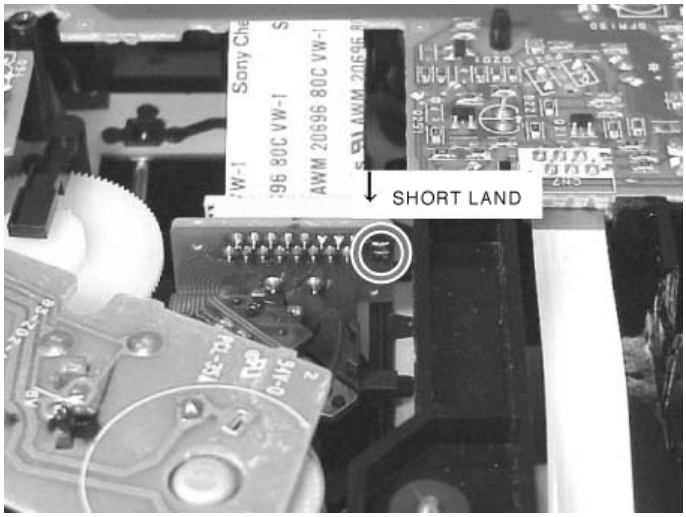
2) First, hook the rear side of the CD circuit board on the picks. Then position it on the front side. Make sure that the boss of the SW 201 and SW204 are fitted into the dent (O) of the GEAR, SLIDER B and the LEVER, SW F respectively.
Then connect the 3 FFCs to the CD C.B.



3) Install the CD P.W.B. with screw.And solder the legs of the motors of M201 and M202.



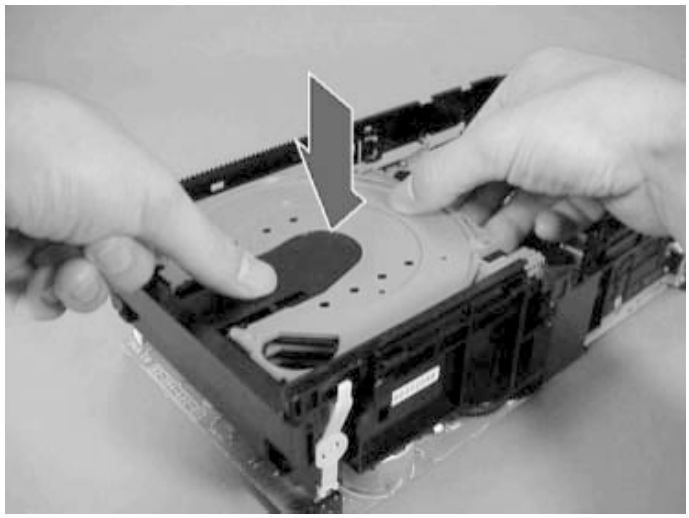
4) Remove the shortland soldering of the pickup.



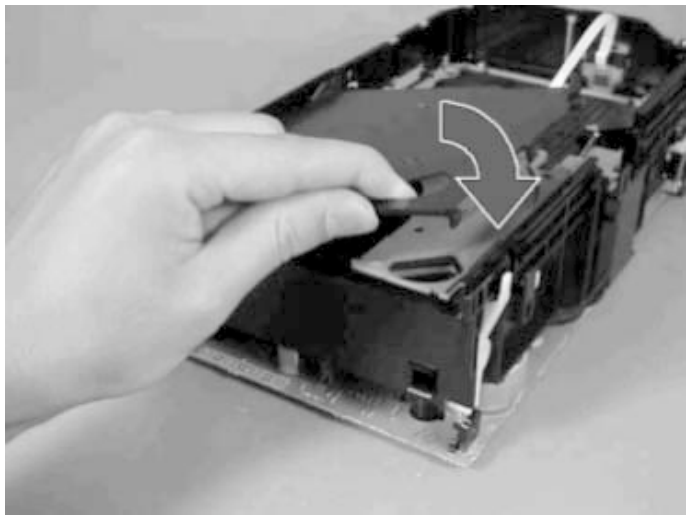
3-4. CG MAGAZINE Installation

1) Insert the TRAY 1, 2, 3 and 3 pieces of MAGAZINE into the BASE.

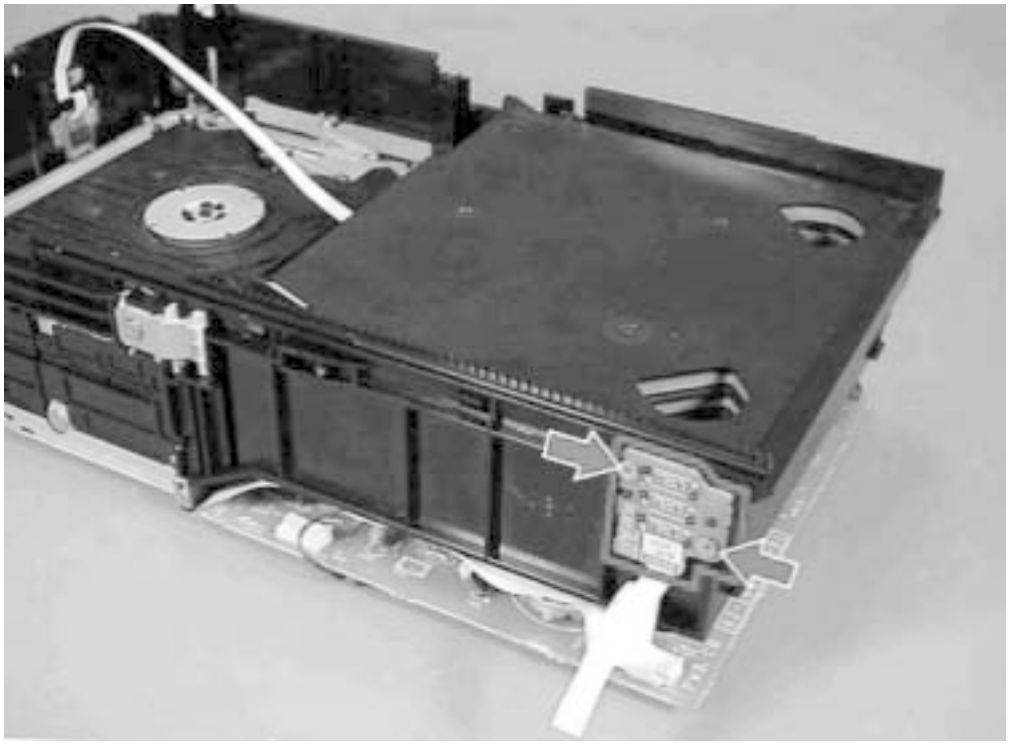
* TRAY should be inserted in order of 3-2-1 from the top (All 3 MAGAZINE are the same).



2) Install the MAGAZINE, TOP as shown in the photo and press it down till the claws (Refer to 4-4-3) get hooked.



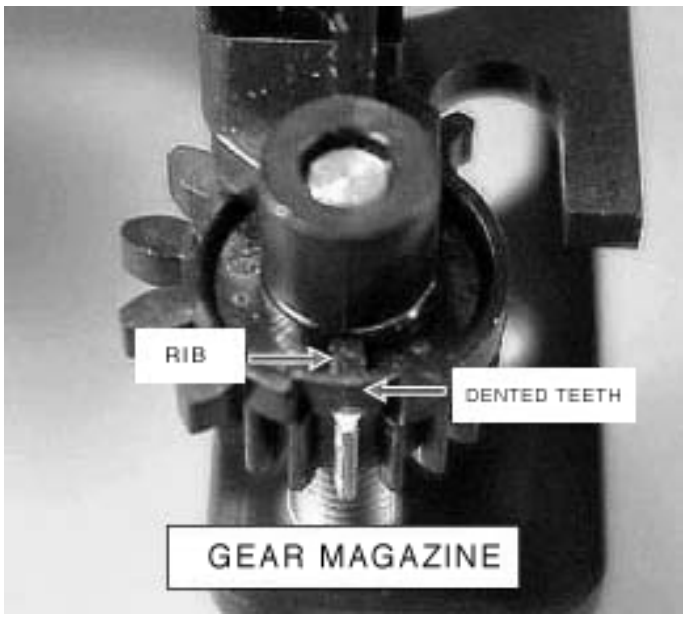
3) Install the PWB, TRAY with the 2 screws.



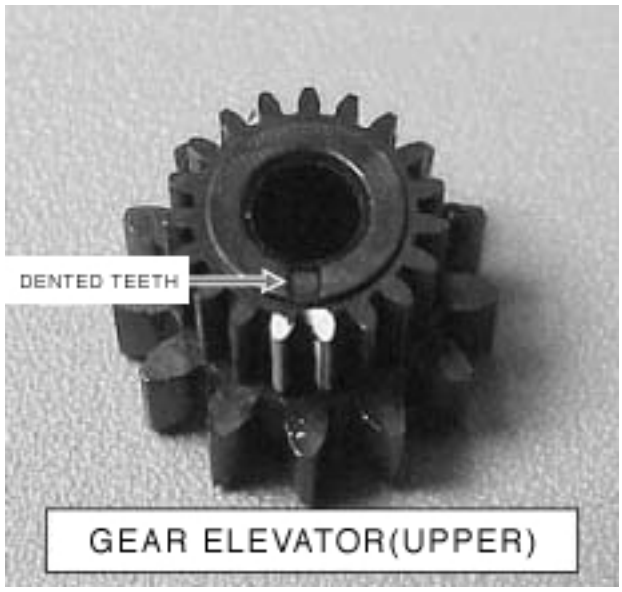
3-5. Marking of each GEAR

* In case of replacing all the GEAR, MAGAZINE / GEAR, ELEVATOR, GEAR, TRAY AB with new GEAR, use a white marker for marking.

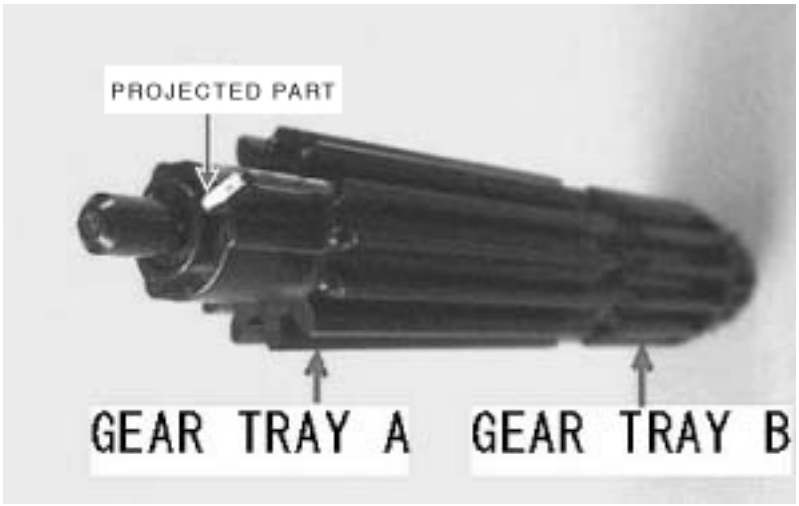
1) Mark the dented teeth with rib of the GEAR, MAGAZINE.



2) Mark the upper and bottom of the GEAR, ELEVATOR. As for the upper side, mark the tooth of the both side of a dent mark. As for the bottom side, on the other hand, mark the 2nd and 3rd from the right of 5 projected tooth.

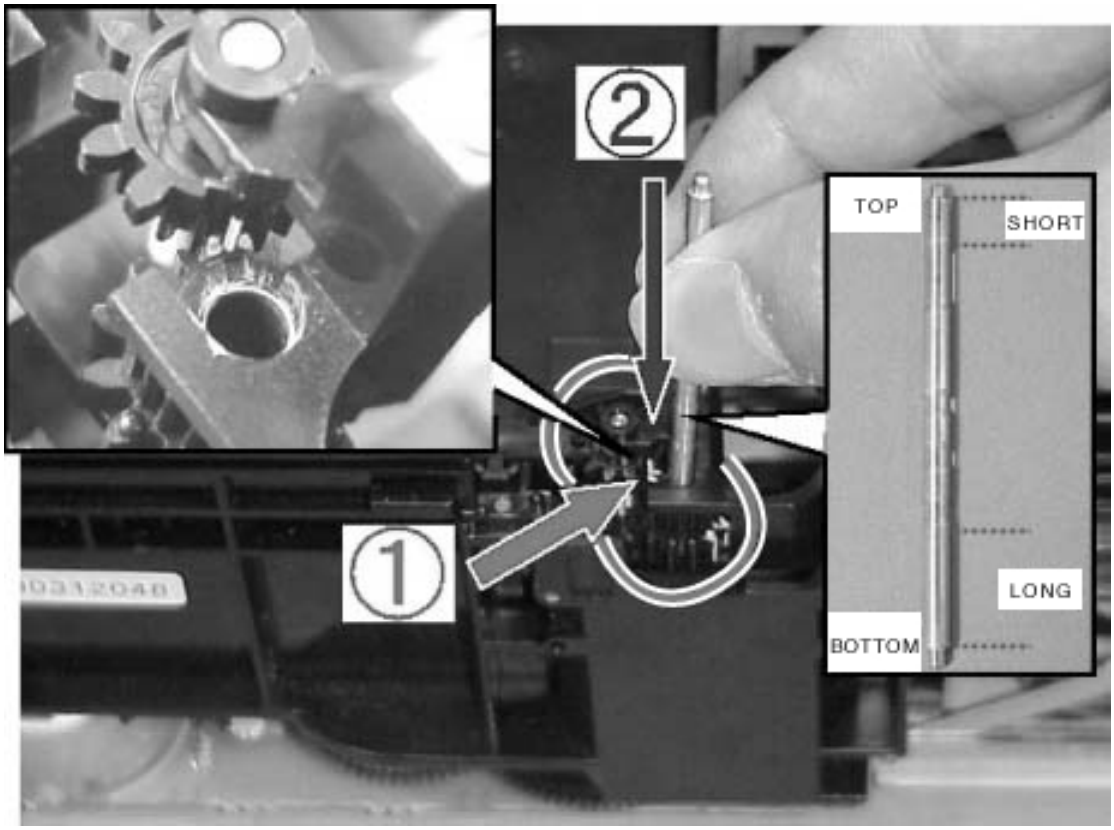


3) Mark the projected part of the GEAR TRAY AB.



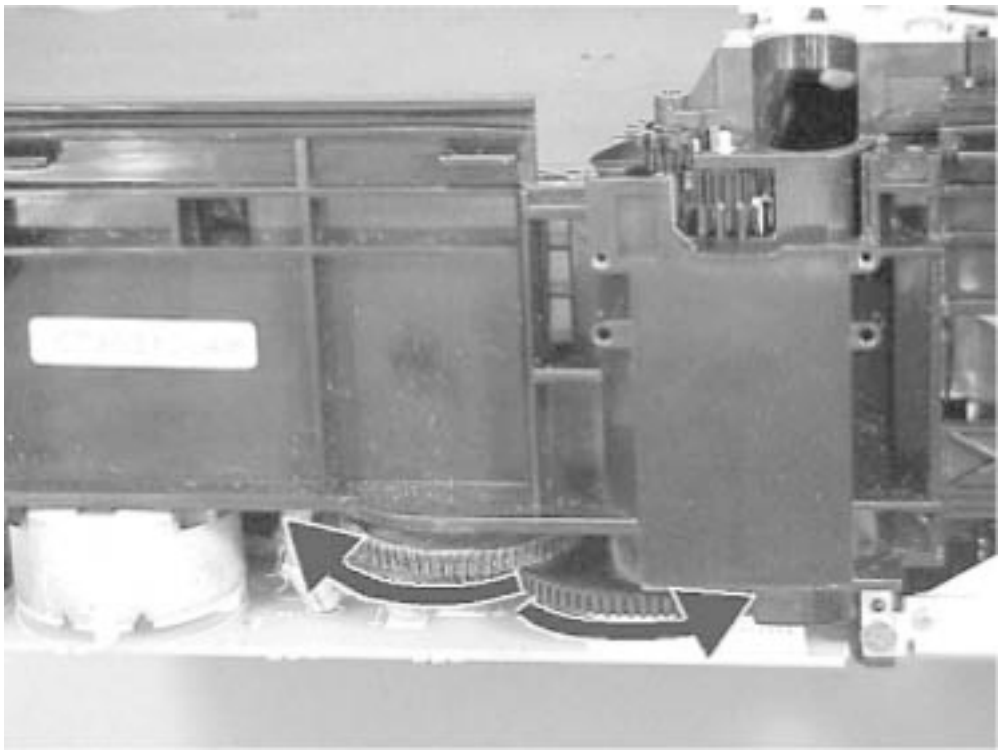
3-6. GEAR, ELEVATOR Phase Adjustment

1) Put the marked teeth of the ① GEAR MAGAZINE and the marked teeth (on the upper side) of the GEAR, ELEVATOR together, and put back the GEAR ELEVATOR itself to the original position. Then insert the ② SHAFT, ELEVATOR (make sure the up and down) and fix it.

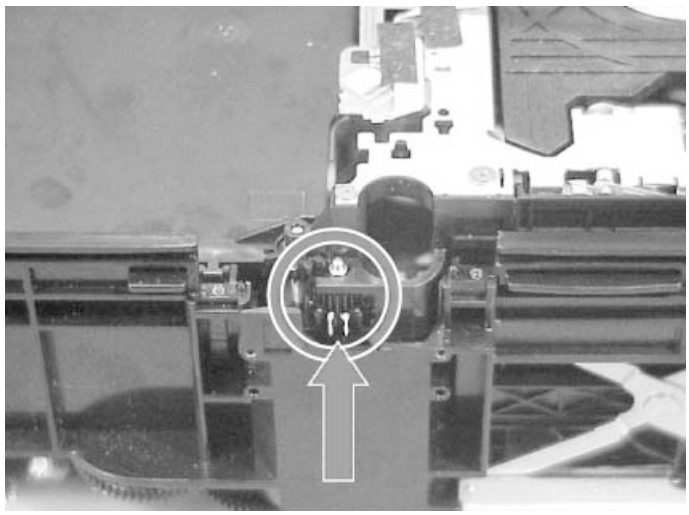


3-7. GEAR, TRAY AB Phase Adjustment

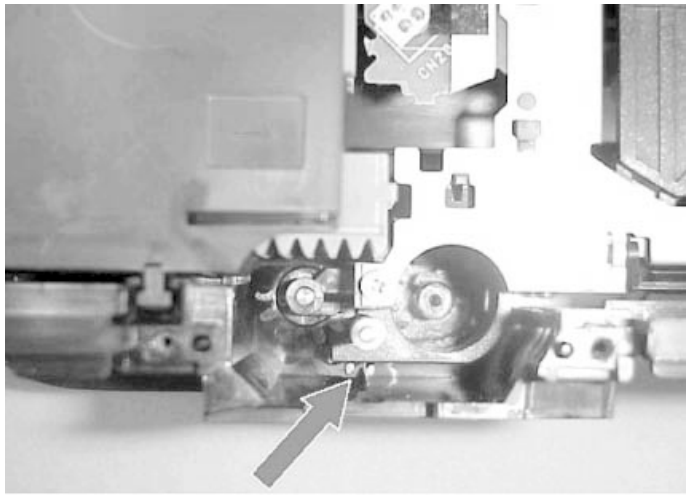
1) Rotate the GEAR, BASE fully to the direction of the arrow.



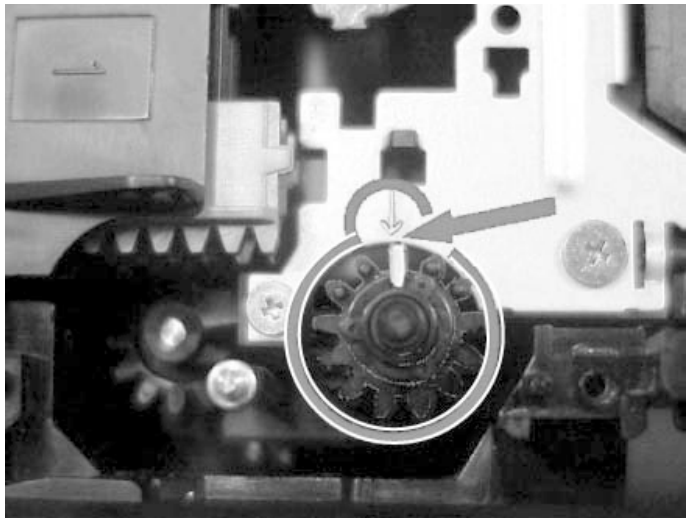
2) Rotate the GEAR, ELEVATOR and position the marked teeth (on the bottom side) at the point indicated by an arrow (Notes: it is different from the marking in 6-6.).



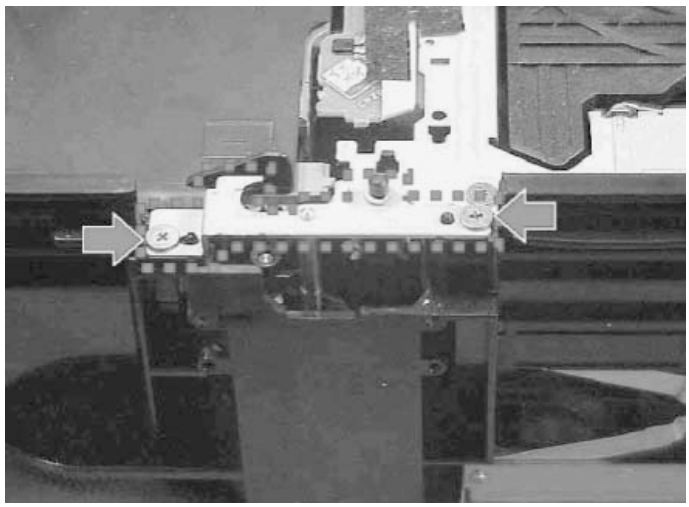
3) Rotate the GEAR, SLIDER B and lower the ELEVATOR to the UNLOCK position (the lowest position). (At this time, the teeth of the GEAR, ELEVATOR should be biting the base stopper.)



4) Insert the GEAR, TRAY AB into the position, so that the marking of the GEAR, TRAY AB will align with the arrow mark on the PLATE, ELEVATOR at the UNLOCK position.



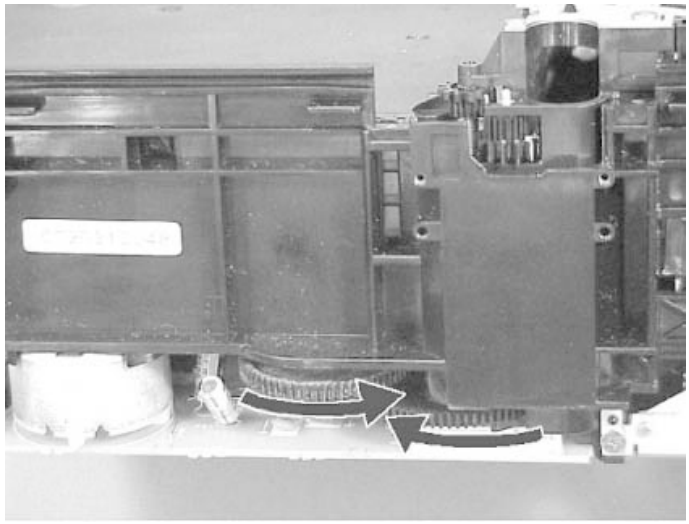
5) Install the HLDR, SHAFT with screws.



6) Rotate the GEAR, SLIDER B to position the ELEVATOR at the TOP position.

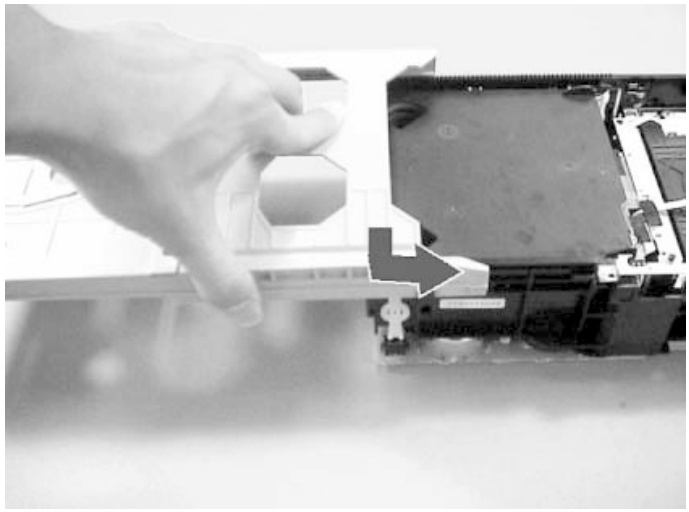
3-8. FRAME, MAIN Installation

1) At this point, three marked GEAR should be positioned at the GEAR position with the TRAY on top of the ELEVATOR. Rotate the GEAR, BASE fully to the direction of the arrow.

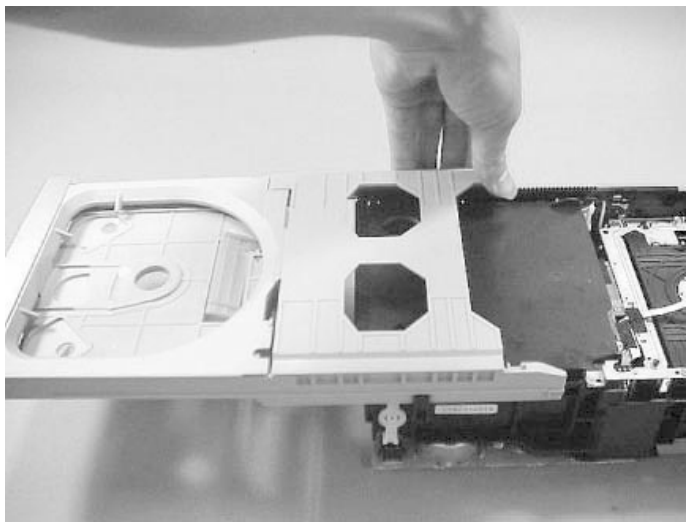


2) Lower down the ELEVATOR to the bottom again.

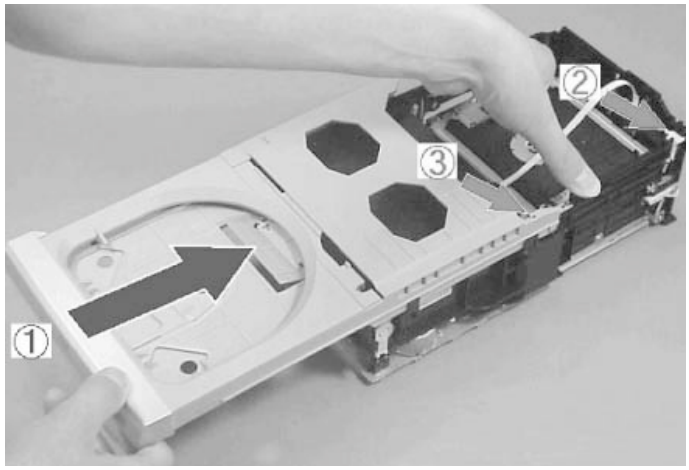
3) Set the right-hand side of the FRAME, MAIN onto the rail.



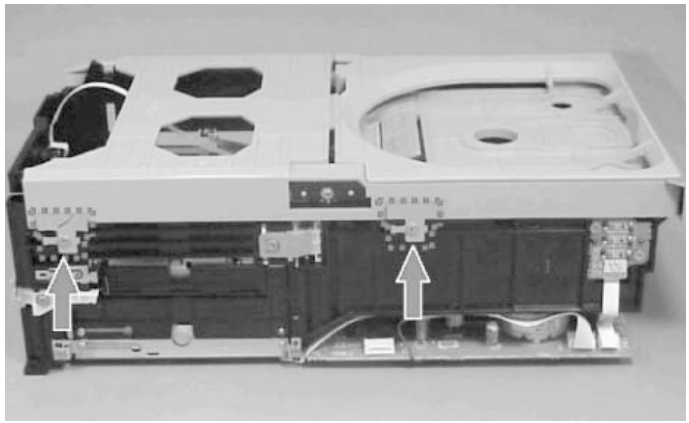
4) Set the left-hand side of the FRAME, MAIN onto the rail.



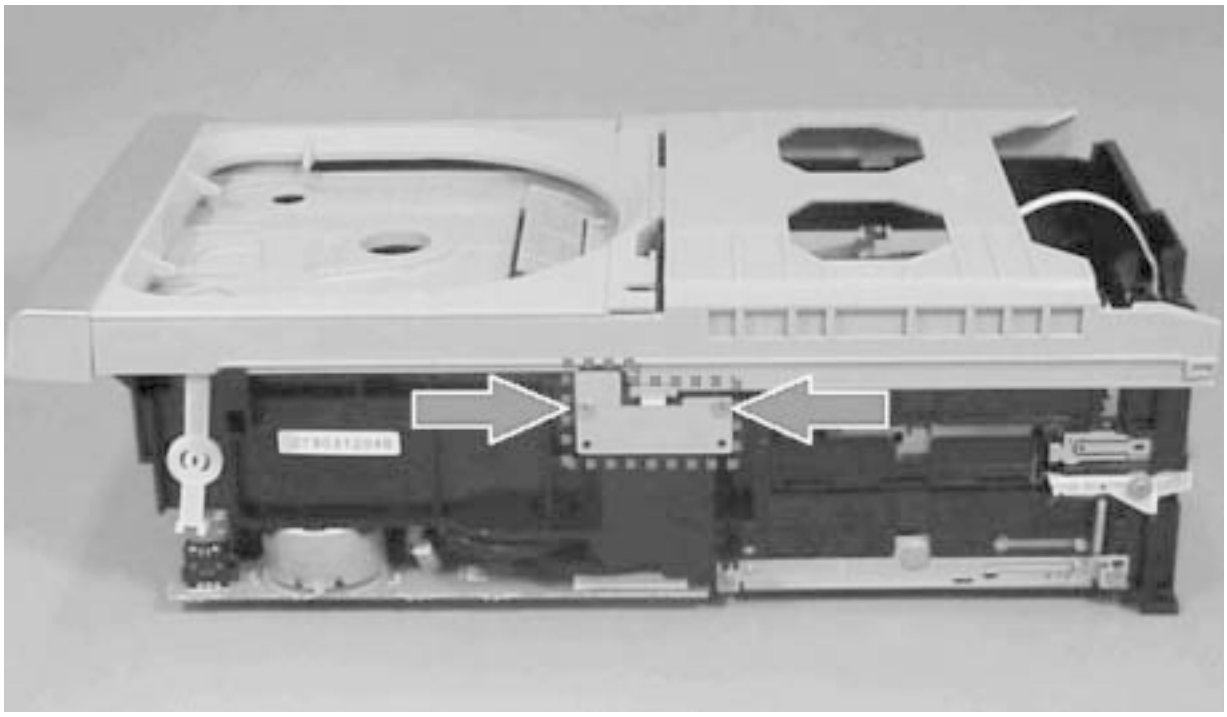
5) Insert the ① FRAME, MAIN all the way to the end.
Press the ③ FRAME, MAIN until the ② LEVER, LOCK F get set into the groove of the FRAME MAIN.



6) Install the PLATE, FRAME L with screws.



7) Install the PLATE, FRAME R with screws.



CD TEST MODE

1. How to activate
   1) Insert AC plug into an outlet while pressing the CD function button. (Fig.1 ①)
   2) Display will be all lit as shown in Fig2 in CD test mode (All FL display on).
   3) Press the CD function button again to switch into mecha test mode as shown in Fig.3.
   4) Press the CD function button in order to switch between CD and mecha test modes.

Fig.1. Front View

Fig.2. Display in CD Test Mode

Fig.3. Display in Mecha Test Mode

2. Mecha Test Mode
   1) By pressing the following buttons, up and down operation of the elevator, and the OPEN/CLOSE operation of the frame (tray), can be controlled and operated regardless of the positions of mecha and switches.

Operation	Control Button	Display
Elevator Up	►► (Fig.1②)	ELV.UP
Elevator Down	◄◄ (Fig.1③)	ELV.OPEN
Frame Open (Tray)	CD1 OPEN/CLOSE button (Fig.1④)	FRAME OPEN (TRAY OPEN)
Frame Close (Tray)	CD2 OPEN/CLOSE button (Fig.1⑤)	FRAME CLOSE (TRAY CLOSE)

Note 1: It displays FRAME OPEN/CLOSE while the elevator is in the top position. It displays TRAY OPEN/CLOSE if the elevator is in any other positions.

Note 2: Mecha test mode may be operated regardless of the positions of mecha and switches. Once operated in the Mecha test mode, make sure that go into the transfer mode (no disc, all trays are within MAGAZINE, and ELV in the lowest position), in which the mecha should be in a stable position, before quitting the test mode.

2) Each mecha switch and ON/OFF position of sensors may be checked on display.

SW and Sensor	Ref. No	Position of SW and Sensor	Display
Frame OPEN / CLOSE SW	SW204	Frame is in OPEN position. Frame is in MIDDLE position. Frame is in CLOSE position.	ROCK POP [JAZZ] is lit ROCK [POP] JAZZ is lit [ROCK] POP JAZZ is lit
TRAY No. Detection SW	SW202	Tray 1 is in PLAY position. Tray 2 is in PLAY position. Tray 3 is in PLAY position.	 T-BASS is lit.  T-BASS is lit.  T-BASS is lit.
Elevator Position Detection SW	SW201	Elevator is in TOP position. Elevator is in CD3 position. Elevator is in CD2 position. Elevator is in CD1 position. Elevator is in PLAY position. Elevator is in UNLOCK position. Elevator is in other positions.	"3" is lit. "7" is lit. "5" is lit. "6" is lit. "4" is lit. "1" is lit. "8" is lit.
Faulty Disc Prevention Sensor	Q202 Q212	Frame (tray) is covering Q202. Frame (tray) is covering Q201.	"MONO" is turned off. "SLEEP" is turned off.
Tray Edge Detection Sensor	PS231	Frame (tray) is in OPEN/CLOSE position. Frame (tray) is in MIDDLE position.	 ....is lit.  ....is turned off.
Tray No. Detection SW	SW213 SW212 SW211	Tray 1 is in CD MAGAZINE. Tray 2 is in CD MAGAZINE. Tray 3 is in CD MAGAZINE.	 BBE is lit.  BBE is lit.  BBE is lit.

3. CD Test Mode
   1) CD test mode retains the functions as usual. After the activation, press each control button in order to turn on the following mode functions.

MODE	Control	Display	Operation	Details
Start Mode	Test Mode Activated	All lit	–	–
Search Mode	■	"CD"	Continual Focus Search Object Lenses will repeat a full swing.	• Check APC circuit • Measure laser current • Check the focus error wave
Play Mode	◄►	Display Track No. and Play-time with spinning eye-catch.	Ignore all errors detected. * When any error were detected, continue re-trying.	• Turn ON Focus Servo, Tracking Servo, CLV Servo, Sledding Servo. • Check DRF
Traverse Mode	▮▮	Display Track No. and Play-time with flashing eye-catch.	Pause	• Turn OFF Tracking Servo • Check Tracking Balance (Traverse)
Sledding Mode	►► ◄◄	"CD TEST"	• Shift to the internal circumference of the pickup. • Shift to the external circumference of the pickup.	• Check Sledding Motor Driver Circuit and Sledding Mecha Operation