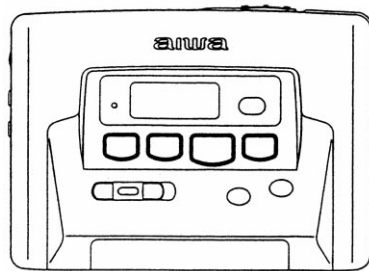


HS-JX807 AH,AU

HS-JX807D AH

HS-JX808 AH

HS-JX808D AH



SERVICE MANUAL

STEREO RADIO
CASSETTE RECORDER

BASIC TAPE MECHANISM : 6ZM-2 R2

aiwa

S/M Code No. 09-989-289-00T

SPECIFICATIONS

Frequency range:		Power source:	DC 1.2V using supplied rechargeable battery NB-3A
Reception area "EU"	AM 531-1,602kHz (9kHz steps) FM1,FM2 87.5-108MHz (50kHz steps)		DC 1.5V using an R6 (size AA) dry cell battery
Reception area "USA"	AM 530-1,710kHz (10kHz steps) FM1,FM2 87.5-108.1MHz (200kHz steps)	Maximum dimensions:	AC house current using the optional AC adaptor 111.4(W)x79.7(H)x29.8(D)mm (4 ¹ / ₂ x 3 ¹ / ₄ x 1 ³ / ₁₆ in.)
Reception area "JPN"	AM 531-1,629kHz (9kHz steps) FM1,FM2 76-108MHz (100kHz step in 76-90MHz, 50kHz step in 90-108MHz)	Weight:	Approx.146g (5.1oz) (excluding batteries)
Maximum output:	4mW + 4mW (EIAJ 32ohms)	< Battery charger RB-N01 >	
		Rated voltage:	AC 115V-230V, 50/60Hz

- Design and specifications are subject to change without notice.

- "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

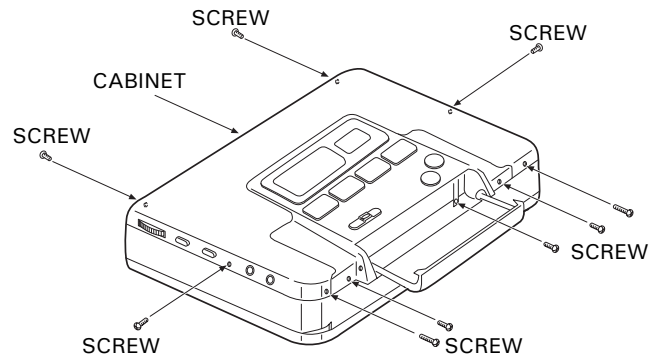
ACCESSORIES / PACKAGE LIST

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-HJ3-901-010	IB, EC-808<808AH, 808DAH>	
1	88-HJ3-902-010	IB, EC-807<807AH, 807DAH>	
1	88-HJ3-903-010	IB, SF-807<807AU>	
1	88-HJ3-904-010	IB, E-807<807AU>	
2	87-B30-122-010	HEADPHONE, HP-M023<808AH, 808DAH>	
2	87-B30-152-010	HEADPHONE, HP-MR002A(T)<807AH, 807AU, 807DAH>	
3	86-HJ4-950-010	CASE, CARRYING	
4	87-041-083-110	MIC, CM-S40A<807AH, 807AU, 807DAH>	
4	87-B30-138-010	MIC, CM-MS001<808AH, 808DAH>	
 5	87-B30-174-010	CHARGER, RB-N01UNC<807AU>	
 5	87-B30-135-010	CHARGER, RB-N01HNC<EXCEPT 807AU>	
6	87-047-153-210	BAT, NB-3A-PH	
7	88-HJ3-951-010	RC UNIT, RC808<808AH, 808DAH>	

DISASSEMBLY INSTRUCTIONS

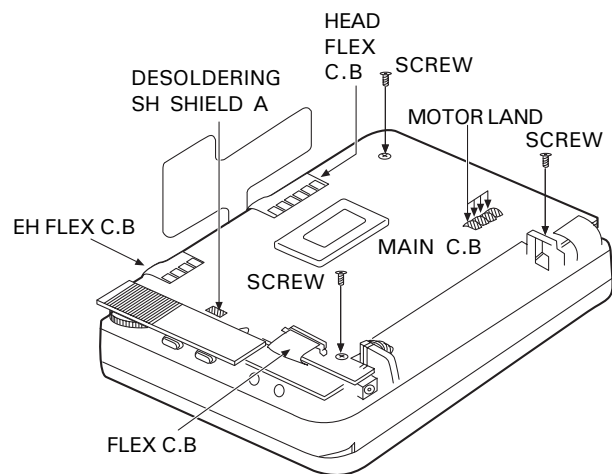
• REMOVAL OF CABINET

- 1) Remove the 9 screws.
- 2) Remove the cabinet.



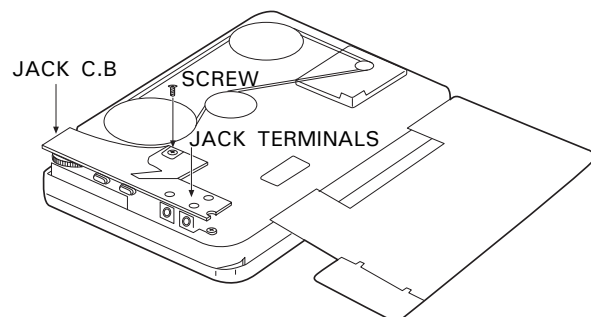
• REMOVAL OF MAIN C.B

- 1) Remove the 3 screws.
- 2) Remove SH SHIELD A.
- 3) Remove the EH FLEX C.B.
- 4) Remove the HEAD FLEX C.B.
- 5) Remove the FLEX C.B from the connector.
- 6) Remove the soldering of the motor terminal.
- 7) Remove the battery terminal from the holder and pull up the MAIN C.B.



• REMOVAL OF JACK C.B

- 1) Remove the screw on the JACK C.B.
- 2) Remove the soldering of the jack terminals.
- 3) Pull up the JACK C.B.



ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C261	87-012-140-080		CAP, 470P
	87-A20-745-040		C-IC, TA2030FN	C262	87-012-245-080		C-CAP, U 15P-50 UJ
	87-A20-076-040		C-IC, TA2022AFN	C263	87-010-787-080		C-CAP, U 0.022-25
	87-A20-124-080		IC, TK11823	C264	87-012-274-080		C-CAP, U 1000P-50 B
	87-A20-441-010		C-IC, BA3632K	C265	87-A10-353-080		C-CAP, U 0.22-10 KB
	87-A20-818-040		C-IC, NJM2185AV	C266	87-010-787-080		C-CAP, U 0.022-25
	87-A20-580-040		C-IC, BA3641FV	C267	87-A10-263-080		C-CAP, U 0.1-16 ZF
	87-A20-878-040		C-IC, TK70403M	C268	87-A10-249-080		C-CAP, U 1-10 ZF
	87-A20-880-010		C-IC, TC9327F-017	C269	87-012-273-080		C-CAP, U 820P-50 B
	87-A21-050-040		C-IC, S-808010ANNP-E72-T2	C270	87-A10-031-080		C-CAP, U 0.01-25 KB
	87-A20-755-080		C-IC, AK93C45AF	C271	87-A10-418-080		C-CAP, TN 22-4 A TCF
	87-A20-757-040		C-IC, S-80815ANNP-EDC-T2	C272	87-A10-249-080		C-CAP, U 1-10 ZF
	87-A20-961-040		C-IC, MM1279XV	C273	87-A10-422-080		C-CAP, TN 10-4 A TCF
	87-A20-603-040		C-IC, RN5RK241A	C274	87-012-274-080		C-CAP, U 1000P-50 B
				C275	87-012-282-080		CAP, U 4700P-50
TRANSISTOR				C276	87-012-349-080		C-CAP, S 1000P-50 CH
	87-026-482-080		TR, RN4610	C277	87-010-829-080		CAP, U 0.047-16
	87-A30-188-080		C-TR, 2SC4915 (O)	C278	87-012-274-080		C-CAP, U 1000P-50 B
	89-342-153-080		TR, 2SC4215	C279	87-012-282-080		CAP, U 4700P-50
	87-026-343-080		C-TR, DTC123JU	C280	87-012-282-080		CAP, U 4700P-50
	89-508-814-080		C-FET, 2SK881Y	C281	87-A10-249-080		C-CAP, U 1-10 ZF
	87-026-425-080		C-TR, RN2307	C282	87-A10-249-080		C-CAP, U 1-10 ZF
	87-026-480-080		TR, RN4605 (0.3W)	C283	87-A10-418-080		C-CAP, TN 22-4 A TCF
	89-508-804-080		C-FET, 2SK880Y	C284	87-A10-368-080		C-CAP, S 2.2-10 ZF
	89-341-165-080		C-TR, 2SC4116GR	C301	87-010-787-080		CAP, U 0.022-25
	87-026-597-080		C-TR, UMH3	C302	87-A10-419-080		C-CAP, TN 1-16 A TCF
	87-026-352-080		C-TR, DTC144TU	C303	87-A10-707-080		C-CAP, U 0.47-10 ZF
	89-113-625-080		TR, 2SA1362GR	C304	87-A10-251-080		C-CAP, TN 33-2.5 A
	87-026-585-080		C-TR, IMX1HQQ	C305	87-A10-264-080		C-CAP, S 0.1-16 ZF
	87-026-461-080		C-TR, IMH3	C306	87-012-167-080		C-CAP, U 5P-50 CH
	87-026-532-080		C-TR, RN2907	C307	87-012-174-080		C-CAP, CERA SS 12P CHJ
	87-026-596-080		C-TR, UMH9	C308	87-012-191-080		C-CAP, 68 PF
	87-026-424-080		C-TR, RN2306	C401	87-012-274-080		C-CAP, U 1000P-50 B
	87-026-524-080		C-TR, HN1C03FU (B)	C402	87-012-274-080		C-CAP, U 1000P-50 B
	89-413-284-080		TR, 2SD1328T	C403	87-012-274-080		C-CAP, U 1000P-50 B
	87-026-346-080		C-TR, DTC114YU	C404	87-012-274-080		C-CAP, U 1000P-50 B
	87-A30-228-080		C-TR, UMB3	C405	87-016-117-080		C-CAP, U 0.018-25 JB
	87-026-481-080		TR, RN4607 (0.3W)	C406	87-016-117-080		C-CAP, U 0.018-25 JB
	89-342-132-080		TR, 2SC4213	C407	87-016-296-080		C-CAP, TN 22-4SV(A)
	87-026-648-080		C-TR, UPA608T	C408	87-016-296-080		C-CAP, TN 22-4SV(A)
DIODE				C409	87-010-828-080		C-CAP, U 0.033-25 F
	87-017-366-080		DIODE, DAN202U	C410	87-010-828-080		C-CAP, U 0.033-25 F
	87-017-367-080		DIODE, DAP202U	C411	87-A10-262-080		C-CAP, U 1-10 ZF
	87-001-553-080		C-DIODE, 1SS322	C412	87-A10-262-080		C-CAP, U 1-10 ZF
				C415	87-012-272-080		C-CAP, U 680P-50 B
	87-017-366-080		DIODE, DAN202U	C416	87-012-272-080		C-CAP, U 680P-50 B
	87-017-367-080		DIODE, DAP202U	C417	87-A10-262-080		C-CAP, U 1-10 ZF
	87-001-553-080		C-DIODE, 1SS322	C418	87-A10-262-080		C-CAP, U 1-10 ZF
				C419	87-A10-263-080		C-CAP, U 0.1-16 ZF
				C420	87-A10-263-080		C-CAP, U 0.1-16 ZF
MAIN C.B				C423	87-A10-703-080		C-CAP, TN 47-2.5 MA
	87-A90-291-080		C-FLTR, KMFC5132-AE-TC	C424	87-A10-263-080		C-CAP, U 0.1-16 ZF
BPF201	81-HW1-628-080		C-BAND PASE FILTER	C425	87-016-296-080		C-CAP, TN 22-4SV(A)
C201	87-A10-031-080		C-CAP, U 0.01-25 KB	C426	87-010-829-080		CAP, U 0.047-16
C202	87-012-274-080		C-CAP, U 1000P-50 B	C427	87-A10-781-080		C-CAP, U 0.15-10 KB
C203	87-A10-031-080		C-CAP, U 0.01-25 KB	C428	87-016-504-080		C-CAP, TN 6.8-4 (A2)
C204	87-012-270-080		C-CAP, 470P	C429	87-A10-260-080		C-CAP, U 0.1-16 KB
C205	87-A10-031-080		C-CAP, U 0.01-25 KB	C431	87-016-296-080		C-CAP, TN 22-4SV(A)
C206	87-012-165-080		CAP, 3P	C432	87-016-286-080		C-CAP, TN 2.2-6.3 F93
C207	87-012-162-080		C-CAP, U 1P-50 CK	C433	87-A10-263-080		C-CAP, U 0.1-16ZF
C208	87-A10-031-080		C-CAP, U 0.01-25 KB	C434	87-010-274-080		C-CAP, TN 3.3-4
C209	87-012-193-080		C-CAP, U 82P-50 CH	C435	87-A10-704-080		C-CAP, TN 100-2.5 M B2
C210	87-A10-368-080		C-CAP, S 2.2-10 ZF	C436	87-010-787-080		CAP, U 0.022-25
C211	87-A10-030-080		C-CAP, U 100P-50 CH	C437	87-A10-263-080		C-CAP, U 0.1-16 ZF
C212	87-A10-030-080		C-CAP, U 100P-50 CH	C438	87-012-273-080		C-CAP, U 820P-50 B
C214	87-012-275-080		C-CAP, U 1200P-50 B	C439	87-A10-263-080		C-CAP, U 0.1-16 ZF
C251	87-A10-368-080		C-CAP, S 2.2-10 ZF	C440	87-A10-263-080		C-CAP, U 0.1-16 ZF
C254	87-A10-031-080		C-CAP, U 0.01-25 KB	C441	87-010-746-080		CAP, TANTAL 10-4
C257	87-A10-263-080		C-CAP, U 0.1-16 ZF	C442	87-012-274-080		C-CAP, U 1000P-50 B
C259	87-012-172-080		C-CAP, U 10P CH	C443	87-A10-827-080		C-CAP, U 0.47-6.3 KB
C260	87-012-180-080		C-CAP, U 22P-50 CH				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C444	87-A10-827-080	C-CAP,U	0.47-6.3 KB	IFT251	87-005-788-080	C-IFT,AM(450K)	
C445	87-A10-353-080	C-CAP,U	0.22-10 KB	J801	87-A60-319-010	JACK,DC DIA 2.75	
C446	87-A10-353-080	C-CAP,U	0.22-10 KB	L201	87-A50-245-080	C-COIL,S 0.1UH G	
C450	87-A10-262-080	C-CAP,U	1-10 ZF	L202	87-A50-244-080	C-COIL,S 82NH G	
C451	87-A10-262-080	C-CAP,U	1-10 ZF	L203	87-005-564-080	C-COIL,S 2.2MH	
C452	87-A10-262-080	C-CAP,U	1-10 ZF	L251	88-HJ3-610-010	BAR-ANT,MW	
C453	87-012-274-080	C-CAP,U	1000P-50 B	L252	87-A50-194-080	C-COIL,100UH J N	
C501	87-012-274-080	C-CAP,U	1000P-50 B	L253	87-003-245-080	C-COIL,22UH	
C502	87-012-274-080	C-CAP,U	1000P-50 B	L301	87-A50-037-080	C-COIL,D-D 5CDLU	
C503	87-012-274-080	C-CAP,U	1000P-50 B	L403	87-A50-322-080	C-COIL,S BK2125LM252	
C504	87-012-274-080	C-CAP,U	1000P-50 B	L404	87-HJ2-613-010	COIL,LOADING3.3UH	
C505	87-A10-262-080	C-CAP,U	1-10 ZF	L405	87-003-245-080	C-COIL,22UH	
C506	87-A10-262-080	C-CAP,U	1-10 ZF	L501	87-HJ3-605-080	C-COIL,OSC BIAS	
C507	87-A10-262-080	C-CAP,U	1-10 ZF	L803	87-003-089-110	CHOKO-COIL,47UH FL5R200F	
C508	87-A10-262-080	C-CAP,U	1-10 ZF	L804	87-003-089-110	CHOKO-COIL,47UH FL5R200F	
C509	87-A10-262-080	C-CAP,U	1-10 ZF	L805	87-003-246-080	C-COIL,33UH	
C510	87-A10-262-080	C-CAP,U	1-10 ZF	LCD601	88-HJ3-608-010	LCD,AIW4145	
C511	87-A10-262-080	C-CAP,U	1-10 ZF	LED601	87-070-079-080	C-LED,SML-010 VT	
C512	87-A10-262-080	C-CAP,U	1-10 ZF	PS601	87-A90-440-010	SNSR,PHOTO GP2S24N2-B	
C513	87-012-271-080	CAP,U	560P-50	R403	87-022-432-080	C-RES,U 270-1/16WF	
C514	87-012-267-080	C-CAP,U	270P-50 B	R404	87-022-432-080	C-RES,U 270-1/16WF	
C515	87-012-278-080	C-CAP,U	2200P-50 B	R405	87-022-437-080	C-RES,U 430-1/16WF	
C516	87-A10-031-080	C-CAP,U	0.01-25 KB	R406	87-022-437-080	C-RES,U 430-1/16WF	
C517	87-A10-031-080	C-CAP,U	0.01-25 KB	R434	87-022-252-080	C-RES,U 36K-1/16WF	
C518	87-012-279-080	C-CAP,U	2700P-50 B	R612	87-022-245-080	C-RES,U 18K-1/16WF	
C519	87-016-296-080	C-CAP,TN	22-4SV(A)	R613	87-022-245-080	C-RES,U 18K-1/16WF	
C520	87-010-746-080	CAP,TANTAL	10-4	R616	87-022-223-080	C-RES,U 2.2K-1/16WF	
C521	87-A10-262-080	C-CAP,U	1-10 ZF	R617	87-022-223-080	C-RES,U 2.2K-1/16WF	
C522	87-A10-262-080	C-CAP,U	1-10 ZF	R618	87-022-223-080	C-RES,U 2.2K-1/16WF	
C523	87-015-923-080	C-CAP,TN	0.22-35	R619	87-022-227-080	C-RES,U 3.3K-1/16WF	
C524	87-015-923-080	C-CAP,TN	0.22-35	R620	87-022-227-080	C-RES,U 3.3K-1/16WF	
C525	87-010-787-080	CAP,U	0.022-25	R621	87-022-231-080	C-RES,U 4.7K-1/16WF	
C526	87-010-787-080	CAP,U	0.022-25	R804	87-022-569-080	C-RES,0.47-1/2WK	
C527	87-A10-704-080	C-CAP,TN	100-2.5 M B2	S501	87-036-415-080	C-SW,SL 1-3BSSSS8	
C528	87-016-296-080	C-CAP,TN	22-4SV(A)	S601	87-036-220-080	C-SW,TACT SKQBAA	
C529	87-A10-031-080	C-CAP,U	0.01-25 KB	S602	87-A90-361-010	SW,PUSH SPPB51-H11.3	
C530	87-010-746-080	CAP,TANTAL	10-4	S603	87-A90-356-210	SW,LEAF 62M-2	
C531	87-A10-262-080	C-CAP,U	1-10 ZF	S604	87-036-373-080	C-SW,SLIDE 1-1-2 (E)	
C532	87-A10-262-080	C-CAP,U	1-10 ZF	S605	87-036-220-080	C-SW,TACT SKQBAA	
C533	87-010-505-080	C-CAP,TANTALUM	1-16	S606	87-A90-665-080	C-SW,TACT LS7A2M	
C534	87-A10-263-080	C-CAP,U	0.1-16 ZF	S607	87-A90-665-080	C-SW,TACT LS7A2M	
C535	87-010-196-080	C-CAP,U	0.1-25	S608	87-A90-665-080	C-SW,TACT LS7A2M	
C536	87-010-196-080	C-CAP,U	0.1-25	S609	87-A90-665-080	C-SW,TACT LS7A2M	
C601	87-A10-263-080	C-CAP,U	0.1-16 ZF	S610	87-A90-665-080	C-SW,TACT LS7A2M	
C603	87-A10-031-080	C-CAP,U	0.01-25 KB	S611	87-036-203-180	C-SW,SL1-1-3 SSSS81	
C604	87-016-296-080	C-CAP,TN	22-4SV(A)	S614	87-HJ3-608-010	SW,LEAF REC ASSY	
C605	87-012-172-080	C-CAP,U	10P CH	S615	87-HJ3-608-010	SW,LEAF REC ASSY	
C606	87-012-172-080	C-CAP,U	10P CH	SFR701	87-024-406-080	C-SFR,6.8K RH03A3A	
C607	87-A10-025-080	C-CAP,U	0.22-16 ZF	TC201	87-011-189-080	C-TRIMMER,CTZ-10A	
C608	87-A10-263-080	C-CAP,U	0.1-16 ZF	TC202	87-A90-688-080	C-TRIMMER,30P CTZ2S-30C	
C609	87-A10-263-080	C-CAP,U	0.1-16 ZF	TC251	87-011-189-080	C-TRIMMER,CTZ-10A	
C610	87-A10-263-080	C-CAP,U	0.1-16 ZF	TH701	87-A90-855-080	C-THMS,SC20-3K102K	
C611	87-A10-263-080	C-CAP,U	0.1-16 ZF	VR251	87-A90-027-080	C-SFR,22K H CVR-32	
C613	87-A10-262-080	C-CAP,U	1-10 ZF	X601	87-A70-078-110	VIB,XTAL 75KHZ KF-26R5	
C701	87-A10-031-080	C-CAP,U	0.01-25 KB				
C702	87-A10-260-080	C-CAP,U	0.1-16 KB	JACK C.B			
C703	87-A10-950-080	C-CAP,S	4.7-10 ZF				
C704	87-A10-263-080	C-CAP,U	0.1-16 ZF	C413	87-A10-262-080	C-CAP,U 1-10 ZF	
C705	87-A10-025-080	C-CAP,U	0.22-16 ZF	C414	87-A10-262-080	C-CAP,U 1-10 ZF	
C706	87-A10-707-080	C-CAP,U	0.47U-16 FZ	C421	87-010-673-080	CAP,ELECT 100-2	
				C422	87-010-673-080	CAP,ELECT 100-2	
C707	87-A10-031-080	C-CAP,U	0.01-25 KB	J402	87-A60-273-010	JACK,DIA3.5 ST5P<807,807D>	
C708	87-A10-031-080	C-CAP,U	0.01-25 KB				
C709	87-A10-031-080	C-CAP,U	0.01-25 KB	J402	85-HK3-605-010	JACK,DIA3.5 ST5P<808,808D>	
C801	87-010-674-080	CAP,ELECT	220-2	J501	87-A60-416-010	JACK,3.5 BLK ST 3P	
C805	87-016-296-080	C-CAP,TN	22-4SV(A)	L401	87-A50-322-080	COIL,S BK2125LM252	
				L402	87-A50-322-080	COIL,S BK2125LM252	
CF251	87-A90-456-080	C-FLTR,PFWCC	450J3	L601	87-A50-322-080	COIL,S BK2125LM252<808,808D>	
CN401	87-A60-473-080	C-CONN,18P H SFV2ST					
D201	87-A40-517-040	C-VARI-CAP,SVC208		L602	87-A50-322-080	COIL,S BK2125LM252<808,808D>	
D202	87-A40-517-040	C-VARI-CAP,SVC208		L603	87-A50-322-080	COIL,S BK2125LM252<808,808D>	
D251	87-A40-462-040	C-VARI-CAP,SVC347(S)		L604	87-A50-322-080	COIL,S BK2125LM252<808,808D>	

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
I605	87-A50-322-080	COIL,S	BK2125LM252
I606	87-A50-322-080	COIL,S	BK2125LM252<807,807D>
S612	87-A90-378-080	C-SW,PUSH	PTO35C1T
S613	87-A90-378-080	C-SW,PUSH	PTO35C1T
VR401	88-HJ3-609-080	C-VR,RTRY	50KCX2 XV0103G

DD C.B

C802	87-016-444-080	C-CAP,TN	47-10 F95E
C803	87-016-444-080	C-CAP,TN	47-10 F95E
C804	87-A10-034-080	C-CAP,TN	33-10 (B2)
L801	87-A50-174-080	C-COIL,	82UH 7004-2
L802	87-A50-010-080	C-COIL,	22UH LQH3C

FLEX C.B

88-HJ3-606-010 PWB,FLEX 18P

HEAD FLEX C.B

RPH 86-ZM2-323-010 HEAD ASSY,R2

DD CON FLEX C.B

88-HJ3-607-010 PWB,FLEX 4P

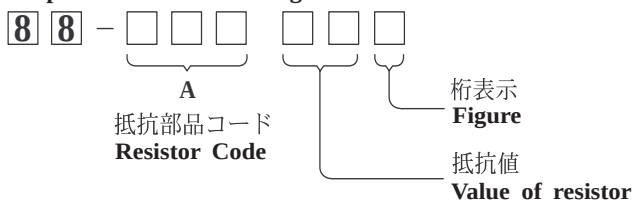
EH FLEX C.B

86-ZM2-326-010 HEAD ASSY,EH 6ZM-2 R2

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

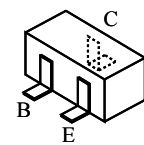


チップ抵抗

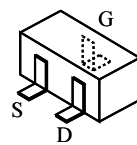
Chip resistor

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

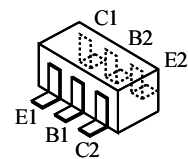
TRANSISTOR ILLUSTRATION



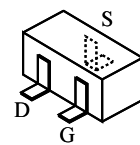
2SA1362	DTC114YU
2SC4116	DTC123JU
2SC4213	DTC144TU
2SC4215	RN2307
2SC4915	RN2306
2SD1328	



2SK880

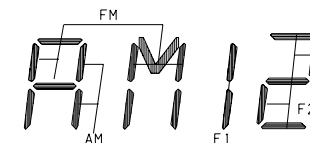


HN1C03FU	UMH3
RN2907	UMH9
RN4605	IMH3
RN4610	IMX1 HQQ
UMB3	UPA608T
RN4607	



2SK881

LCD DIAGRAM

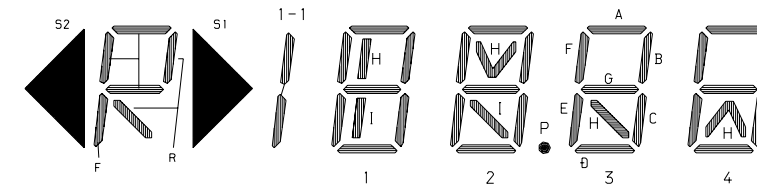


MONO

BL-ON
ON



PRE
PRESET



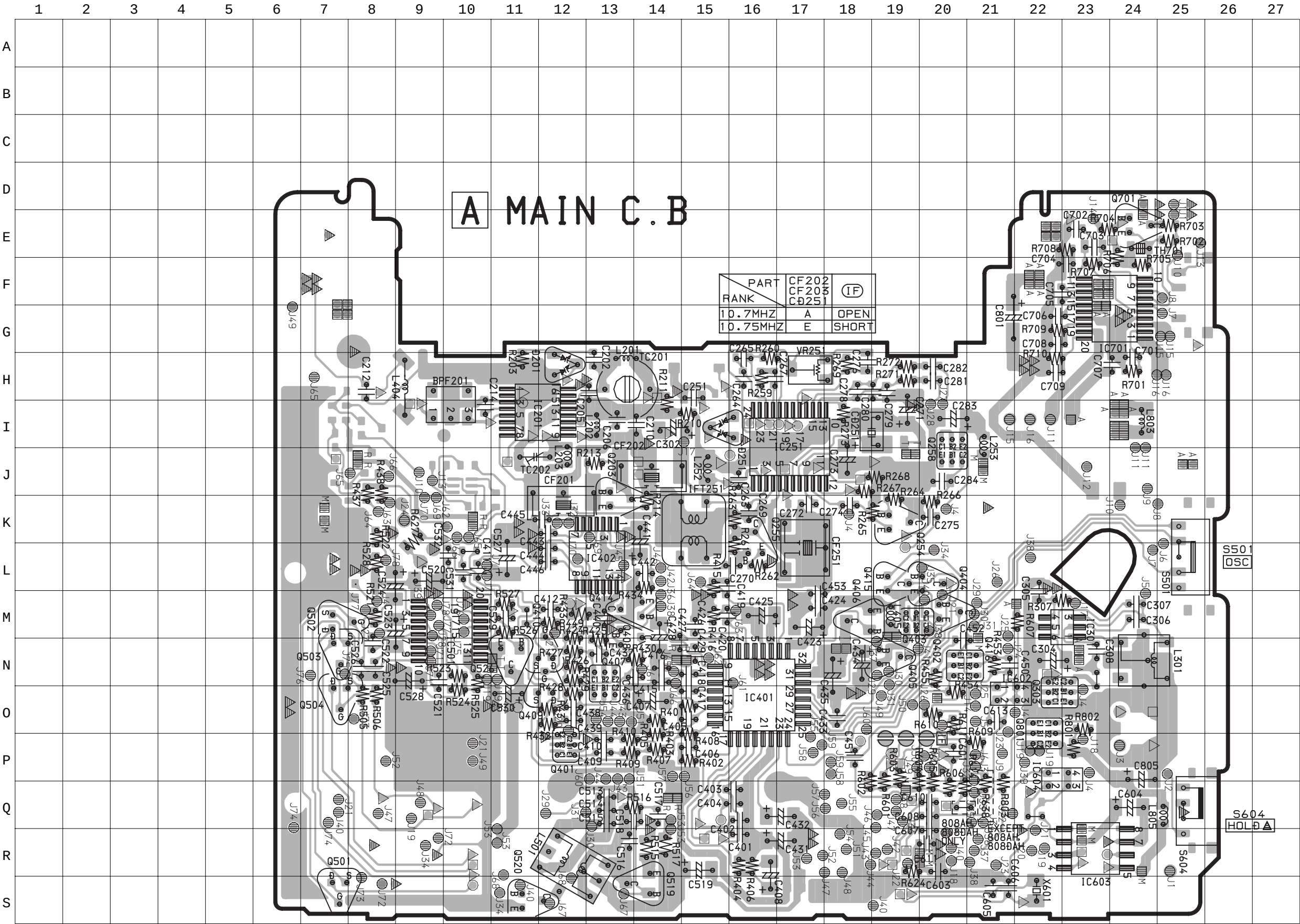
ON
D-ON

NOR HI

B-ON
ON



NO	COM1	COM2	COM3	COM4
1	2D	2I	2G	NOR
2	P	2C	2B	HI
3	3D	3H	—	—
4	3C	3G	3A	+
5	B-ON	4E	4F	5E
6	4D	4H	4G	4A
7	—	4C	4B	5D
8	—	—	COM3	—
9	—	COM2	—	—
10	COM1	—	—	—
11	5A	5B	5C	5G
12	—	3B	1-2	5F
13	—	3E	3F	PRE
14	—	—	—	COM4
15	—	—	COM3	—
16	—	COM2	—	—
17	COM1	—	—	—
18	MONO	BL-ON	RV2	RV1
19	—	COM2	—	—
20	—	—	COM3	—
21	—	—	—	COM4
22	1-1	1E	1F	1A
23	F	R	AM	F2
24	S2	S1	FM	F1
25	1D	1I	1G	1H
26	REC	1C	1B	2A
27	D-ON	2E	2F	2H



THIS WIRING DIAGRAM SHOWS A 4 LAYER BOARD. THE MARKS SHOWS THE CONNECTIONS BETWEEN THE USUAL DOUBLE FACE PATTERNS AND THE PATTERNS ON THE INTERNAL LAYERS THAT CANNOT BE SEEN.

THE PATTERN WITH MARK ARE CONNECTED TO GND PATTERNS.

THE PATTERN WITH MARK ARE CONNECTED TO JUMPER PATTERNS.

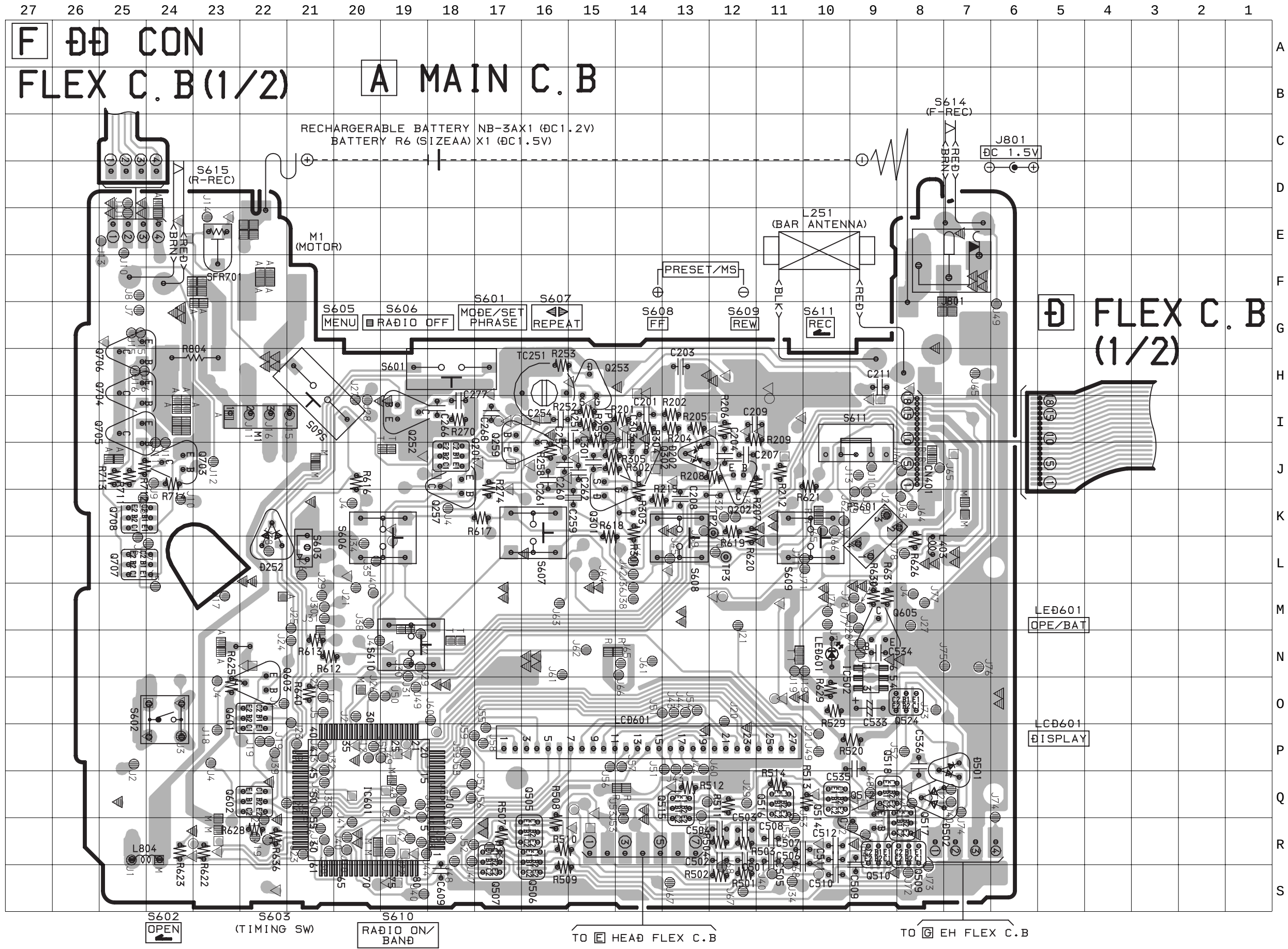
THE PATTERN WITH MARK ARE CONNECTED TO VCC PATTERNS.

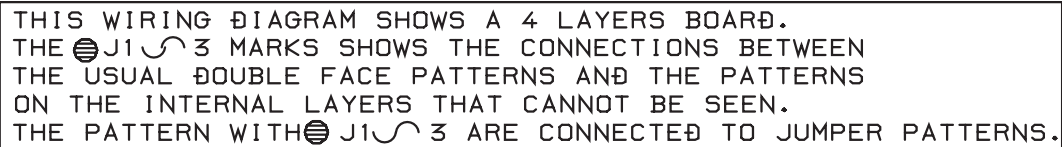
THE PATTERN WITH MARK ARE CONNECTED TO AU/TU DB-VCC PATTERNS.

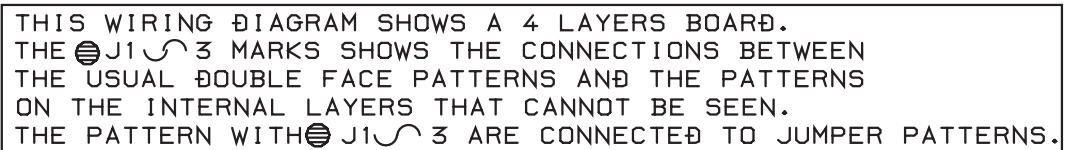
THE PATTERN WITH MARK ARE CONNECTED TO MCOM-VDD PATTERNS.

THE PATTERN WITH MARK ARE CONNECTED TO TU-VCC PATTERNS.

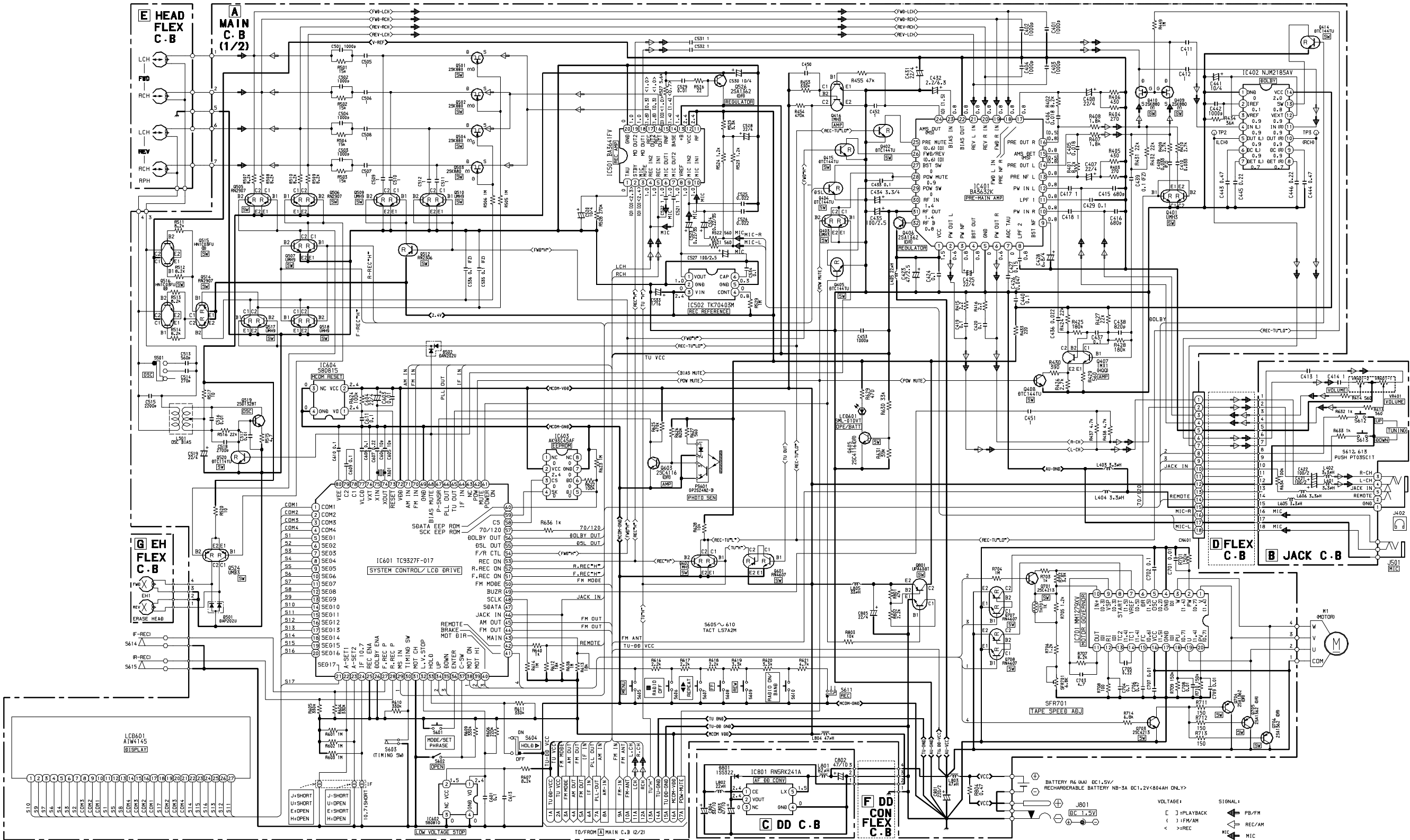
THE PATTERN WITH MARK ARE CONNECTED TO VREF PATTERNS.



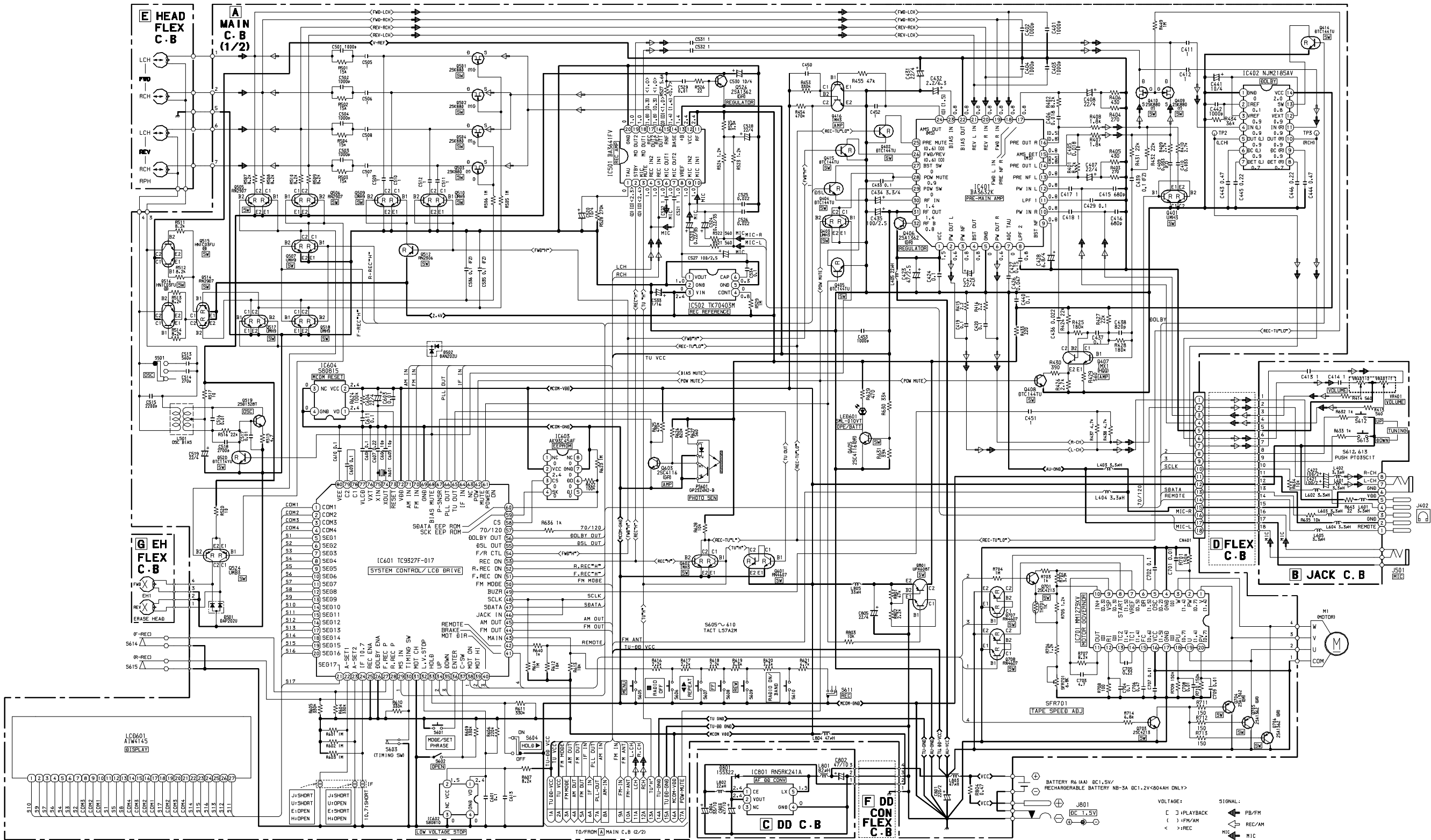


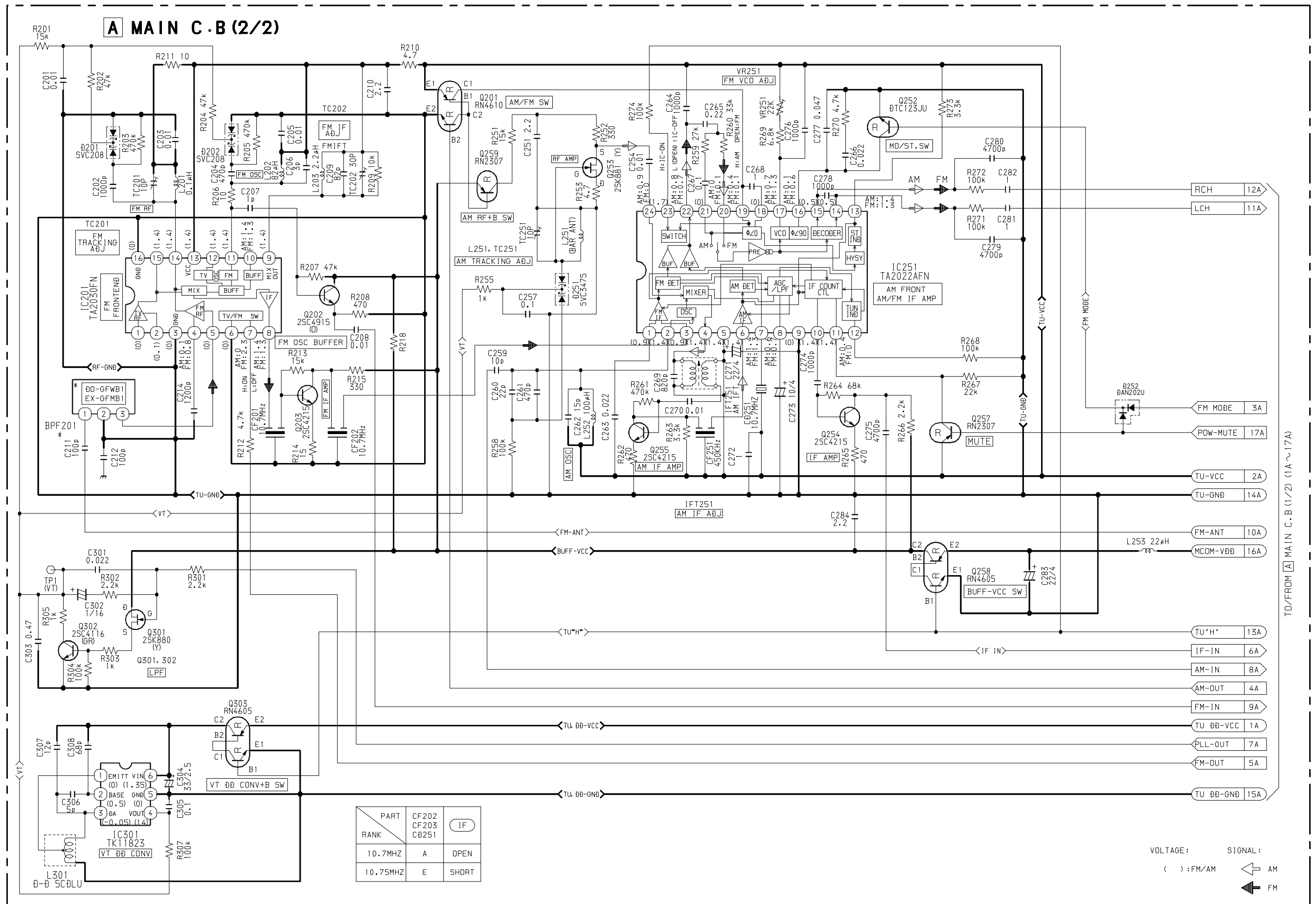


SCHEMATIC DIAGRAM – 1 (MAIN:1/2 / JACK / DD / FLEX) <HS-JX807 / 807D>



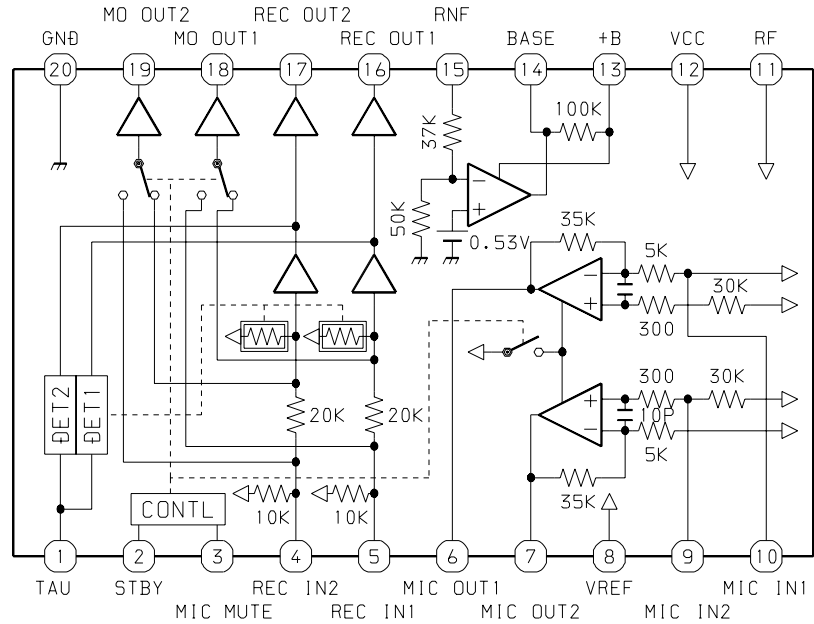
SCHEMATIC DIAGRAM – 2 (MAIN:1/2 / JACK / DD / FLEX) <HS-JX808 / 808D>



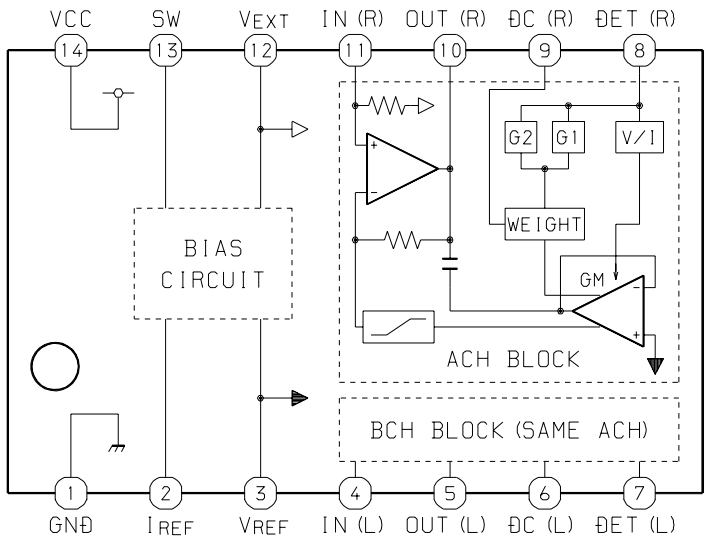


IC BLOCK DIAGRAM

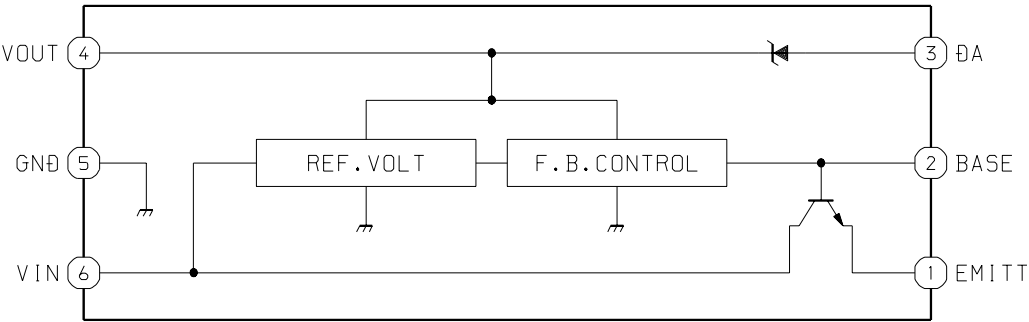
IC,BA3641FV



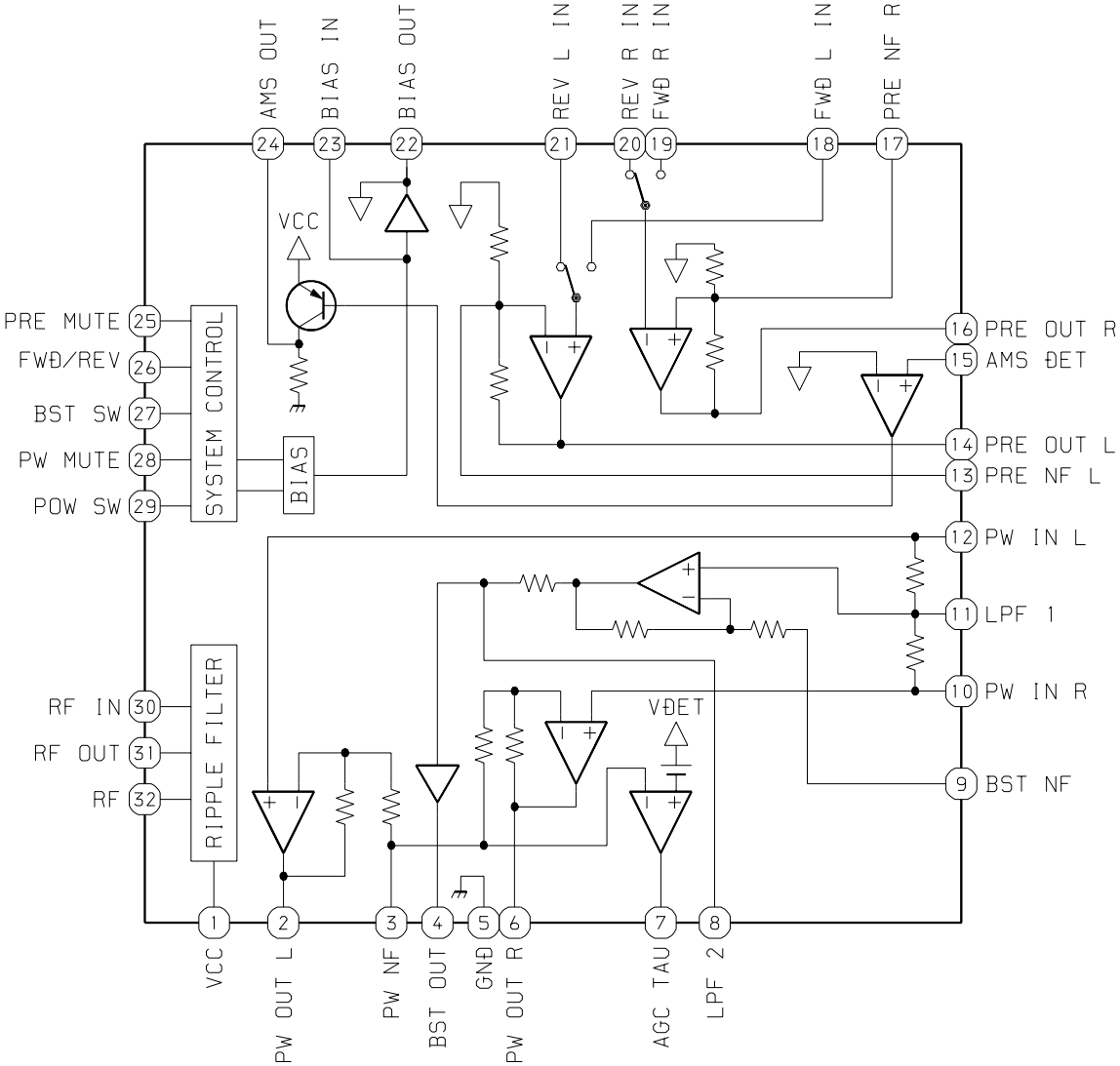
IC,MM1279XV



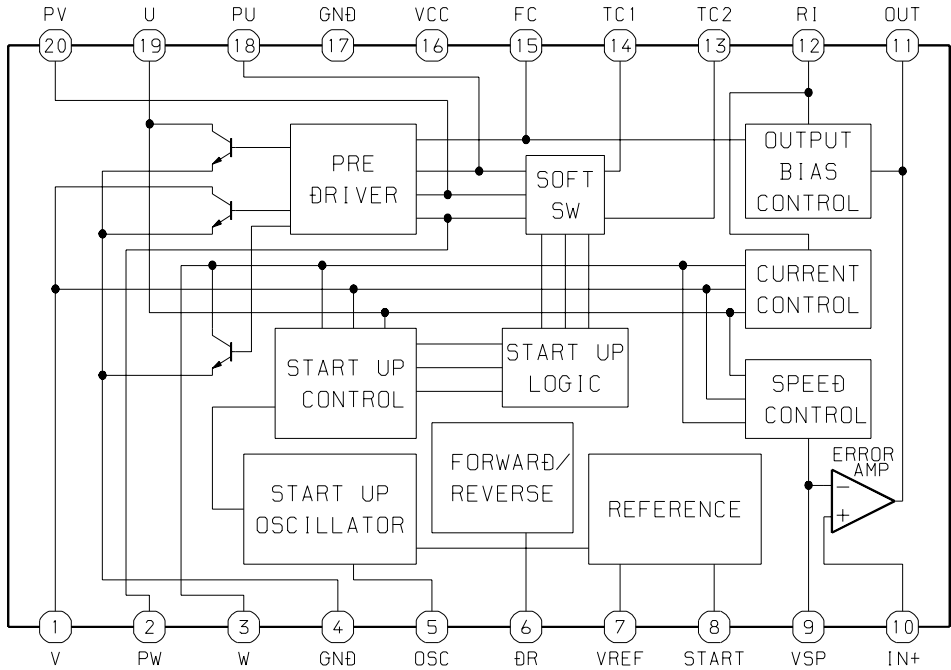
IC,TK11823



IC,BA3632K



IC,NJM2185V



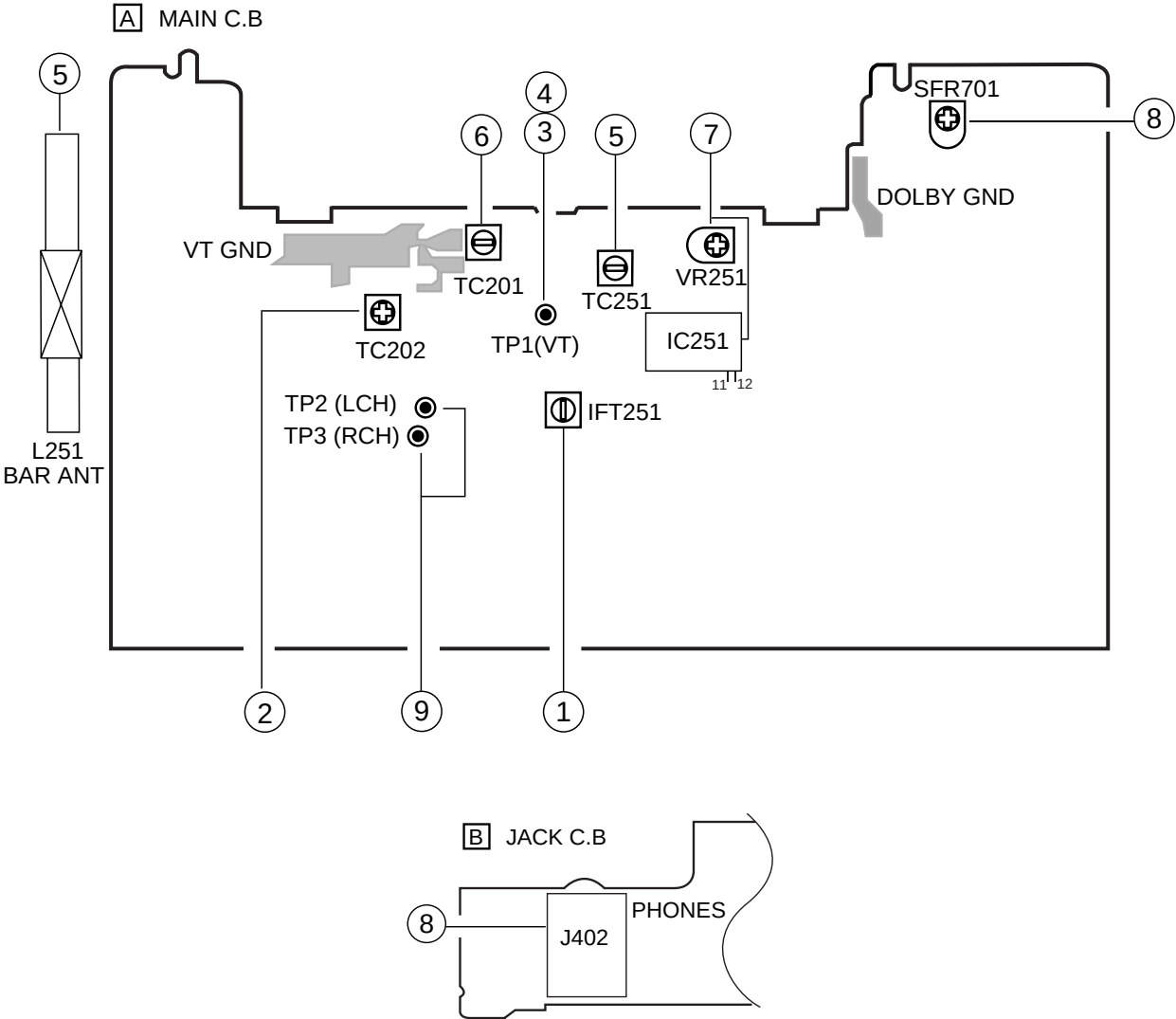
IC DESCRIPTION

IC, TC9327F-017

Pin No.	Pin Name	I/O	Description															
1 ~ 4	COM1~COM4	O	LCD common output 1~4.															
5 ~ 21	SEG1 ~ SEG17	O	LCD segment output 1~17.															
22,23	A-SET1,2	I	Input pin for switching J , U , E , H areas. <table><tr><td></td><td>J area</td><td>U area</td><td>E area</td><td>H area</td></tr><tr><td>A-SET1</td><td>L</td><td>L</td><td>H</td><td>H</td></tr><tr><td>A-SET2</td><td>L</td><td>H</td><td>L</td><td>H</td></tr></table>		J area	U area	E area	H area	A-SET1	L	L	H	H	A-SET2	L	H	L	H
				J area	U area	E area	H area											
			A-SET1	L	L	H	H											
A-SET2	L	H	L	H														
24	IF 10.7	I	"H": IF 10.75 MHz. "L": 10.7 MHz.															
25	REC ENA	I	Input pin for REC enable. "H": REC enable. "L": REC disable.															
26	DOLBY ENA	I	Input pin for DOLBY enable. "H": DOLBY enable. "L": DOLBY disable.															
27	F. REC P	I	"H": FWD REC shift disable. "L": enable.															
28	R. REC P	I	"H": REV REC shift disable. "L": enable.															
29	MS IN	I	Pin to input music sensor signal. "H": music exist. "L": blank.															
30	TIMING SW	I	Pin to input for mechanism operation detection.															
31	MOT CH	I	Pin to input for motor activation detection.															
32	L.V. STOP	I	Stop mechanism operation and hold key input when low voltage is detected.															
33	HOLD	I	"H": Hold OFF. "L": Hold ON.															
34	UP	I	Up key input pin. "H": Key ON. "L": Key OFF.															
35	DOWN	I	Down key input pin. "H": Key ON. "L": Key OFF.															
36	ENTER	I	Enter key input pin. "H": Key ON. "L": Key OFF.															
37	C-SW	I	Input pin for detecting the presence of cassette. "H": C-SW OFF. "L": C-SW ON.															
38	MOT ON	O	Pin to output motor control. "H": Motor ON. "L": Motor OFF.															
39	MOT HI	O	Pin to control motor. "H": Motor high speed. "L": Motor normal speed.															
40	MOT DIR	O	Pin to output for motor rotation direction. "H": Clockwise. "L": Counter Clockwise.															
41	BRAKE	O	Pin to output brake control for motor. "H": Brake ON. "L": Brake OFF.															
42	REMOTE	I	Remote control key input pin.															
43	MAIN	I	Main unit key input pin.															
44	FM OUT	O	Pin to output for FM mode. "H": FM mode. "L" except FM mode.															
45	AM OUT	O	Pin to output for AM mode. "H": AM(MW) mode. "L" except AM(MW) mode.															
46	JACK IN	I	This is a pin where HP plug input is detected. "H": no plug. "L" plug exist.															
47	SDATA	O	Pin to output data for remote controller display.															
48	SCLK	I	Pin to input serial clock.															
49	BUZR	O	Output buzzer.															
50	FM MODE	O	Pin to output FM MONO/ST switching.															
51	F. REC ON	O	"H": FWD REC mode. "L": Other mode.															
52	R.REC ON	O	"H": REV REC mode. "L": Other mode.															
53	REC ON	O	"H": REC mode. "L": Other mode.															
54	F/R CTL	O	Output pin for tape run direction. "H": FWD direction. "L": REV direction.															
55	DSL OUT	O	Pin to output DSL ON/OFF control.															

Pin No.	Pin Name	I/O	Description
56	DOLBY OUT	O	DOLBY ON/OFF control output pin.
57	70/120	O	Pin to output normal tape and metal tape switching.
58	CS	O	Pin to control READ,WRITE of EEPROM.
59	SCK EEPROM	O	Pin to output serial clock of EEPROM.
60	SDATA EEPROM	I/O	Pin to input/output data of EEPROM.
61	POWER ON	O	"H": POWER ON. "L": POWER OFF.
62	POW MUTE	O	Pin to output muting. "H": MUTE ON. "L": MUTE OFF.
63	NC	–	Not connected.
64	IF IN	I	Pin to input IF signal.
65	TU OUT	O	Output "H". "H": TU mode. "L": except TU mode.
66	PLL OUT	O	Output phase comparison instrument.
67	P-SNSR	I	Pin to input photo sensor waveform output.
68	BIAS MUTE	O	Pin to output mute when REC. "H": MUTE ON. "L": MUTE OFF.
69	GND	–	GND.
70	FM IN	I	Input FM programmable counter.
71	AM IN	I	Input AM programmable counter.
72	VDD	–	Pin to apply voltage.
73	$\overline{\text{RESET}}$	I	Pin to input system reset signal.
74	XOUT	O	Crystal oscillation pin.
75	XIN	I	Crystal oscillation pin.
76	VXT	–	Power supply pin for crystal oscillation.
77	VLCD	–	Reference voltage pin for LCD drive.
78	C1	–	Reference voltage pin for LCD drive.
79	C2	–	Reference voltage pin for LCD drive.
80	VEE	–	1.5V constant voltage power supply pin for LCD drive.

ADJUSTMENT



<TUNER SECTION>

- | | |
|---|--|
| 1. AM IF Adjustment
IFT251 450kHz | 7. FM VCO Adjustment
Settings : • Adjustment location : VR251
Method : Connect a frequency counter to pin 11 and 12 of IC251, adjust VR251 for VCO to 19kHz $\pm$ 100Hz. |
| 2. FM IF Adjustment
TC202 10.7MHz | |
| 3. AM VT Check
Settings : • Test point : TP1 (VT)
Method : Set to AM 531kHz<AH>, 530kHz<AU> and check that the test point voltage is 1.3V $\pm$ 0.3V. Then set to AM 1602kHz<AH>, 1710kHz<AU> and check that the test point voltage is within 6.7 ~ 8.2V<AH>, 6.5 ~ 8.0V<AU>. | <TAPE PLAYER SECTION> |
| 4. FM VT Check
Settings : • Test point : TP1 (VT)
Method : Set to FM 87.5MHz and check that the test point voltage is 3.6V $\pm$ 0.4V. Then set to FM 108.0MHz<AH>, 108.1MHz<AU> and check that the test point voltage is within 6.8 ~ 9.0V. | 8. Tape Speed Adjustment
Settings : • Test tape : TTA-100
• Test point : PHONES JACK (J402)
• Volume : MAX.
• Adjustment location : SFR701
Method : Play back the test tape and adjust SFR701 for 3015Hz $\pm$ 10Hz(FWD) and 3015Hz $\pm$ 45Hz (REV). |
| 5. AM Tracking Adjustment
L251 630kHz
TC251 1440kHz | 9. Dolby Level Check
Settings : • Test tape : TTA-200
• Test point : TP2(Lch), TP3(Rch)
• Volume : MIN.
• DOLBY SW : OFF
Method : Connect an electrolytic capacitor (10uF/16V) to measured instrument and test point, check the voltage for 31.6mV $\pm$ 1dB. |
| 6. FM Tracking Adjustment
TC201 87.5MHz | |

PRACTICAL SERVICE FIGURE

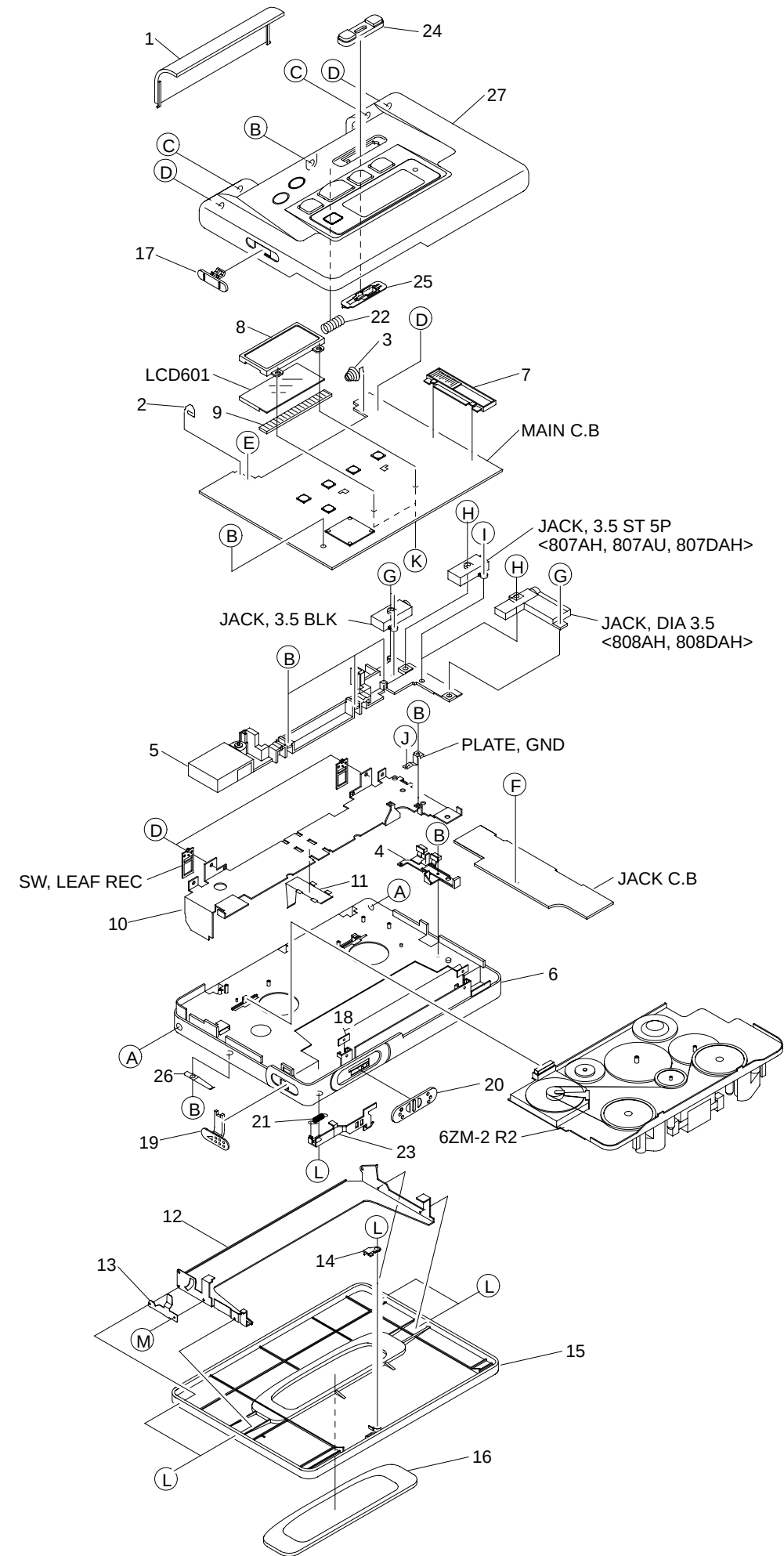
<TUNER SECTION>

- <FM SECTION>
Sensitivity : Less than 17dB
[at 87.5 / 98.5 / 108.0MHz]
Distortion : Less than 3% (at input 54dB)
Less than 5% (at input 110dB)
[at 98.5MHz]
Stereo separation : More than 16dB
[at 98.5MHz]
Auto stop level : 20dB $\pm$ 6dB
[at 98.5MHz]
Intermediate frequency : 10.7 / 10.75MHz $\pm$ 0.05MHz
- <AM SECTION>
Sensitivity : Less than 58dB
[at 630kHz]
Less than 56dB
[at 999 / 1440kHz]<AH>
[at 1000 / 1440kHz]<AU>
S/N ratio : More than 26dB
(Input 74dB)
[at 630kHz]
More than 27dB
[at 999 / 1440kHz]<AH>
[at 1000 / 1440kHz]<AU>
Distortion : Less than 5% (at input 74dB)
Less than 10% (at input 120dB)
[at 999 / 1440kHz]<AH>
[at 1000 / 1440kHz]<AU>
Auto stop level : 60dB $\pm$ 7dB
[at 999 / 1440kHz]<AH>
[at 1000 / 1440kHz]<AU>
Intermediate frequency : 450kHz $\pm$ 3kHz

<TAPE SECTION>

- | | |
|----------------------|---|
| Tape speed : | 3015Hz $\pm$ 50Hz |
| Wow & flutter : | Less than 0.52% (RMS) |
| Take-up torque : | 20 ~ 30g-cm (FWD, REV) |
| F.F torque : | 70 ~ 150g-cm |
| Rew torque : | 70 ~ 150g-cm |
| Back tension : | 1.0 ~ 3.0g-cm (FWD, REV) |
| S/N ratio : | More than 43dB (PB, DC)
More than 20dB (REC/PB, DC) |
| Distortion : | Less than 3.0% (PB, DC)
Less than 7.0% (REC/PB, DC) |
| Noise level : | Less than 3.0mV (PB, DC, MAX.)
Less than 0.3mV (PB, DC, MIN.) |
| Erasing Ratio: | More than 45dB |
| Dolby level : | 31.6mV $\pm$ 1dB |
| Dolby NR effect : | More than 8.5dB (B-TYPE) |
| Frequency response : | 63Hz +2/-6dB ~ 8kHz $\pm$ 4dB
(NORMAL, PB)
63Hz +2/-6dB ~ 10kHz $\pm$ 4dB
(CRO2, PB)
125Hz -4/-12dB ~ 8kHz +3/-12dB
(REC/PB) |
| Test tape : | MTT-15070
TTA-100
TTA-200
TTA-210
TTA-320(NORMAL)
TTA-310(CRO2)
TTA-601
TTA-610 |

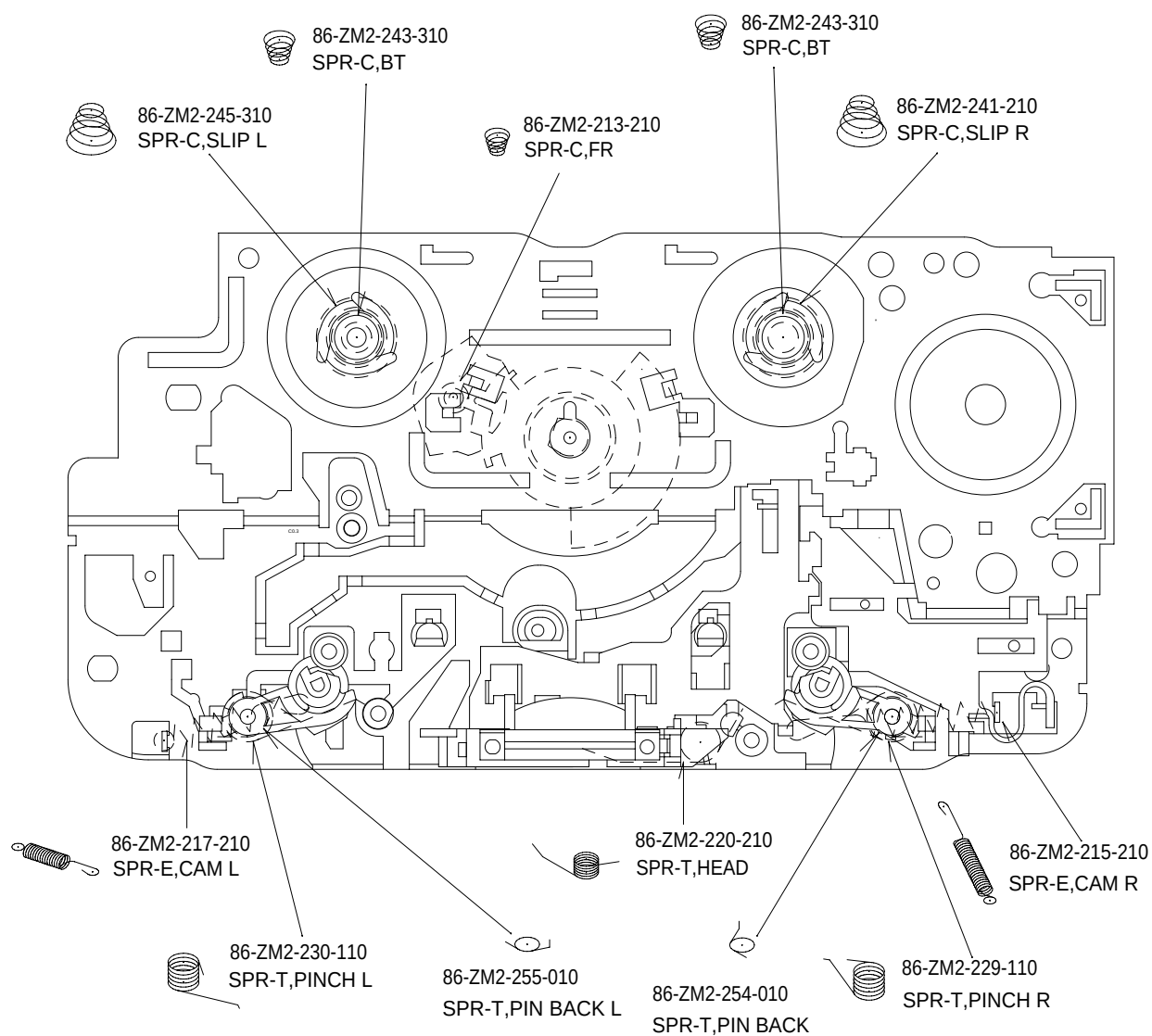
MECHANICAL EXPLODED VIEW 1/1



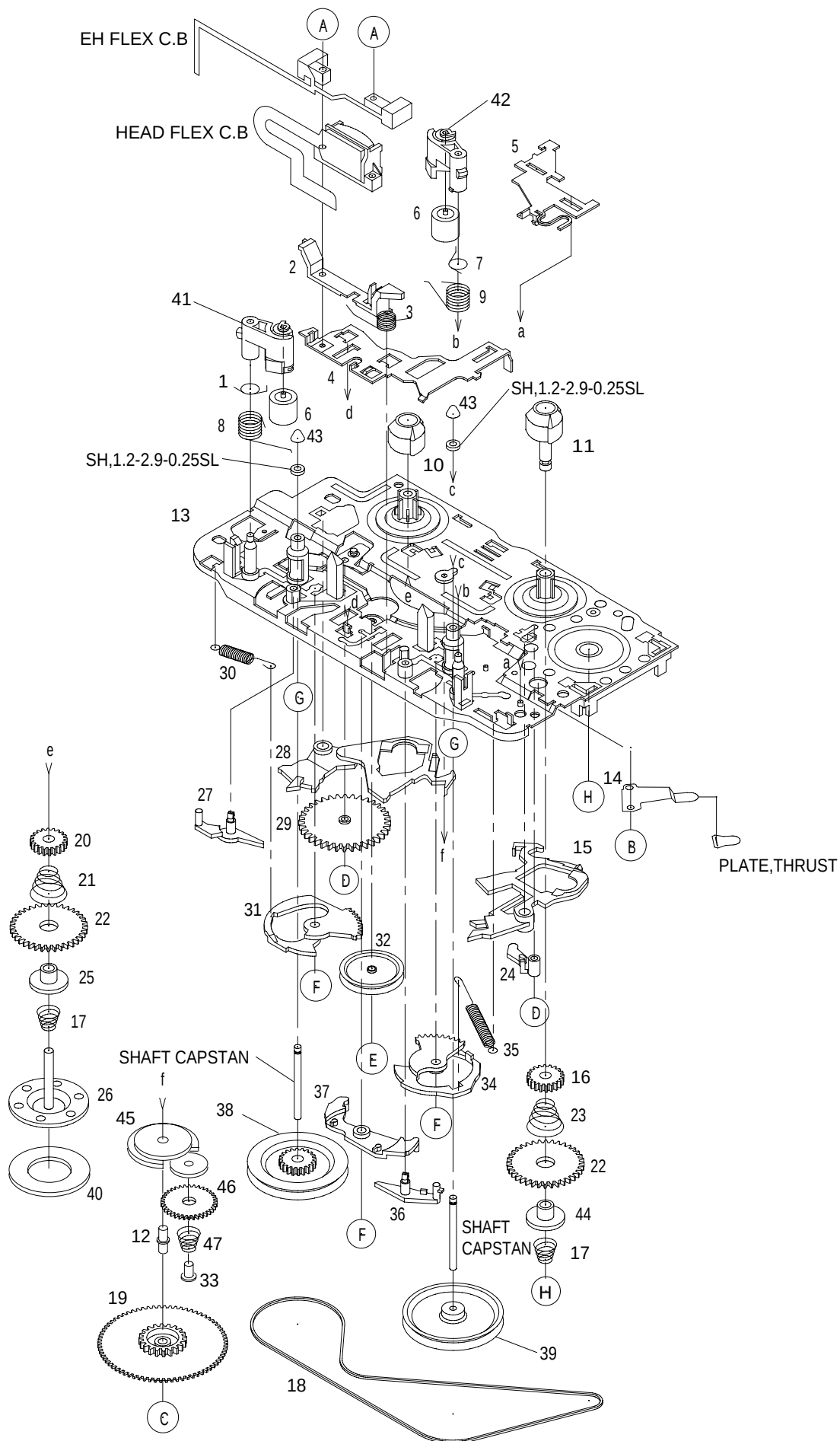
MECHANICAL PARTS LIST 1 /

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-HJ3-006-010		LID, BAT
2	88-HJ3-211-010		TERMINAL, BAT+
3	88-HJ3-212-010		TERMINAL, BAT-
4	88-HJ3-015-010		KEY, TUNING
5	88-HJ3-210-010		HLD, BAT
6	88-HJ3-004-010		FRAME, CENTER<808AH, 808DAH>
6	88-HJ3-020-010		FRAME, CENTER LOW<807AH, 807AU, 807DAH>
7	88-HJ3-204-010		HLD, ANTENNA
8	88-HR4-201-010		HLD, LCD
9	88-HR4-202-010		CONN, RUBBER LCD
10	88-HJ3-206-010		PLATE, HINGE
11	88-HJ3-205-010		SPR-P, CASS
12	88-HJ3-202-010		HLD, CASS
13	88-HJ3-203-010		SPR-P, CLICK
14	88-HJ3-201-010		STOPPER, CASS
15	88-HJ3-002-010		LID, CASS S<808AH, 808DAH>
15	88-HJ3-021-010		LID, CASS S JX807<807AH, 807AU, 807DAH>
16	88-HJ3-007-010		WINDOW, CASS
17	88-HJ3-010-010		KNOB, SL SIDE
18	88-HJ3-208-010		NUT, FRONT
19	88-HJ3-009-010		KNOB, SL HOLD
20	88-HJ3-008-010		KNOB, SL OPEN
21	87-HR5-225-010		SPR-E, EJECT N
22	82-HK3-206-110		C-SP, LOCK
23	88-HJ3-207-010		PLATE, LOCK
24	88-HJ3-011-010		KNOB, SL REC
25	87-HR6-219-010		SPR-P, POP UP
26	87-HR6-219-010		SPR-P, POP UP
27	09-028-360-010		CABI, REAR ASSY<808AH, 808DAH>
27	09-028-359-010		CABI, REAR ASSY<807AH, 807AU, 807DAH>
A	88-HJ3-220-010		S-SCREW, +1.4-0.7-1 CR NL
B	87-067-384-010		SCREWVT1.4-3.5HL
C	86-HK4-224-010		S-SCREW, SERR+1.4-3.5 CR L
D	87-078-153-010		SCRW, 1.4-2.5 CR
E	87-067-534-010		SCREW, VT-1.4-6
F	87-078-113-010		S-SCRW, +1.4-3.5 HL(B)
G	87-078-185-010		SCRW-SR, 1.4-4.5 BL
H	87-262-512-310		V+1.4-5.5
I	87-078-218-010		SCRW-SERR, M1.4-5.3<807AH, 807AU, 807DAH>
J	88-HK5-228-010		S-SCREW, +1.4-2 CR
K	88-HR4-222-010		S-SCREW, +1.4-1.6 CR (0.2)
L	86-HJ3-222-010		S-SCREW, SERR+1.4-2 CR L
M	87-078-216-010		SCRW-SR, 1.4-1.4B LS
N	88-HJ3-219-010		S-SCREW, +1.4-2.5 B HL(0.3)
O	87-HK5-235-010		S-SCREW, 1.4-0.6-2.5

SPRING APPLICATION POSITION



TAPE MECHANISM EXPLODED VIEW 1/1



TAPE MECHANISM PARTS LIST 1/1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM2-255-010		SPR-T, PIN BACK L	31	86-ZM2-216-410		LEVER, CAM L
2	86-ZM2-286-210		GUIDE, TAPE REC	32	86-ZM2-276-010		PULLEY, COUPLER
3	86-ZM2-220-210		SPR-T, HEAD	33	86-ZM2-212-210		SHAFT, FR
4	86-ZM2-285-110		LEVER, HEAD REC	34	86-ZM2-214-410		LEVER, CAM R
5	86-ZM2-247-210		LEVER, MS	35	86-ZM2-215-210		SPR-E, CAM R
6	86-ZM2-226-110		ROLLER ASSY, PINCH	36	86-ZM2-222-210		LEVER, PIN UP R
7	86-ZM2-254-010		SPR-T, PIN BACK	37	86-ZM2-218-110		LEVER, HEAD UP
8	86-ZM2-230-110		SPR-T, PINCH L	38	86-ZM2-205-410		FLY-WHL, L
9	86-ZM2-229-110		SPR-T, PINCH R	39	86-ZM2-330-010		FLY-WHL, R2
10	86-ZM2-240-110		CAP, REEL	40	86-ZM2-282-010		SH, AUTO 2
11	86-ZM2-234-110		SHAFT, REEL R	41	86-ZM2-225-310		ARM, PINCH L
12	86-ZM2-251-210		SHAFT, GEAR B	42	86-ZM2-224-210		ARM, PINCH R
13	86-ZM2-308-310		CHAS ASSY, OUT-SERT R	43	86-ZM2-283-010		CAP, SHAFT
14	86-ZS2-312-010		SPR-P, 6A-MOT	44	86-ZM2-275-110		CAP, SLIP R
15	86-ZM2-232-210		LEVER, REEL R	45	86-ZM2-210-610		LEVER, FR
16	86-ZM2-258-610		GEAR, REW	46	86-ZM2-211-210		GEAR, FR
17	86-ZM2-243-310		SPR-C, BT	47	86-ZM2-213-210		SPR-C, FR
18	86-ZM2-329-110		BELT, P5	A	86-ZM2-296-110		S-SCREW, +1.4-8.45
19	86-ZM2-209-110		GEAR, B	B	87-067-430-010		VT1.4-5 BLK
20	86-ZM2-238-610		GEAR, FF	C	87-067-516-010		PW, 3-1.58-0.25, SLIT
21	86-ZM2-245-310		SPR-C, SLIP L	D	87-067-860-010		PW, 3-0.95-0.4
22	86-ZM2-237-010		GEAR, PLAY	E	86-ZM2-277-010		W-P, 0.8-3-0.2 SLT
23	86-ZM2-241-210		SPR-C, SLIP R	F	86-ZM2-319-010		W-L, 0.95-3-0.35
24	86-ZM2-272-010		LEVER, SW P 8.4	G	86-ZM2-313-010		W-P, 1.76-4-0.13
25	86-ZM2-236-210		CAP, SLIP	H	86-ZM2-278-010		W-P, 1.36-4-0.2 SLT
26	86-ZM2-235-210		SHAFT, REEL L				
27	86-ZM2-223-210		LEVER, PIN UP L				
28	86-ZM2-233-310		LEVER, REEL L				
29	86-ZM2-208-210		GEAR, A				
30	86-ZM2-217-210		SPR-E, CAM L				

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サービス技術ニュース	
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