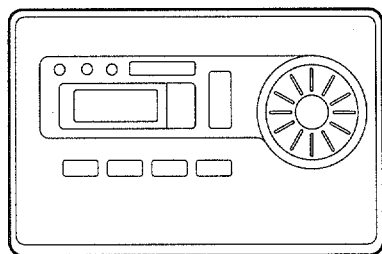


aiwa



HS-JX869



STEREO RADIO CASSETTE RECORDER

• BASIC TAPE MECHANISM: 7ZM-6 R1N

• TYPE: YHS,AH,DAH

SPECIFICATIONS

Frequency range:	Reception area "USA" AM: 530 – 1,710 kHz (10 kHz steps) FM1, FM2: 87.5 – 108.1 MHz (200 kHz steps) Reception area "JPN" AM: 531 – 1,629 kHz (9 kHz steps) FM1, FM2: 76 – 108 MHz (100 kHz steps) Reception area "EU" AM: 531 – 1,602 kHz (9 kHz steps) FM1, FM2: 87.5 – 108 MHz (50 kHz steps)
Maximum output:	4 mW + 4 mW (EIAJ 32 ohms)
Power source:	DC 1.2V using supplied rechargeable battery NB-5G DC 1.5V using a R6 (size AA) dry cell battery AC house current using the optional AC adaptor
Maximum dimensions (W x H x D):	109.1 x 79.5 x 25.1 mm (4 ³ / ₈ x 3 ¹ / ₄ x 1 in)
Weight:	Approx. 164 g (5.7 oz) excluding batteries
<battery charger RB-107>	
Rated voltage:	AC 115 V/230 V, 50/60 Hz

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

CAUTIONS WHEN SERVICING

When the main circuit board is opened during servicing, operation cannot be checked because the motor terminals, etc. are soldered directly to the board.

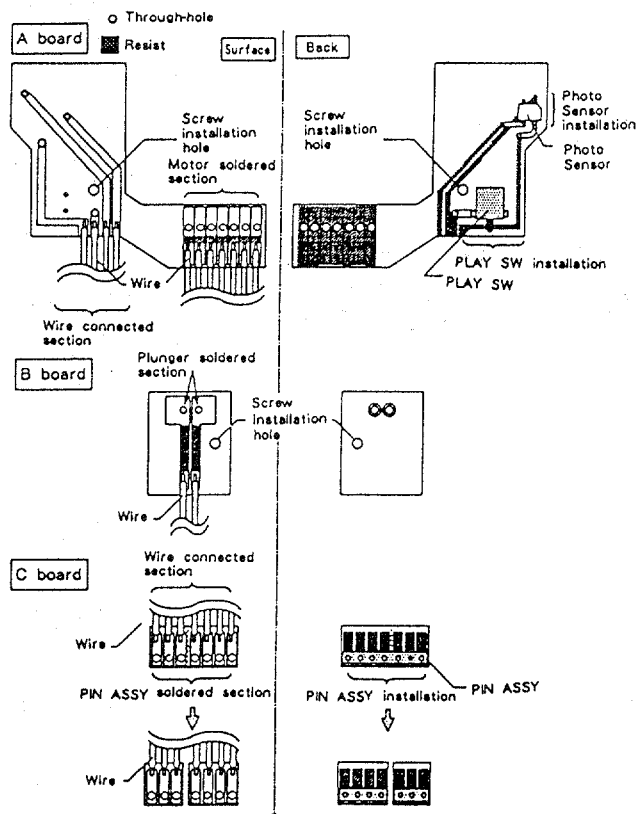
Use a jig (for the 7ZM-6 to check operation with the main circuit board open).

Part Description : 4ZM-1 JIG KIT, Part No. 09-001-323-010

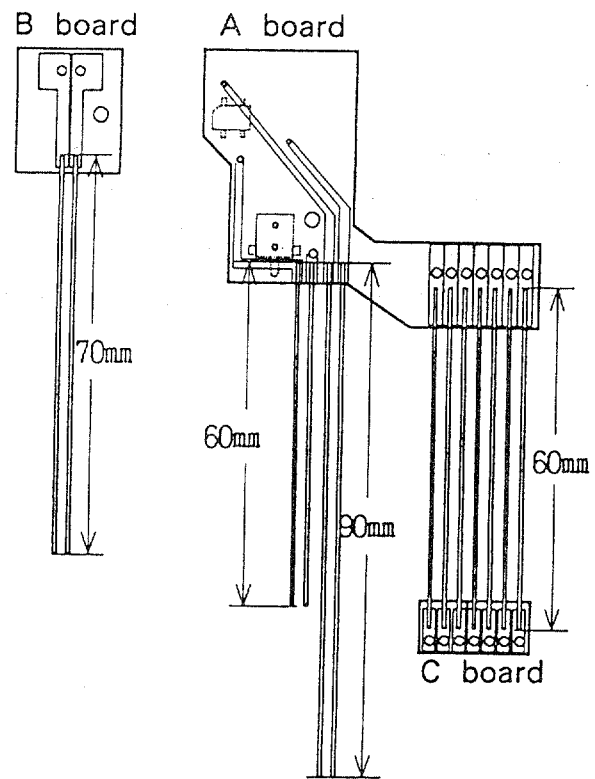
1. Assembling the Jig

Install the jig, referring to the following diagrams.

- 1) Divide the 6-pin flat cable to create three 2-pin wires.
- 2) Solder the C-SW PUSH and P-SNSR to the A board.
- 3) Solder the 7-pin flat cable and two 2-pin wires to the A board.
- 4) Solder the 2-pin wire to the B board.
- 5) Attach the PIN ASSY to the C board and solder it to the other end of the 7-pin flat cable which has been soldered to the A board.



Details of Jig and Assembly



Jig Complete View

2. Attaching the Jig

A board

- Fix the A board to the mechanism using the main board holding screws.
- Solder the motor terminals.
- Solder wires ① and ② to the PHOTO SENSOR.
- Solder wires ③ and ④ to the PLAY SW.

B board

- Fix the B board to the mechanism using the main board holding screws.
- Solder the plunger terminals.
- Solder wires ⑤ and ⑥ to plunger land on the MAIN board.

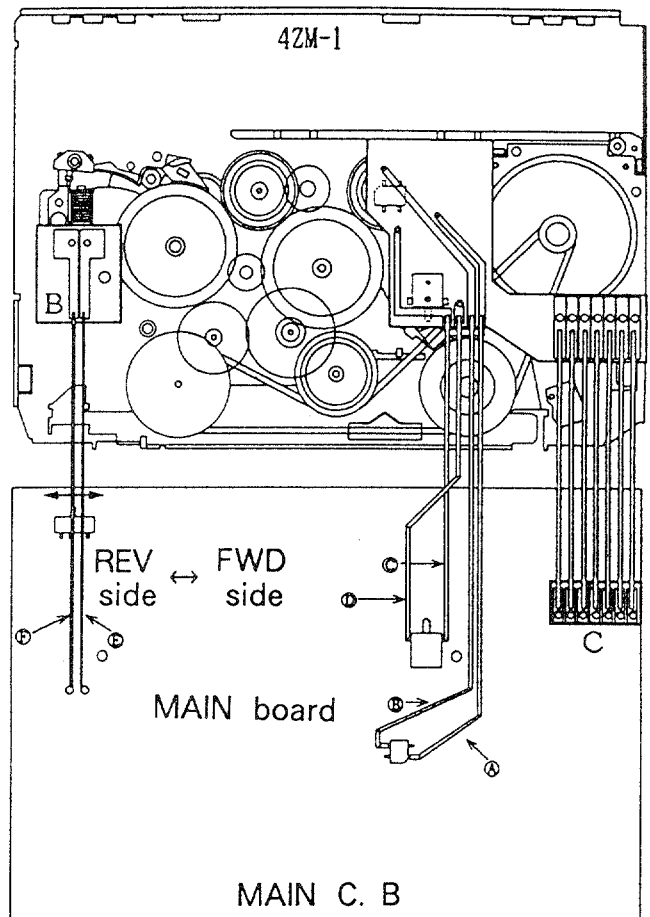
C board

- Solder the PIN ASSY on the C board to motor land on the MAIN board.

3. Using the Jig

When the circuit board is opened, the operation switches on the board are at the back. To increase working efficiency, use the remote control to operate the unit.

- 1) Connect the remote control to unit.
- 2) Set the remote switch to ON.
- 3) Short the C-SW terminal.
- 4) Be careful that no external light enters the photosensor on the MAIN board to prevent a malfunction.
- 5) Switch the F/R SW to match the running of tape.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC	87-A20-745-040	C-IC,TA2030FN		C118	87-012-274-080	C-CAP,U 1000P-50B	
	87-A20-076-040	C-IC,TA2022AFN		C119	87-A10-057-080	C-CAP,TN 100-4 F95 E	
	87-001-516-080	C-IC,TK11821		C120	87-012-286-080	C-CAP,U 0.01-25	
	87-HJ2-605-010	C-IC,TC9327F-012		C126	87-012-270-080	C-CAP,U 470P-50	
	87-A20-860-040	C-IC,AK93C55AV		C202	87-A10-368-080	C-CAP,S 2.2-10 Z F	
	87-A20-088-040	C-IC,PST9017		C203	87-012-270-080	C-CAP,U 470P-50	
	87-A20-441-010	C-IC,BA3632K		C204	87-012-286-080	C-CAP,U 0.01-25	
	87-A20-818-040	C-IC,NJM2185AV		C205	87-012-274-080	C-CAP,U 1000P-50B	
	87-A20-580-040	C-IC,BA3641FV		C206	87-A10-353-080	C-CAP,U 0.22-10KB	
	87-A20-878-040	C-IC,TK70403M		C207	87-010-787-080	C-CAP,U 0.022-25	
	87-070-450-040	C-IC,MM1209XWBE		C208	87-010-831-080	C-CAP,U 0.1-16F	
	87-002-406-080	C-IC,TPIC326ADB		C209	87-A10-249-080	C-CAP,U 1-10 ZF	
	87-A20-603-040	C-IC,RN5RK241A		C210	87-012-349-080	C-CAP,S 1000P-50 CH	
				C211	87-010-831-080	C-CAP,U 0.1-16F	
				C212	87-010-829-080	C-CAP,U 0.047-16	
				C213	87-A10-249-080	C-CAP,U 1-10 ZF	
				C214	87-A10-249-080	C-CAP,U 1-10 ZF	
				C215	87-012-284-080	C-CAP,U 6800P-50	
TRANSISTOR	87-026-481-080	C-TR,RN4607		C216	87-012-284-080	C-CAP,U 6800P-50	
	89-342-153-080	C-TR,2SC4215		C217	87-012-282-080	C-CAP,U 4700P-50	
	87-026-648-080	C-TR,UPA608T		C218	87-012-274-080	C-CAP,U 1000P-50B	
	87-026-343-080	C-TR,DTC123JU		C219	87-A10-048-080	C-CAP,TN 22-4 F95 S	
	87-026-425-080	C-TR,RN2307		C220	87-A10-249-080	C-CAP,U 1-10 ZF	
	87-A30-188-080	C-TR,2SC49150		C221	87-012-286-080	C-CAP,U 0.01-25	
	89-508-804-080	C-PET,2SK880Y		C222	87-012-245-080	C-CAP,U 15P-50 UJ	
	89-341-165-080	C-TR,2SC4116GR		C223	87-012-140-080	C-CAP,470P-50 J CH	
	87-026-417-080	C-TR,RN1310		C224	87-012-188-080	C-CAP,U 47P-50 CH	
	87-026-461-080	C-TR,IMH3		C225	87-012-172-080	C-CAP,U 10P-50 D CH	
	87-026-337-080	C-TR,DTA144TU		C226	87-A10-025-080	C-CAP,U 0.1-16F	
	87-A30-148-080	C-TR,2SC4738GR		C227	87-012-282-080	C-CAP,U 4700P-50	
	87-026-585-080	C-TR,IMX1 HQQ		C228	87-010-787-080	C-CAP,U 0.022-25	
	87-026-352-080	C-TR,DTC144TU		C229	87-A10-796-080	C-CAP,TN 10-4 F95 Q	
	89-113-625-080	C-TR,2SA1362GR		C230	87-012-273-080	C-CAP,U 820P-50 B	
	87-026-358-080	C-TR,IMD6		C231	87-012-274-080	C-CAP,U 1000P-50B	
	87-026-479-080	C-TR,RN2610		C232	87-012-167-080	C-CAP,U 5P-50 CH	
	87-026-470-080	C-TR,HN1C03F		C233	87-012-282-080	C-CAP,U 4700P-50	
	89-413-284-080	C-TR,2SD1328T		C234	87-012-286-080	C-CAP,U 0.01-25	
	87-026-346-080	C-TR,DITC114YU		C301	87-010-787-080	C-CAP,U 0.022-25	
	87-026-626-080	C-TR,IMB4		C302	87-010-505-080	C-CAP,TN 1-16 ECS	
	87-026-604-080	C-TR,IMH9		C303	87-012-195-080	C-CAP,U 100P-50CH	
	89-342-132-080	C-TR,2SC4213		C304	87-A10-251-080	C-CAP,TN 33-2.5 A	
	87-A30-025-070	C-TR,2SD1935-6		C305	87-A10-249-080	C-CAP,U 1-10 ZF	
	89-115-884-080	C-TR,2SA1588Y		C306	87-012-188-080	C-CAP,U 47P-50 CH	
	87-A30-183-040	C-TR,2SD1628G		C307	87-012-172-080	C-CAP,U 10P-50 D CH	
	87-026-349-080	C-TR,DTC143TU		C308	87-010-831-080	C-CAP,U 0.1-16F	
DIODE	87-A40-461-070	C-VARI-CAP,KV1460		C309	87-010-505-080	C-CAP,TN 1-16 ECS	
	87-A40-462-040	C-VARI-CAP,SVC347		C401	87-A10-263-080	C-CAP,U 0.1-16ZF	
	87-017-367-080	C-DIODE,DAP 202U		C402	87-A10-263-080	C-CAP,U 0.1-16ZF	
	87-017-779-080	C-DIODE,1SS355		C403	87-A10-263-080	C-CAP,U 0.1-16ZF	
	87-A40-427-080	C-DIODE,RB051L-40		C404	87-A10-025-080	C-CAP,U 0.22-16Z F	
	87-A40-426-080	C-ZENER,UDZ2.7B		C405	87-012-172-080	C-CAP,U 10P-50 D CH	
	87-001-533-080	C-DIODE,1SS322		C406	87-012-172-080	C-CAP,U 10P-50 D CH	
				C407	87-A10-263-080	C-CAP,U 0.1-16ZF	
				C408	87-A10-418-080	C-CAP,TN 22-4 A TCF	
				C409	87-012-286-080	C-CAP,U 0.01-25	
				C410	87-012-286-080	C-CAP,U 0.01-25 K B	
				C501	87-012-274-080	C-CAP,U 1000P-50 B	
MAIN C.B	C101	87-012-286-080	C-CAP,U 0.01-25	C502	87-012-274-080	C-CAP,U 1000P-50 B	
	C103	87-A10-251-080	C-CAP,TN 33-2.5 A	C503	87-016-117-080	C-CAP,U 0.018-25 J B	
	C105	87-010-322-080	C-CAP,S 100P-50 CH	C504	87-016-117-080	C-CAP,U 0.018-25 J B	
	C106	87-012-286-080	C-CAP,U 0.01-25	C505	87-A10-418-080	C-CAP,TN 22-4 A TCF	
	C107	87-012-286-080	C-CAP,U 0.01-25	C506	87-A10-418-080	C-CAP,TN 22-4 A TCF	
	C109	87-010-321-080	C-CAP,S 82P-50 J CH	C507	87-010-828-080	C-CAP,U 0.033-25F	
	C110	87-012-286-080	C-CAP,U 0.01-25	C508	87-010-828-080	C-CAP,U 0.033-25F	
	C111	87-012-193-080	C-CAP,U 82P-50 CH	C509	87-A10-249-080	C-CAP,U 1-10 ZF	
	C112	87-012-164-080	C-CAP,U 2P-50 CK	C510	87-A10-249-080	C-CAP,U 1-10 ZF	
	C114	87-012-286-080	C-CAP,U 0.01-25	C511	87-012-272-080	C-CAP,U 680P-50 B	
	C115	87-A10-555-080	C-CAP,V 1500P-50 K B	C512	87-012-272-080	C-CAP,U 680P-50 B	
	C117	87-012-195-080	C-CAP,U 100P-50CH	C513	87-A10-249-080	C-CAP,U 1-10 ZF	
				C514	87-A10-249-080	C-CAP,U 1-10 ZF	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C515	87-A10-263-080		C-CAP,U 0.1-16ZF	CT102	87-A90-654-080		C-TRIMMER,10P CTZ2S-10A
C516	87-A10-263-080		C-CAP,U 0.1-16ZF	CT105	87-A90-688-080		C-TRIMMER,30P CTZ2S-30C
C517	87-010-852-080		C-CAP,E 100-4	CT201	87-A90-654-080		C-TRIMMER,10P CTZ2S-10A
C518	87-010-852-080		C-CAP,E 100-4	D651	87-A90-276-080		C-LED,SML-210MT GRN
C519	87-016-436-080		C-CAP,TN 47-4(B2)	D652	87-A90-277-080		C-LED,SML-210DT ORN
C520	87-A10-263-080		C-CAP,U 0.1-16ZF	D653	87-A90-278-080		C-LED,SML-210VT RED
C521	87-A10-418-080		C-CAP,TN 22-4 A TCF	F101	81-HW1-628-080		BPF,GFWB1
C522	87-010-829-080		C-CAP,U 0.047-16	J501	87-099-575-010		JACK,3.5ST BLK 5P
C523	87-A10-781-080		C-CAP,U 0.15-10 K B	J551	87-A60-272-010		JACK,3.5 ST 4P
C524	87-016-504-080		C-CAP,TN 6.8-4(A2)	L102	87-A50-245-080		C-COIL,S 0.1UH G
C525	87-A10-260-080		C-CAP,U 0.1-16 K B	L104	87-A50-244-080		C-COIL,S 82NH G
C526	87-A10-263-080		C-CAP,U 0.1-16ZF	L105	87-005-564-080		C-COIL S2.2MH
C527	87-012-273-080		C-CAP,U 820P-50 B	L201	88-HR4-614-010		BAR-ANT,MW
C528	87-A10-263-080		C-CAP,U 0.1-16ZF	L202	87-005-375-080		C-COIL,100MH
C529	87-A10-353-080		C-CAP,U 0.22-10KB	L203	87-005-788-080		C-IFT,AM (450K)
C530	87-A10-418-080		C-CAP,TN 22-4 A TCF	L301	87-007-249-080		DC-DC COIL
C531	87-A10-421-080		C-CAP,TN 2.2-10 A TCF	L501	87-003-369-080		C-COIL,U 3.3UH K
C532	87-A10-263-080		C-CAP,U 0.1-16ZF	L502	87-003-369-080		C-COIL,U 3.3UH K
C534	87-A10-466-080		C-CAP,TN 3.3-6.3 A TCF	L503	87-003-240-080		C-COIL,S 3.3UH
C535	87-A10-704-080		C-CAP,TN 100-2.5 M B2	L504	87-HJ2-613-010		COIL,LOADING3.3UH
C541	87-A10-249-080		C-CAP,U 1-10 ZF	L505	87-003-369-080		C-COIL,U 3.3UH K
C542	87-A10-249-080		C-CAP,U 1-10 ZF	L506	87-003-369-080		C-COIL,U 3.3UH K
C543	87-016-526-080		C-CAP,S 0.47-16 BK	L509	87-003-245-080		C-COIL,22UH
C544	87-016-526-080		C-CAP,S 0.47-16 BK	L581	87-HJ3-605-080		C-COIL,OSC BIAS
C545	87-A10-353-080		C-CAP,U 0.22-10KB	L611	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
C546	87-A10-353-080		C-CAP,U 0.22-10KB	L612	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
C547	87-012-274-080		C-CAP,U 1000P-50B	L613	87-003-089-010		COIL,47UH
C548	87-010-746-080		C-CAP,TA 10-4	L614	87-003-089-010		COIL,47UH
C551	87-015-923-080		C-CAP,TN 0.22-35	L751	87-A50-232-080		C-COIL,10UH CD54
C552	87-015-923-080		C-CAP,TN 0.22-35	LCD401	87-HJ2-607-010		LCD,AIW4106(7HJ-2EX)
C553	87-A10-418-080		C-CAP,TN 22-4 A TCF	PS431	87-A90-526-010		SNSR,NJL 5163-F1-B
C554	87-A10-249-080		C-CAP,U 1-10 ZF	R411	87-022-237-080		C-RES,U 8.2K-1/16W F
C555	87-A10-249-080		C-CAP,U 1-10 ZF	R412	87-022-215-080		C-RES,U 1K-1/16W F
C556	87-A10-249-080		C-CAP,U 1-10 ZF	R413	87-022-215-080		C-RES,U 1K-1/16W F
C557	87-A10-249-080		C-CAP,U 1-10 ZF	R414	87-022-215-080		C-RES,U 1K-1/16W F
C558	87-012-274-080		C-CAP,U 1000P-50B	R415	87-022-219-080		C-RES,U 1.5K-1/16W F
C559	87-012-274-080		C-CAP,U 1000P-50B	R416	87-022-219-080		C-RES,U 1.5K-1/16W F
C560	87-A10-249-080		C-CAP,U 1-10 ZF	R417	87-022-221-080		C-RES,U 1.8K-1/16W F
C561	87-A10-249-080		C-CAP,U 1-10 ZF	R418	87-022-223-080		C-RES 2.2K 1/16W F
C562	87-010-746-080		C-CAP,TA 10-4	R420	87-022-237-080		C-RES,U 8.2K-1/16W F
C563	87-012-286-080		C-CAP,U 0.01-25	R503	87-022-437-080		C-RES,U 430-1/16W F
C564	87-010-746-080		C-CAP,TA 10-4	R504	87-022-437-080		C-RES,U 430-1/16W F
C565	87-A10-704-080		C-CAP,TN 100-2.5 M B2	R505	87-022-432-080		C-RES,U 270-1/16W F
C566	87-A10-263-080		C-CAP,U 0.1-16ZF	R506	87-022-432-080		C-RES,U 270-1/16W F
C567	87-010-505-080		C-CAP,TA 1-16	R543	87-022-252-080		C-RES,U 36K-1/16WF
C568	87-010-787-080		C-CAP,U 0.022-25	R715	87-022-043-080		M-RES, M/F 8.2K
C569	87-010-787-080		C-CAP,U 0.022-25	S401	87-A90-665-080		C-SW,TACT LS7A2M
C581	87-012-286-080		C-CAP,U 0.01-25	S402	87-A90-665-080		C-SW,TACT LS7A2M
C582	87-012-279-080		C-CAP,U 2700P-50 B	S403	87-A90-665-080		C-SW,TACT LS7A2M
C583	87-012-286-080		C-CAP,U 0.01-25	S404	87-A90-665-080		C-SW,TACT LS7A2M
C584	87-A10-418-080		C-CAP,TN 22-4 A TCF	S405	87-A90-665-080		C-SW,TACT LS7A2M
C585	87-012-278-080		C-CAP,U 2200P-50 B	S407	87-A90-665-080		C-SW,TACT LS7A2M
C586	87-012-267-080		C-CAP,U 270P-50 B	S408	87-036-237-080		CHIP SWICH PUSH
C587	87-012-271-080		C-CAP,U 560P-50	S409	87-A90-665-080		C-SW,TACT LS7A2M
C611	87-010-852-080		C-CAP,E 100-4	S410	87-036-237-080		C-SW,PUSH
C612	87-A10-418-080		C-CAP,TN 22-4 A TCF	S411	87-036-237-080		C-SW,PUSH
C613	87-A10-418-080		C-CAP,TN 22-4 A TCF	S412	87-036-236-080		C-SW,SLIDE 1-1-2(NC)
C651	87-010-746-080		C-CAP,TA 10-4	S413	87-036-237-080		C-SW,PUSH
C652	87-A10-249-080		C-CAP,U 1-10 ZF	S414	87-036-373-080		C-SW,SLIDE 1-1-2(E)
C701	87-010-831-080		C-CAP,U,0.1-16F	S415	84-HK3-604-110		SW,LEAF 42M-1P
C702	87-010-829-080		C-CAP,U 0.047-16	S416	84-HJ2-620-110		SW,LEAF 42M-1 J(EH)
C703	87-010-831-080		C-CAP,U,0.1-16F	S501	87-036-244-080		C-SW,SLIDE 1-2-2 (NC)
C704	87-010-831-080		C-CAP,U 0.1-16F	S581	87-A90-331-080		C-SW SLIDE1-1-3
C705	87-010-486-080		C-CAP,TN 0.33-50	SFR701	87-A90-104-080		C-SFR,6.8K H CVR-32
C706	87-010-829-080		C-CAP,U 0.047-16	VR201	87-A90-747-080		C-SFR,22K H EVM3YSX50B
C707	86-HR4-615-080		C-CAP,TN 0.47-25(AW)	VR501	87-HJ2-608-010		VR,RTRY 50KAX2
C708	86-HR4-615-080		C-CAP,TN 0.47-25(AW)	X401	87-A70-078-010		VIB,XTAL 75KHZ KF-26R5
C751	87-A10-039-080		C-CAP,U 470P-50 J CH				
C752	87-A10-719-080		C-CAP,TN 330U-4. M				
CF201	87-A90-456-080		C-FLTR,PFWCC 450J3	DD C.B			

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
C601	87-016-444-080	C-CAP,TN 47-10 F95E	
C602	87-016-444-080	C-CAP,TN 47-10 F95E	
C603	87-A10-034-080	C-CAP,TN 33-10 (B2)	
L601	87-A50-174-080	C-COIL,82UH 7004-2	
L602	87-A50-010-080	C-COIL,22UH LQH3C	

RPH FLEX C.B

RPH1	87-ZM6-606-010	HEAD,RPH ASSY M-6A
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EH FLEX C.B

EH1	87-ZM6-611-010	HEAD ASSY,EH M-6R
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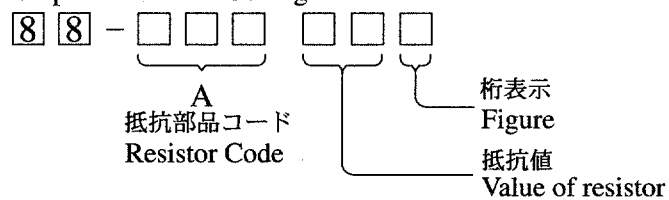
FLEX C.B

W1	88-HR4-607-010	PWB,FLEX 4P
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○チップ抵抗部品コード／CHIP RESISTOR PART CODE

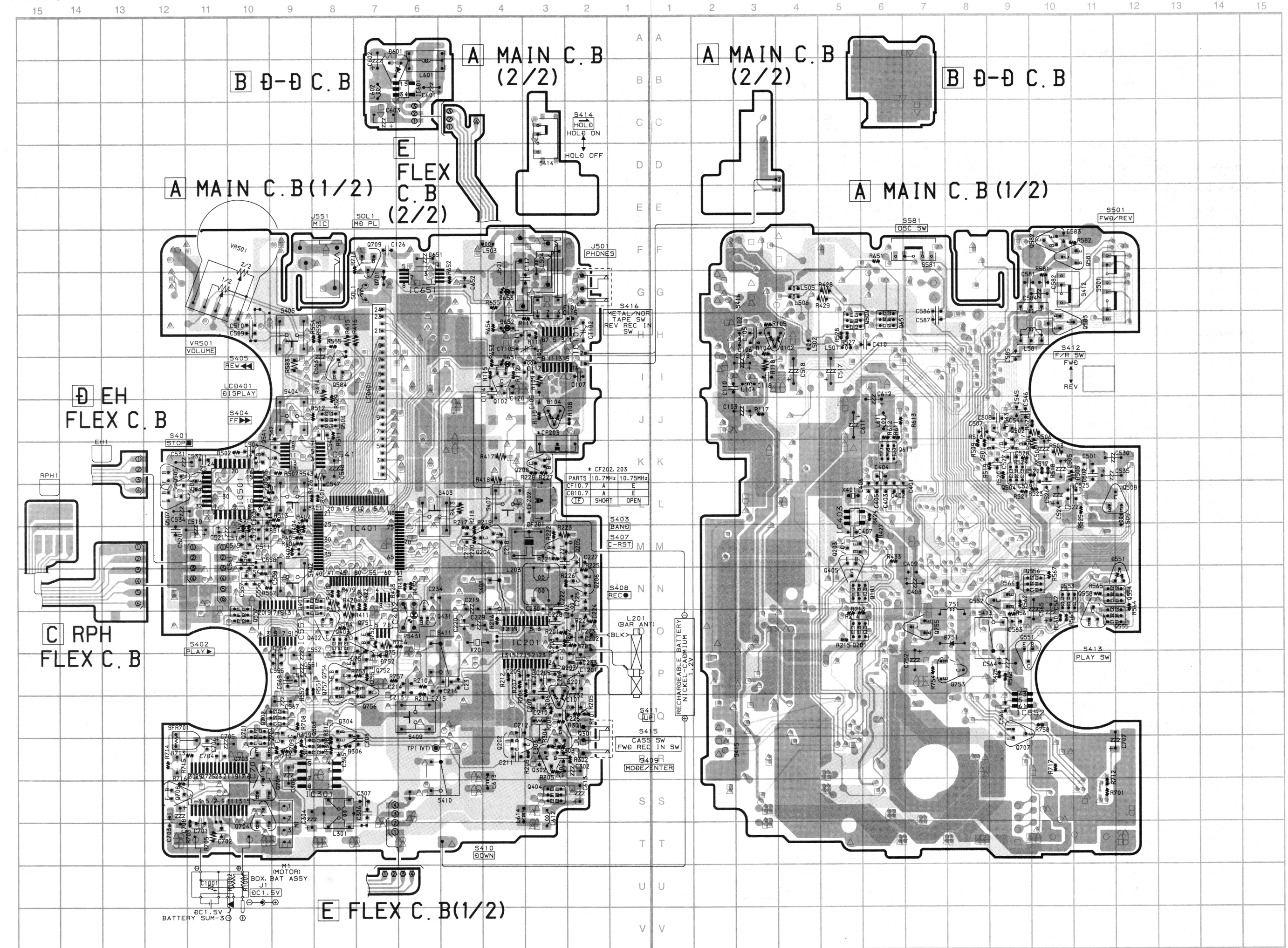
チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding

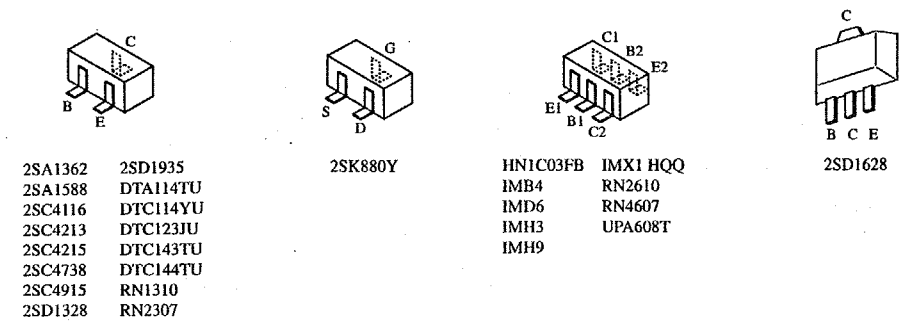


チップ抵抗 Chip resistor

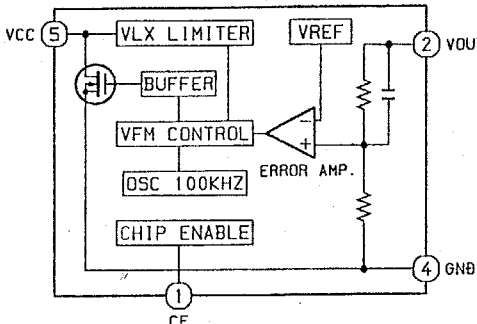
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形/Form	L	W	t	
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128



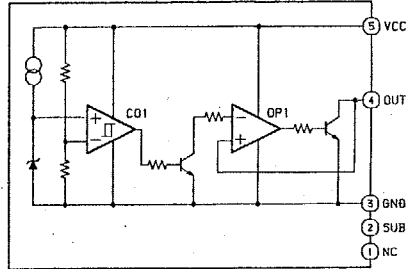
TRANSISTOR ILLUSTRATION



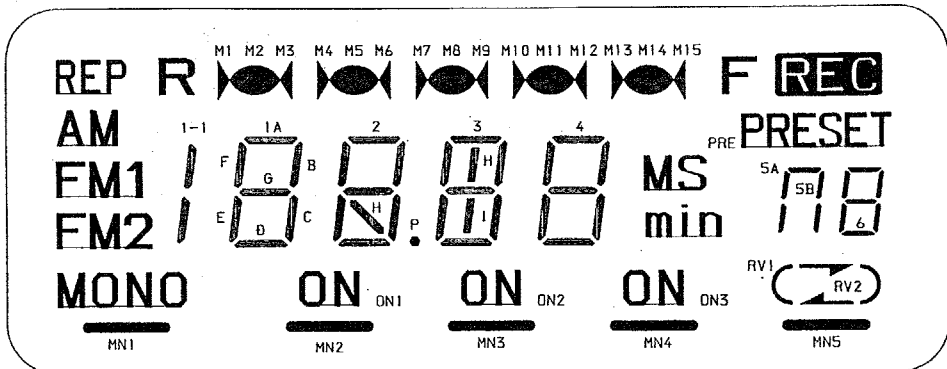
IC BLOCK DIAGRAM – 1
IC, RN5RK241A



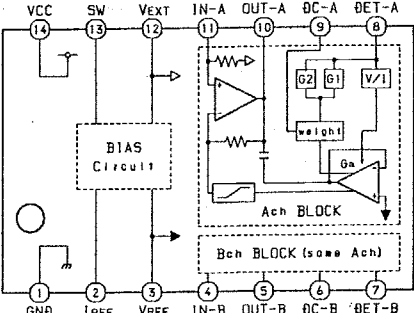
IC, PST9017



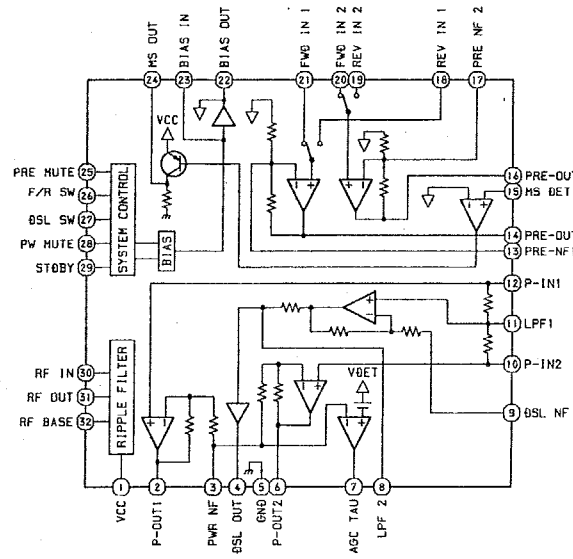
LCD DIAGRAM



IC, NJM2185AV

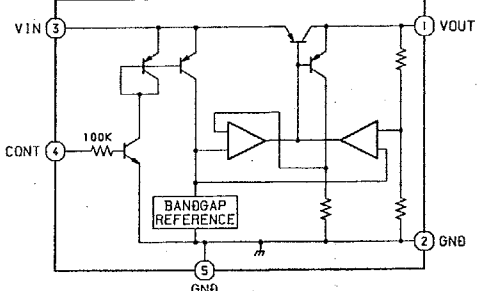


IC, BA3632K

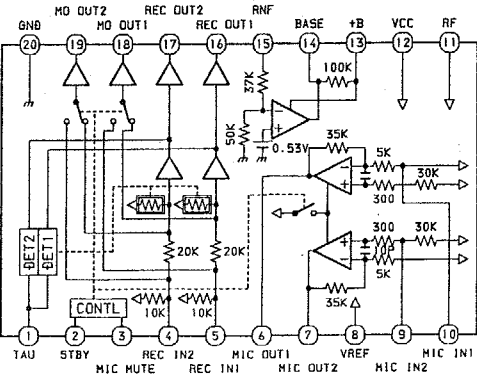


NO	COM1	COM2	COM3	COM4
1	COM1	-	-	-
2	-	COM2	-	-
3	-	-	COM3	-
4	-	-	-	COM4
5	REC	6B	6C	-
6	6A	6G	6D	RV2
7	6F	6E	RV1	MN5
8	5B	5A	ON3	MN4
9	F	PRE	MS	min
10	4A	4B	4C	4D
11	MN3	4F	4G	4E
12	3A	3B	3C	ON2
13	3H	3G	3I	3D
14	M3	3F	3E	P
15	M2	2B	2C	MN2
16	2A	2G	2H	2D
17	M1	2F	2E	ON1
18	1A	1B	1C	1D
19	R	1F	1G	1E
20	REP	1-1	MONO	MN1
21	AM	FM1	-	FM2
22	M4	M5	M6	M7
23	M11	M10	M9	M8
24	M12	M13	M14	M15

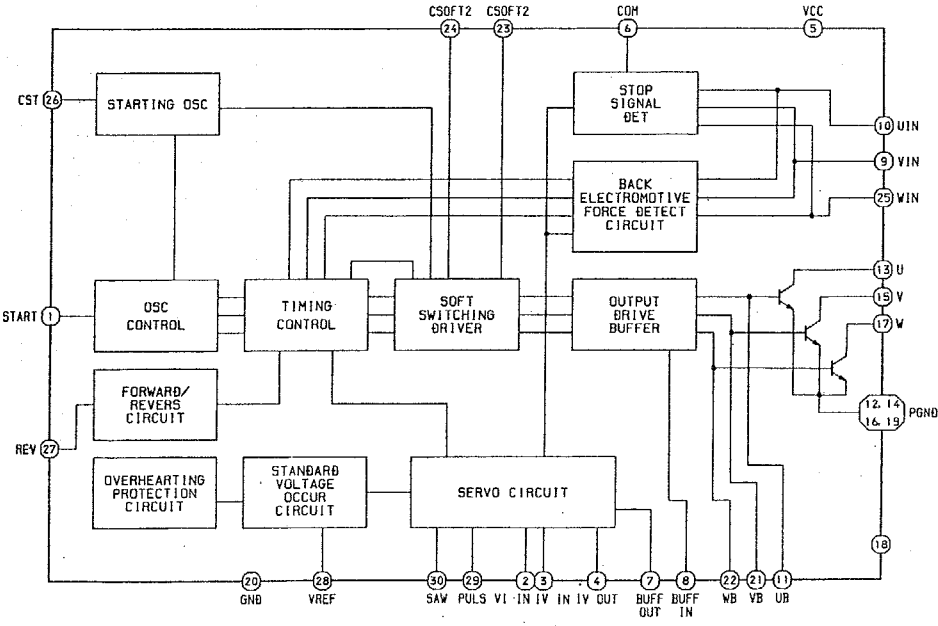
IC, TK70403M



IC, BA3641FV



IC, TPIC326ADB



IC DESCRIPTION

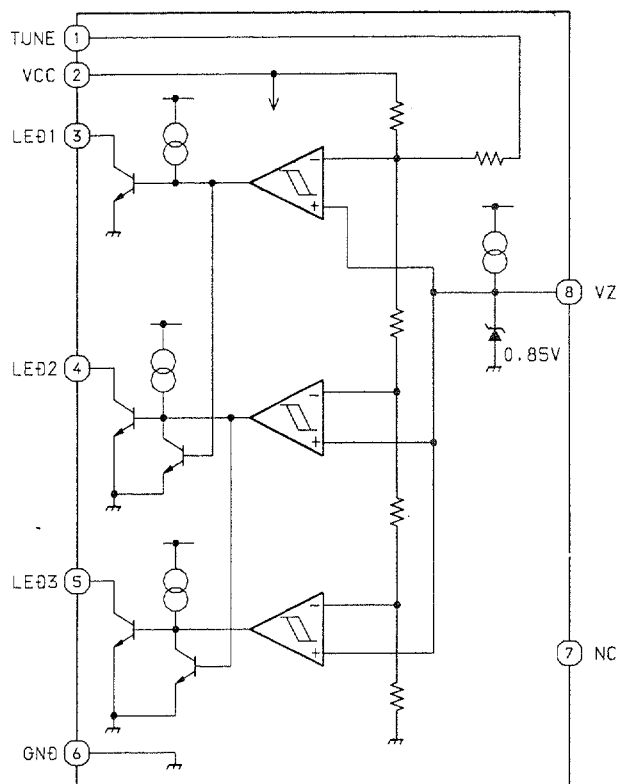
IC, TC9327F-012

Pin No.	Pin Name	I/O	Description
1~4	COMT 1~4	O	LCD COMMON OUT 1~4.
5~24	SEG 1~20	O	LCD DRIVER OUT 1~20.
25	HOLD IN	I	Input pin for setting KEY HOLD. H: hold ON.
26	QUICK IN	I	Quick reverse input pin. L: quick reverse ON.
27	IF 10.7	I	H: IF 10.75 MHz. L:IF 10.7 MHz.
28	PLAY SW	I	Input pin for detecting PLAY condition. L: PLAY or REC condition.
29	F/R SW	I	Input pin for detecting tape run direction. H: REV direction. L: FWD direction.
30	CASS SW	I	Input pin for detecting presence of cassette. H: no cassette.
31	F REC IN	I	Input pin for preventing wrong deletion on FWD side. H: recording not possible.
32	R REC IN	I	Input pin for preventing wrong deletion on REV side. H: recording not possible.
33	JACK IN	I	This is a pin where HP plug input is deleted. H: no plug. L: plug exist.
34	U.E.H.D	I	Input pin for switching U.E.H.D area.
35	UP	I	UP KEY input pin. H: KEY ON.
36	DOWN	I	DOWN KEY input pin. H: KEY ON.
37	MODE/ENTER	I	MODE/ENTER KEY input pin. H: KEY ON.
38	POWER ON	O	H: POWER ON. L: POWER OFF.
39	F REC ON	O	H: FWD REC ON. L:FWD REC OFF.
40	R REC ON	O	H: REV REC ON. L: REV REC OFF.
41	DOLBY	O	DOLBY ON/OFF control output pin. H: DOLBY ON.
42	KEY MAIN	I	Main unit KEY input pin.
43	KEY REM	I	Remote control KEY input pin.
44	MS IN	I	Pin to input music sensor signal. H: music exist.
45	BIAS MUTE	O	Pin to output MUTE when REC. H: MUTE ON.
46	MOT HI	O	Pin to control motor. L: MOTOR HI SPEED.
47	REM DATA	O	Pin to output LCD microcomputer serial data.
48	REM CLK	I	Pin to output LCD microcomputer serial clock.
49	BUZR	O	Output buzzer.
50	MOT F/R	O	Pin to output motor rotation control. H: MTOR FWD.
51	MOT ON	O	Pin to output motor control. H: MOTOR ON.
52	BRAKE	O	Pin to output brake control for motor. H: BRAKE ON.
53	MD PL	O	Pin to output MD plunger control. H: PL ON.
54	DSL	O	Pin to output DSL ON/OFF control. L: DSL ON.
55	FM MODE	O	Pin to output FM MONO/ST switching. L: FM STEREO.
56	TU OUT	O	Output H only when TU operating.
57	TV OUT	O	Output H only when TV (4 - 12 ch) operating.
58	EE SEL	O	Pin to control READ, WRITE of EEPROM.
59	EE CSK	O	Pin to output serial clock of EEPROM.
60	EE DATA	I/O	Pin to input/output data of EEPROM.
61	PHOTO	I	Pin to input photo sensor output.
62	MUTE	O	Pin to output muting. H:MUTE ON.
63	TEST	I	Not Connected.

Pin No.	Pin Name	I/O	Description
64	IF IN	I	Pin to input IF signal.
65	FM TV OUT	O	Output H only when FM TV operating.
66	PLL OUT	O	Output phase comparison instrument. (Pin to output PLL).
67	K.TEL	I	Pin to input buzzer control signal.
68	AM OUT	O	Output H only when AM operating.
69	GND	–	GND pin.
70	FM IN	I	Input FM programmable counter.
71	AM IN	I	Input AM programmable counter.
72	VDD	–	Pin to apply voltage.
73	RESET	I	Pin to input system reset signal. L: RESET.
74	XOUT	O	Crystal oscillation pin.
75	XIN	I	Crystal oscillation pin.
76	VXT	–	Power supply pin for crystal oscillation.
77	VLCD	–	Pin for voltage doubler pressure up for LCD drive.
78	C1	–	Pin for voltage doubler pressure up for LCD drive.
79	C2	–	Pin for voltage doubler pressure up for LCD drive.
80	VEE	–	1.5V constant voltage power supply pin for LCD drive.

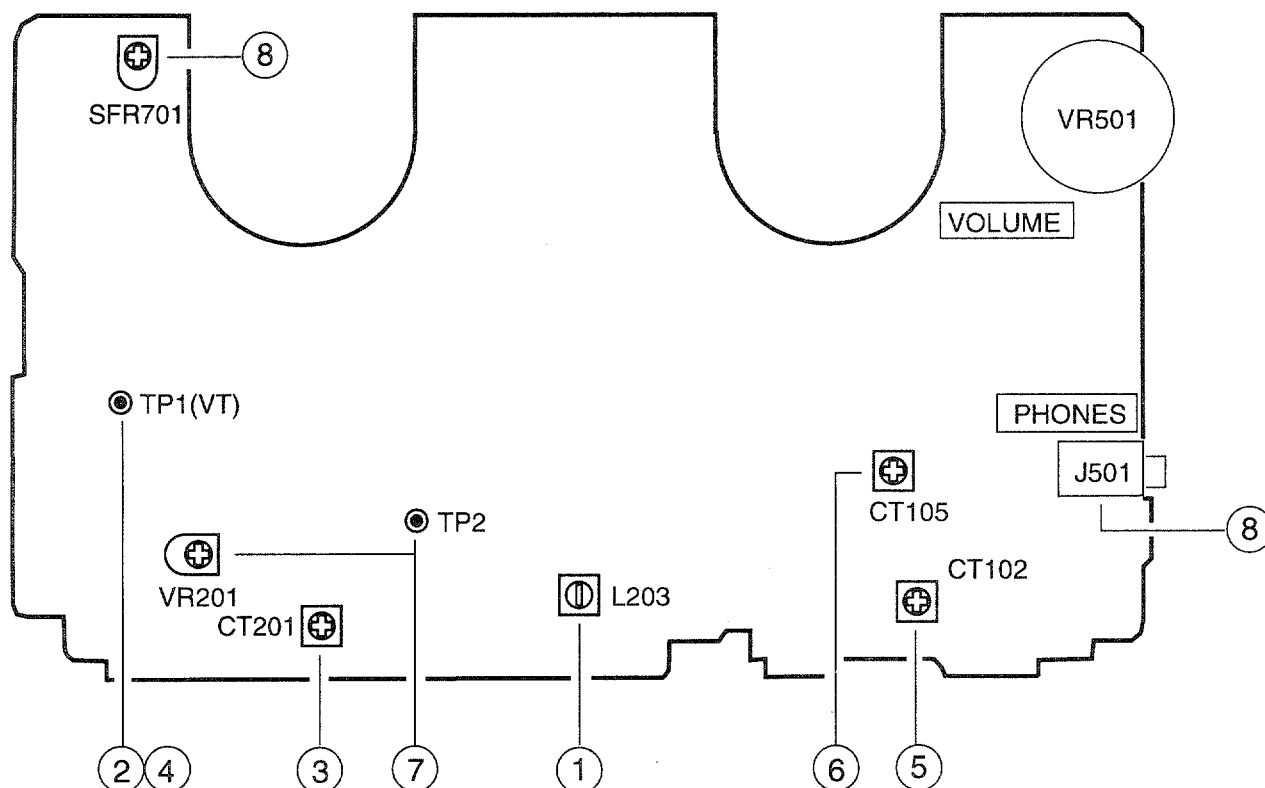
IC BLOCK DIAGRAM – 2

IC, MM1209XWBE



ADJUSTMENT

A MAIN C.B



<TUNER SECTION>

1. AM IF Adjustment
L203 450kHz
2. AM VT Check
Settings : • Test point : TP1 (VT)
Method : Set to AM 531kHz (AH,YHS), 530kHz (DAH) and TP1, check the test point is 0.9 ~ 1.4V.
Then set to AM 1629kHz (AH,YHS), 1710kHz (DAH) and check the test point is 6.7~7.5V (AH,YHS), 7.0~7.8V(DAH).
3. AM Tracking Adjustment
L201 630kHz
CT201 1440kHz
4. FM VT Check
Settings : • Test point : TP1 (VT)
Method : Set to FM 87.5MHz (AH,YHS), 76.0MHz (DAH) and TP1, check the test point is $2.4 \pm 0.2V$ (AH,YHS), $1.2 \pm 0.2V$ (DAH). Then set to FM 108MHz and check test point is $5.2 \pm 0.4V$.
5. FM Tracking Adjustment
CT102 87.5MHz
6. FM IF Adjustment
CT105 10.7/10.75MHz
7. FM ST VCO Adjustment
Settings : • Test point : TP2 (IC201 pin 12)
• Adjustment location : VR201
Method : Set to test point TP2 and adjust VR201 so that the test point becomes $19kHz \pm 100Hz$ (use frequency counter).

<TAPE SECTION>

8. Tape Speed Adjustment
Settings : • Test tape : TTA-100
• Test point : PHONES JACK (J501)
• Adjustment location : SFR701
• Direction : FWD, REV
• Volume : NON-CLIP
• Power supply : 1.5V
Method : Play back the test tape and adjust for $3010 \pm 10Hz$ (FWD), $3010 \pm 45Hz$ (REV).

PRACTICAL SERVICE FIGURE

<TAPE SECTION>

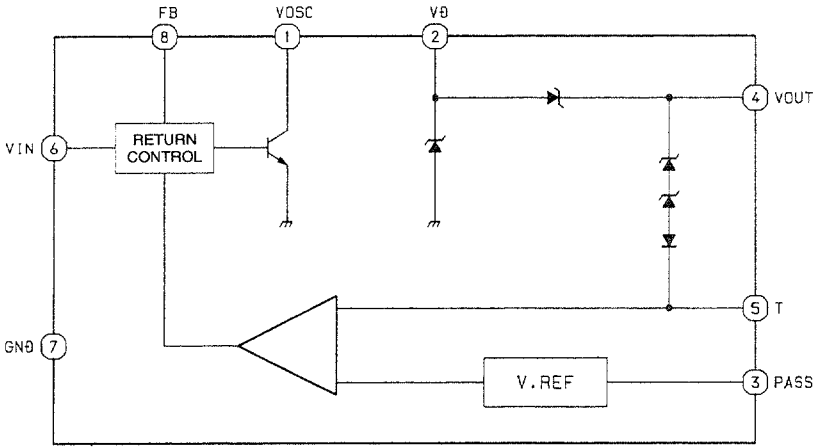
Tape speed :	3015Hz ± 50Hz
Wow & flutter :	Less than 0.50% (RMS)
Take-up torque :	18 ~ 25 g-cm (FWD, REV)
F.F torque :	55 ~ 100 g-cm
Rew torque :	55 ~ 100 g-cm
Back tension :	1.5 ~ 3 g-cm (FWD, REV)
S/N ratio :	More than 43dB (PB, DC)
	More than 20dB (REC/PB, DC)
Distortion :	Less than 3.0% (PB, DC)
	Less than 10.0% (REC/PB, DC)
Noise level :	Less than 3.0 mV (PB, DC)
Frequency response :	63Hz +2/-6dB ~ 8kHz ± 4dB
	(NORMAL, PB)
	63Hz +2/-6dB ~ 10kHz ± 4dB
	(CrO2/METAL, PB)
	125Hz - 4/-12dB ~ 8kHz + 3/-13dB
	(NORMAL, REC/PB)
Test tape :	MTT-15070
	TTA- 100
	TTA- 200
	TTA- 210
	TTA- 320(120μ)/TTA-310(70μ)
	TTA- 601

<TUNER SECTION>

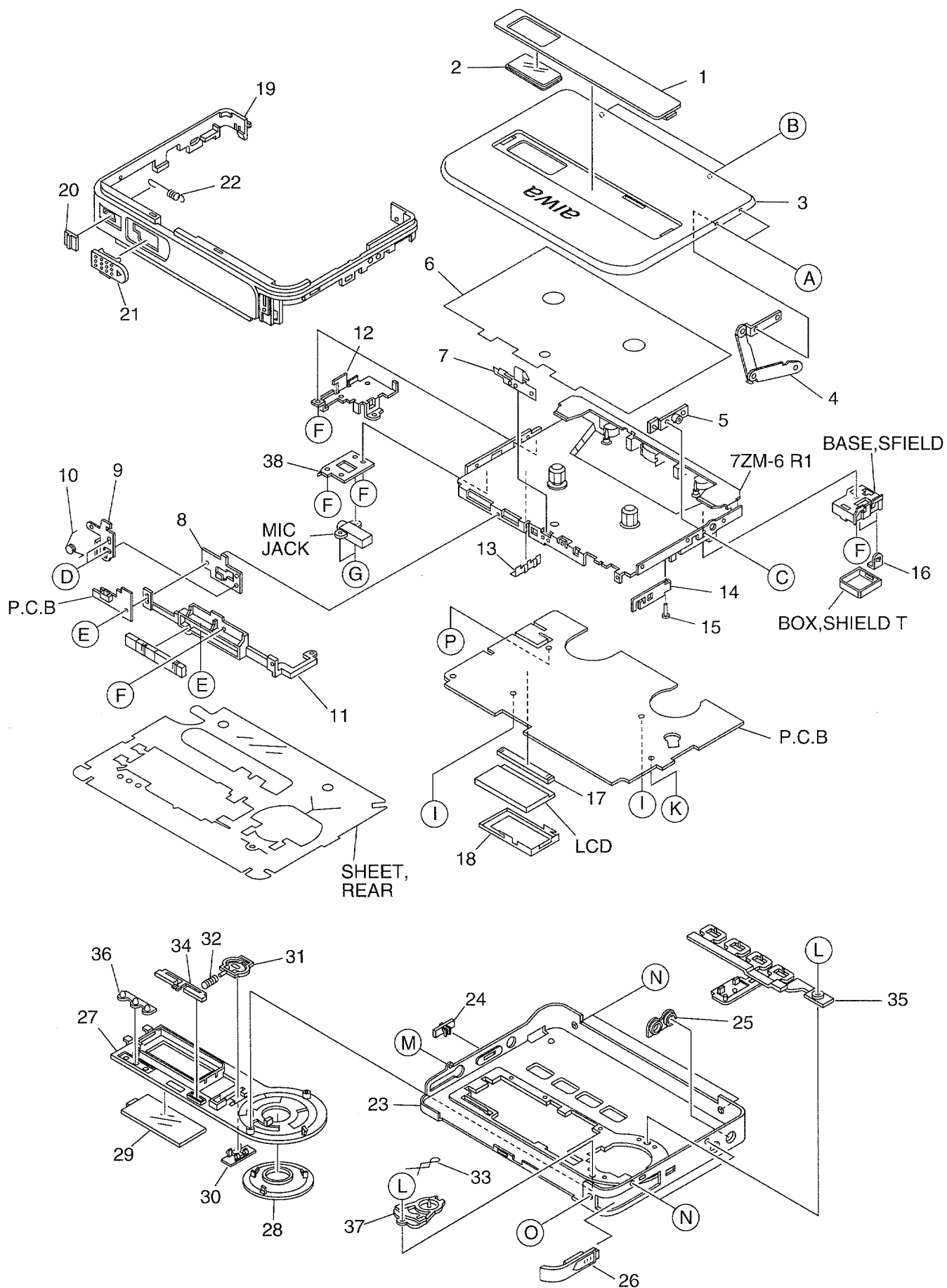
Sensitivity :	
(IHF, THD 3%)	FM Less than 19 dB
	[at 76/98.5/108 MHz (DAH)]
	[at 87.5/98.5/108 MHz (AH, YHS)]
(S/N 10dB)	AM Less than 63 dB [at 630kHz]
	Less than 59 dB [at 999kHz]
	Less than 57 dB [at 1440kHz]
Intermediate frequency :	FM 10.7/10.75MHz ± 0.05MHz
	AM 450kHz ± 3kHz
FM stereo separation :	More than 16dB

IC BLOCK DIAGRAM – 3

IC, TK11821



MECHANICAL EXPLODED VIEW 1 / 1

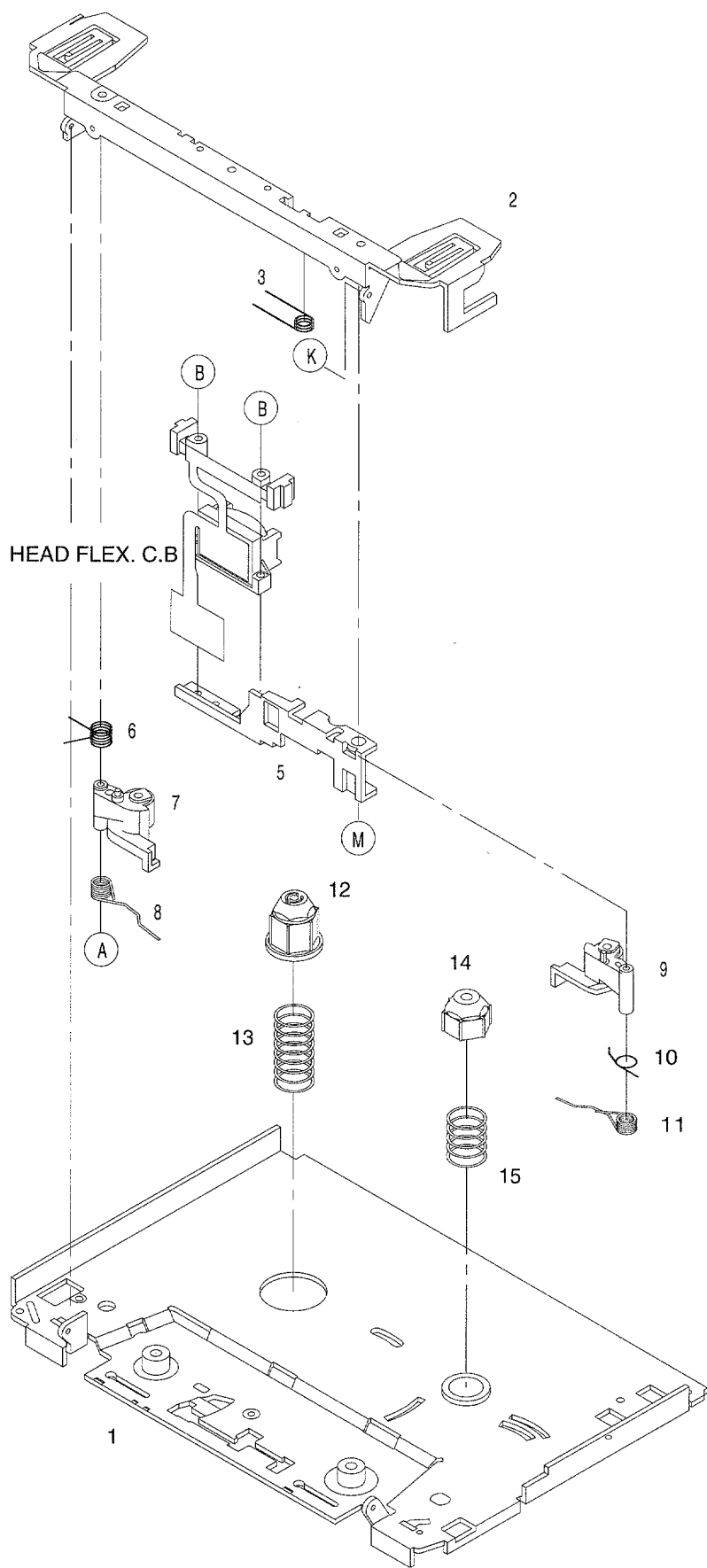


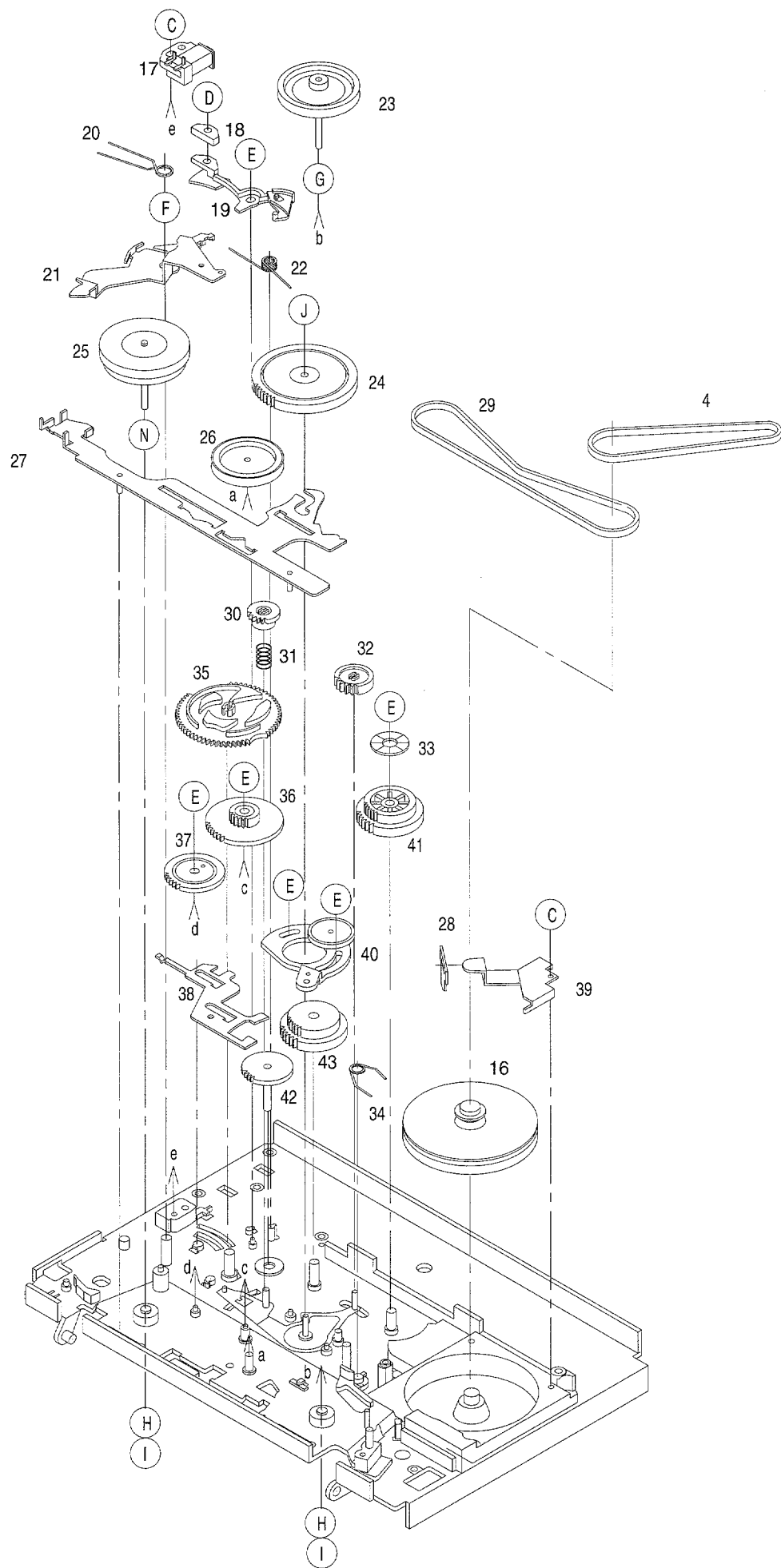
MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-HJ2-004-010		PANEL, CASS
2	87-HJ2-005-010		WINDOW, CASS
3	87-HJ2-001-010		LID ASSY, CASS
4	85-HK4-201-010		ARM, HINGE ASSY
5	84-HK3-205-410		NUT, B-BOX
6	87-HJ2-030-010		PLATE, CHAS 869
7	87-HJ2-204-010		SPR-P, CASS
8	87-HJ2-201-010		BASE, LOCK
9	87-HJ2-207-010		PLATE, LOCK
10	87-HJ2-203-010		SPR-T, LOCK
11	87-HJ2-209-010		HLDR, ANTENNA
12	87-HJ2-212-010		HLDR, MIC
13	87-HJ2-217-010		BAT-CONTACT, (-)
14	88-HK4-204-010		BAT-CONTACT, (+)
15	87-HJ2-205-010		SHAFT, HINGE
16	87-HJ2-218-010		BAT-CONTACT, B-BOX
17	88-HR4-202-010		CONN, RUBBER LCD
18	87-HJ2-215-010		HLDR, LCD
19	87-HJ2-007-010		FRAME, CENTER
20	87-HJ2-014-010		KNOB, SL HOLD
21	87-HJ2-015-010		KNOB, SL OPEN<869AH, 869YHS>
21	87-HJ2-042-010		KNOB, SL OPEN N<869DAH>
22	87-HJ2-220-010		SPR-E, OPEN
23	87-HJ2-040-010		CABI, REAR 869DAH1
24	87-HJ2-012-010		KNOB, SL SIDE
25	88-HK4-218-010		GUIDE, B-BOX
26	87-HJ2-008-010		LID, BAT
27	87-HJ2-032-010		PANEL, REAR 879<869AH, 869YHS>
27	87-HJ2-038-010		PANEL, REAR DAH1<869DAH>
28	87-HJ2-018-010		KNOB, SL JOG<869AH, 869YHS>
28	87-HJ2-036-010		KNOB, SL JOG N<869DAH>
29	87-HJ2-011-010		WINDOW, REAR
30	87-HJ2-013-010		KNOB, SL REC<869AH, 869YHS>
30	87-HJ2-041-010		KNOB, SL REC N<869DAH>
31	87-HJ2-017-010		KNOB, LEVER REC
32	82-HK3-206-110		C-SP, LOCK
33	87-HJ2-223-010		SPR-T, JOG
34	87-HJ2-033-010		KEY, RESET 879
35	87-HJ2-016-010		KEY, PLAY<869AH, 869YHS>
35	87-HJ2-039-010		KEY, PLAY N<869DAH>
36	87-HJ2-009-010		LENS, LED
37	87-HJ2-019-010		KEY, ENTER<869AH, 869YHS>
37	87-HJ2-037-010		KEY, ENTER N<869DAH>
38	87-HJ2-225-010		HLDR, HP 5P
A	87-HK5-237-010		S-SCREW, 1.4-2 CR NL
B	87-078-145-010		S-SCRW, +1.4-0.8 CR N
C	87-067-736-010		SCREW, 1.4-2 BLK NLOCK
D	87-067-739-010		HINGE SCREW 1.4-1 CR N
E	87-078-139-010		SCRW-SERR-M1.4-2.5B
F	87-078-216-010		SCRW-SR, 1.4-1.4B LS
G	86-HK4-223-010		S-SCREW, SERR+1.4-3.5 B L
I	87-067-384-010		SCREWVT1.4-3.5HL
K	87-067-430-010		VT1.4-5 BLK
L	87-078-190-010		S-SCRW, +1.7-3HL B
M	87-078-186-010		SCRW-SR, 1.4-1.8 CR L
N	87-078-153-010		SCRW, 1.4-2.5 CR
O	87-HJ2-224-010		S-SCREW, SERR+1.4-5 CR L
P	87-067-746-010		SCREW, M 1.4-2 (H0.5)

TAPE MECHANISM EXPLODED VIEW 1 / 1



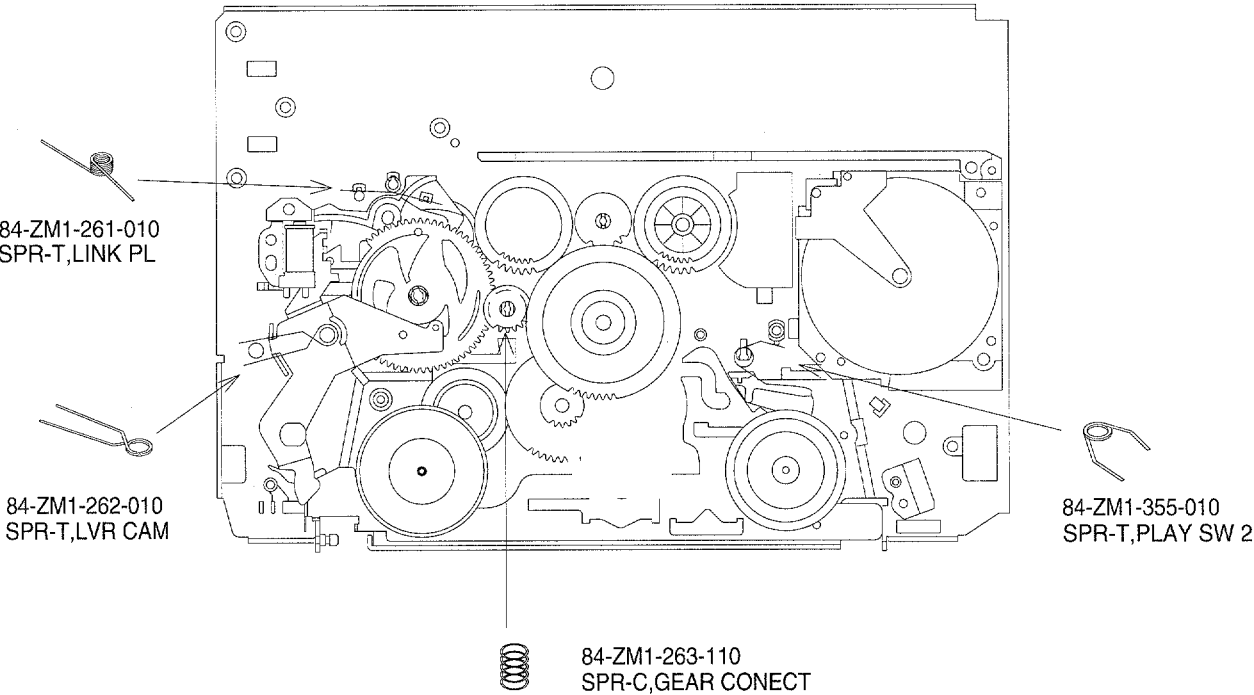
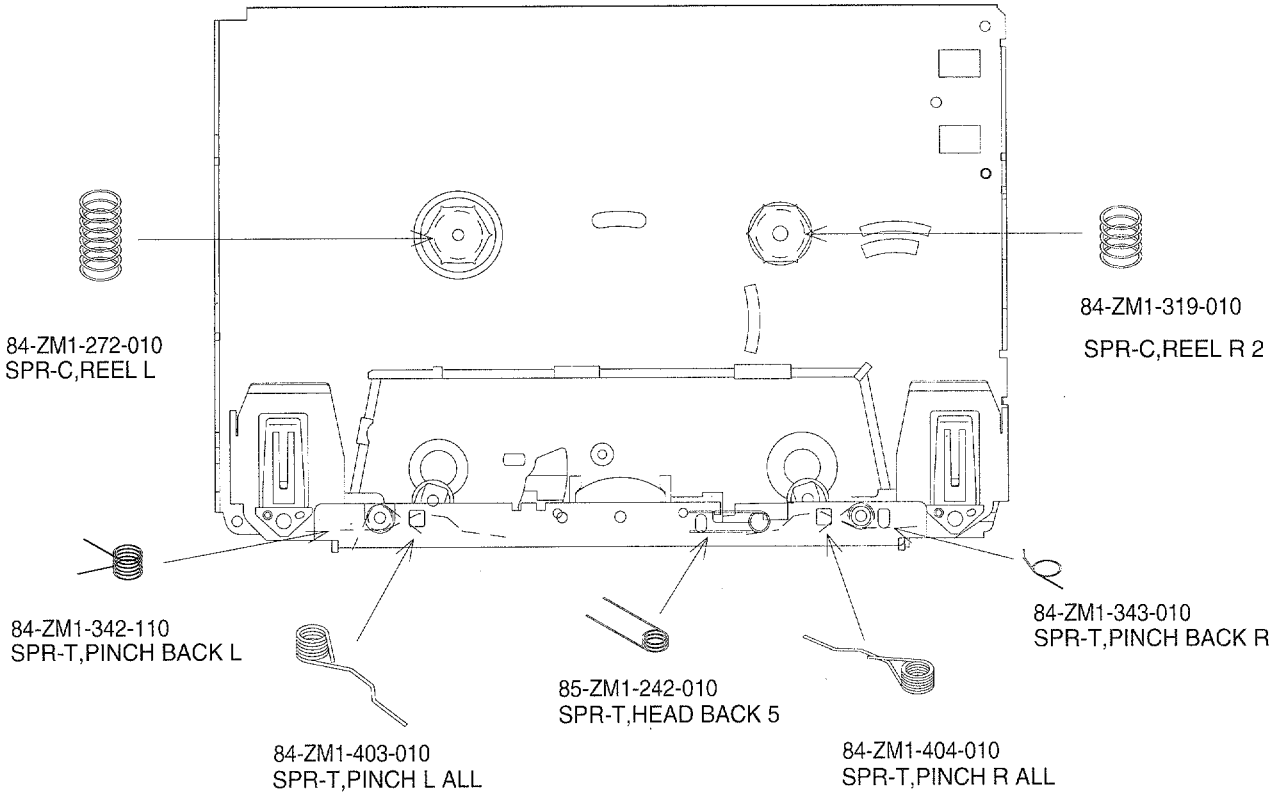


TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-ZM6-301-010		CHAS ASSY,OUT-SERT R	31	84-ZM1-263-110		SPR-C,GEAR CONECT
2	84-ZM1-212-A10		HLDER CASSET ASSY P	32	84-ZM1-225-210		GEAR FR
3	85-ZM1-242-010		SPR-T,HEAD BACK 5	33	87-ZM6-240-010		SH,AUTO M-6
4	87-ZM6-217-010		BELT,MOT M-6	34	84-ZM1-355-010		SPR-T,PLAY SW2
5	84-ZM1-270-310		ARM HEAD SN	35	84-ZM1-221-410		GEAR CAM
6	84-ZM1-342-110		SPR-T PINCH BACK L	36	84-ZM1-223-610		GEAR LINK B
7	84-ZM1-409-310		ARM ASSY,PINCH L 50	37	84-ZM1-222-110		GEAR LINK A
8	84-ZM1-403-010		SPR-T,PINCH L ALL	38	84-ZM1-217-410		L,FR LOCK
9	84-ZM1-408-410		ARM ASSY,PINCH R 50	39	87-ZS5-208-010		SPR-P, 7ZS5
10	84-ZM1-343-010		SPR-T PINCH BACK R	40	84-ZM1-210-110		LVR ASSY,T-UP
11	84-ZM1-404-010		SPR-T,PINCH R ALL	41	84-ZM1-240-010		GEAR IDLE B
12	84-ZM1-227-210		GEAR REEL L	42	84-ZM1-228-110		GEAR REEL R
13	84-ZM1-272-010		SPR-C,REEL L	43	84-ZM1-224-310		GEAR IDLE A
14	84-ZM1-220-110		REEL CAP,R	A	87-067-569-010		POLY WASHER 1.83-2.5-0.25
15	84-ZM1-319-010		SPR-C,REEL R 2	B	87-ZM6-311-010		S-SCREW,V+1.4-8.2
16	M8-7ZS-591-000		ABL-75 R	C	87-067-384-010		SCREWWT1.4-3.5HL
17	87-ZM6-602-010		SOL,MD M-6R	D	87-067-367-010		POLY WASHER,0.95-2.6-0.25
18	84-ZM1-602-010		CHIP,SOL	E	87-067-860-010		PW,3-0.95-0.4
19	84-ZM1-219-110		LINK PL	F	87-078-018-010		PW 1.55-3.6-0.25
20	84-ZM1-262-110		SPR-T,LVR CAM	G	87-078-071-110		SW,1.2-3-0.25
21	84-ZM1-204-010		LVR ASSY,CAM	H	87-078-101-010		PW,1.21-24-0.25
22	84-ZM1-261-010		SPR-T,LINK PL	I	87-078-065-010		SH,0.9-2.25-0.25SLT
23	87-ZM6-225-010		FLY-WHL,ASSY L M-6	J	87-067-693-010		PW,3-0.8-0.25 SLT
24	87-ZM6-236-010		GEAR ASSY,SLIP M-6	K	87-B10-015-010		W,1-3-0.35C-CUT60
25	87-ZM6-221-010		FLY-WHL,ASSY R M-6	M	87-067-998-010		PW,0.8-2.5-0.2 SLT
26	85-ZM1-212-110		PULLY PM 2	N	87-ZM6-243-010		W-R,1.3-2.8-0.25
27	87-ZM6-307-010		LEVER ASSY,HEAD R M-6				
28	84-ZM1-383-010		THRUST,PLATE(B)				
29	87-ZM6-219-010		BELT,FW M-6				
30	84-ZM1-226-010		GEAR CAM C				

SPRING APPLICATION POSITION



ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-HJ2-904-010	IB, EC-869	
2	87-B30-137-010	CHARGER, RB-107 H	
3	87-B30-038-010	BAT, NB-5G	
4	87-041-083-110	CM-S40A	
5	82-HK3-951-010	CARRYING, CASE	
6	87-B30-130-010	HEADPHONE, HP-MR026	
7	88-HK4-090-010	BOX, BAT ASSY SIL	

REFERENCE NAME LIST

ELECTRICAL SECTION

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

MECHANICAL SECTION

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

サービス技術ニュース	
番号	連絡内容
G- --	
G- --	
G- --	

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