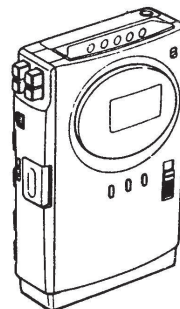


aiwa

HS-J303 MKII

SERVICE MANUAL



STEREO RADIO CASSETTE RECORDER

• BASIC TAPE MECHANISM : $\alpha - 1$

• TYPE. H,E

SPECIFICATIONS

Frequency range:

FM: 87.5/87.5—108.1/108 MHz (200/50 kHz STEP)

AM: 530/531—1600/1602 kHz (10/9 kHz STEP)

Maximum output:

10mW + 10mW (EIAJ/16 Ω)

Power source:

Battery DC 2V, rechargeable lead battery (PB-3) $\times$ 1

Battery DC 3V, LR-03 (UM-4, AAA, R03) $\times$ 2

Domestic AC power (using AC adaptor)

Battery life:

Rechargeable lead battery (AIWA PB-3)

Approx. 2 hours (EIAJ, REC/1 hour recharging)

Approx. 2 hours [EIAJ, PB 1mW/15 minutes (H model is 20 minutes) recharging]

Approx. 3 hours (EIAJ, PB 1mW/1 hour recharging)

Alkaline batteries (LR-03, AAA)

Approx. 7.5 hours (EIAJ, PB 1 mW)

< AC adaptor >

Rated voltage:

AC-207H AC 115V/230V, switchable

AC-207E AC 220V

Rated input:

10 VA 50/60 Hz

Usable Batteries:

AIWA rechargeable lead battery (PB-3)

Rated output:

DC 2V 350mA

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

AIWA CO.,LTD.

Tokyo Japan

Printed in Japan

DISASSEMBLY INSTRUCTION

1. "Panel, Control, Cabinet, Rear and Frame, Center" Removal (See Figure - 1)

- 1) Remove 3 screws (A) and take out the "Panel, Control".
- 2) Remove 3 screws (B) and take out the "Cabinet, Rear" in the direction of the arrow ①.
- 3) Remove 3 screws (C) and release two Hooks, then take out the "Frame, Center" in the direction of the arrow ②.

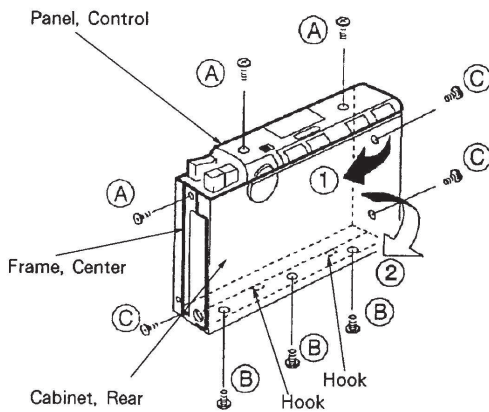


Fig - 1

2. "Lid Cassette ASSY" Removal (See Figure - 2)

- 1) Remove 2 screws (A)×1, (B)×1 and remove the "Lid Cassette ASSY".

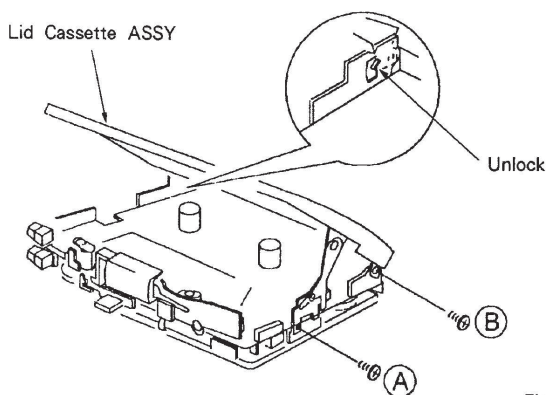


Fig - 2

3. "Main Circuit Board" Removal (See Figure - 3)

- 1) Remove 2 screws (A) and remove the "Main Circuit Board".

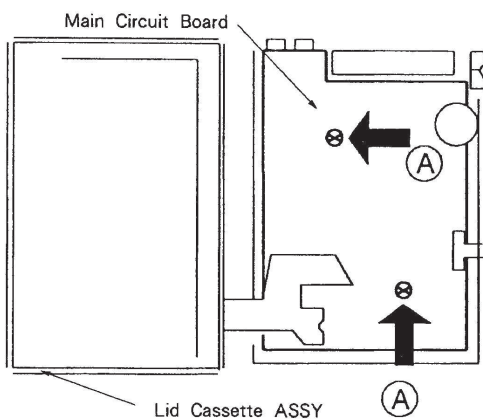


Fig - 3

4. "Holder Cassette ASSY" Removal (See Figure - 4)

- 1) Remove 5 screws (A)×1, (B)×1, (C)×3 and remove the "Holder Cassette ASSY".

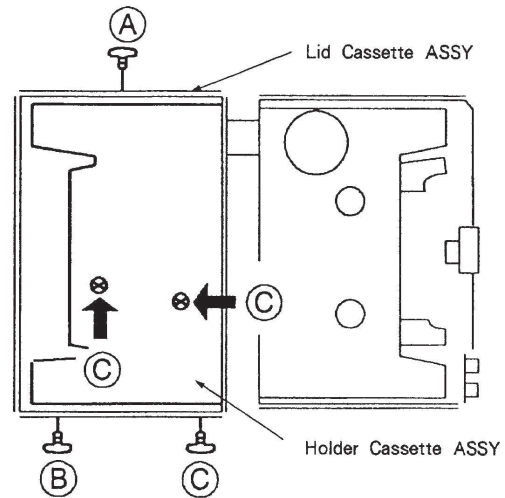


Fig - 4

5. "Front Circuit Board" Removal (See Figure - 5)

- 1) Remove screw (A) and remove the "Front Circuit Board".

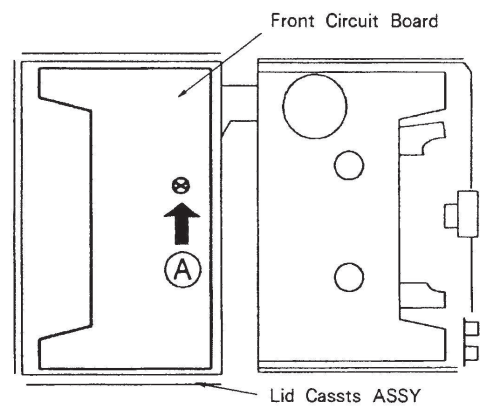


Fig - 5

6. "Button, PLAY" Removal (See Figure - 6)

- 1) Remove the "Panel, Control" and "Cabinet, Rear".
- 2) Move the "Button, PLAY" in the direction of the arrow ① by 1.5mm to release the lock and pull it up in the direction of the arrow ② to remove it.

Note) Fix the "Button, PLAY" with bond.

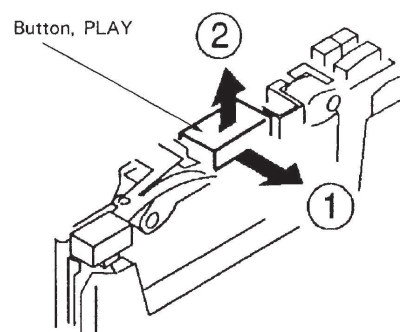


Fig - 6

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
=== IC ===			C24	★87-010-594-010	CAP, CHIP S 0.033-16
	87-001-351-010	IC, AN6612S	C25	★87-012-282-010	CAP, CHIP SS 4700P-50
	87-001-147-010	IC, BA1102FS	C26	★87-012-282-010	CAP, CHIP SS 4700P-50
	87-001-373-010	IC, CXA1278N	C27	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4
	87-020-234-010	IC, TA7688F(S)	C28	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4
	87-001-145-010	IC, TA8126F	C29	★87-012-286-010	CAP, CHIP SS 0.01-25
	87-001-971-010	IC, TA8132AF	C30	★87-012-286-010	CAP, CHIP SS 0.01-25
	87-001-149-010	IC, TA8158F	C31	★87-010-594-010	CAP, CHIP S 0.033-16
	87-001-550-010	IC, TC7S04F	C32	★87-010-594-010	CAP, CHIP S 0.033-16
	87-001-585-010	IC, TC7S32F	C33	★87-010-196-010	CAP, CHIP S 0.1-25
	87-001-767-010	IC, TC9308AF-014	C34	★87-010-196-010	CAP, CHIP S 0.1-25
	87-001-151-010	IC, TD6134A	C35	★87-010-452-010	CAP, CHIP 1-16
=== TRANSISTOR ===			C36	★87-010-452-010	CAP, CHIP 1-16
	89-508-805-010	FET, 2SK880GR	C37	★87-010-452-010	CAP, CHIP 1-16
	89-508-804-010	FET, 2SK880Y	C38	★87-010-452-010	CAP, CHIP 1-16
	89-508-824-010	FET, 2SK882Y	C39	★87-012-270-010	CAP, CHIP SS 470P-50
	89-112-134-010	TRANSISTOR, 2SA1213Y	C40	★87-012-270-010	CAP, CHIP SS 470P-50
	89-115-864-010	TRANSISTOR, 2SA1586Y	C41	★87-010-194-010	CAP, CHIP S 0.047-25
	89-115-884-010	TRANSISTOR, 2SA1588Y	C42	★87-010-194-010	CAP, CHIP S 0.047-25
	89-341-165-010	TRANSISTOR, 2SC4116GR	C43	★87-010-194-010	CAP, CHIP S 0.047-25
	89-342-132-010	TRANSISTOR, 2SC4213B	C44	★87-010-194-010	CAP, CHIP S 0.047-25
	89-342-153-010	TRANSISTOR, 2SC4215(O)	C45	★87-010-198-010	CAP, CHIP S 0.022-25
	87-026-466-010	TRANSISTOR, HNIC01FY	C46	★87-010-198-010	CAP, CHIP S 0.022-25
	87-026-407-010	TRANSISTOR, IMX2	C47	★87-010-452-010	CAP, CHIP 1-16
	87-026-417-010	TRANSISTOR, RN1310	C48	★87-010-452-010	CAP, CHIP 1-16
	87-026-476-010	TRANSISTOR, RN1610	C49	★87-012-270-010	CAP, CHIP SS 470P-50
	87-026-428-010	TRANSISTOR, RN2310	C50	★87-012-270-010	CAP, CHIP SS 470P-50
	87-026-479-010	TRANSISTOR, RN2610	C51	★87-012-274-010	CAP, CHIP SS 1000P-50
	87-026-480-010	TRANSISTOR, RN4605	C52	★87-012-274-010	CAP, CHIP SS 1000P-50
=== DIODE ===			C53	★87-010-452-010	CAP, CHIP 1-16
	87-020-339-010	DIODE, CHIP 1SS226	C54	★87-010-452-010	CAP, CHIP 1-16
	87-001-142-010	DIODE, CHIP 1SS294	C55	★87-010-452-010	CAP, CHIP 1-16
	87-001-165-010	DIODE, CHIP 1SS300	C56	★87-010-452-010	CAP, CHIP 1-16
	87-001-166-010	DIODE, CHIP 1SS301	C57	★87-010-674-010	CAP, CHIP ELECT 220-2
	87-001-167-010	DIODE, CHIP 1SS302	C58	★87-010-674-010	CAP, CHIP ELECT 220-2
	87-001-221-010	DIODE, CHIP 1SS319	C59	★87-012-272-010	CAP, CHIP SS 680P-50
=== MAIN CIRCUIT BOARD SECTION ===			C60	★87-012-272-010	CAP, CHIP SS 680P-50
BPF1	★87-008-406-010	BPF GFMB1	C61	★87-010-664-010	CAP, CHIP ELECT 47-4
C1	★87-010-215-010	CAP, CHIP TANTALUM 0.047-35	C62	★87-010-640-010	CAP, CHIP TANTALUM 22-4
C2	★87-010-215-010	CAP, CHIP TANTALUM 0.047-35	C63	★87-010-243-010	CAP, CHIP TANTALUM 10-4
C3	★87-012-284-010	CAP, CHIP SS 6800P-50	C64	★87-010-243-010	CAP, CHIP TANTALUM 10-4
C4	★87-012-284-010	CAP, CHIP SS 6800P-50	C65	★87-010-243-010	CAP, CHIP TANTALUM 10-4
C5	★87-012-278-010	CAP, CHIP SS 2200P-50	C66	★87-010-243-010	CAP, CHIP TANTALUM 10-4
C6	★87-012-278-010	CAP, CHIP SS 2200P-50	C67	★87-010-452-010	CAP, CHIP 1-16
C7	★87-010-426-010	CAP, CHIP S 0.012-25	C68	★87-010-452-010	CAP, CHIP 1-16
C8	★87-010-426-010	CAP, CHIP S 0.012-25	C69	★87-010-668-010	CAP, CHIP ELECT 220-4
C9	★87-010-243-010	CAP, CHIP TANTALUM 10-4	C70	★87-010-673-010	CAP, CHIP ELECT 100-2
C10	★87-010-243-010	CAP, CHIP TANTALUM 10-4	C71	★87-010-452-010	CAP, CHIP 1-16
C11	★87-010-198-010	CAP, CHIP S 0.022-25	C72	★87-010-452-010	CAP, CHIP 1-16
C12	★87-010-198-010	CAP, CHIP S 0.022-25	C73	★87-010-668-010	CAP, CHIP ELECT 220-4
C13	★87-010-452-010	CAP, CHIP 1-16	C74	★87-010-668-010	CAP, CHIP ELECT 220-4
C14	★87-010-452-010	CAP, CHIP 1-16	C75	★87-010-662-010	CAP, CHIP ELECT 22-6.3
C15	★87-012-276-010	CAP, CHIP SS 1500P-50	C76	★87-010-664-010	CAP, CHIP ELECT 47-4
C16	★87-012-276-010	CAP, CHIP SS 1500P-50	C77	★87-010-594-010	CAP, CHIP S 0.033-16
C17	★87-010-452-010	CAP, CHIP 1-16	C78	★87-010-196-010	CAP, CHIP S 0.1-25
C18	★87-010-452-010	CAP, CHIP 1-16	C79	★87-012-286-010	CAP, CHIP SS 0.01-25
C19	★87-012-274-010	CAP, CHIP SS 1000P-50	C80	★87-010-452-010	CAP, CHIP 1-16
C20	★87-012-274-010	CAP, CHIP SS 1000P-50	C81	★87-010-452-010	CAP, CHIP 1-16
C21	★87-012-274-010	CAP, CHIP SS 1000P-50	C82	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4
C22	★87-012-274-010	CAP, CHIP SS 1000P-50	C83	★87-010-243-010	CAP, CHIP TANTALUM 10-4
C23	★87-010-594-010	CAP, CHIP S 0.033-16	C84	★87-015-934-010	CAP, CHIP TANTALUM 2.2-4
			C85	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4
			C86	★87-010-668-010	CAP, CHIP ELECT 220-4
			C87	★87-012-270-010	CAP, CHIP SS 470P-50

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
C88	★87-012-286-010	CAP, CHIP SS 0.01-25	C155	★87-010-195-010	CAP, CHIP S 0.068-25
C89	★87-012-286-010	CAP, CHIP SS 0.01-25	C156	★87-010-196-010	CAP, CHIP S 0.1-25
C90	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4	C157	★87-010-196-010	CAP, CHIP S 0.1-25
C91	★87-012-286-010	CAP, CHIP SS 0.01-25	C158	★87-010-198-010	CAP, CHIP S 0.022-25
C92	★87-012-280-010	CAP, CHIP SS 3300P-50	C159	★87-012-280-010	CAP, CHIP SS 3300P-50
C93	★87-012-286-010	CAP, CHIP SS 0.01-25	C180	★87-012-273-010	CAP, CHIP SS 820P-50
C94	★87-010-452-010	CAP, CHIP 1-16	C182	★87-012-269-010	CAP, CHIP SS 390P-50
C95	★87-010-426-010	CAP, CHIP S 0.012-25	CF1	★87-008-425-010	FILTER KIT 10.7M
C96	★87-010-426-010	CAP, CHIP S 0.012-25	CF2	+++	FILTER KIT 10.7M
C97	★87-012-276-010	CAP, CHIP SS 1500P-50	CF5	+++	FILTER KIT 10.7M
C98	★87-012-195-010	CAP, CHIP SS 100P-50 CH	CF3	★87-008-412-010	FILTER CF PFBF 450JR
C101	★87-012-274-010	CAP, CHIP SS 1000P-50	CF4	★87-030-182-010	CERALOCK CSB456F-FBL18
C102	★87-012-286-010	CAP, CHIP SS 0.01-25	CP1	87-026-248-010	PHOTO SENSOR ON227002
C103	★87-012-286-010	CAP, CHIP SS 0.01-25	J1	87-009-240-010	JACK 3.5 (RED) (MIC)
C104	★87-012-274-010	CAP, CHIP SS 1000P-50	J2	87-009-239-010	JACK 3.5 (BLK) (PHONES)
C105	★87-012-286-010	CAP, CHIP SS 0.01-25	J3	87-049-859-010	JACK DC (BLK) (DC2V)
C106	★87-012-199-010	CAP, CHIP SS 220P-50 CH	L1	★87-003-218-010	COIL 1UH
C107	★87-012-176-010	CAP, CHIP SS 15P-50 CH	L2	★87-007-246-010	COIL OSC BIAS
C108	★87-012-168-010	CAP, CHIP SS 6P-50 CH	L101	★84-462-627-010	COIL FM OSC
C109	★87-012-195-010	CAP, CHIP SS 100P-50 CH	L102	★84-462-626-010	COIL FM RF
C110	★87-012-166-010	CAP, CHIP SS 4P-50 CH	L103	★87-003-098-010	COIL 2.2UH
C111	87-012-172-080	CAP, CHIP SS 10P-50 CH	L104	★87-005-260-010	COIL 4.7UH
C112	★87-012-195-010	CAP, CHIP SS 100P-50 CH	L105	★84-462-629-010	COIL LOADING R
C113	★87-010-502-010	CAP, ELECT 100-4	L106	★84-462-617-010	BAR ANT
C114	★87-012-269-010	CAP, CHIP SS 390P-50	L107	★87-003-152-010	COIL 100UH
C115	★87-012-196-010	CAP, CHIP SS 120P-50 CH	L108	87-008-420-010	COIL IFT 450K MW
C116	★87-012-178-010	CAP, CHIP SS 18P-50 CH	L110	★87-005-262-010	COIL 10UH
C117	★87-010-667-010	CAP, CHIP ELECT 100-4	R83	★87-022-042-010	RES, CHIP M/F 0.51-1/8
C118	★87-012-286-010	CAP, CHIP SS 0.01-25	R84	★87-022-043-010	RES, CHIP M/F 8.2K-1/8
C119	★87-012-286-010	CAP, CHIP SS 0.01-25	S2	87-036-082-010	SLIDE SW (REC/PB)
C120	★87-012-286-010	CAP, CHIP SS 0.01-25	S3	87-036-083-010	PUSH SW (POWER)
C121	★87-010-196-010	CAP, CHIP S 0.1-25	S4	87-036-123-010	SLIDE SW (TAPE)
C122	★87-012-286-010	CAP, CHIP SS 0.01-25	S5	87-036-123-010	SLIDE SW (DOLBY-NR)
C123	★87-012-199-010	CAP, CHIP SS 220P-50 CH	S6	87-036-123-010	SLIDE SW (DSL)
C124	★87-010-194-010	CAP, CHIP S 0.047-25	S7	87-036-123-010	SLIDE SW (PAUSE)
C125	★87-010-668-010	CAP, CHIP ELECT 220-4	SFR1	★87-024-288-010	SFR 10K
C126	★87-012-286-010	CAP, CHIP SS 0.01-25	SFR2	★87-024-288-010	SFR 10K
C127	★87-012-286-010	CAP, CHIP SS 0.01-25	SFR3	★87-024-076-010	SFR 1K
C128	★87-012-274-010	CAP, CHIP SS 1000P-50	TC101	★87-011-192-010	TRIMER CHIP CTZ30C
C129	★87-012-283-010	CAP, CHIP SS 5600P-50	TC102	★87-011-189-010	TRIMER CHIP CTZ10A
C131	★87-012-176-010	CAP, CHIP SS 15P-50 CH	VC101	★87-026-359-010	DIODE, VARICAP KV1410
C132	★87-012-286-010	CAP, CHIP SS 0.01-25	VC102	★87-026-359-010	DIODE, VARICAP KV1410
C133	★87-010-746-010	CAP, CHIP TANTALUM 10-4	VC103	★87-026-435-010	DIODE, VARICAP KV1560
C134	★87-012-286-010	CAP, CHIP SS 0.01-25	VR1	87-024-142-010	VOLUME 20K (VOLUME)
C135	★87-012-286-010	CAP, CHIP SS 0.01-25	=== CONTROL CIRCUIT BOARD SECTION ===		
C136	★87-010-503-010	CAP, CHIP ELECT 220-4	BAT1	★84-462-614-010	CL BATT
C137	★87-012-286-010	CAP, CHIP SS 0.01-25	C160	★87-010-452-010	CAP, CHIP 1-16
C138	★87-012-186-010	CAP, CHIP CERAMIC SS 39P CH	C161	★87-012-286-010	CAP, CHIP SS 0.01-25
C139	★87-012-271-010	CAP, CHIP SS 560P-50	C162	★87-012-276-010	CAP, CHIP SS 1500P-50
C140	★87-010-668-010	CAP, CHIP ELECT 220-4	C163	★87-012-168-010	CAP, CHIP SS 6P-50 CH
C141	★87-012-282-010	CAP, CHIP SS 4700P-50	C164	★87-012-199-010	CAP, CHIP SS 220P-50 CH
C142	★87-012-286-010	CAP, CHIP SS 0.01-25	C165	★87-010-452-010	CAP, CHIP 1-16
C143	★87-010-668-010	CAP, CHIP ELECT 220-4	C166	★87-010-196-010	CAP, CHIP S 0.1-25
C144	★87-010-668-010	CAP, CHIP ELECT 220-4	C167	★87-012-286-010	CAP, CHIP SS 0.01-25
C145	★87-012-286-010	CAP, CHIP SS 0.01-25	C168	★87-010-505-010	CAP, CHIP TANTALUM 1-16
C146	★87-010-198-010	CAP, CHIP S 0.022-25	C169	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4
C147	★87-010-424-010	CAP, CHIP TANTALUM 4.7-4	C170	★87-012-195-010	CAP, CHIP SS 100P-50 CH
C148	★87-012-282-010	CAP, CHIP SS 4700P-50	C171	★87-012-184-010	CAP, CHIP SS 33P-50 CH
C149	★87-012-286-010	CAP, CHIP SS 0.01-25	C172	★87-012-169-010	CAP, CHIP SS 7P-50 CH
C150	★87-010-198-010	CAP, CHIP S 0.022-25	C173	★87-012-286-010	CAP, CHIP SS 0.01-25
C151	★87-012-286-010	CAP, CHIP SS 0.01-25	C174	★87-012-188-010	CAP, CHIP SS 47P-50 CH
C152	★87-012-278-010	CAP, CHIP SS 2200P-50	C175	★87-010-196-010	CAP, CHIP S 0.1-25
C153	★87-010-452-010	CAP, CHIP 1-16	C176	★87-012-141-010	CAP, CHIP S 0.22
C154	★87-010-452-010	CAP, CHIP 1-16			

PRACTICAL SERVICE FIGURE

REF. NO.	PART NO.	DESCRIPTION
C177	★87-010-452-010	CAP, CHIP 1-16
C178	★87-010-196-010	CAP, CHIP S 0.1-25
C179	★87-010-196-010	CAP, CHIP S 0.1-25
D103	87-020-508-010	LED, CHIP SLM-13VW (OPE/BATT)
L109	★87-005-262-010	COIL 10UH
L111	★87-006-173-010	COIL DD 5CDL
LCD1	84-518-605-010	LCD HS ASSY(DISPLAY)
S8	87-036-146-010	SLIDE SW(FUNCTION BAND)
S9	87-036-123-010	SLIDE SW(AM/FM STEP)
S10	87-036-123-010	SLIDE SW(HOLD)
S11	87-030-152-010	TACT SW(STORE/SET)
S12	87-030-152-010	TACT SW(UP/HOUR)
S13	87-030-152-010	TACT SW(DOWN/MIN)
X1	★87-030-180-010	X'TAL KF-38R5-8A

=== REGULATOR CIRCUIT BOARD SECTION ===

C1	★84-439-620-010	CAP, ELECT 470-4
TM2	84-435-246-110	TERMINAL ASSY

=== TERMINAL CIRCUIT BOARD SECTION ===

TM1	84-435-246-110	TERMINAL ASSY
-----	----------------	---------------

=== HEAD CIRCUIT BOARD SECTION ===

S1	84-462-610-010	HEAD ASSY(W/PCB-E)
	84-541-602-010	SLIDE SW(FWD/REV)

=== CONNECT CIRCUIT BOARD SECTION ===

PCB-F	★84-462-603-010	CONNECT CIRCUIT BOARD
-------	-----------------	-----------------------

=== SWITCH CIRCUIT BOARD SECTION ===

(W/PCB-G)

S15	★84-518-608-010	MEMBRANE SW(PRESET CLOCK/1)
S16	+++	MEMBRANE SW(PRESET CLOCK/2)
S17	+++	MEMBRANE SW(PRESET3)
S18	+++	MEMBRANE SW(PRESET4)
S19	+++	MEMBRANE SW(PRESET5)

=== MISCELLANEOUS ===

EH	86-541-601-010	EH
M1	87-045-303-010	MOTOR 26FL-0611

<RADIO SECTION>

Sensitivity :

(IHF, THD, 3%) FM 13±4dB (97.5MHz)
(S/N 10dB) AM 53±4dB (999kHz)

Intermediate frequency : FM 10.7MHz

AM 450kHz

FM stereo separation : FM 20±4dB (1kHz)

<TAPE RECORDER SECTION>

Bias frequency : 54kHz

Erasing ratio : More than 50dB

Distortion : Less than 3% (PB)

Less than 10% (REC/PB)

S/N ratio : 50±4dB (PB)

35±8dB (REC/PB)

Noise level : Less than 3.0mV (PB,VOL MAX)

Less than 20mV (PB/REC,VOL MAX)

Wow & flutter : Less than 0.45% (FWD) RMS

Less than 0.48% (REV) RMS

Pinch roller pressure : 135±15 g (FWD)

125±15 g (REV)

Take up torque : 30⁺¹⁰₋₅ g-cm (FWD/REV)

F.F & REW torque : 80~130 g-cm

Back tension : 2~3.5 g-cm (FWD/REV)

Frequency response : 63Hz~8kHz ±4.0dB (NORMAL)

63Hz~10kHz ±5.0dB (CrO₂, METAL)

○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

8 8 - □ □ □ - □ □ □

A
抵抗コード
Resistor code

桁表示
Figure

抵抗値
Value of resistor

チップ抵抗

Chip resistor

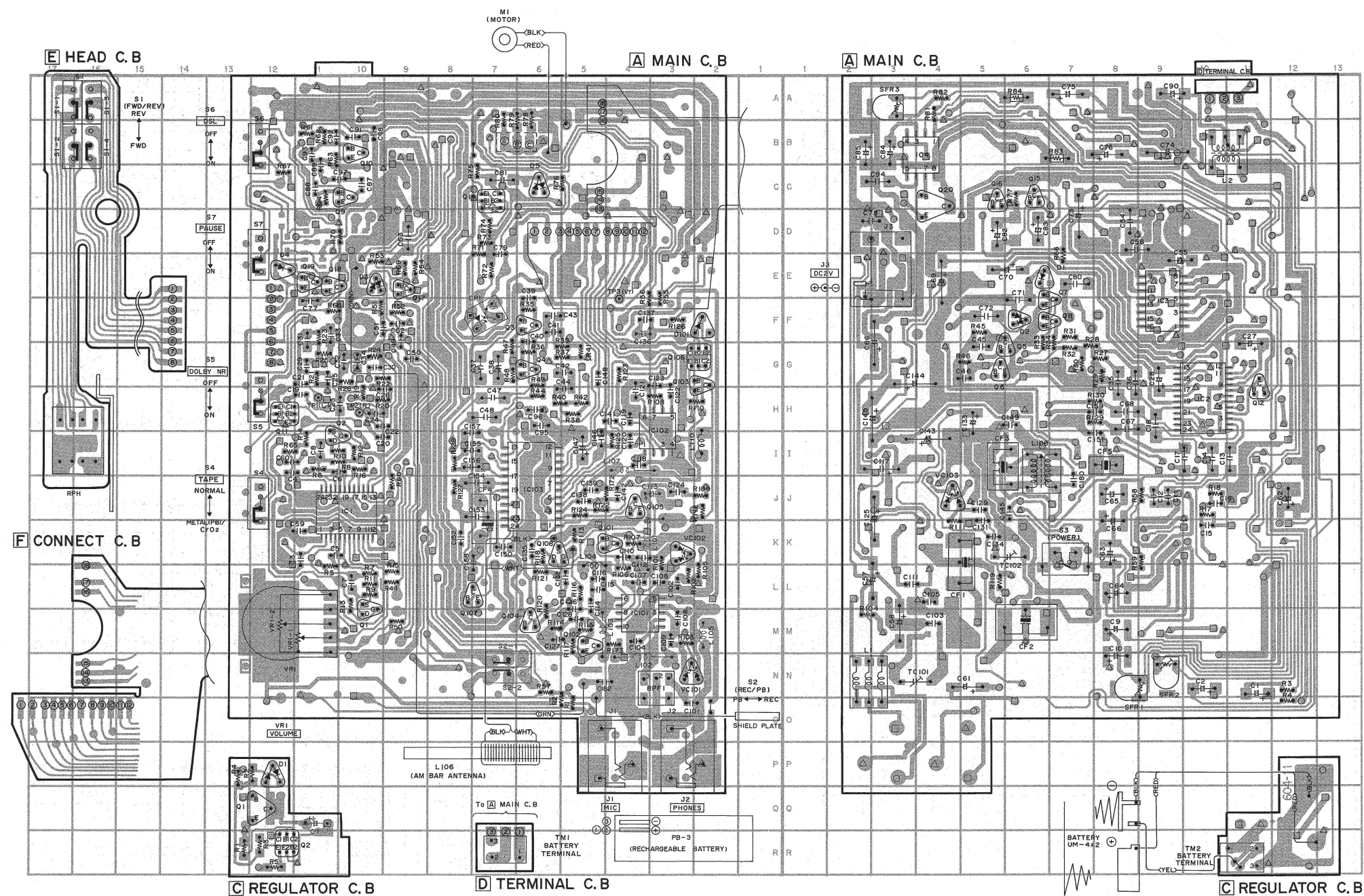
Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions/寸法(mm)				Resistor Code : A
				Form/外形	L	W	t	抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128

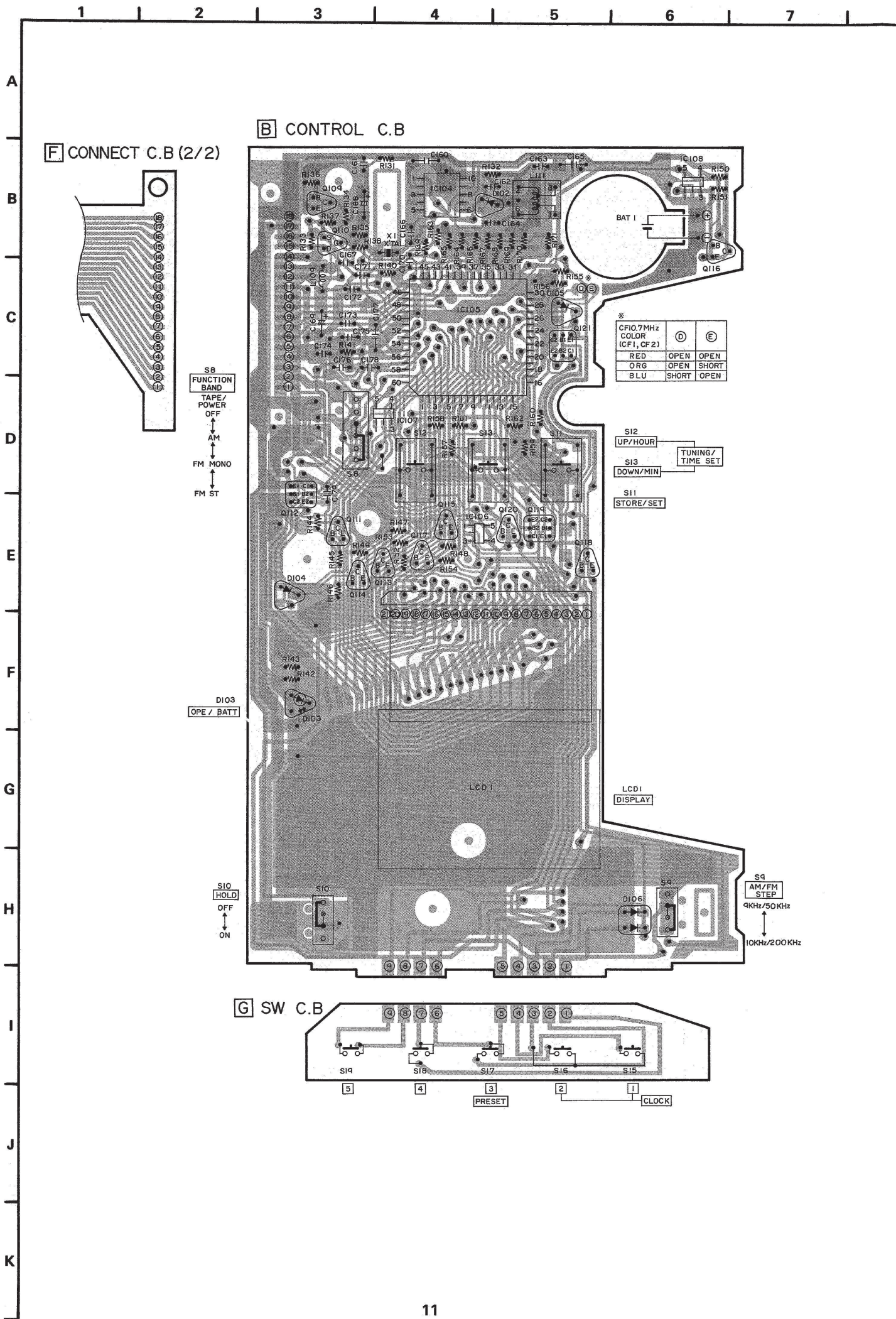
IC DESCRIPTION

TC9308AF-014

Pin No.	Pin Name	Description																
58	COM1	Common output terminal.	} LCD drive output terminal.															
19	COM2	Common output termianl.																
59,60 1~18	S ₁ ~S ₂₀	Segment output terminal.																
20	K ₀	Key return signal inputs for the key matrix.																
21	K ₁																	
22	K ₂																	
24	K ₃																	
25	T ₀	Key return signal inputs for the key matrix.																
26	T ₁																	
27	T ₂																	
28	T ₃																	
29,30	I ₀₀ , I ₀₁	Band select terminal.	<table><tr><td>I₀₀</td><td>I₀₁</td><td colspan="2">Mode</td></tr><tr><td>H</td><td>H</td><td>10kHz</td><td rowspan="2">AM</td></tr><tr><td>H</td><td>L</td><td>9kHz</td></tr><tr><td>L</td><td>H</td><td colspan="2">FM</td></tr></table>	I ₀₀	I ₀₁	Mode		H	H	10kHz	AM	H	L	9kHz	L	H	FM	
I ₀₀	I ₀₁	Mode																
H	H	10kHz	AM															
H	L	9kHz																
L	H	FM																
31,32	E ₀ , E ₁	Bandwidth/tuning step select terminal.	<table><tr><td></td><td>U.C</td><td>H</td><td>Except U,C,H</td></tr><tr><td>E₀</td><td>L</td><td>H</td><td>H</td></tr><tr><td>E₁</td><td>H</td><td>L</td><td>H</td></tr></table>		U.C	H	Except U,C,H	E ₀	L	H	H	E ₁	H	L	H			
	U.C	H	Except U,C,H															
E ₀	L	H	H															
E ₁	H	L	H															
33	————	Not used.																
34	STOP IN	Goes high during motor rotation. Goes low when motor stops.																
35	————	Not used.																
36	F/R IN	Goes high in FWD mode. Goes low in REV mode.																
37	————	Not used.																
38	MUTE	Mute output terminal. Muted in high level.																
39	————	Not used.																
40	————	Not used.																
41	IF IN	Auto stop input terminal. Goes input signal when mute on.																
42	DO1	Phase detectors error output terminal. A pulse is output to LPF.																
43	————	Not used.																
44	AM OSC	AM OSC input terminal.																
45	PSC	PSC output terminal.																
46	FM IN	Prescaler OUT input termianl.																
47	GND	GND terminal.																
48	INH	PLL is activated when high. PLL is stopped when low (backup mode).																
49	————	Not used.																
50, 51	XT, XT	Used to connect crystal oscillator.																
52	INT	Initialize terminal. Initialized and set to the initial value when low. Memory is then cleared.																
53	VDD	Power supply connection terminal.																
54	VLCD	LCD step-up power supply.																
55~57	C ₁ ~C ₃	Capacitor connection terminal for LCD step-up power supply.																

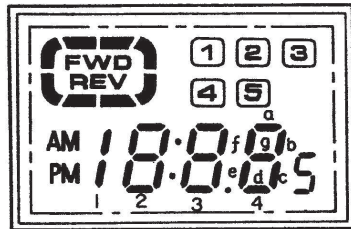






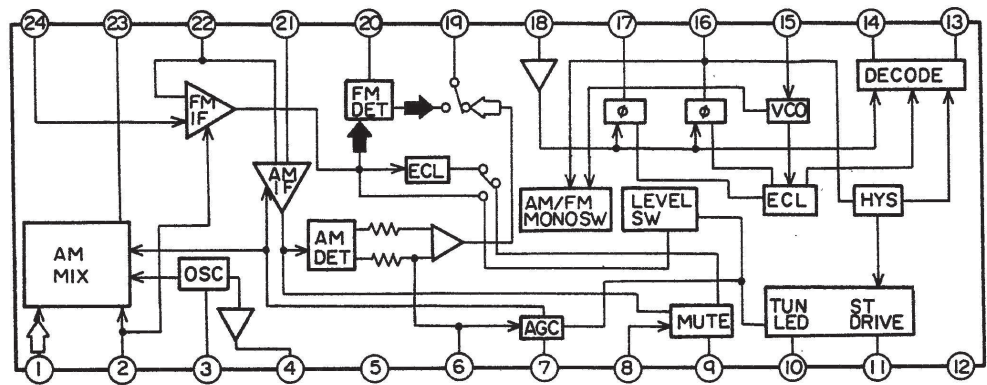
IC BLOCK DIAGRAM

LCD 1

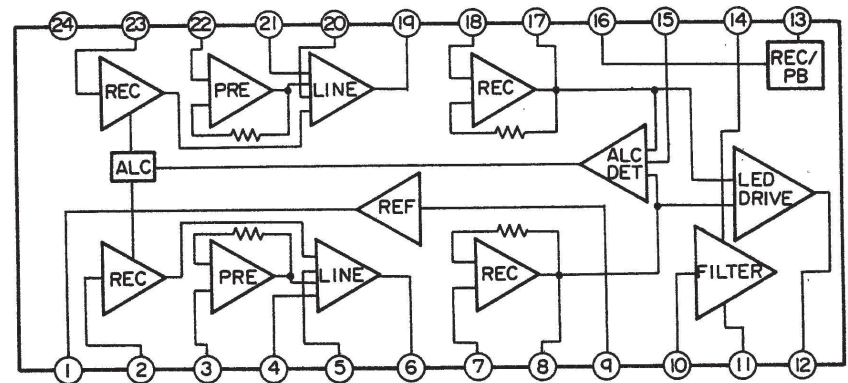


No.	COM. 1	COM. 2
1	COM. 1	
2	↑ ↓	↑ ↓
3	REV	FWD
4	—	—
5	1	2
6	PM	3
7	1 bc	AM
8	2 d	2 e
9	2 g	2 f
10	2 c	.
11	2 b	2 a
12	3 d	3 e
13	3 g	3 f
14	3 c	.
15	3 b	3 a
16	4 d	4 e
17	4 g	4 b
18	4 c	5
19	4 a	4 f
20	4	5
21		COM. 2

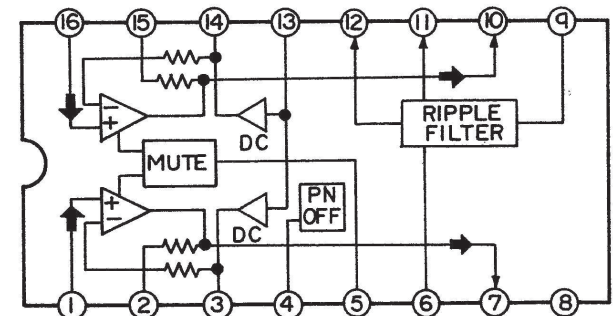
TA8132AF



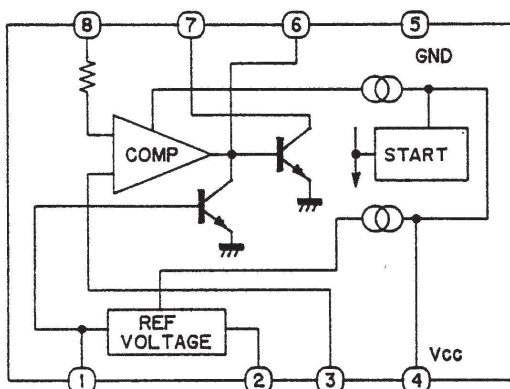
CXA1278N



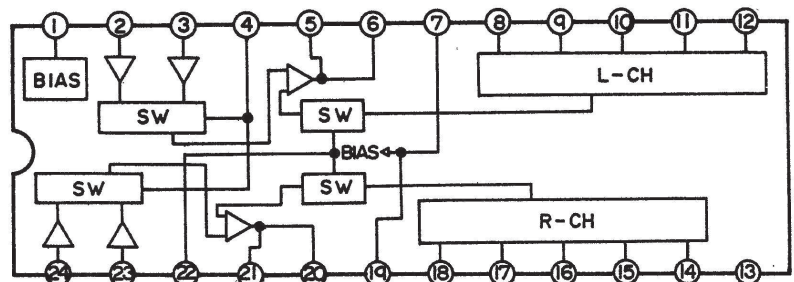
TA7688FS



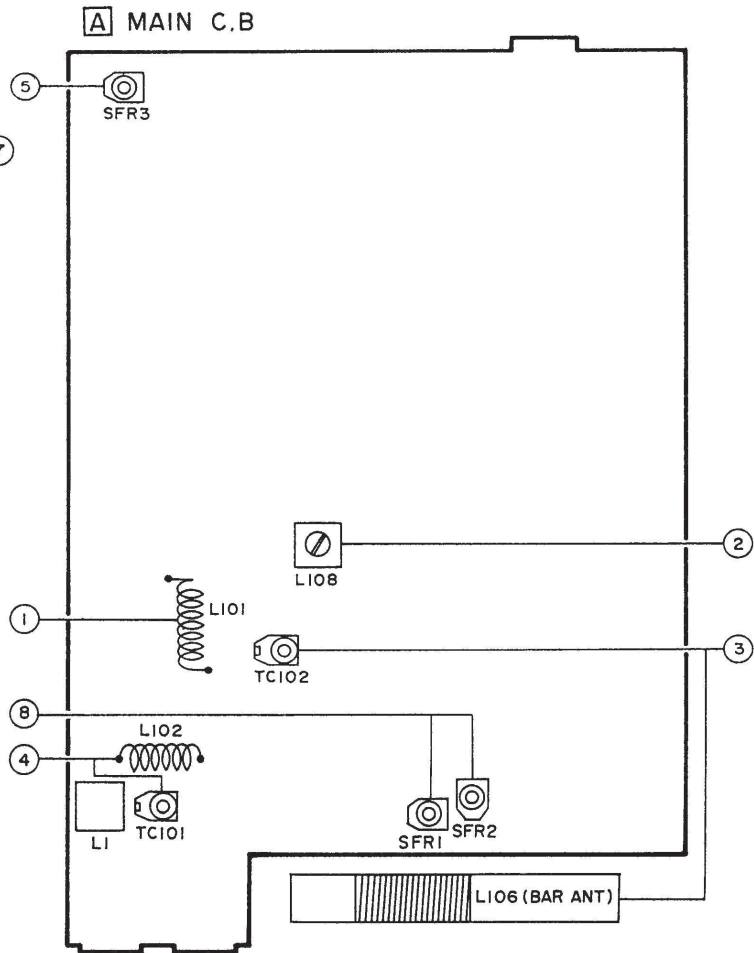
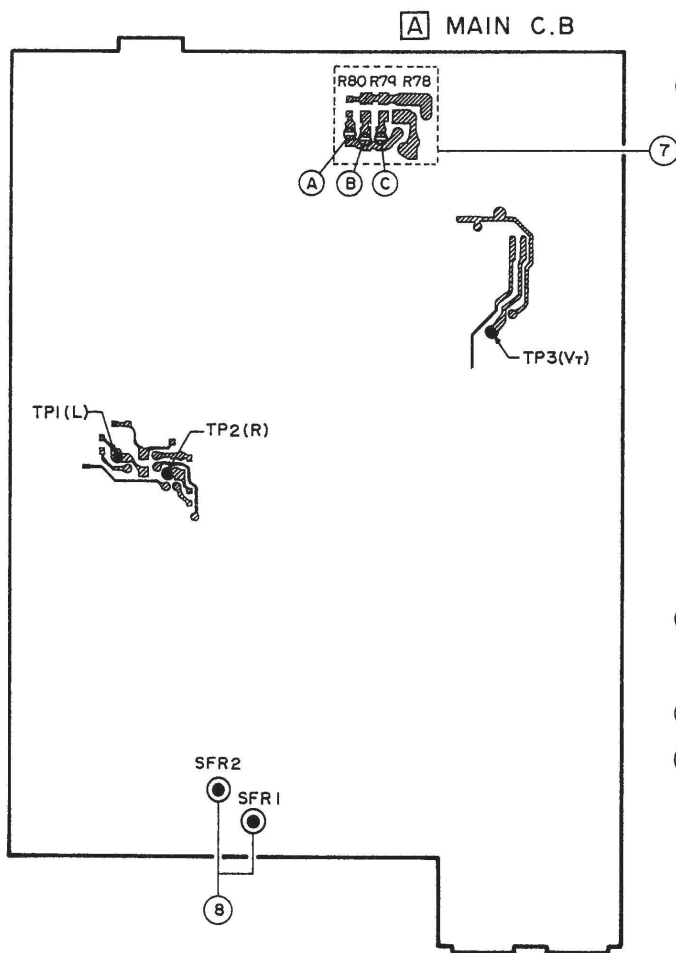
AN6612S



BA1102FS



ADJUSTMENT



<RADIO SECTION>

1. FM VT Adjustment

Settings : • Test point : TP3(VT)

• Adjustment location : L101

Method : Tune to FM 87.5MHz and adjust L101 so that the voltage at TP3 is $0.95 \pm 0.05V$. After adjustment is completed, check that it is 6.5V or more at TP3 with the FM 108MHz signal.

2. AM IF Adjustment

L108 450kHz

3. AM Tracking Adjustment

L106 630kHz

TC102 1440kHz

4. FM Tracking Adjustment

L102 87.5MHz

TC101 108MHz

<TAPE RECORDER SECTION>

5. Tape Speed Adjustment

Settings : • Test tape : TTA-100(TTA-111S)

• Adjustment location : SFR3

Method : Play back the test tape, adjust for 3000Hz at FWD and $\pm 45Hz$ at REV mode.

6. Azimuth Adjustment

Settings : • Test tape : TTA-320(TTA-317E)

• Adjustment location : Azimuth adjustment screw

Method : Play back the 8kHz signal of the test tape, and adjust so that the output becomes maximum at FWD and REV mode.

7. Motor Load Adjustment

Refer to the REF No. SI-88-037-0P of service technical information.

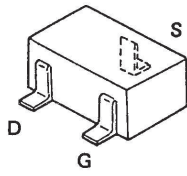
8. Dolby Level Adjustment

Settings : • Test tape : TTA-200(TTA-161,TCC-130)

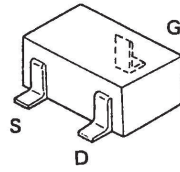
• Test point : TP1(Lch), TP2(Rch)

• Adjustment location : SFR1(Lch)
SFR2(Rch)

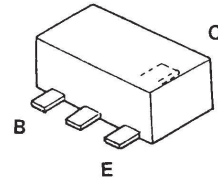
Method : Connect an electrolytic capacitor ($10\mu F/16V$) to measured equipment and TP1(2), adjust for $100mV \pm 10mV$ at FWD and REV mode.



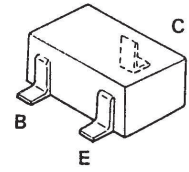
2SK882



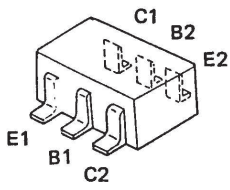
2SK880



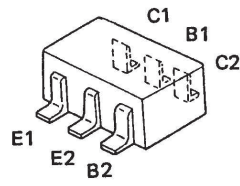
2SA1213



**2SA1586
2SA1588
2SC4116
2SC4213
2SC4215
RN1310
RN2310**



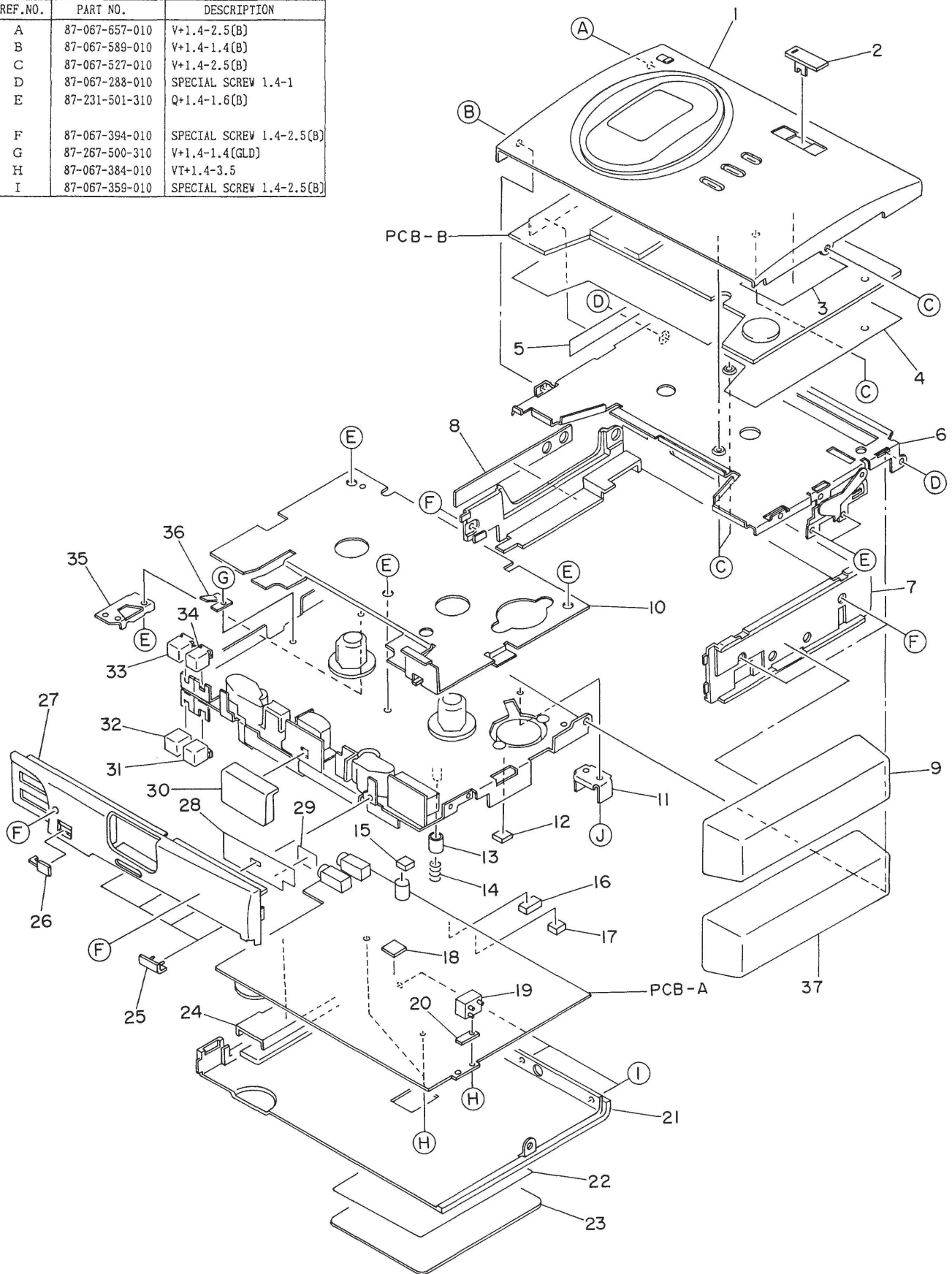
**HN1C01
RN1610
RN2610
RN4605**



IMX2

EXPLODED VIEW - 1

REF.NO.	PART NO.	DESCRIPTION
A	87-067-657-010	V+1.4-2.5(B)
B	87-067-589-010	V+1.4-1.4(B)
C	87-067-527-010	V+1.4-2.5(B)
D	87-067-288-010	SPECIAL SCREW 1.4-1
E	87-231-501-310	Q+1.4-1.6(B)
F	87-067-394-010	SPECIAL SCREW 1.4-2.5(B)
G	87-267-500-310	V+1.4-1.4(GLD)
H	87-067-384-010	VT+1.4-3.5
I	87-067-359-010	SPECIAL SCREW 1.4-2.5(B)

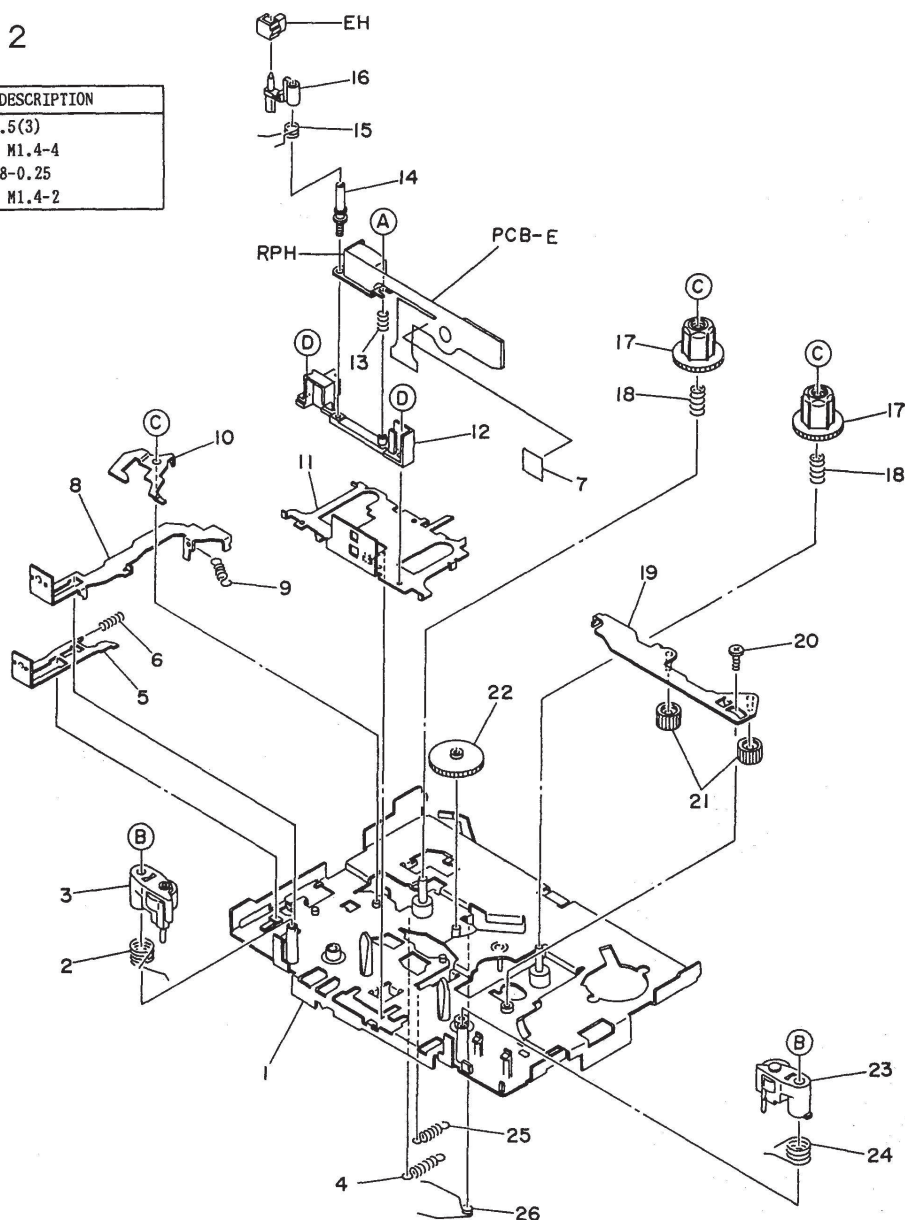


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
1-1		09-027-948-010	LID CASSETTE ASSY	*	1
1-2	★	84-518-008-010	KNOB, SLIDE BAND	*	1
1-3	★	84-518-210-010	SHEET A	*	1
1-4	★	84-518-207-010	SHEET, INSULATION	*	1
1-5	★	84-518-209-010	SHEET, CONTROL	*	1
1-6	★	84-518-206-010	HOLDER CASSETTE ASSY	*	1
1-7	★	84-518-001-010	FRAME, CENTER B	*	1
1-8	★	81-HJ6-004-010	PLATE, JACK		1
1-9	★	09-027-585-010	BATTERY BOX ASSY	*	1
1-10	★	84-518-020-010	SHEET, DECORATION	*	1
1-11	★	84-462-204-010	HOLDER, JACK DC		1
1-12	★	84-462-220-010	G CUSHION 6-6-2.7		1
1-13	★	84-462-208-110	SPACER, BOSS		1
1-14	★	84-462-218-010	C-SPRING, MECHANISM EARTH A		1
1-15	★	82-663-232-010	G CUSHION 4-4-2		1
1-16	★	82-681-244-010	G CUSHION 2.5-2.5-2		1
1-17	★	82-690-237-010	G CUSHION 5-3-2		1
1-18	★	82-462-237-010	SHEET PB		1
1-19	★	84-435-246-110	TERMINAL 1.4 ASSY		1
1-20	★	84-462-206-010	SPACER, CONTACT		1
1-21	★	84-518-014-010	CABINET, REAR	*	1
1-22	★	84-462-225-010	AD SHEET, SPEC		1
1-23	★	81-HJ6-005-010	PLATE, SPEC (H,E)		1
1-24		84-462-210-010	HOLDER, BAR ANTENNA		1
1-25	★	84-518-018-010	KNOB, SLIDE A	*	4
1-26	★	84-462-014-010	KNOB, DIRECTION		1
1-27	★	84-518-002-210	PANEL, CONTROL	*	1
1-28		84-465-209-010	SHIELD SHEET, PANEL		1
1-29	★	84-460-220-010	SHEET 4-10		1
1-30	★	84-518-009-010	PUSH-BUTTON, PLAY	*	1
1-31	★	84-518-010-010	PUSH-BUTTON, FF	*	1
1-32	★	84-518-011-010	PUSH-BUTTON, REW	*	1
1-33	★	84-518-012-010	PUSH-BUTTON, STOP	*	1
1-34	★	84-518-013-010	PUSH-BUTTON, REC	*	1
1-35	★	84-462-240-010	HOLDER, JACK		1
1-36	★	84-463-209-010	P-SPRING, POP UP		1
1-37		84-462-018-010	BOX, BATTERY A		1
	★	09-027-749-010	APPEARANCE SCREW KIT	*	1

EXPLODED VIEW - 2

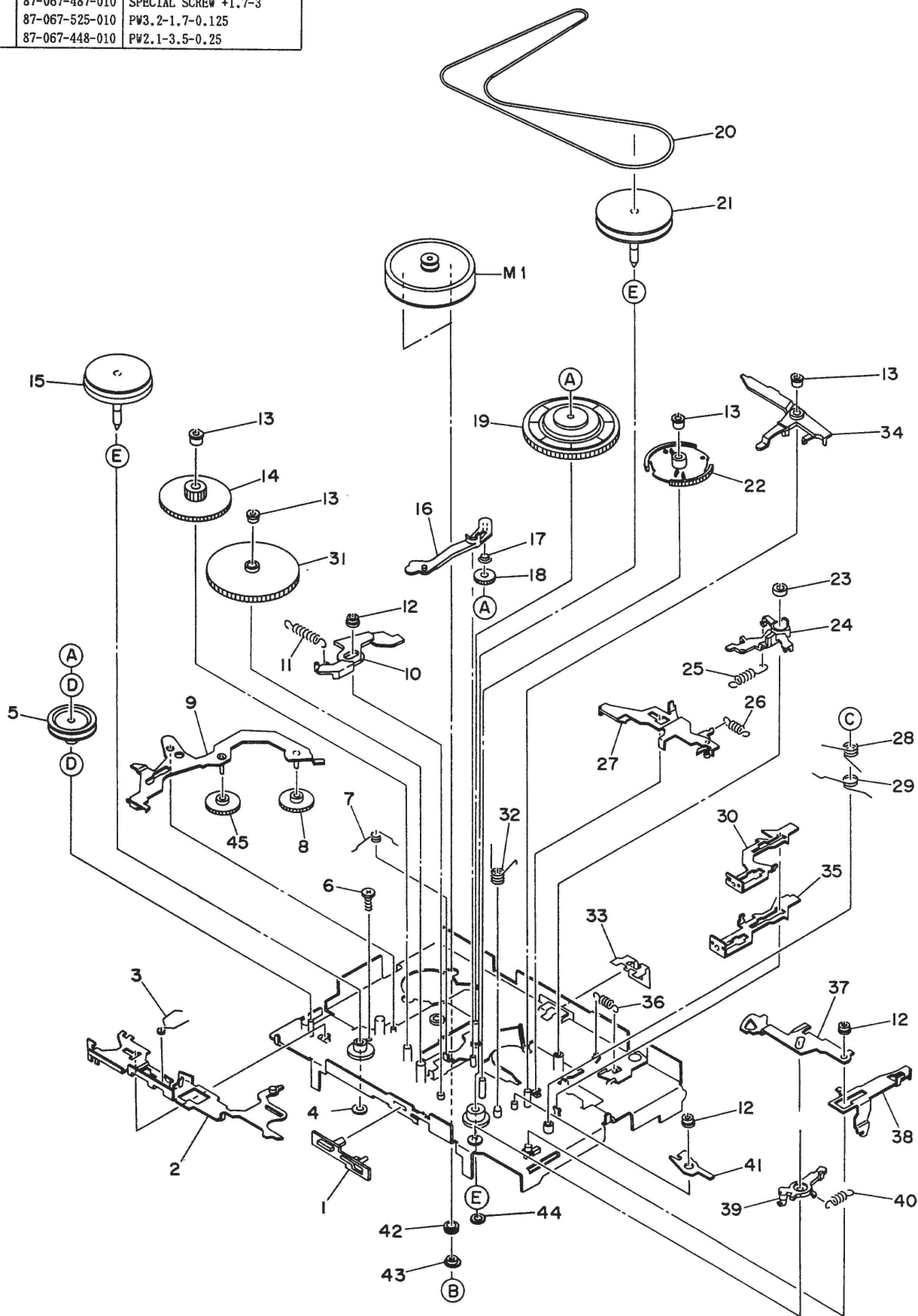
REF.NO.	PART NO.	DESCRIPTION
A	87-268-512-310	V+1.4-5.5(3)
B	87-067-517-010	S-SCREW M1.4-4
C	87-067-516-010	PW3-1.58-0.25
D	87-067-749-010	S-SCREW M1.4-2



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	2-1	★ 86-541-500-710	OUTSERT ASSY BP		1
	2-2	★ 86-541-338-110	T-SPRING, PINCH RP		1
	2-3	86-541-516-010	PINCH LEVER R ASSY		1
	2-4	★ 86-541-336-010	E-SPRING, REC		1
	2-5	★ 86-556-255-110	PLATE, STOP		1
	2-6	★ 86-541-329-010	C-SPRING, STOP		1
	2-7	★ 86-541-421-010	MYLAR, FLEXIBLE		1
	2-8	★ 86-541-497-010	PLATE, REC B		1
	2-9	★ 86-541-312-110	E-SPRING, REC LOCK		1
	2-10	★ 86-541-277-210	LEVER, REC LOCK		1
	2-11	★ 86-541-260-910	CHASSIS, ACTUATING		1
	2-12	★ 86-541-283-110	GUIDE, TAPE		1
	2-13	★ 86-541-318-110	C-SPRING, AZIMUTH		1
	2-14	★ 86-541-369-010	SCREW, EH M1.4		1
	2-15	★ 86-541-344-010	T-SPRING, EH LEVER		1
	2-16	★ 86-541-287-310	LEVER, EH		1
	2-17	★ 86-541-236-010	GEAR, REEL PLATFORM		2
	2-18	★ 86-541-328-110	C-SPRING, REEL PLATFORM		2
	2-19	★ 86-541-509-110	PLATE FR ASSY		1
	2-20	★ 86-541-519-010	S-SCREW, FR		1
	2-21	★ 86-541-520-110	GEAR, FR 2		2
	2-22	★ 86-541-239-010	GEAR, REW		1
	2-23	86-541-515-010	PINCH LEVER F ASSY		1
	2-24	★ 86-541-314-110	T-SPRING, PINCH FR		1
	2-25	★ 86-541-331-010	E-SPRING, ACTUATING		1
	2-26	★ 86-541-347-210	T-SPRING, FR LEVER		1

EXPLODED VIEW - 3

REF.NO.	PART NO.	DESCRIPTION
A	87-067-447-010	PW3-1.215-0.25
B	87-233-526-310	V+1.7-2.8
C	87-067-487-010	SPECIAL SCREW +1.7-3
D	87-067-525-010	PW3.2-1.7-0.125
E	87-067-448-010	PW2.1-3.5-0.25



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
3-1	★	84-518-019-110	KNOB, DIRECTION MODE		1
3-2	★	86-541-222-710	PLATE PINCH SELECT ASSY		1
3-3	★	86-541-320-710	T-SPRING, PLAY LEVER		1
3-4	★	87-067-612-010	SHEET, SOMA 3.5-1.45-0.3		1
3-5	★	86-541-235-110	PULLEY, RELAY B		1
3-6	★	86-541-423-010	SCREW, FR		2
3-7	★	86-541-334-210	T-SPRING, AUTO LEVER		1
3-8	★	86-541-242-310	GEAR, PLAY		2
3-9	★	86-541-479-310	LEVER, PLAY ASSY M		1
3-10	★	86-541-288-410	LEVER, MODE SELECT		1
3-11	★	86-541-341-010	E-SPRING, MODE SELECT		1
3-12	---	---	COLLAR, PW-BOARD P		3
3-13	★	86-541-367-010	COLLAR, PW-BOARD J		4
3-14	★	86-541-240-010	GEAR, SLOW-DOWN		1
3-15	★	86-541-481-210	FLYWHEEL FWD ASSY		1
3-16	★	86-541-285-110	LEVER, AUTO		1
3-17	★	86-541-325-010	C-SPRING, AUTO GEAR		1
3-18	★	86-541-521-010	GEAR, AUTO		1
3-19	★	86-541-517-010	GEAR CLUTCH ASSY		1
3-20	★	86-541-371-010	BELT, B1		1
3-21	★	86-541-482-310	FLYWHEEL ASSY RVS		1
3-22	★	86-541-238-510	GEAR, CAM		1
3-23	---	---	SPACER, BOSS		1
3-24	★	86-541-291-110	LEVER, REC EJECT BR		1
3-25	★	86-541-297-210	E-SPRING, REC EJECT		1
3-26	★	86-541-332-010	E-SPRING, PLATE LOCK		1
3-27	★	86-541-223-310	PLATE EJECT ASSY A		1
3-28	★	86-541-349-010	T-SPRING, FR BUTTON		1
3-29	★	86-541-339-010	T-SPRING, TRIGGER		1
3-30	★	86-541-495-010	PLATE, REW		1
3-31	★	86-541-237-210	GEAR, AUTO CAM		1
3-32	★	86-541-345-310	T-SPRING, SELECT CAM		1
3-33	★	86-541-323-010	P-SPRING, CASSETTE SUPPORT		1
3-34	★	86-541-284-310	LEVER, TRIGGER		1
3-35	★	86-541-494-010	PLATE, FF		1
3-36	★	86-541-330-110	E-SPRING, REC BLOCKING		1
3-37	★	86-541-522-110	LEVER, EH RESET		1
3-38	★	86-541-263-210	PLATE, EJECT		1
3-39	★	86-541-286-110	LEVER, DIRECTION		1
3-40	★	86-541-343-010	E-SPRING, DIRECTION		1
3-41	★	86-541-273-110	LEVER, TRIGGER LOCK		1
3-42	★	86-511-445-010	G CUSHION, MOTOR		2
3-43	★	86-541-449-010	COLLAR, MOTOR B		2
3-44	★	87-067-925-010	SHEET, SOMA 1.72-3.2-0.3 CUT		1
3-45	★	86-541-477-210	GEAR, PLAY M		1
	★	09-027-568-010	COLLAR, PW-BOARD (PJ) KIT		1

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
1	★	84-518-904-010	INSTRUCTION BOOKLET EX	*	1
2	★	84-518-951-010	CARRYING CASE EX	*	1
3	★	09-027-585-010	BATT BOX ASSY[B]	*	1
4	★	84-462-018-010	BOX, BAT A[B]		1
5		87-041-064-010	MIC, CM-S20A		1
6		87-042-094-119	AC-207HA		1
7		87-042-095-019	AC-207EA(E)		1
8	★	87-047-123-010	PB-3NAY		1
9		87-048-238-010	HP-23NA(H, E)		1