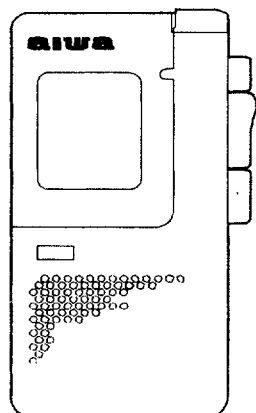


aiwa



TP-M320



MICRO CASSETTE RECORDER

• BASIC TAPE MECHANISM : M-132

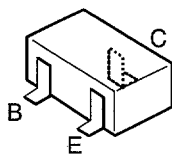
• TYPE : Y,YJ,YU,YL

SPECIFICATIONS

Track system	Micro cassette, 2 tracks 1 channel, monaural
Usable tapes	MICROCASSETTE TM (Normal position type)
Frequency response	250 – 5,000Hz (2.4 cm/sec) EIAJ
Tape speed	2.4 cm/sec or 1.2 cm/sec switchable
Microphone	Electret condenser microphone (monaural)
Maximum output	130 mW (EIAJ/DC)
Output jack	Phone jack (monaural mini-jack) (1)
Input jack	EXT MIC jack (monaural mini-jack)
Other jack	DC 3V jack
Speaker	Diameter 36 mm
Recording system	DC bias
Erasing system	Magnet erasure
Power sources	DC 3V, two R6 (size AA) dry cell batteries YJ,YU,YL: AC house current using an optional adaptor: AIWA AC-620/AC-302 Y: AC house current using an optional adaptor: AIWA AC-300/AC-302
Battery life	Approx. 7 hours using manganese (R6P) batteries Approx. 21 hours using Alkaline (LR6) batteries
Dimensions	66 (W) x 121.2 (H) x 26.5 (D) mm (2 ⁵ / ₈ x 4 ⁷ / ₈ x 1 ¹ / ₁₆ in)
Weight	Approx. 138 g (4.8 oz) (excluding batteries)

• Design and specifications are subject to change without notice.

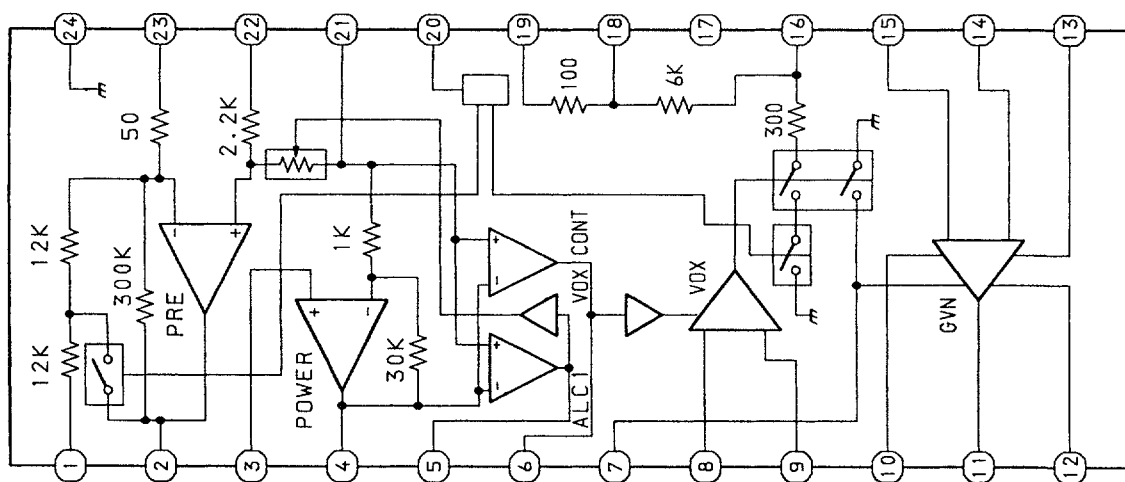
TRANSISTOR ILLUSTRATION



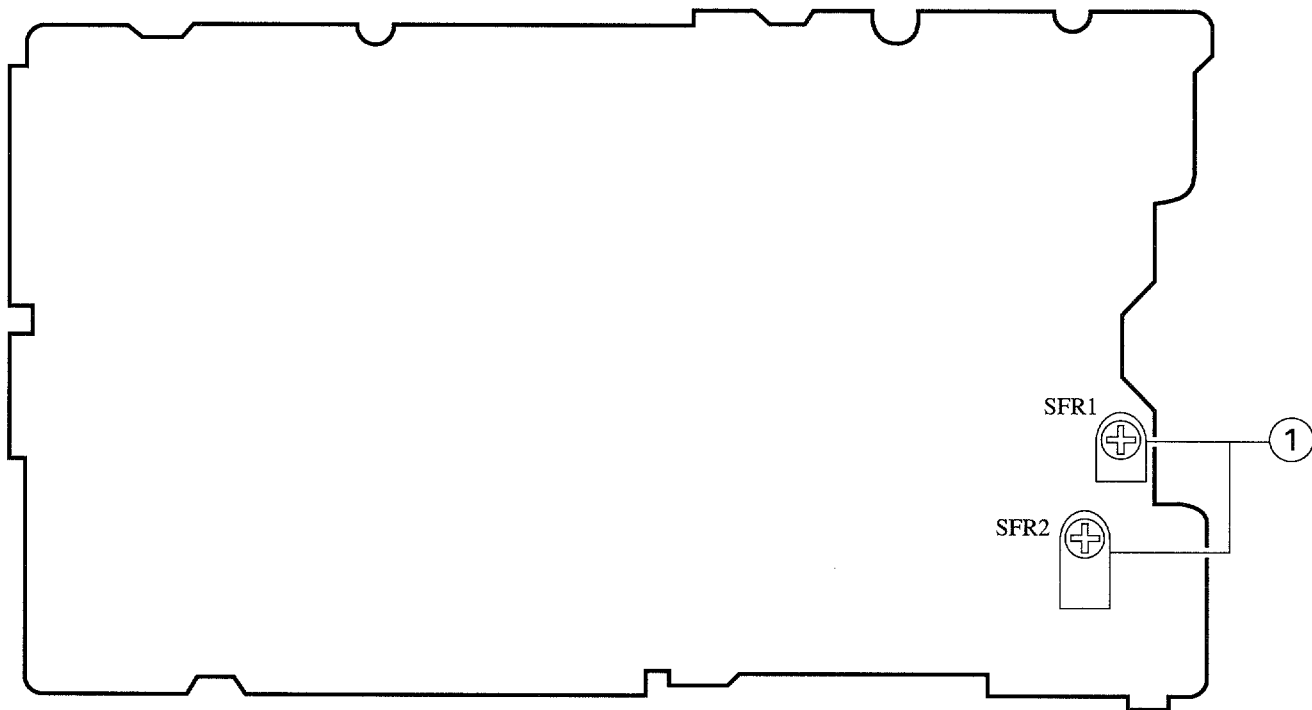
2SC2712
DTA114YK
DTC114YK

IC BLOCK DIAGRAM

IC, LA4165M



A MAIN C.B



< TAPE PLAYER SECTION >

1. Tape Speed Adjustment NORMAL (PALY)
 - Settings:
 - Test tape: TTS-900/910
 - Tape Speed: 2.4cm/s, 1.2cm/s
 - Adjustment point: SFR1, 2
 - Method: Play back the alignment tape, adjust SFR1, 2 so that frequency counter reads 3000Hz±10Hz.

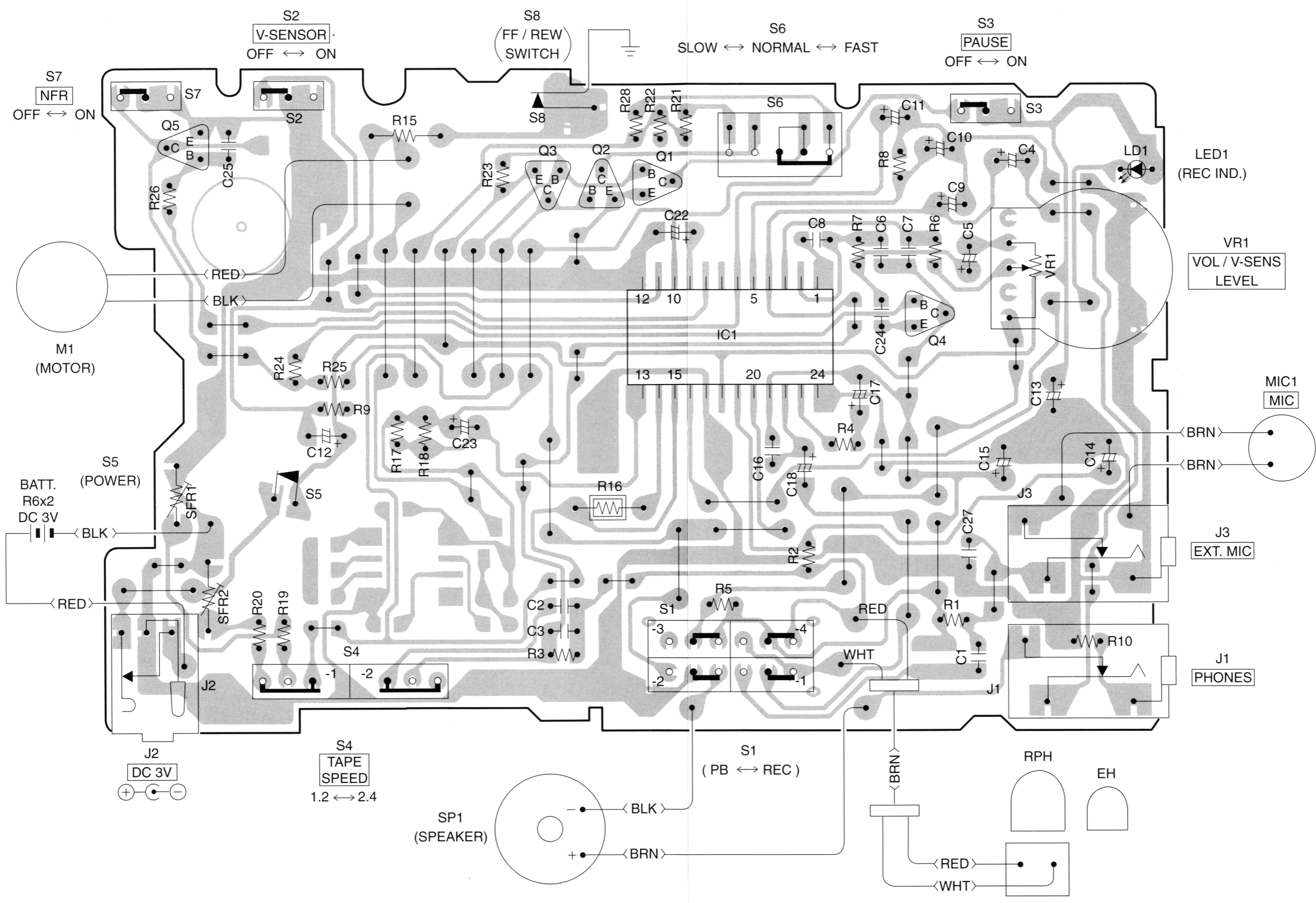
2. Azimuth Adjustment
 - Settings:
 - Test tape: TTS-930
 - Adjustment location: Head Azimuth Adjustment Screw
 - Method: Play back the 5kHz signal of the test tape and adjust screw so that output become maximum.

PRACTICAL SERVICE FIGURE

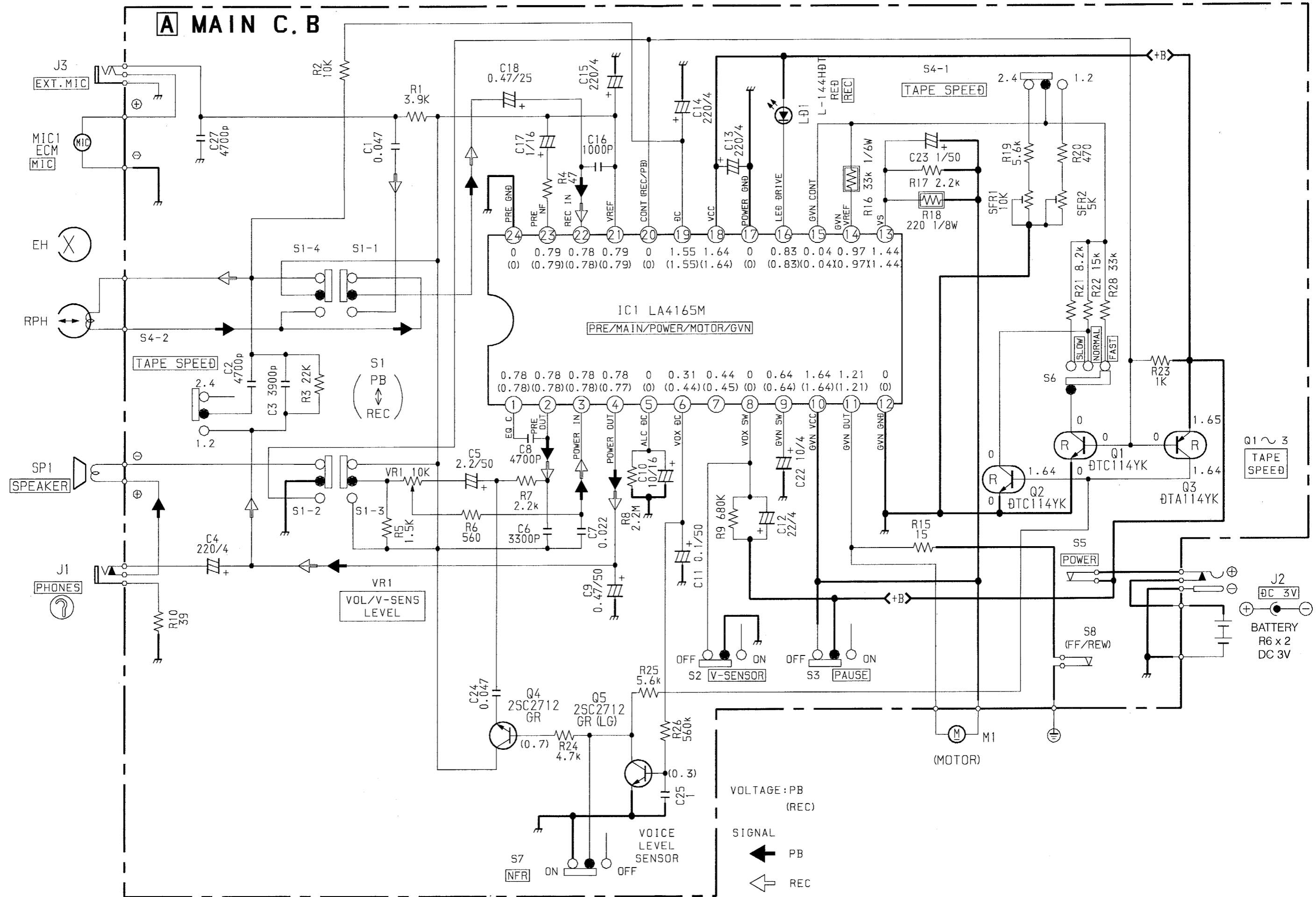
< TAPE PLAYER SECTION >

Tape speed:	3000Hz±90Hz
Wow & flutter:	Less than 0.65% (RMS)
Take-up torque:	4-12g-cm (FWD)
F.F torque:	30-150g-cm
REW torque:	25-60g-cm
Back tension:	1.3g-cm (FWD)
S/N ratio:	More than 57dB (DC)
Distortion:	Less than 3% (DC)
Noise level:	Less than 1.7mV (VOL MAX DC)
Frequency response:	250Hz±4.0dB - 5kHz±4.5dB

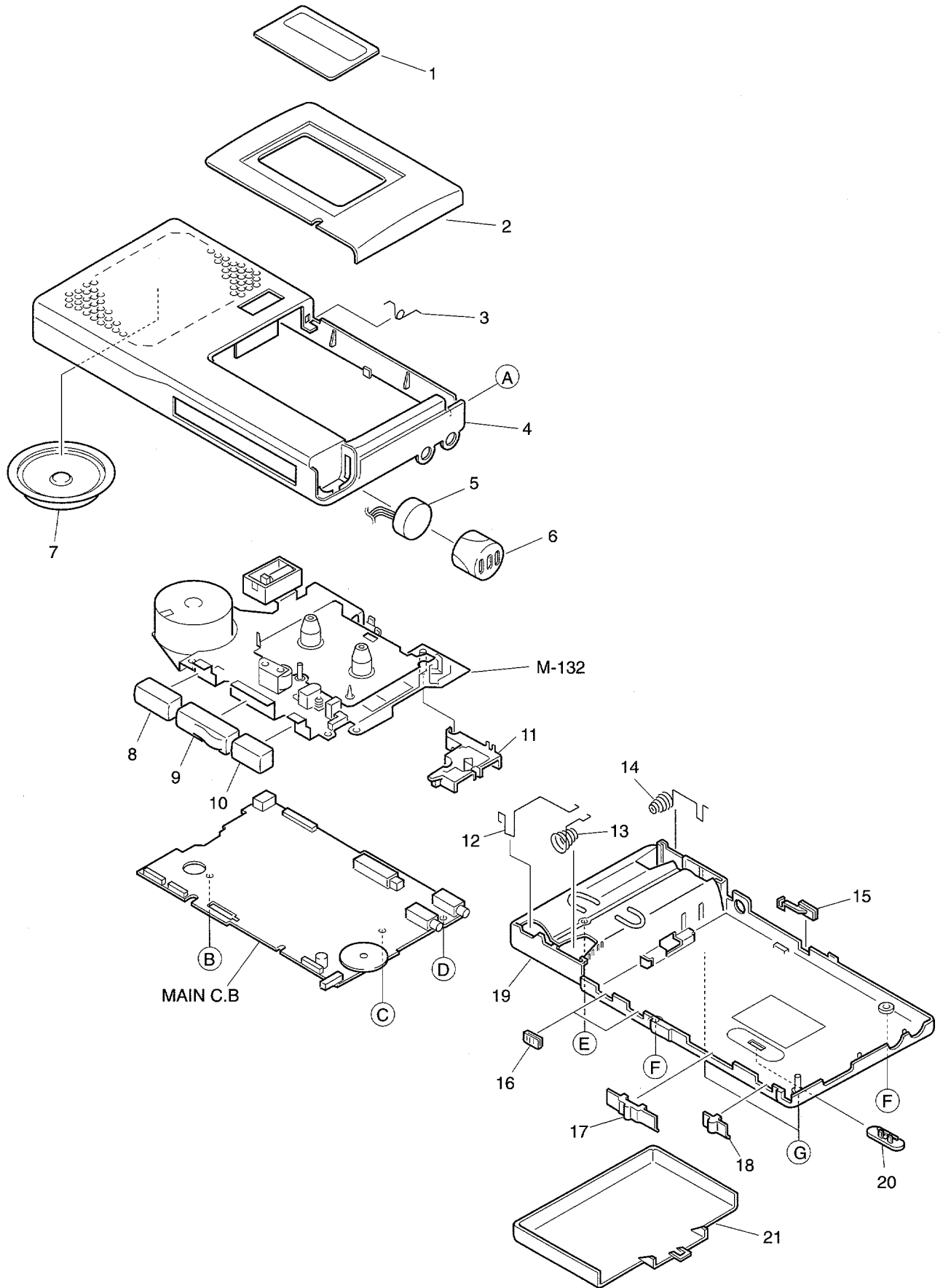
A MAIN C.B



SCHEMATIC DIAGRAM



MECHANICAL EXPLODED VIEW 1 / 1

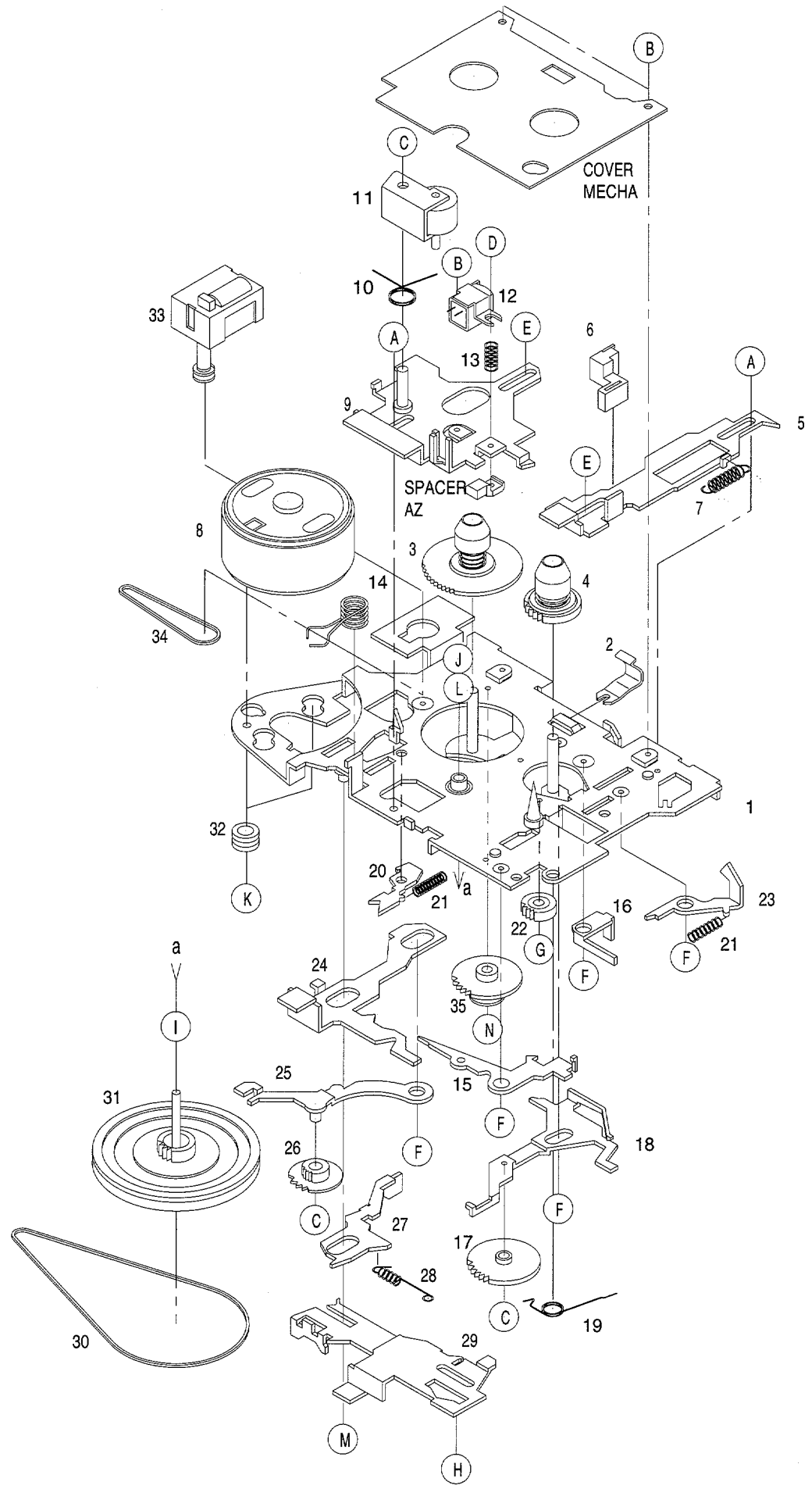


MECHANICAL PARTS LIST 1 / 1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-HX5-105-010		WINDOW, CASS
2	87-HX5-103-010		LID, CASS
3	86-HX5-208-010		SPR-T, CASS
4	87-HX5-101-010		CABI, FRONT
5	84-TM1-639-010		ECM, KUC3523
6	87-HX5-106-010		COVER, MIC
7	84-TM1-635-010		SP, DIA36
8	87-HX5-108-010		BTN, STOP
9	87-HX5-107-010		BTN, PLAY
10	87-HX5-109-010		BTN, REC
11	86-HX5-202-010		HLDR, JACK
12	86-HX5-204-010		SPR, BAT(+)
13	86-HX5-205-010		SPR, BAT(-)
14	86-HX5-203-010		SPR, BAT (+/-)
15	87-HX5-113-010		KNOB, SL 2.4/1.2
16	87-HX5-112-010		KNOB, SL SLSS/VZRS
17	87-HX5-110-010		KNOB, SL F/R
18	87-HX5-111-010		KNOB, SL PAUSE
19	87-HX5-102-010		CABI, REAR
20	86-HX5-111-010		KNOB, SL F/N/S
21	87-HX5-104-010		LID, BAT
A	87-HX5-202-010		S-SCREW, VT3+1.4-2.2 CR
B	86-HX5-211-010		S-SCREW, 1.7-5.3
C	86-HX5-214-010		S-SCREW, VT3+1.4-3
D	87-067-407-010		VT1.4-6W
E	87-B10-153-010		VT2+1.7-6 CR
F	87-B10-154-010		V+1.4-5 CR
G	87-HX5-201-010		S-SCREW, 1.7-14 CR

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	S1-000-01K-000		CHASSIS ASSY	26	S1-000-500-000		GEAR, FWD
2	S1-000-550-000		SPR, HOLDER CST	27	S1-000-380-200		SW, LEVER
3	S1-001-500-000		T-REEL ASSY	28	S1-000-390-000		SPR, LEVER SW
4	SV-100-210-000		S-REEL ASSY	29	S1-000-530-000		LEVER, FR
5	S1-000-330-000		LEVER, REC	30	SY-160-000-000		BELT, MAIN
6	SE-690-100-000		HEAD, E	31	S1-000-520-000		FW ASSY
7	S1-000-340-000		SPR, LEVER REC	32	S0-710-000-000		CUSHION, RUBBER
8	SM-M7H-30T-181		MOTOR ASSY	33	SM-U34-500-400		COUNTER
9	S1-000-25K-000		BASE HEAD ASSY	34	SV-170-000-000		BELT, COUNTER
10	S1-000-310-000		SPR, PINCH	35	S1-000-580-000		GEAR, COUNTER
11	S1-000-290-000		ARM PINCH ASSY	A	S1-000-320-000		SCREW
12	SR-M55-110-000		HEAD, R/P	B	S3-FW1-4X2-000		SCREW
13	S1-000-650-000		SPR, AZIMUTH	C	S1-6X3-2X0-250		WASHER, CUT
14	S1-000-270-000		SPR, BASE HEAD	D	S3-PB1-4X6-500		SCREW
15	S1-000-450-200		ARM, LOCK REC	E	S1-000-640-000		SCREW
16	S1-000-350-000		LEVER, SW REC	F	S1-000-590-000		SCREW
17	S1-000-420-000		GEAR, CENTER	G	S1-000-600-000		SCREW
18	S1-000-41K-000		ARM CENTER ASSY	H	S1-000-620-000		SCREW
19	S1-300-100-000		SPR, LOCK REC	I	S1-6X3-5X0-250		WASHER
20	S1-000-460-000		CAM, LOCK FWD	J	S1-26X-25X-050		WASHER, CUT
21	S1-000-130-000		SPR, SAFETY REC	K	S1-000-750-000		SCREW
22	S1-000-100-000		GEAR, REW	L	S1-6X2-5X0-200		WASHER
23	S1-000-090-000		SAFETY REC	M	S1-6X4-X03-500		WASHER, CUT
24	S1-000-370-000		LEVER, STOP	N	S1-000-630-000		SCREW
25	S1-000-49K-000		ARM FWD ASSY				

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-HX5-903-010	IB, EX-ESC<YJ>	
1	87-HX5-906-010	IB, EX-ESD<Y>	
1	87-HX5-901-010	IB, EX-ESF<YU>	
1	87-HX5-905-010	IB, EX-ESP<YL>	
1	87-HX5-904-010	IB, EX-GFI<Y>	
1	87-HX5-907-010	IB, EX-PHNCZ<Y>	
2	86-HX5-122-010	CASE, CARRING<YJ, YL>	

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-SPR	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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