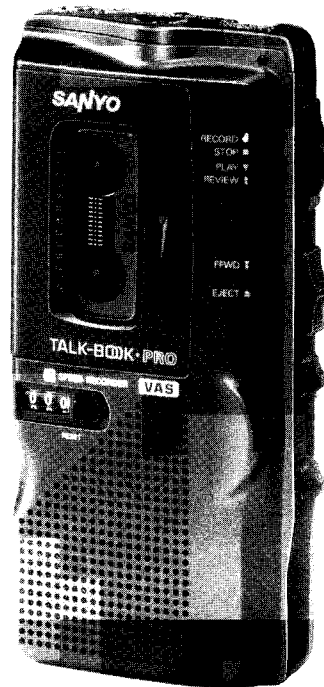


Service Manual

Microcassette Recorder

TRC-5880 (XE)
(SS)



Specifications

PRODUCT CODE No.

142 936 01 (XE)

142 936 02 (SS)

Recording system	DC bias	Output power	400 mW (DC max.)
Erasing system	Magnet	Power source	DC : 3 V, (2 size "AA" batteries)
Tape speed	2.4 cm/sec or 1.2 cm/sec	Speaker	40 mm dia.
Fast forward / Rewind time	140 sec. (MC-60)	Terminals	Earphone jack, Ext. DC jack, Ext. MIC jack
Wow & flutter	0.20 % WRMS	Dimensions	60 (W) × 129 (H) × 27 (D) mm
Frequency response	300 - 4,000 Hz	Weight	Approx. 151 g (without batteries)
S/N ratio	30 dB (max.)		
Specifications subject to change without notice.			

OPERATION

The unit employs a slide type mechanism that boasts the following features.

- 4-position slide-button control
- Sliding **F.FWD/EJECT** button
- One-touch recording system
- Quick **RECORD** / quick **REVIEW**

The operation button (**RECORD/STOP/PLAY/REVIEW**) can be used when a microcassette tape is loaded in the unit.

The **EJECT/F.FWD** button can be operated when the operation button is in the **STOP** position.

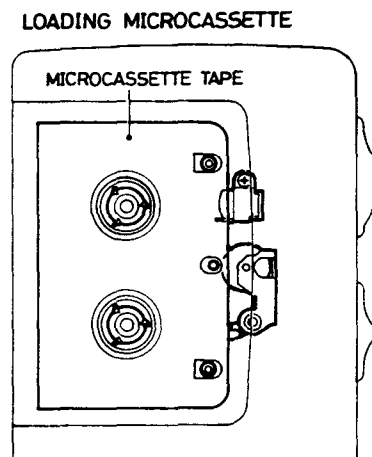
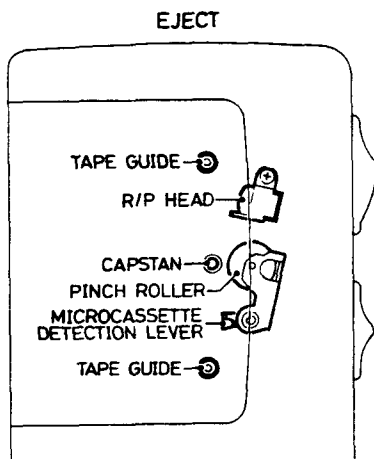
a. LOADING MICROCASSETTE

The illustration shows the position of the R/P head and pinch roller when the unit is in eject status.

Load microcassette tape into the unit.

The microcassette detection lever is pressed upon by the microcassette, releasing the lock.

The mechanism then enters loading (standby) status.

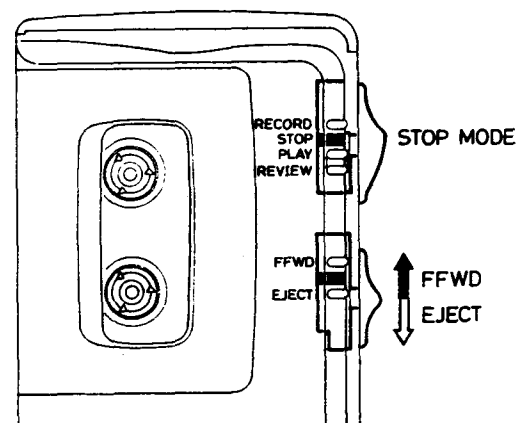


b. STOP MODE

The illustration shows the unit with the operation button in the **STOP** position.

The **EJECT/F.FWD** button can be operated when the unit is in stop status.

A safety device prevents the **EJECT/F.FWD** button from operating when the unit is in other than stop status.

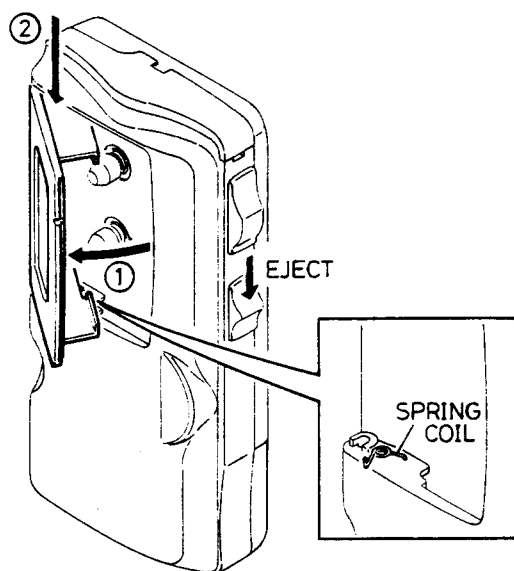


REMOVAL AND INSTALLATION

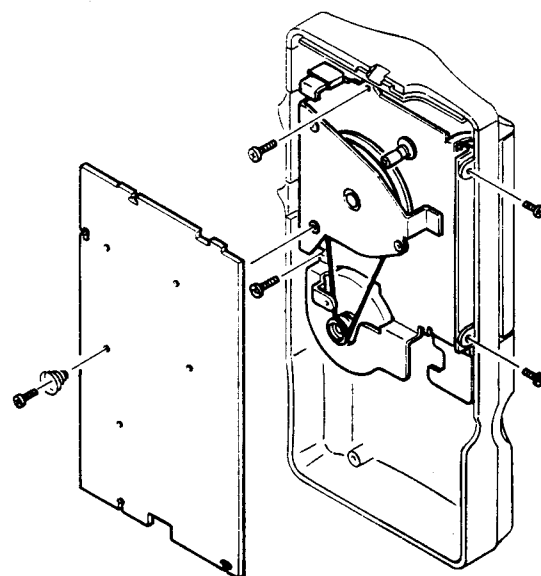
GENERAL REMARKS

- All wiring should be returned to the original position after work is completed.
- Before adjusting the mechanism of this unit, wipe the tape contacting surfaces clean as well as the contacting surfaces of the driving parts with a cotton swab or a soft cloth soaked in alcohol.
Trouble may occur because of oil and grease stains.
- Handle the belt carefully because grease easily attaches to it.
Then check the used rubber parts.
If the rubber has deteriorated or is scratched, replace the parts with new one.

a. TOP LID

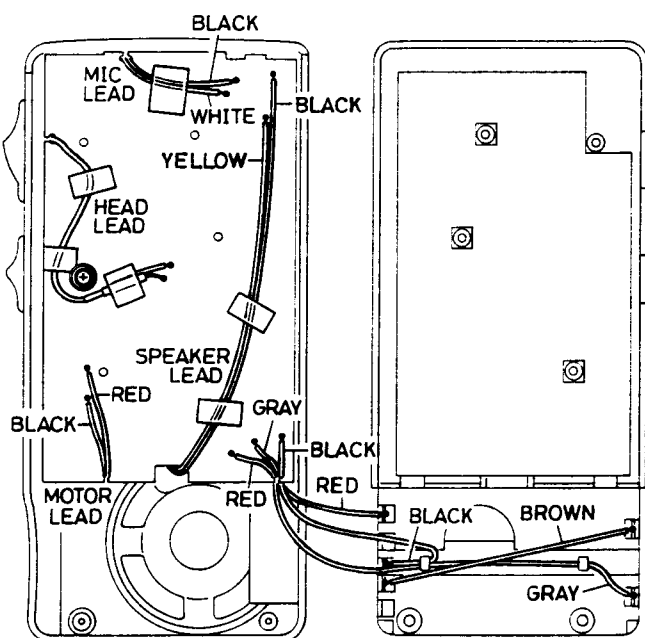


b. AMP. P.C. BOARD & MECHANISM



c. WIRING LAYOUT

- Arrange the wiring as shown in the figure.



ADJUSTMENTS

Measuring instructions, tools

- | | | |
|-----------------------|-----------------------------|--|
| (1) AF VTVM | (4) DC POWER SUPPLY ; 3.0 V | (6) TEST TAPE, HEAD AZIMUTH ; 6,300 Hz |
| (2) FREQUENCY COUNTER | (5) DUMMY LOAD, 4 ohms | (7) TEST TAPE, MOTOR SPEED ; 3,000 Hz |
| (3) OSCILLOSCOPE | | |

a. HEAD REPLACEMENT AND AZIMUTH ADJUSTMENT

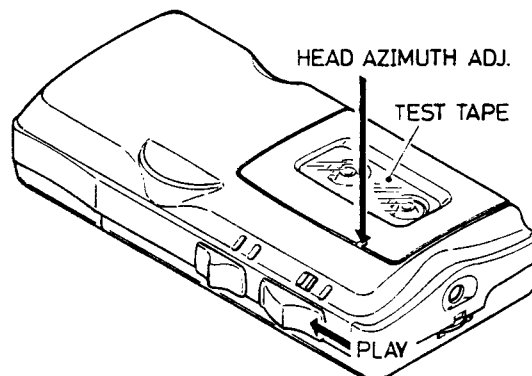
- TAPE SPEED select switch: 2.4 cm

(a) Head replacement

- After replacement, demagnetize the heads by using a head eraser.
- Be sure to clean the heads before attempting to make any adjustments.

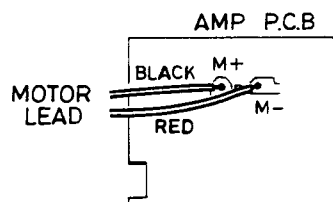
(b) Head azimuth adjustment

- (1) Load the test tape (OA-431, etc. ; 6,300 Hz) for azimuth adjustment.
- (2) Press the PLAY button.
- (3) Use a cross-tip (+) screwdriver to turn the screw for azimuth adjustment so that the outputs maximized.
- (4) After completion of the adjustment, use threadlock (TB-1401B) to secure the azimuth adjustment screw.



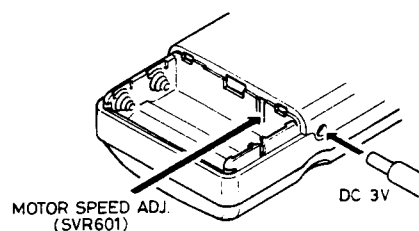
b. MOTOR REPLACEMENT AND SPEED ADJUSTMENT

(a) Motor replacement



(b) Motor speed adjustment

- (1) Load the test tape (OA-W411, etc., 3,000Hz).
- (2) Press the PLAY button.
- (3) Use a cross-tip (+) screwdriver to turn the SVR601 to adjust so that the frequency counter becomes 3,000 Hz.



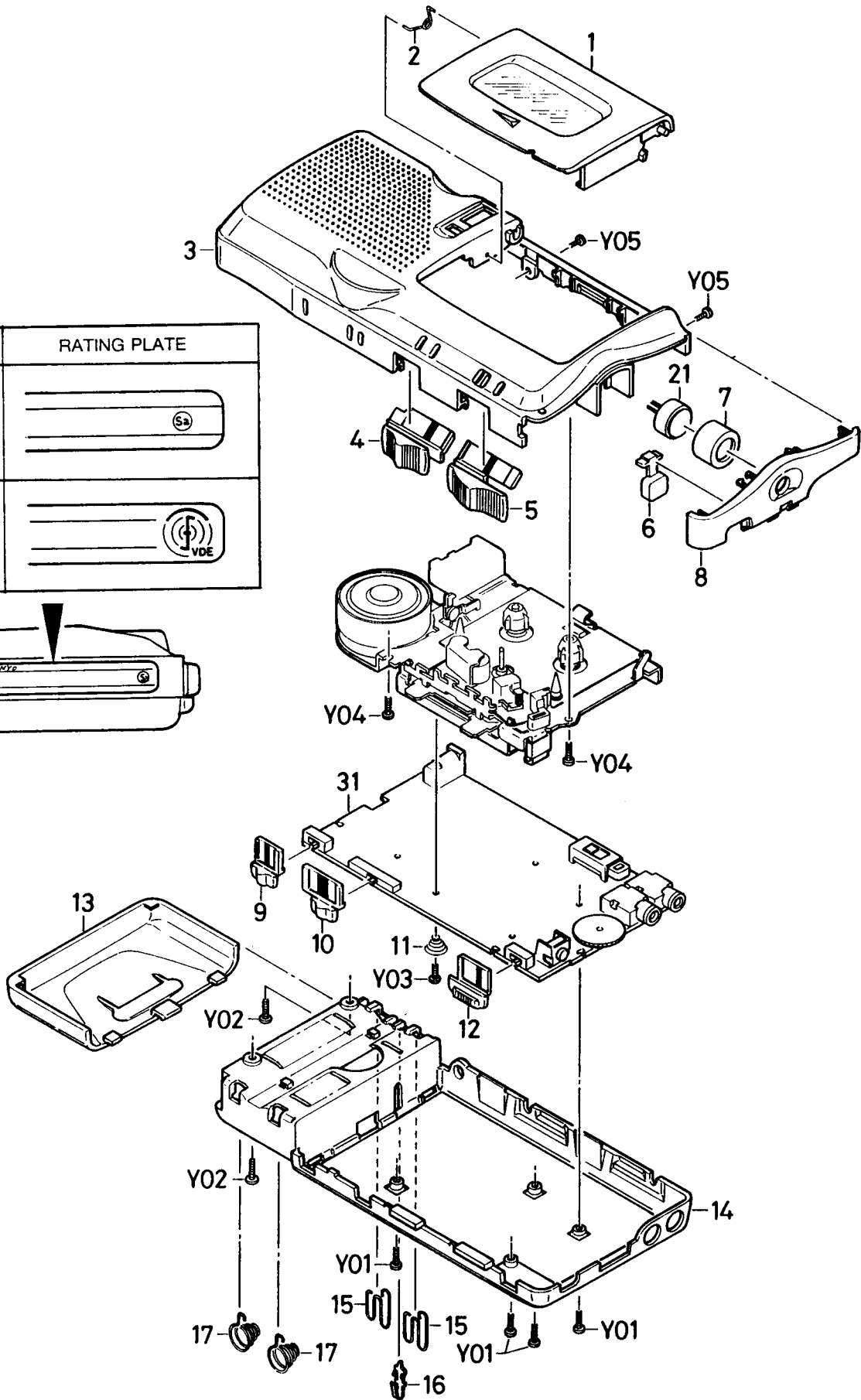
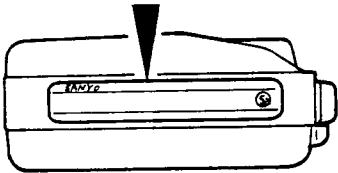
c. CHECKING THE MECHANISM TORQUE AND TENSION

- Clean the head, capstan and pinch roller before measurement.

Measuring item	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY:TW-1111 F.FWD / REW: TW-1231A	PLAY:TW-1111	Driving power cassette TW-1422
PLAY	4 ~ 12 gr.cm	0.6 ~ 3.0 gr.cm	30 gr (MIN.)
F. FWD	30 ~ 150 gr.cm	-	-
REW	25 ~ 60 gr.cm	-	-

EXPLODED VIEW (CABINET & CHASSIS)

DESTINATION	RATING PLATE
SS (GENERAL)	
XE (EUROPE)	



PARTS LIST

CAUTION: Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

DESTINATION (XE): EUROPE, (SS): GENERAL

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 255 8188	INNER CARTON (XE)
	614 255 8195	INNER CARTON (SS)
	614 176 1190	INNER POLYE COVER, SET
	614 253 1372	SHEET, SET
	614 252 8662	INSTRUCTION MANUAL (XE) (ENGLISH/GERMAN, ETC.)
	614 252 8679	INSTRUCTION MANUAL (XE) (ITALIAN/PORTUGUESE, ETC.)
	614 252 8686	INSTRUCTION MANUAL (SS) (ENGLISH/GERMAN, ETC.)
	614 252 8693	INSTRUCTION MANUAL (SS) (ITALIAN/PORTUGUESE, ETC.)
	614 251 2104	CARRYING CASE, SET

FIXING PARTS

Ref. No.	Part No.	Description
Y01	411 156 4802	SCR S-TPG PAN PCS 1.4X6MM, BACK-PCB-MECHANISM
Y02	411 155 3905	SCR S-TPG PAN PCS 1.7X6MM, BACK-CABINET
Y03	411 156 4703	SCR S-TPG PAN PCS 1.4X4MM, PCB-MECHANISM
Y04	411 155 3905	SCR S-TPG PAN PCS 1.7X6MM, MECHANISM-CABINET
Y05	411 156 4604	SCR S-TPG PAN PCS 1.4X4MM, MECHANISM-CABINET

ELECTRICAL

Ref. No.	Part No.	Description
21	614 247 8684	MICROPHONE

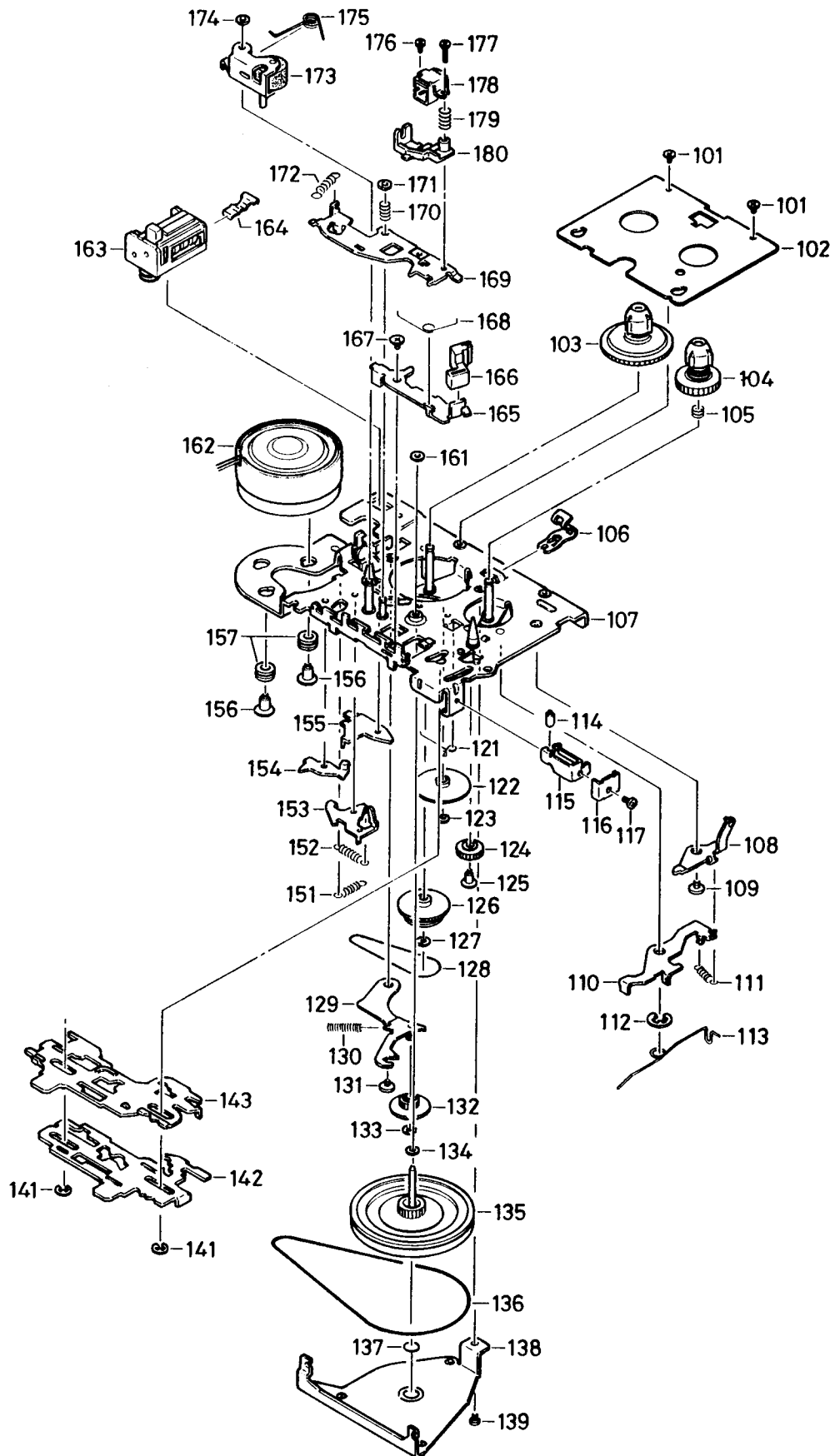
CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 255 6054	ASSY, LID, CASSETTE
2	614 252 6682	SPRING, TORSION, TOP-CABINET
3	614 256 5605	ASSY, CABINET (WITH SPEAKER) (XE)
	614 256 5612	ASSY, CABINET (WITH SPEAKER) (SS)
4	614 250 2914	ASSY, KNOB, SLIDE, F. FWD/EJECT
5	614 250 2907	ASSY, KNOB, SLIDE, RECORD/STOP/PLAY/REVIEW
6	614 255 6177	BUTTON, CUE INDEX
7	614 248 1660	CUSHION, RUBBER, MIC
8	614 249 5094	ESCUTCHEON, MIC
9	614 250 2938	ASSY, KNOB, SLIDE, VAS
10	614 250 2921	ASSY, KNOB, SLIDE, SPEED
11	614 249 0297	SPRING, COMP, SHIELD, GROUND
12	614 255 6085	ASSY, KNOB, SLIDE, SAFETY
13	614 255 6146	LID, BATTERY
14	614 255 6023	ASSY, CABINET, REAR
15	614 254 6765	TERMINAL, (+)
16	614 248 1622	TERMINAL, (GND)
17	614 248 1608	TERMINAL, (-)
	614 255 3343	SHEET, 8x28x0.5MM, SPEAKER
	614 125 1660	CUSHION, 10X20MM, SPEAKER
	614 125 0236	CUSHION, 5X15MM, CABINET, REAR
	614 125 0151	CUSHION, LID, BATTERY

AMP. P.C. BOARD ASSY

Ref. No.	Part No.	Description
31	614 250 1702	ASSY, PCB, AMP.
C914	403 263 4806	POLYESTER 0.033U M 50V
C916	403 062 1303	POLYESTER 0.047U M 50V
CN901	620 196 7104	JACK, 3P, EARPHONE
CN902	620 196 7104	JACK, 3P, EXT MIC
CN903	614 248 1226	JACK, EXT DC
D901	407 116 6504	LED SLP-181B-51, OPR BATT
D904	407 053 8708	ZENER DIODE MTZ9.1A
IC901	409 245 5106	IC LA4167M
R602	401 155 7201	MT-FILM 220 JQ 1/6W
R603	401 176 6405	MT-FILM 10K JH 1/6W
S901	620 195 8461	SWITCH, SLIDE, RECORD/PLAY
S902	620 016 4504	SLIDE SWITCH, VAS
S903	620 016 4504	SLIDE SWITCH, SAFETY LOCK
S904	620 016 5990	SLIDE SWITCH, TAPE SPEED
S905	614 215 9828	SWITCH, TACT, CUE/TONE
S906	620 016 2845	LEAF SWITCH, POWER
S907	614 249 5360	TERMINAL, FF/REW SWITCH
VR601	614 250 7711	POTENTIOMETER, 1K OHM
VR901	614 250 1900	VR, ROTARY, VOLUME, 10K
	614 249 5346	MOUNT-E, LED

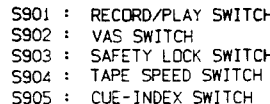
EXPLODED VIEW (MECHANISM)



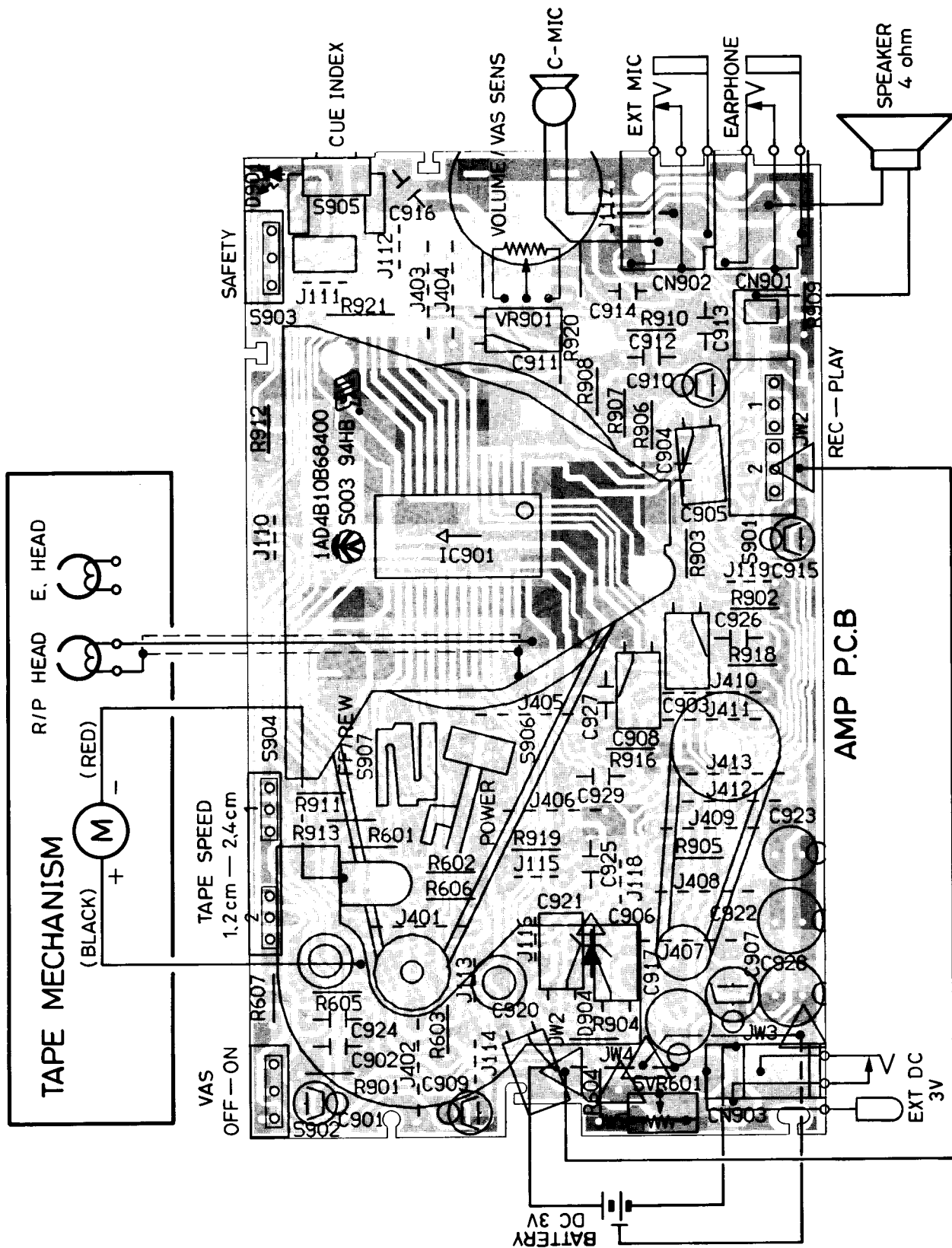
PARTS LIST

MECHANISM (TM-T5880 MEC/SH)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
101	412 047 6905	SPECIAL SCREW, 1.4X1.6MM	141	412 047 5908	SPECIAL WASHER,
102	614 253 5325	ESCUTCHEON, MECHANISM COVER			"E" RING, 1.5MM
103	✓ 614 251 0827	ASSY, REEL, TAKE-UP	142	614 253 5561	SLIDE, LEVER
104	✕ 614 251 0834	ASSY, REEL, SUPPLY			RECORD/STOP/PLAY/REVIEW
105	614 253 5622	SPRING, COMP, BACK TENTION	143	614 253 5554	SLIDE, F.FWD/EJECT LEVER
106	614 250 9623	SPRING, PLATE, CASSETTE	151	614 253 5608	SPRING, TENSION, EJECT LEVER
107	614 253 7046	ASSY, CHASSIS, MAIN	152	614 253 5592	SPRING, TENSION, SWITCH LEVER
108	614 253 5479	LEVER, RECORD SAFETY	153	614 253 7060	ASSY, LEVER, SWITCH
109	412 047 1009	SPECIAL SCREW	154	614 253 5493	LEVER, F.FWD ARM
110	614 253 5486	LEVER, RECORD ARM	155	614 253 5516	LEVER, EJECT ARM
111	614 253 5585	SPRING, TENSION, REC SAFETY	156	412 047 6806	SPECIAL SCREW, MOTOR
112	412 047 5700	SPECIAL WASHER,	157	614 250 9333	CUSHION, RUBBER, MOTOR
		"E" RING, 2.5MM	161	412 047 6202	SPECIAL WASHER,
113	614 253 5660	SPRING WIRE, REC ARM			1.48X2.1X0.13MM,
114	614 253 5578	ROLLER, LOCK			POLY WASHER, FLYWHEEL
115	614 253 5653	SPRING, PLATE, LEVER	162	✕ 614 253 6971	ASSY, MOTOR
116	614 253 5387	HOLDER, SPRING	163	614 253 5462	COUNTER, TAPE
117	412 047 6004	SPECIAL SCREW, 1.4X2MM	164	614 255 7723	SPRING PLATE, TAPE COUNTER
121	614 253 5677	SPRING WIRE, FR PLATE SPRING	165	614 253 5530	LEVER, ERASE HEAD BASE
122	614 250 9357	GEAR, CENTER	166	✕ 614 250 9906	HEAD, ERASE
123	412 047 5809	SPECIAL WASHER, 1.6X3X0.25MM,	167	412 047 0903	SPECIAL SCREW, HEAD BASE
		POLY CUT WASHER	168	614 253 5684	SPRING WIRE, ERASE HEAD
124	614 250 9371	GEAR, REW	169	614 253 5547	LEVER, HEAD, BASE
125	614 250 9319	BOSS, STUD REW GEAR SCREW	170	614 253 5646	SPRING, COMP,
126	614 253 5400	GEAR, COUNTER			HEAD BASE SPRING "A"
127	412 047 6400	SPECIAL WASHER, 1.6X3X0.25MM	171	412 047 6707	SPECIAL WASHER, 1.2X3X0.5MM,
		POLY CUT WASHER			LUMINER CUT WASHER
128	✕ 614 253 5448	BELT, SQUARE, COUNTER	172	614 253 5615	SPRING, TENSION,
129	614 253 7077	ASSY, LEVER, FWD ARM			HEAD BASE SPRING "B"
130	614 253 6728	SPRING, COMP, FWD ARM	173	✕ 614 253 7053	ASSY, PINCH ROLLER ARM
131	412 047 1009	SPECIAL SCREW	174	412 047 7407	SPECIAL WASHER,
132	614 250 9388	GEAR, FWD			1.2X3X0.25MM, POLY CUT
133	412 047 5809	SPECIAL WASHER,	175	614 253 5691	SPRING WIRE, PINCH ARM SPRING
		1.6X3X0.25MM,	176	412 047 6608	SPECIAL SCREW, 1.4X1.5MM
		POLY CUT WASHER	177	412 047 6509	SPECIAL SCREW, 1.4X6MM
134	410 247 6103	SPECIAL WASHER,	178	✕ 614 250 9661	HEAD, RECORD/PLAY
		1.6X3X0.3MM,	179	614 253 5639	SPRING, COMP, AZIMUTH SPRING
		POLY WASHER	180	614 253 5394	HOLDER, HEAD AZIMUTH SPACER
135	614 253 5417	FLYWHEEL			
136	✓ 614 253 5431	BELT, SQUARE, MAIN			
137	614 253 5370	SUPPORT, FLYWHEEL			
138	614 253 5363	SUPPORT, FLYWHEEL, HOLDER			
139	412 047 6301	SPECIAL SCREW, 1.4X1.5MM			



WIRING DIAGRAM



SANYO

SANYO Electric Co., Ltd.
Osaka, Japan