

SERVICE MANUAL

STEREO CASSETTE PLAYER

BASIC TAPE MECHANISM : TN-8S-118

SPECIFICATIONS

Maximum output	20 mW + 20 mW (EIAJ 16 ohms) 15 mW + 15 mW (EIAJ 32 ohms)
Power source	DC 3V using two R6 (size AA) batteries AC house current using an optional AC adaptor AC-620/AC-302
Maximum dimensions	114 (W) x 92 (H) x 36.8 (D) mm (4 1/2 x 3 5/8 x 1 1/2 in.)
Weight	Approx. 147 g (5.1 oz) excluding batteries

- Design and specifications are subject to change without notice.

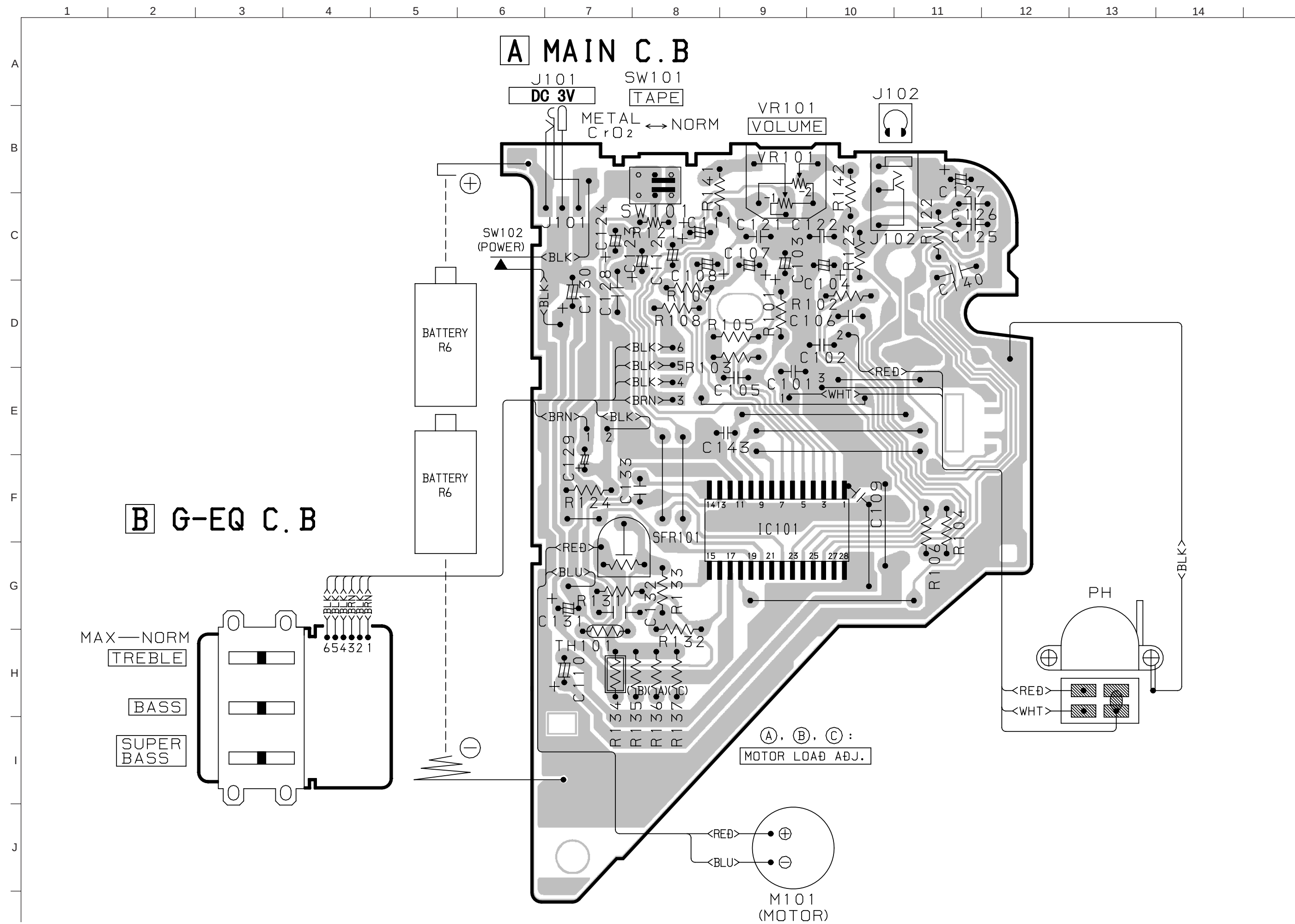
ACCESSORIES LIST

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-447-019-110		CLIP, BELT
2	87-B30-078-010		HEADPHONE, HP-M006
3	87-HG9-907-010		IB, EC-182-YH

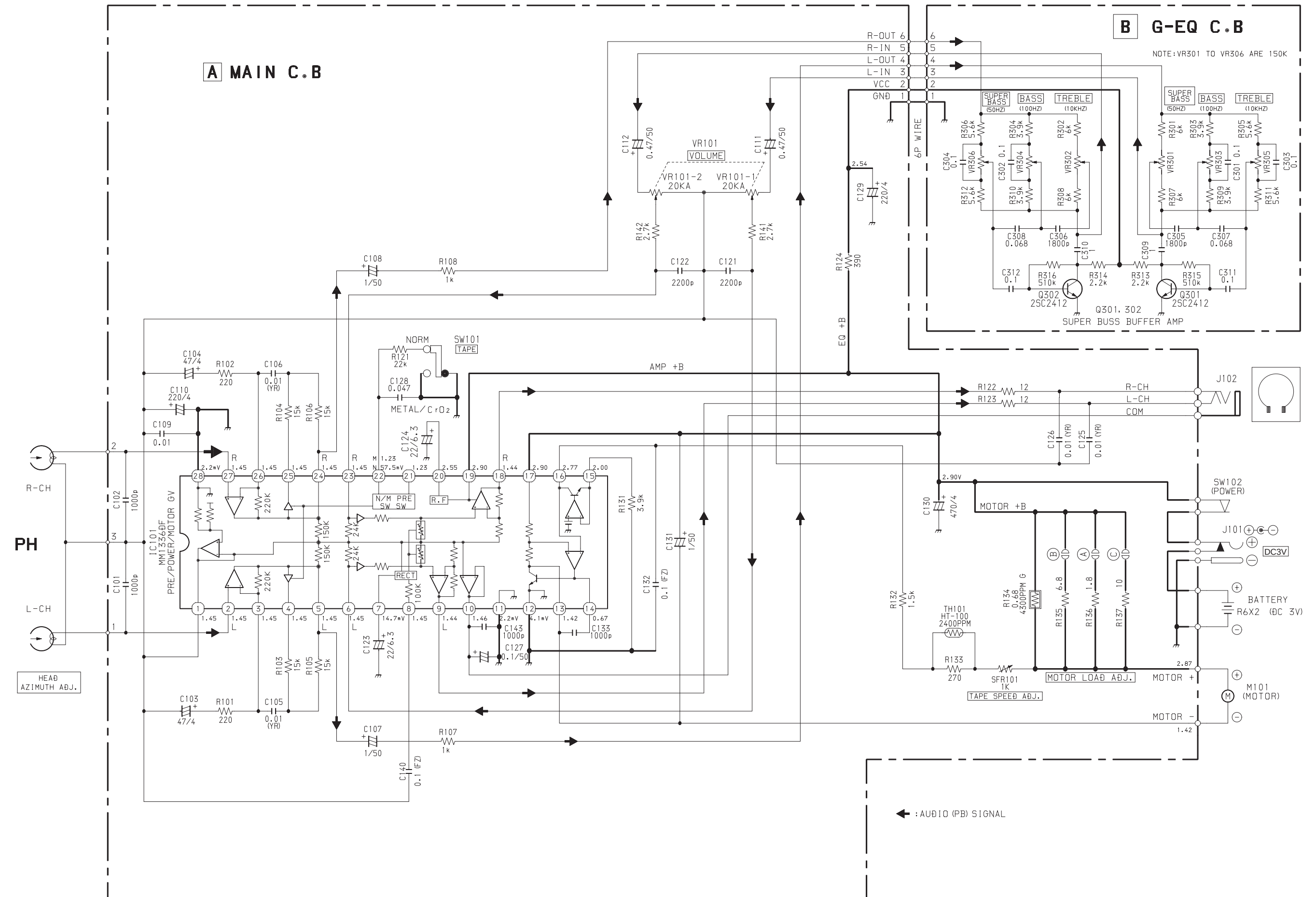
ELECTRICAL MAIN PARTS LIST

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-461-040	IC, MM1336DF	
MAIN C.B			
C103	87-010-501-080	E/CAP GAS 47-4	
C104	87-010-501-010	CAP GAS 47UF 4V	
C107	87-015-695-010	CAP, E 1-50 7L	
C108	87-015-695-010	CAP, E 1-50 7L	
C109	87-010-197-080	CAP, CHIP 0.01 DM	
C110	87-010-503-080	VAP, E 220-4 GAS	
C111	87-010-400-080	CAP, ELECT 0.47-50V	
C112	87-010-400-010	CAP, ELECT 0.47-50SME	
C121	87-A10-574-010	CAP, CER 2200P-50 Z YF	
C122	87-A10-574-010	CAP, CER 2200P-50 Z YF	
C123	87-015-674-080	CAP 22U-6.3V	
C124	87-015-674-010	CAP 22U-6.3V	
C127	87-015-691-080	CAP, E 0.1-50 7L	
C129	87-010-503-010	CAP, E 220-4 GAS	
C130	84-439-620-010	CAP, ELECT 470-4	

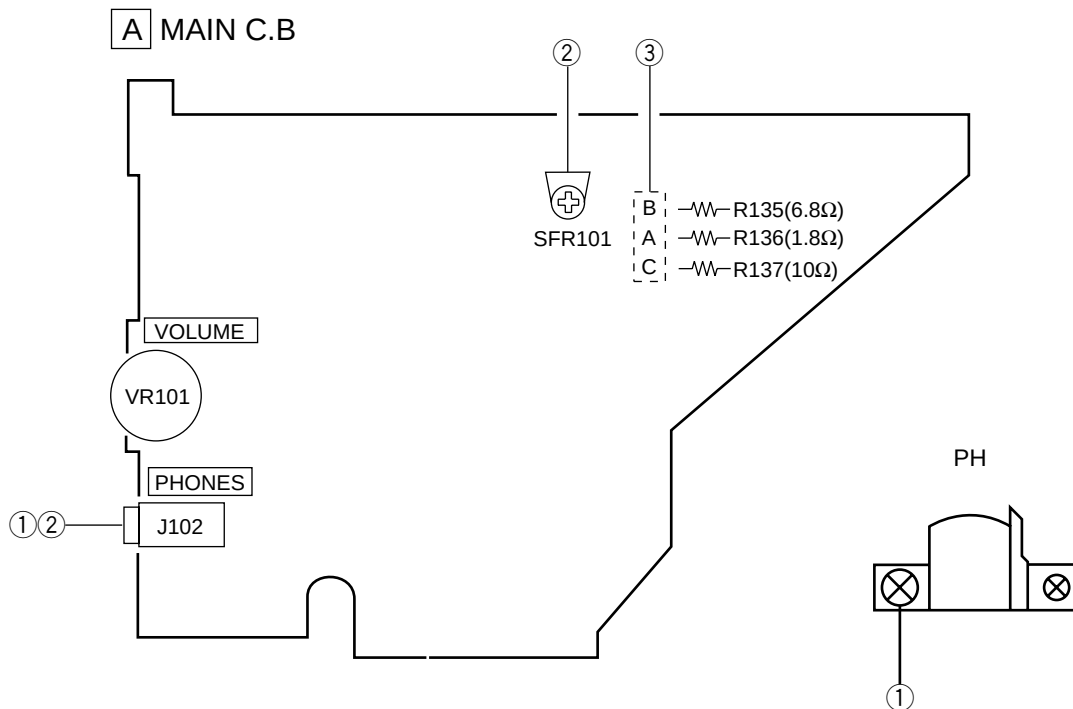
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C131	87-015-695-010	CAP, E 1-50 7L	
C132	87-A10-579-010	CAP, CER 0.1-16 Z YF	
C140	87-A10-579-010	CAP, CER 0.1-16 Z YF	
C143	87-010-178-080	CHIP CAP 1000P	
J101	87-A60-122-010	JACK, DC 3.8	
J102	83-HRL-602-010	JACK, 3.5ST	
R134	87-022-657-010	RES, K43G 0.68	
SFR101	87-024-197-010	SEMI-FIXED RESISTOR, 1K	
SW101	87-A90-050-010	SW, SL 2-2-2 NS (BLK)	
TH101	87-026-256-090	THERMISTOR, HT-100	
VR101	87-024-326-010	VOLUME 20KA	
G-EQ C.B			
	83-HRG-605-110	G-EQ ASSY(SB)	



SCHEMATIC DIAGRAM-1



ELECTRICAL ADJUSTMENT



<TAPE PLAYER>

1. Azimuth Adjustment

- Settings :
- Test tape : TTA-320
 - Test point : PHONES JACK (J102)
 - Adjustment location : Azimuth adjustment screw
 - VOLUME : MAX
 - GEQ : NORMAL

Method : Play back the 8kHz signal of the test tape and adjust so that the output becomes maximum.

2. Tape Speed Adjustment

- Settings :
- Test tape : TTA-100
 - Test point : PHONES JACK (J102)
 - Adjustment location : SFR101
 - GEQ : NORMAL

Method : Play back the test tape and adjust for $3015\text{Hz} \pm 10\text{Hz}$.

2) Set the tape speed (using speed adjustment SFR).

3) Restrict the motor rotation by hand (or turn PAUSE ON).

4) Remove your hand and listen to the beginning of the tape-run.

5) When the rise of tape running is smooth, no more adjustment is necessary. If wow continues for 1 to 2 seconds at the rise time, Reduce the combined resistance according to procedure 6 and check that the tape starts running smooth.

6) Solder the resistor pattern according to the table below.

Pattern	(Procedure 1 above)	Step(1)	Step(2)	Step(3)
High resistance(C)	Open	Open	Solder	Open
Medium resistance(B)	Solder	Open	Open	Solder
Low resistance(A)	Open	Solder	Solder	Solder

3. Motor Load Adjustment

Perform the STOP to PLAY after the motor is replaced. When the tape starts running smooth, this adjustment is not necessary. this adjustment following the procedure below.

- 1) Solder only medium resistor pattern (B) of the MOTOR AND GOVERNOR MATCHING ADJ. Resistor group.

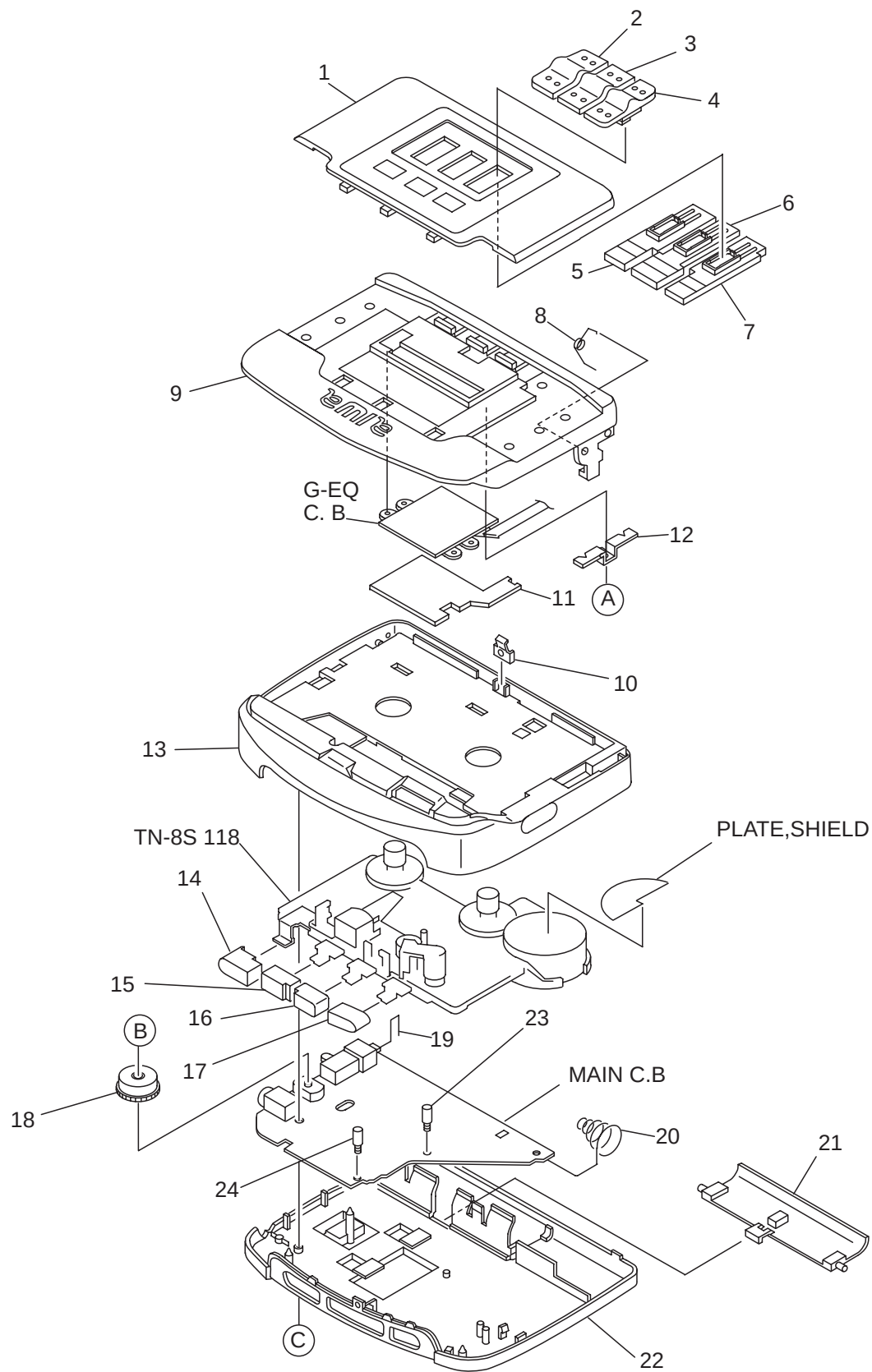
7) Finally recheck the tape speed.

Caution : Cool the patterns down to normal temperature after soldering. If the pattern remains heated, the governor circuit does not operate normally.

PRACTICAL SERVICE FIGURE

Tape speed :	$3015 \pm 40\text{Hz}$
Wow & flutter :	Less than 0.55 % (RMS)
Take - up torque :	$27 \sim 60 \text{ g-cm}$
F. F torque :	$27 \sim 60 \text{ g-cm}$
REW torque :	More than 55 g-cm
Back tension :	$1.5 \sim 5.5 \text{ g-cm}$
S/N ratio :	More than 42 dB
Distortion :	Less than 2.0 %
Noise level :	Less than 4.0 mV (Vol MAX)
Frequency response :	$63\text{Hz} +1 -7\text{dB} \sim 8\text{kHz} \pm 4\text{dB}$

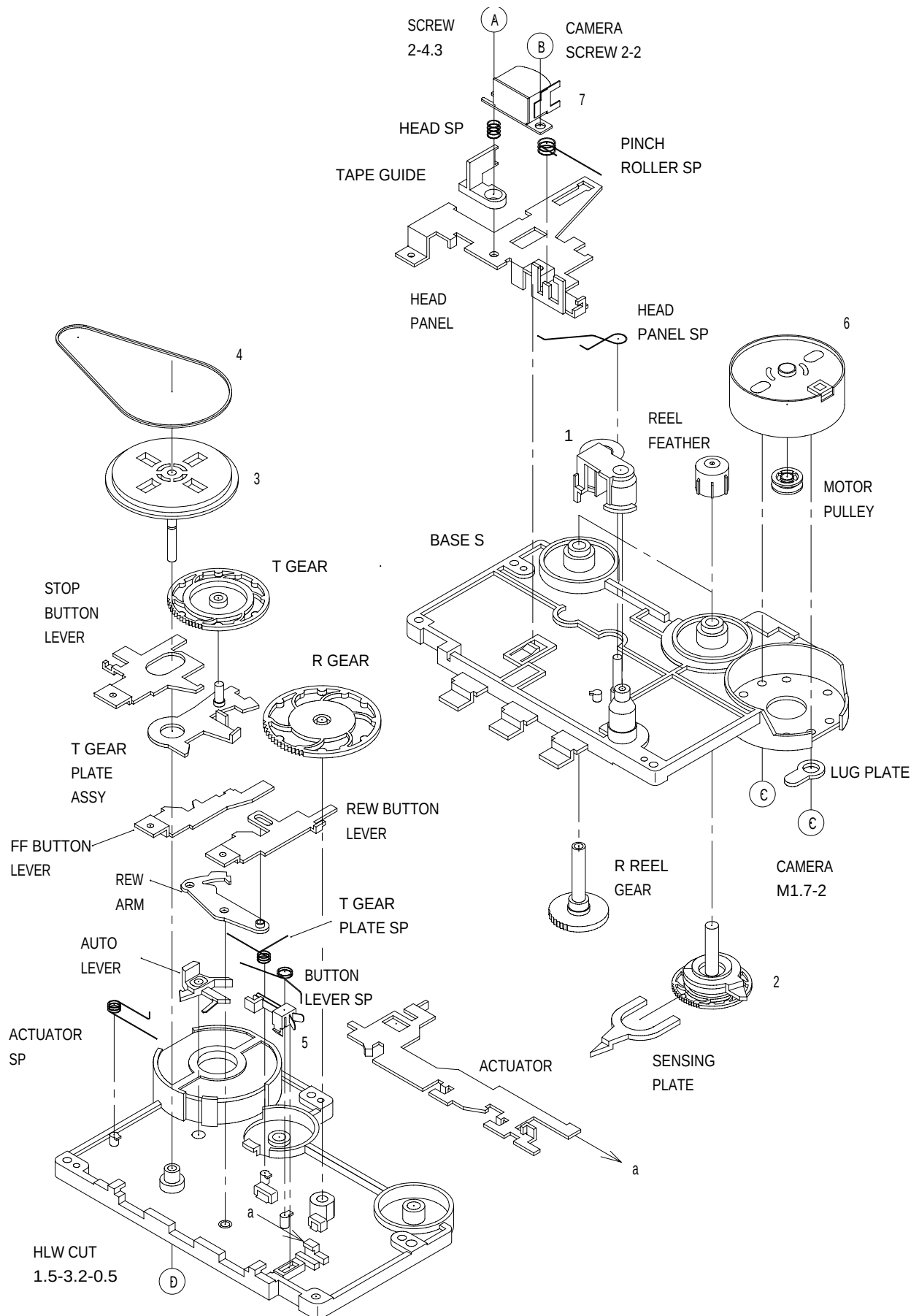
MECHANICAL EXPLODED VIEW 1/1



MECHANICAL PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	87-HG9-052-010		PANEL, GE GS182	16	87-HGA-059-010		BTN, FF
2	87-HG9-015-010		KNOB, SL TREBLE GRY	17	87-HGA-061-010		BTN, STOP
3	87-HG9-014-010		KNOB, SL BASS GRY	18	87-HG8-015-010		KNOB, RTRY VOLUME
4	87-HG9-013-010		KNOB, SL S-BASS GRY	19	87-HG8-204-010		BAT, CONTACT(+)
5	87-HG9-018-010		POINTER, SL TREBLE	20	87-HG8-205-010		BAT, CONTACT(-)
6	87-HG9-017-010		POINTER, SL BASS	21	87-HG9-057-010		LID, BATT
7	87-HG9-016-010		POINTER, SL S-BASS	22	87-HG9-056-010		CABI, REAR
8	87-HG8-208-010		SPR-T, CASS	23	87-HG8-207-010		SHAFT, CALKING
9	87-HG9-051-010		LID, CASS GS182	24	87-HG8-211-010		SHAFT, CALKING B
10	87-HG8-215-010		SPR-P, CASS A	A	87-067-527-010		SCREW, VT+1.4-2.5(B)
11	87-HG9-201-010		PLATE, GE BLK	B	87-262-505-310		SCREW, V+1.4-2.5
12	87-HG9-202-010		HLDR, GE	C	87-262-533-310		SCREW, VT2+1.7-6
13	87-HG9-053-010		FRAME, CENTER				
14	87-HGA-058-010		BTN, PLAY				
15	87-HGA-060-010		BTN, REW				

TAPE MECHANISM EXPLODED VIEW 1/1



TAPE MECHANISM PARTS LIST 1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1~7	S2-010-098-800		TN-8S 118
1	S1-903-073-010		PINCH ROLLER ASSY
2	S1-908-043-010		TAKE UP REEL ASSY
3	S1-908-053-030		FLYWHEEL ASSY
4	S1-908-050-080		MAIN BELT
5	S6-401-011-630		LEAF SW MSW-1541TA(SW1)
6	87-045-351-019		MOTOR BDH3B09(M1)
7	S6-202-010-910		HEAD MS25P-BK007(PH)



サービス技術ニュース	
番号	連絡内容
Gーー	
Gーー	
Gーー	

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