

SERVICE MANUAL

YP-511

STEREO TURNTABLE



SINCE 1887



YAMAHA

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

CONTENTS

SPECIFICATIONS	1
INTERNAL VIEW	2
PARTIAL DISASSEMBLY	3
WIRING DIAGRAM	5
ADJUSTMENT	6
POWER CIRCUIT BOARD	6
SCHEMATIC DIAGRAM	7
PARTIAL CHANGES MADE ACCORDING TO DESTINATION	7
PACKAGE	8
PARTS LIST	10

SPECIFICATIONS

■ PHONOMOTOR	Driving system	Direct drive	Needle pressure	Direct reading method 0 — 3g
	Motor	DC servo motor	regulating mechanism	(0.5g step)
	Turntable	30 cm aluminum die casting (weight 1.6 kg), attached with stroboscope	Regulating range of arm height	+3, -1.5 m/m
		33-1/3, 45 rpm, 2 speeds	Inside force canceller	Direct reading method by spring
No. of revolutions			■ AUXILIARY MECHANISMS	
	Regulating range of no. of revolutions	Not less than ±6%, each no. of revolutions to be regulated inde- pendently	Large size rubber insulator	
SN ratio		-55 dB	Turntable with stroboscope	
	Wow flutter	Not more than 0.04% (W.R.M.S)	Freestop attachable acryl cover	
■ TONEARM	Type	S static balance type	Armlifter	
	Tracking error angle	+2.7°, -1°	■ POWER SOURCE AND OTHERS	
Effective length		222 m/m	Supplied electric power	AC 120V ~ 240V, 50/60 Hz
	Total length	295 m/m	Consumed power	3W (120V, 220V, 240V)
Overhang		17 m/m	Outer dimensions	470 x 150 x 378
Offset angle		23°	(W x H x D)	7.5 kg
Net weight range of cartridge		4 ~ 13g	Weight	
	Head shell	EIA removable and attachable	■ ACCESSORIES	
			EP adaptor	
			Hexagonal wrench	

—The above specifications and dimensions are subject to change without notice for improvement.

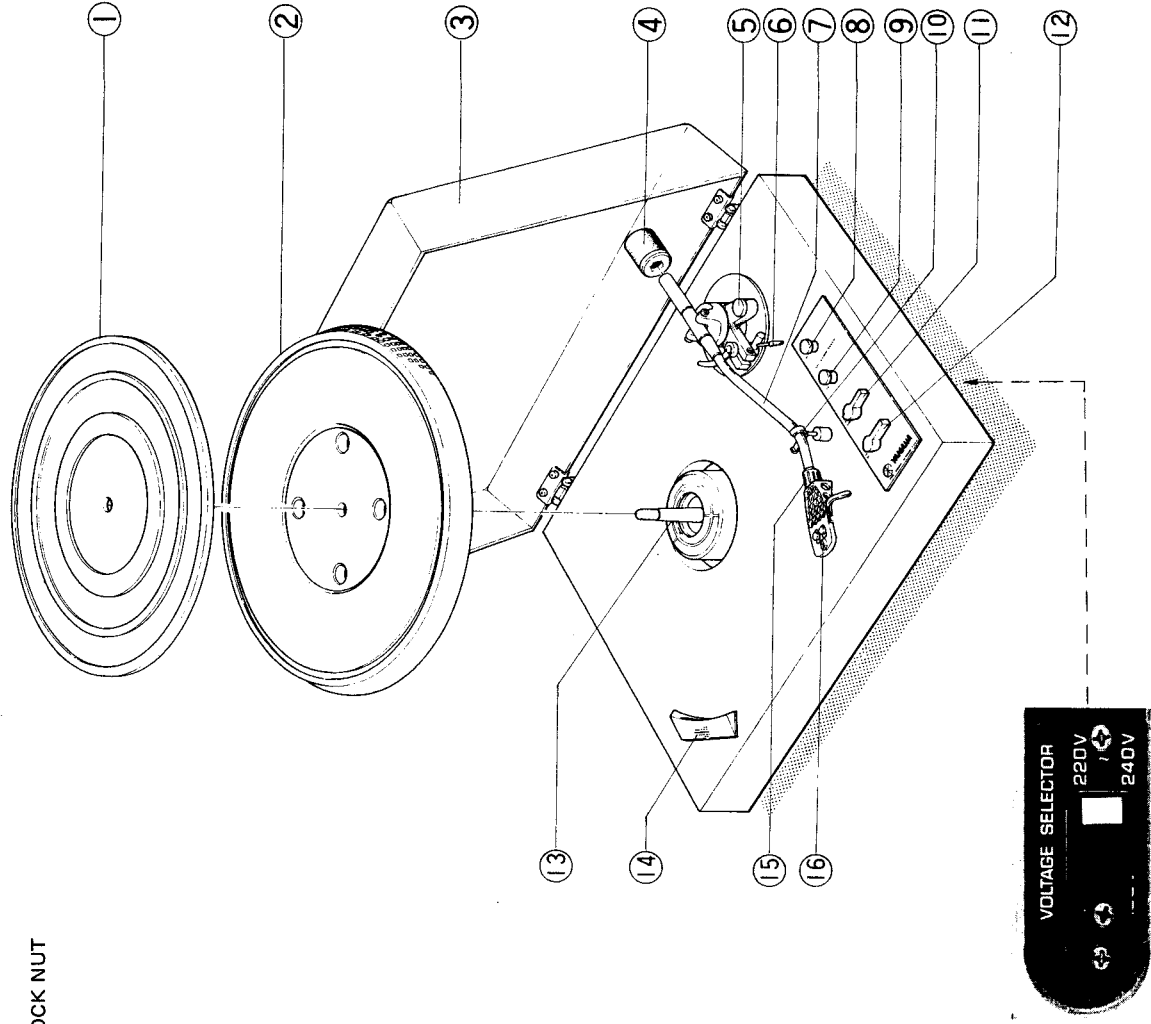
Net weight range of cartridge attached to YP-511 is 4~13g. Weight of attached head shell is 8g so that gross weight up to 21g can be applicable. When using other head shell, determine needle position to fulfill the above and the specified over-hang of YP-511.

(Note) Weights of Yamaha head shells separately vended are:

HS-700	8g
HS-600s	9.6g

INTERNAL VIEW

- 1 RUBBER SHEET
- 2 TURNTABLE
- 3 DUST COVER
- 4 MAIN WEIGHT
- 5 INSIDE FORCE CANCELLER
- 6 ARM LIFTER
- 7 TONE ARM
- 8 SPEED CONTROL (45 r.p.m)
- 9 SPEED CONTROL (33-1/3 r.p.m)
- 10 ARM REST
- 11 SPEED SELECTOR LEVER
- 12 PLAY LEVER
- 13 CENTER SHAFT (MOTOR)
- 14 STROBOSCOPE
- 15 HEAD SHELL ROCK NUT
- 16 HEAD SHELL



PARTIAL DISASSEMBLY

1. METHOD OF REMOVING POWER SOURCE SHEET

- a. Remove bottom plate by removing screws 1 through 8 of Photo 1 attached on the rear side of the turntable.

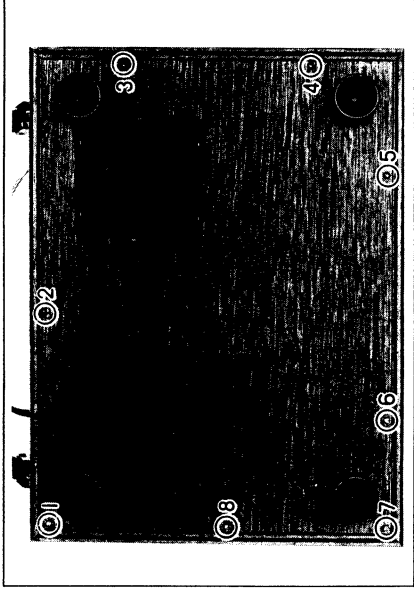


Photo 1

- b. Remove sheet by removing sheet securing screws 1 through 4 of Photo 2. At this time, be careful not to mis-connect leads connected to the sheet.

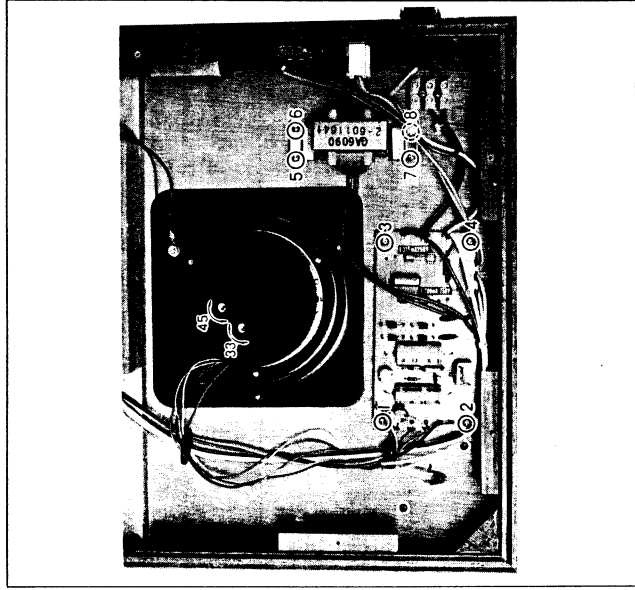


Photo 2

2. METHOD OF REMOVING POWER TRANSFORMER

- a. Remove bottom plate (refer to step 1.a).
- b. Remove power transformer by removing screws 5 to 8 of Photo 2.

3. METHOD OF REMOVING MOTOR ASSEMBLY
 - a. Draw out rubber sheet and turntable from center shaft.

- b. Remove leads connecting power source sheet to motor portion previously.
- c. Remove securing screws 1 through 3 on the front side of motor assembly as shown in Photo 3. (Photo 3, 4)

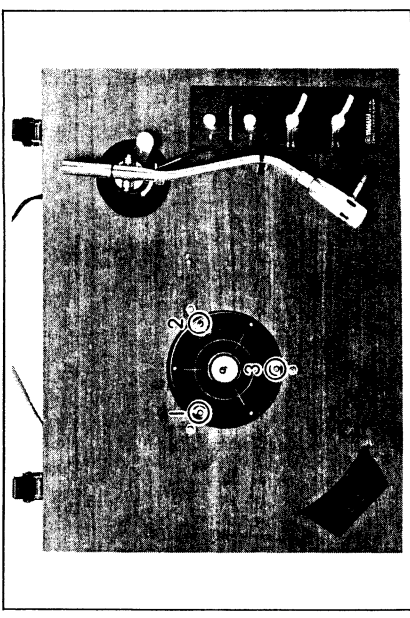


Photo 3

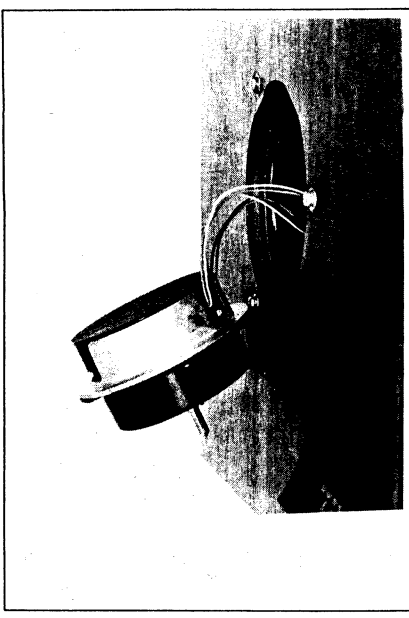


Photo 4

4. METHOD OF REMOVING CONTROL PANEL ASSEMBLY

- a. Remove bottom plate (refer to step 1.a)
- b. Remove control assembly by removing screws 1 and 2 in Photo 5.

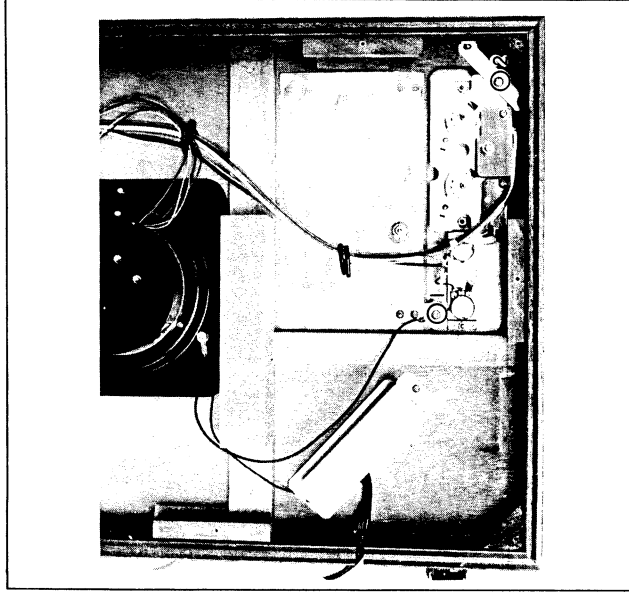


Photo 5

5. METHOD OF REMOVING STROBOSCOPE ILLUMINATING LAMP

- a. Remove illuminating lamp with securing cover by removing screws 1 and 2 of Photo 6.

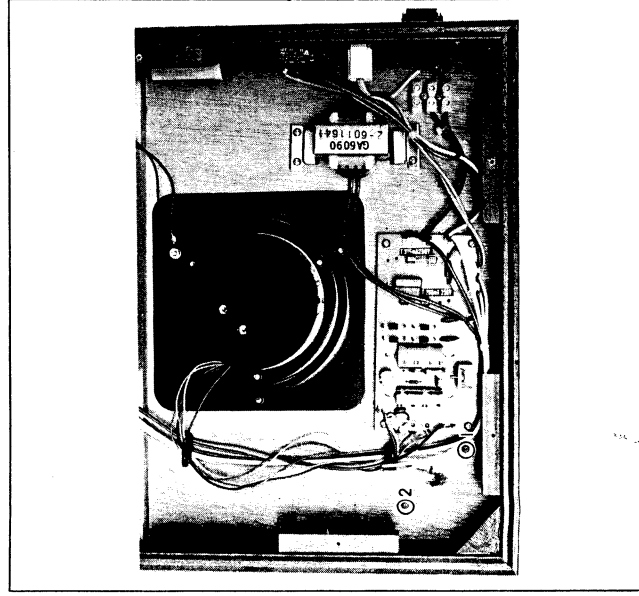


Photo 6

6. METHOD OF REMOVING TONEARM

- a. Remove shield cover by removing screws 1 and 2 of the rear side of the turntable as shown in Photo 7.

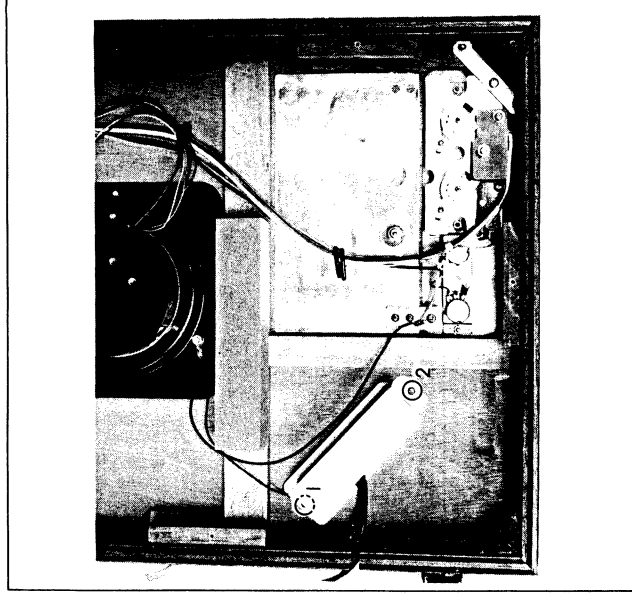


Photo 7

- b. Disengage soldering of terminal plate leads in Photo 8. Be careful not to mis-connect leads in terms of mating colors.
- c. Tonearm is ready for removal by removing nut of Photo 8.

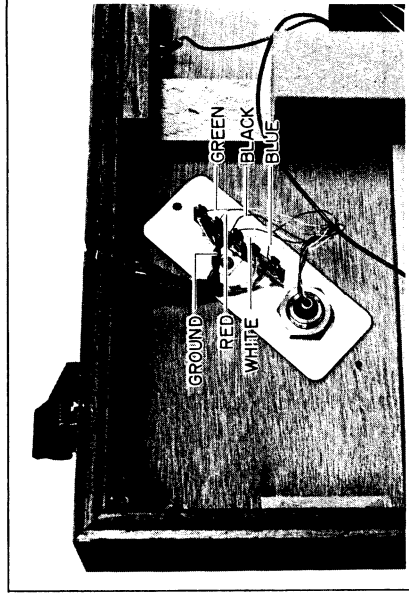
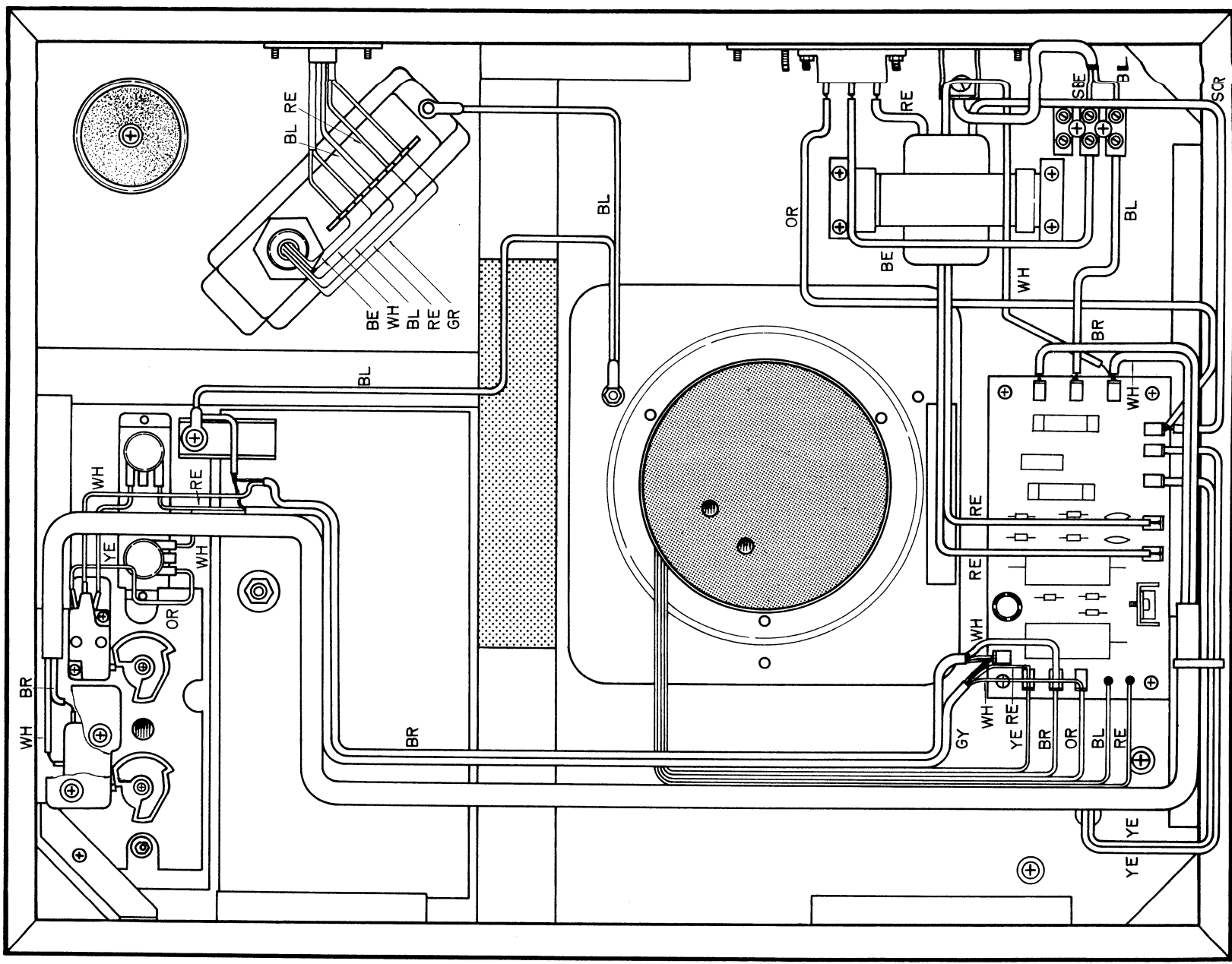


Photo 8

WIRING DIAGRAM



ADJUSTMENT

1. SPEED ADJUSTMENT

Motor revolution can be changed within $\pm 6\%$ by regulating SPEED CONTROL knob. When returning to normal speed, regulate CONTROL knob observing stroboscope.

2. CHECK OF POWER SOURCE VOLTAGE

Check applied voltage to motor whether being $18 \pm 1V$ between +B and E of power source sheet. Provided that AC 100V should be kept within $\pm 3V$ (refer to Fig. 1).

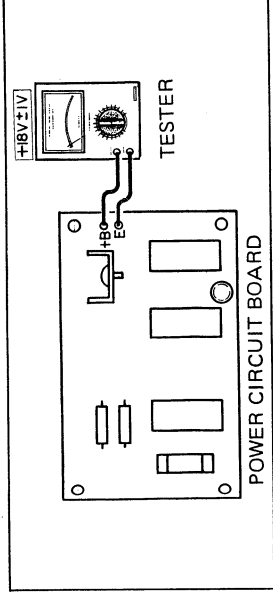


Fig. 1

3. MOTOR ADJUSTMENT

Regulate motor by each speed regulating resistor attached at the bottom of motor, when motor is changed or motor speed is excessively shifted. This regulation will determine center position of allowable SPEED CONTROL range $\pm 6\%$ (refer to Fig. 1).

- * This regulation shall be made after Clause 2. Check of Power Source Voltage.

- Turn power source switch (PLAY lever) on.
- Position SPEED CONTROL knob at the mechanical neutral.
- Regulate semi-fixed VR situated at the bottom of motor such that stroboscopic stripes become stationary.

- * In regulating pitch by stroboscope, note that pitch fluctuates under the following condition;
 - 1) At the time of PLAY, whether needle is placed on the disk or not.
 - 2) When needle is placed, whether it is on outer or inner position.

As the above, stroboscopic stripes may fluctuate depending on a load, but the tolerance of 0.2% (12 divisions on stroboscope scale) is allowed to be within the specified limit.

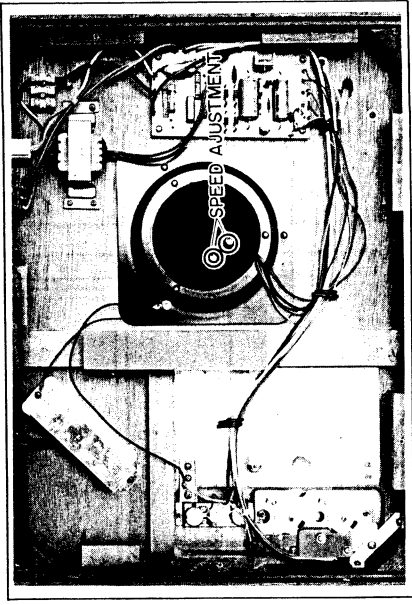
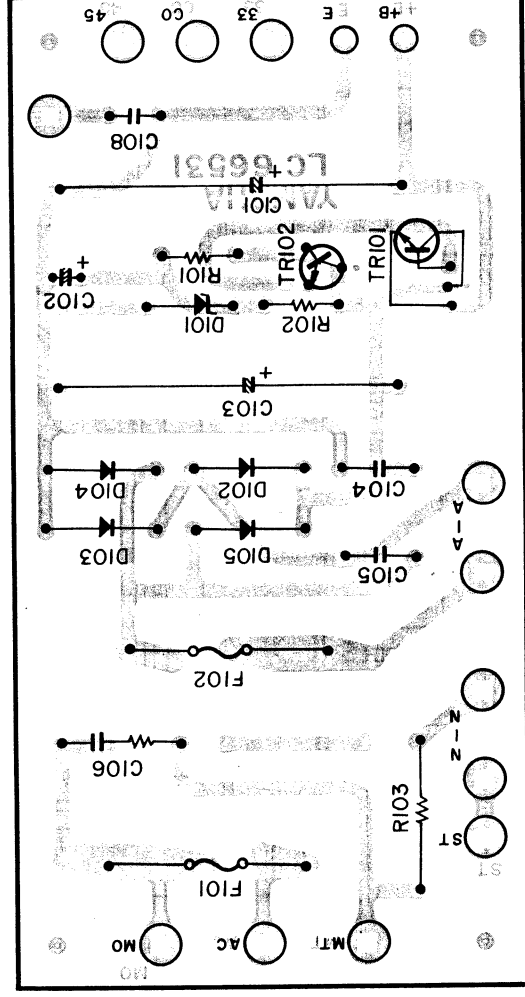
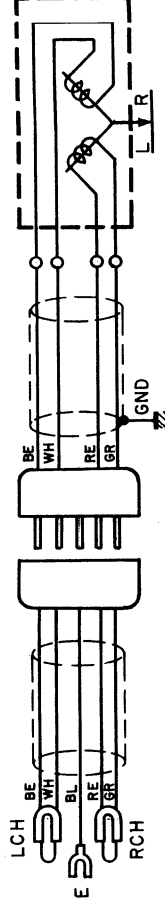
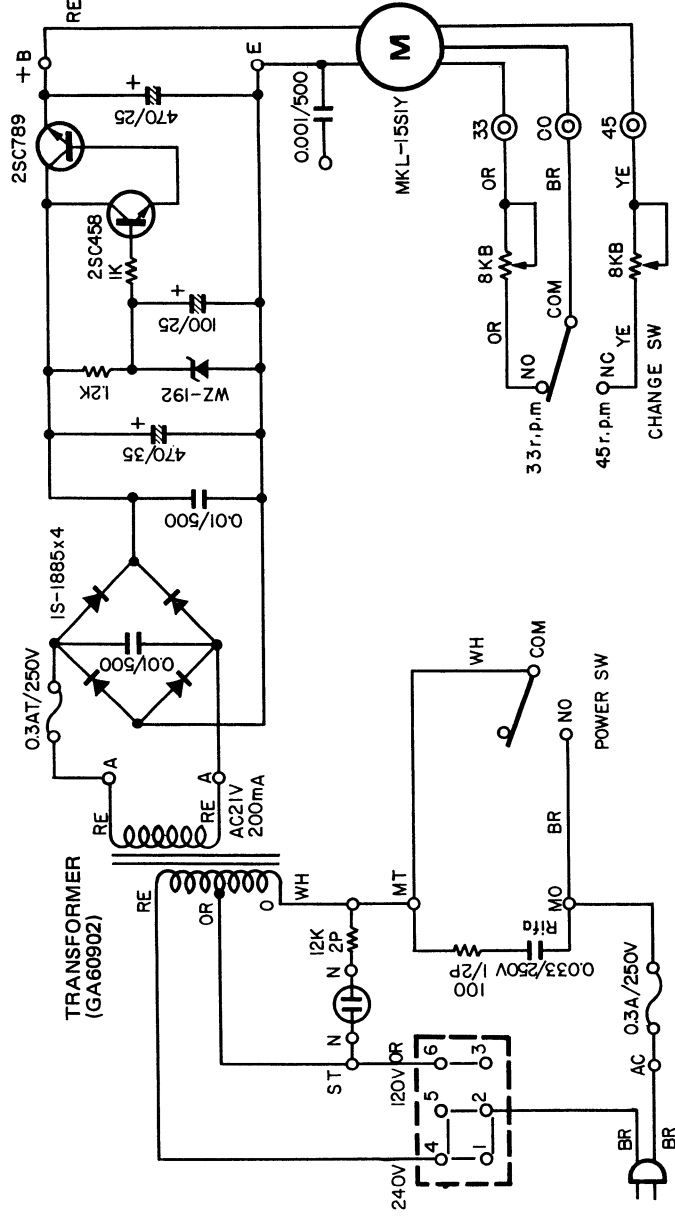


Fig. 2

POWER CIRCUIT BOARD



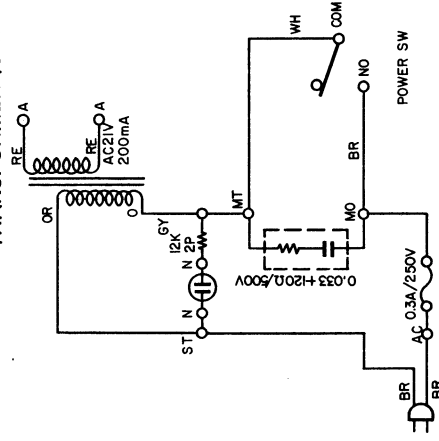
SCHEMATIC DIAGRAM



PARTIAL DISASSEMBLY

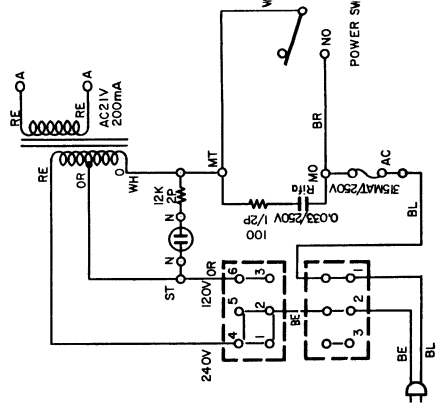
▼ CANADIAN MODEL

TRANSFORMER (GA60904)

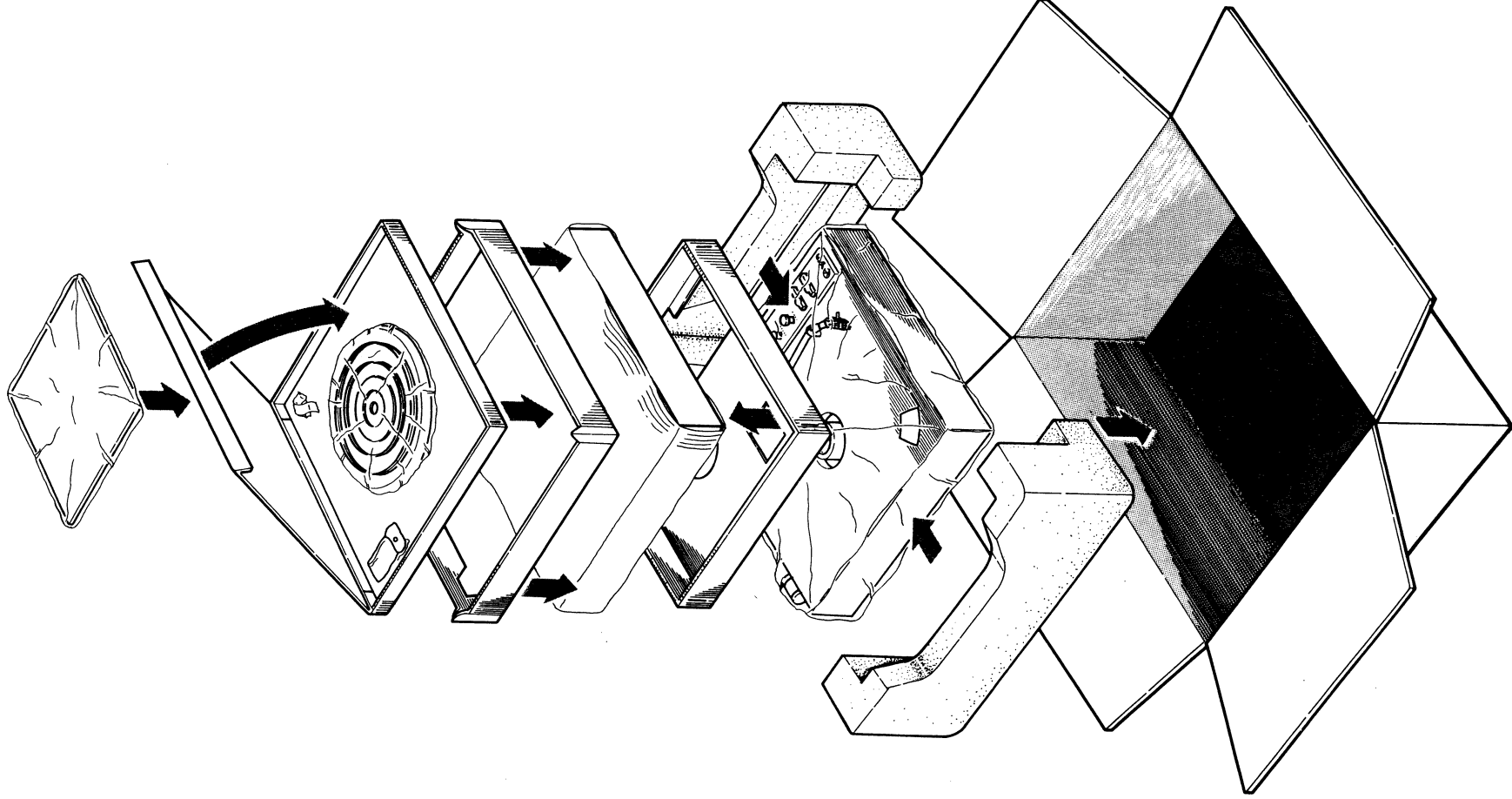


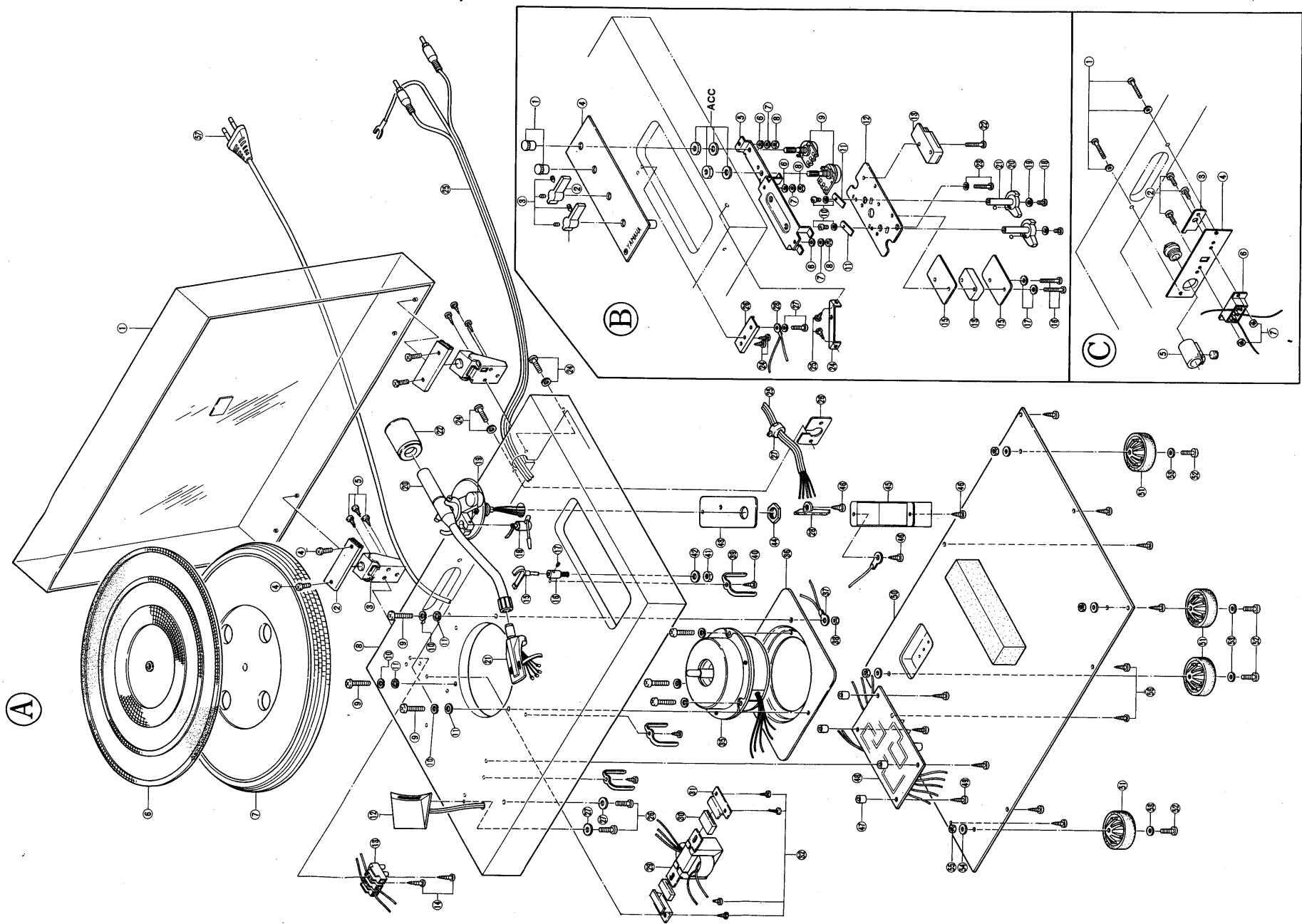
▼ EUROPEAN MODEL

TRANSFORMER (GA60902)



PACKAGE





A

Ref. No.	Parts No.	Description		Remarks	Common Models
1	32:00:00:NB:07:49:00	Acril Cover Ass'y	上蓋ASS'Y		
2	32:00:00:AA:07:98:50	Lock Plate	ヒンジ当板		
3	32:00:00:NB:07:32:90	Hinge Ass'y	オートヒンジASS'Y		
4	42:00:00:ED:23:00:80	Bind Head Screw	バインド小ネジ		
5	42:00:00:EQ:03:11:50	Round Wooden Screw	丸木ネジ		
6	32:00:00:CB:07:30:50	Sheet for Turn Table	ターンテーブルシート		
7	32:00:00:BA:06:94:00	Turn Table	ターンテーブル		
8	32:00:79:20:61:34:10	Cabinet	外装本体		
9	42:00:00:EH:04:25:50	Double Pan Head Cums Screw M4 x 25	Wカムスナベ小ネジ		
10	42:00:00:EV:30:04:00	Spring Washer 4φ	スプリングワッシャー		
	42:00:00:EV:20:04:00	Press Pan Washer 4φ	プレスパンワッシャー		
12	32:00:00:NB:07:90:30	Strobo Ass'y	ストロボASS'Y	C	
	32:00:00:N:NB:07:58:10		"	R.E.BS.A	
13	32:00:00:LA:00:10:40	Connecting Terminal	ボイボ端子	EI BS.	
14	42:00:00:EQ:03:12:00	Round Wooden Screw, Fe. ZMC2-Y	鉄丸木ネジ		
15	42:00:00:CB:07:05:40	Arm Rest	アームレスト		
16	42:00:00:BA:06:69:00	Stand for Arm Rest	レストスタンド		
17	42:00:00:EV:10:04:00	Hexagonal Nut M4	六角ナット		
18	32:00:00:PB:06:04:00	Arm Lifter	アームリフター		
19	42:00:00:EA:02:01:00	Pan Head Screw M2 x 10	ナベ小ネジ		
20	32:00:00:SS:06:00:70	Tone Arm Ass'y	アームASS'Y		
21	32:00:00:N:NB:07:27:00	Head Shell Ass'y	ヘッドシェルASS'Y		
22	32:00:00:NB:99:30:00	Main Weight	メインウエイト		
24	42:00:00:EH:33:01:80	Pan Head Cums Screw M3 x 18 ZMC2-BI	ナベ小ネジ(平型金付)		
25	32:00:00:MZ:06:77:50	Pick Up Cord Ass'y	P.UコードASS'Y		
26	32:00:00:AA:08:26:60	Fixture for Pick Up Cord	P.Uコード 取付板		
27	42:00:00:CB:07:27:50	Cord Stopper for Pick Up Cord	P.Uコードストッパー		
28	42:00:00:LA:00:01:10	Lug Plate, 4P			
29	42:00:00:GA:60:90:40	Transformer, Power	電源トランス	C	
29	42:00:00:GA:60:90:20	- do, -	"	R. E. BS. A.	
30	32:00:00:CB:07:58:50	Cushion for Transformer	トランスクッション	C	
30	32:00:00:CB:07:72:80	- do, -	"	R. E. BS. A.	
31	32:00:00:AA:08:26:70	Tixture for Transformer	トランス固定金具		
32	42:00:00:EQ:03:11:00	Round Wooden Screw, Fe 3.1 x 10 ZMC2-Y	鉄丸木ネジ		
33	42:00:00:EO:04:01:20	Pan Head Cums Screw M4 x 12 ZMC2-Y	カムスナベ小ネジ		
35	42:00:00:JC:00:02:10	Motor	モーター		
36	32:00:00:AA:08:26:80	Fixture, Motor	モーター取付金具		
37	42:00:00:LA:00:02:90	Earth Lug 4φ	アースラグ		
38	42:00:00:EV:10:04:00	Hexagonal Nut M4	六角ナット		
39	42:00:00:AA:07:39:20	Cord Crimper	側線止メ		
40	42:00:00:EQ:03:11:00	Round Wooden Screw 3.1 x 10 ZMC2-Y	丸木ネジ		
41	42:00:00:EV:10:00:60	Hexagonal Nut M6 x 0.75	六角ナット		
42	42:00:00:EV:41:06:00	Theethed Looked Washer φ6	歯付盤金		
43	32:00:00:AA:08:27:20	Holder for Shaft	シャフト受金具		
44	32:00:00:BB:06:47:20	Fixture Nut for Arm	アーム固定ナット		
45	32:00:00:AA:07:95:30	Isolation Cover	シールドカバー		
46	42:00:00:EO:03:11:00	Round Wooden Screw 3.1 x 10	鉄丸木ネジ		

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