

# Service Manual

**QUARTZ** Synthesizer

Direct Drive Automatic Turntable System

**SL-1300MK2 (M)**



• The model SL-1300MK2 (M) is available in America only.

## SPECIFICATIONS

(Specifications are subject to change without notice for further improvement)

### General

**Power supply**

**Power consumption**

**Dimensions**

(H x W x D)

**Weight**

**Turntable section**

**Type**

**Drive method**

**Motor**

**Drive control method**

**Turntable platter**

**Moment of inertia**

**Turntable speeds**

**Turntable speed fine adjustment**

**Starting torque**

**Build-up characteristics**

**Braking system**

**Speed fluctuation due to load torque**

AC 120 V, 50 or 60 Hz

12W

14.5 x 45.3 x 38.4 cm  
(5-45/64 x 17-45/64 x 15-7/64 inches)

11.8 kg (26.0 lb)

Quartz-phase-locked control direct drive automatic turntable with quartz synthesizer pitch control, Automatic start, Automatic return, Momo-repeat play and Manual play

Direct Drive

Brushless DC motor

Quartz-phase-locked control

Aluminum die-cast, diameter 33 cm (13"), weight 2.5 kg (5.5 lb.)

340 kg·cm<sup>2</sup> (116 lb·in<sup>2</sup>)

33-1/3 and 45 r.p.m.

Adjustable up to ±9.9% in 0.1% increments by digital indication

1.5 kg·cm (1.3 lb·in)

90° or 1/4 rotation to 33-1/3 rpm

Electronic brake

0% within 1.5 kg·cm (1.3 lb·in)

**Speed drift**

**Wow and flutter**

Within 0.002%

0.025% WRMS (JIS C5521)

±0.035% weighted zero to peak (DIN 45507)

-50 dB (DIN 45539A)

-73 dB (DIN 45539B)

**Rumble**

**Tonearm section**

**Type**

Gimbal suspended universal "S" shaped tubular arm, static-balanced type

**Effective length**

230 mm (9-1/16")

**Overhang**

15 mm (19/32")

**Tracking error angle**

+3° at the outer groove of 30 cm (12") record

+1° at the inner groove of 30 cm (12") record

21.5°

**Offset angle**

Less than 7 mg (lateral, vertical)

**Friction**

22 g (with a cartridge weighing 6 g

at 1.75 g stylus pressure)

1 mm steps a range of 6 mm

**Effective mass**

0 ~ 3 g

**Tonearm height adjustment**

5-11 g

**Adjustable stylus pressure range**

12.7 mm (1/2") mounting space

**Cartridge weight range**

Headshell terminal lug

1.2 mm, for 4-pin terminal

## ■ FEATURES

Encounter two separate isolation stages. The first stage effectively damps out harmful external vibrations which may reach the unit through its resting surface. The all-important turntable, motor and tonearm assembly are then supported on a second isolation system. These isolators are specially designed with material and springs of calculated, finely-tuned elasticity to absorb external vibrations.

Isolation from feedback lets you enjoy clear, transparent sound even at high volume levels.

**Technics unique motor construction in which the rotor of the motor is integrally formed with the turntable.**

High torque motor delivering 1.5kg·cm makes it possible to reach 33-1/3 r.p.m. from standstill within 0.7 sec. (1/4 rotation) and to effect instantaneous speed change. (Fig. 1).

Superior load characteristic of 0 rotational deviation even at a stylus pressure of 300 g. (Fig. 2).

High performance with wow and flutter of only 0.025% (JIS C5521) and rumble of -73 dB (DIN 45539B).

Since the development of the DD turntable, Technics has continually strived for further improvement of player performance and has introduced numerous high performance models on the market.

The SL-1300MK2 series is brought into being by combination of experience and research.

The characteristic values of rumble -73 dB (DIN 45539B) and wow and flutter of 0.025% (W.R.M.S JIS C5521) by far exceed the standards to which record albums are made.

### Quartz Controlled Rotation Accuracy

The SL-1300MK2 utilizes the oscillation of a quartz crystal as a reference signal or source. This oscillation is not affected by temperature change or power fluctuations. By synchronizing the rotation of the turntable platter accurately to the reference signal, speed drift of the SL-1300MK2 is held within  $\pm 0.002\%$ . This means that for a record with a playing time of 30 min, total playing time variation can amount to no more than 0.036 sec. This stable and accurate rotation sets a new standard of precision.

The accuracy under controlled operating conditions as in a listening room is about  $\pm 0.00001\%$  as shown in Fig. 3.

### Highly sensitive universal tonearm.

For the finest tracking sensitivity, the tonearm rests in a gimbal suspension equipped with two pairs of low friction pivot bearings. Gimbal suspension and low tonearm mass means that accurate tracking is possible at tracking forces as low as 0.25 grams. With enhanced rotational sensitivity of 7 mg. the tonearm is allowed free, gyroscopic movement to ensure flawless balance during tracking. The longer-than-usual effective tonearm length (9-1/16" or 230 mm, stylus to pivot) contributes to the arm's low tracking error, and this in turn facilitates the design of the anti-skating control for precise and reliable tracking. With this design, a single precise anti-skating scale counteracts side thrust for all types of styli.

Arm height is adjustable within a range of 6 mm to accomodate varying cartridge dimensions.

Resonance damped headshell with unique overhang adjuster.

Low capacitance phonocables.

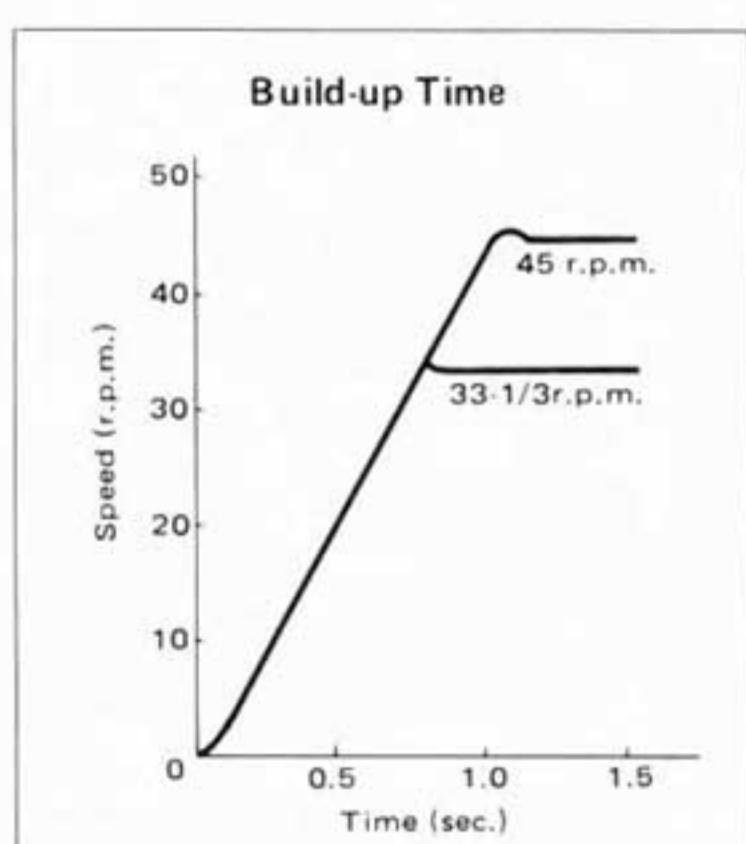


Fig. 1

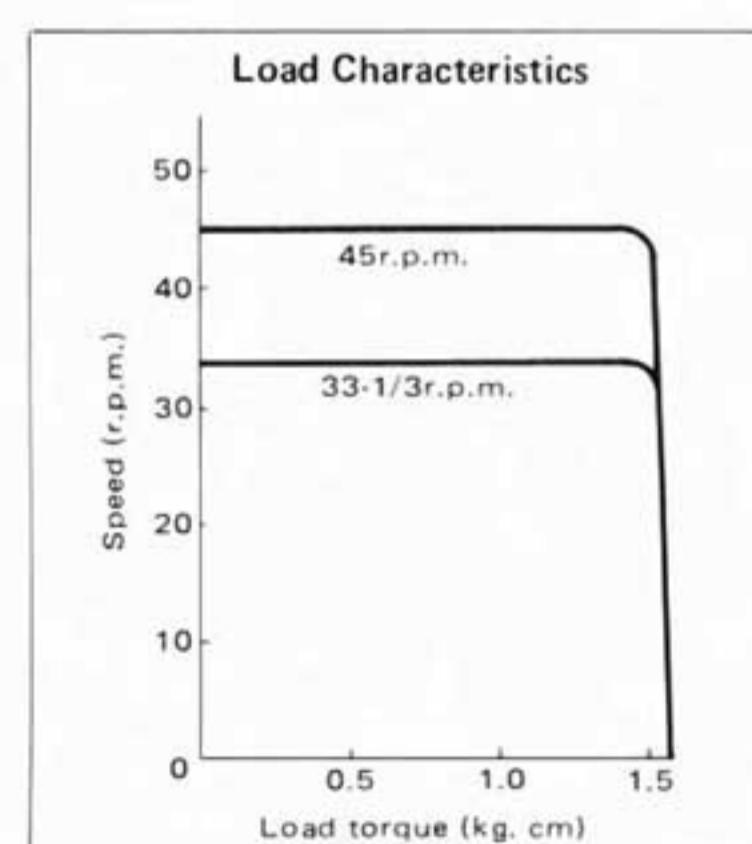


Fig. 2

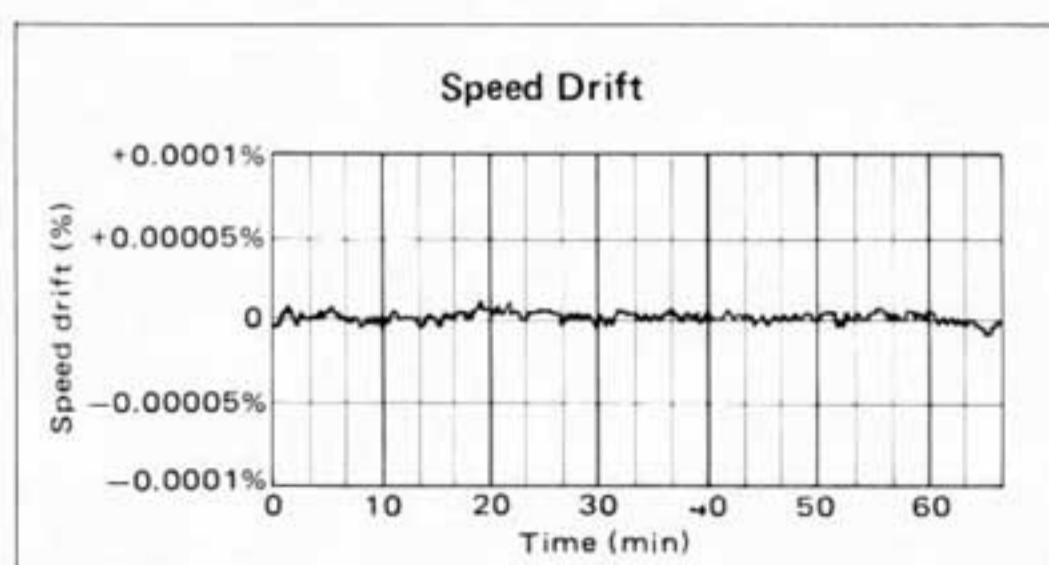


Fig. 3

## ■ CROSS SECTION OF MOTOR PORTION AND DOUBLE INSULATOR

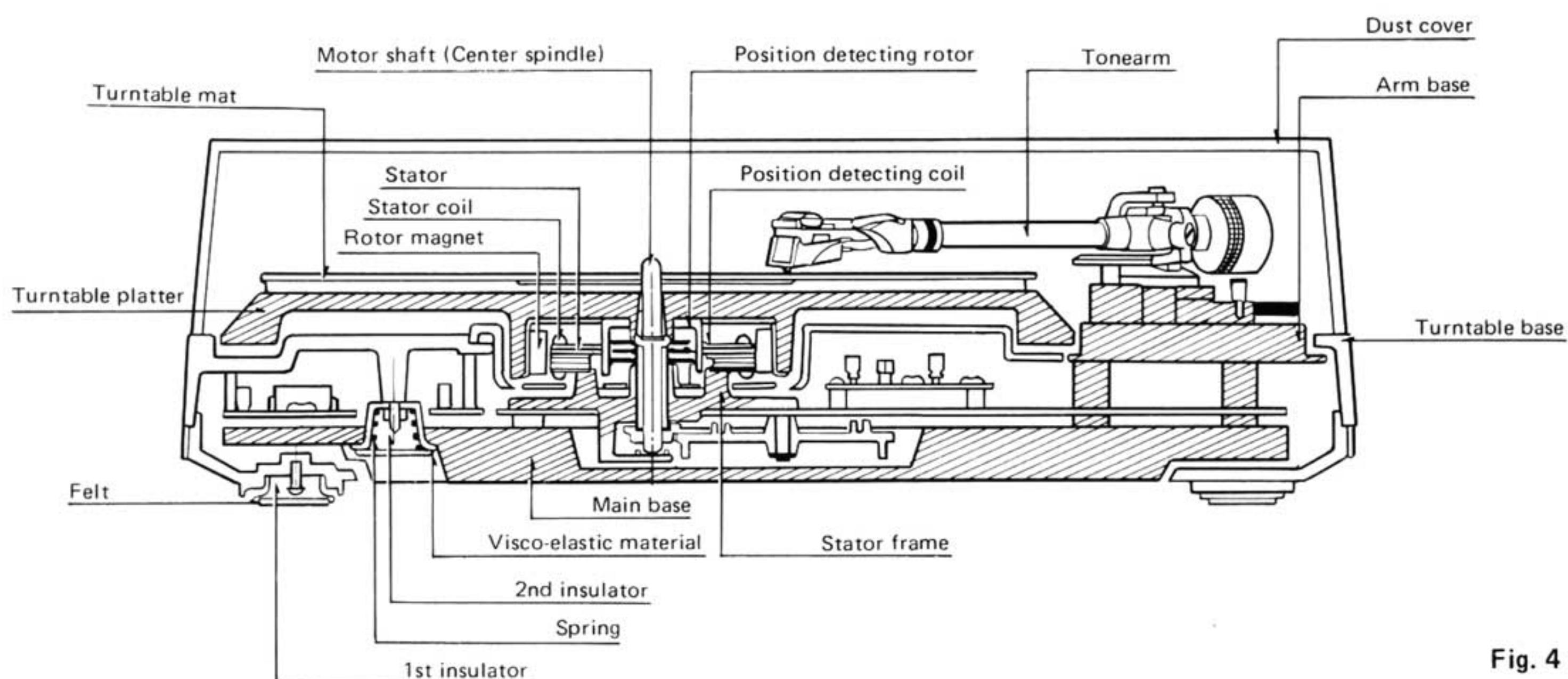


Fig. 4

## ■ PARTS IDENTIFICATION

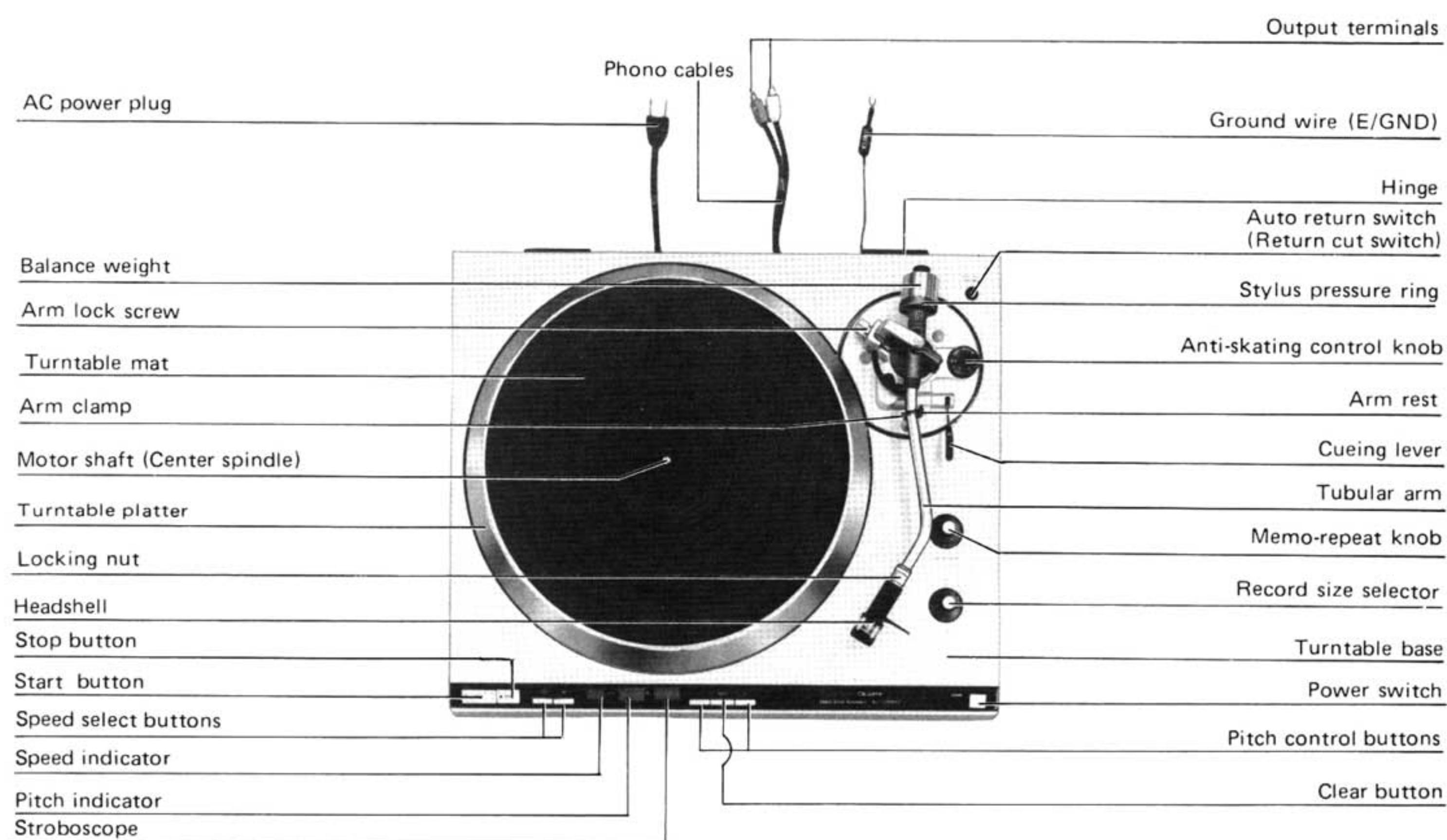


Fig. 5

## ■ TO REMOVE CABINET AND BOTTOM COVER

1. Remove headshell and balance weight.
2. Clamp tone arm to the arm rest.
3. Remove turntable platter.
4. Close dust cover.
5. Turn unit upside down taking special care not to damage or scratch the dust cover.
6. Remove the 7 screws from bottom cabinet (Fig. 6).
7. Remove the 4 screws from main base (Fig. 7).
8. Holding the player firmly with both hands, to prevent separation of upper section (turntable base) from lower section (main base), turn it carefully upwards.
9. Remove dust cover.
10. Remove the 6 screws from the panel cover (Fig. 8).
11. Unplug the 5 plug-in connectors and 1 cord clamp (Fig. 9).
12. To remove the turntable base from the main base bottom section, turn cueing lever upward (cueing position) and move tone arm towards center of spindle. Top section can be lifted up easily.
13. To reassemble, perform steps 1 through 12 in reverse.

### Note:

The turntable horizontally to the panel face is already adjusted before shipment.

If deviated, correct it by means of the adjust screws using a 5 mm box spanner.

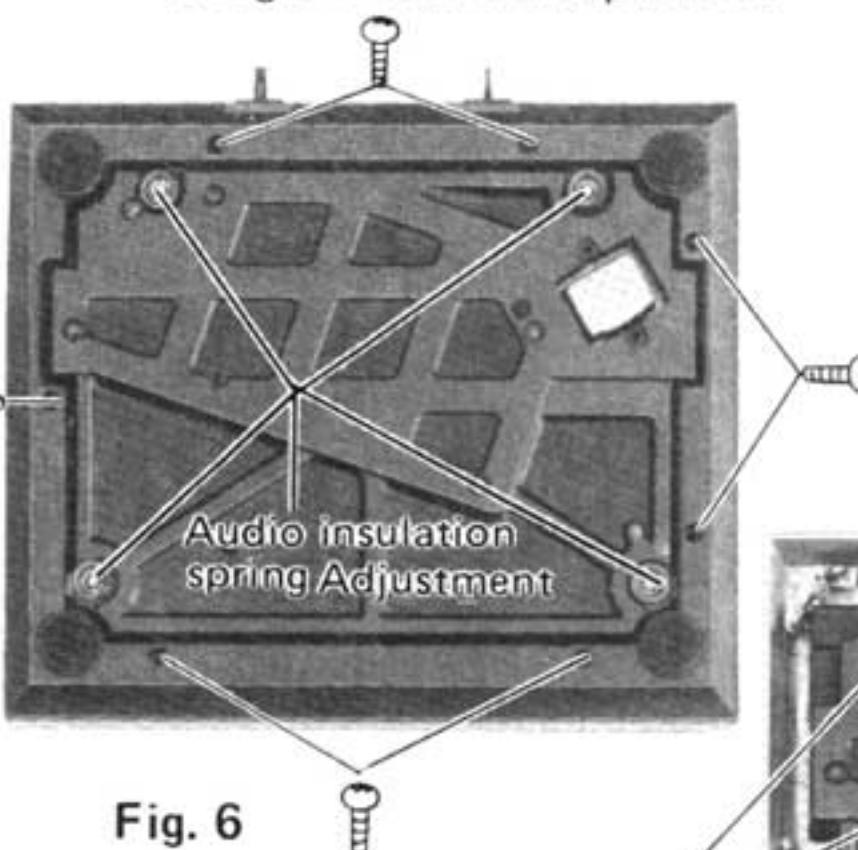


Fig. 6

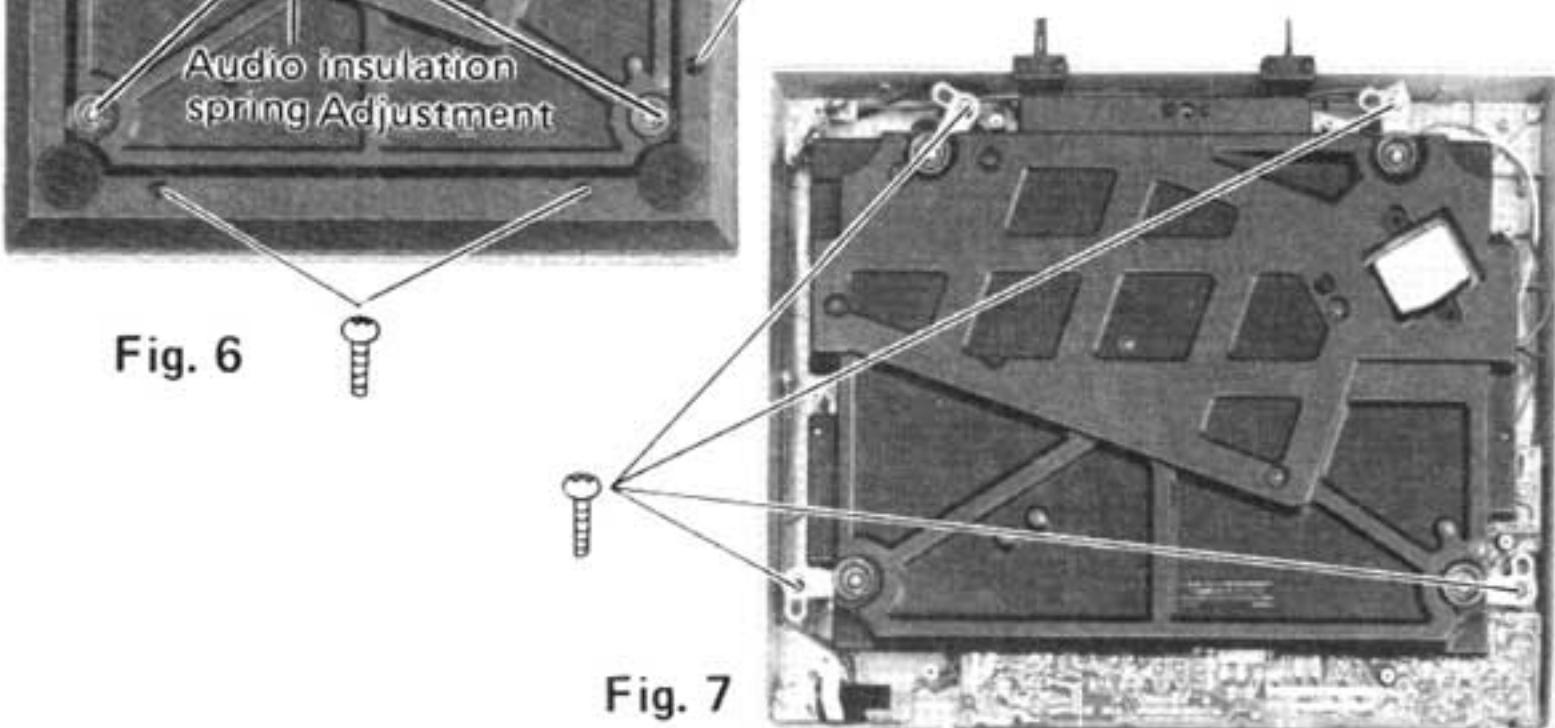


Fig. 7

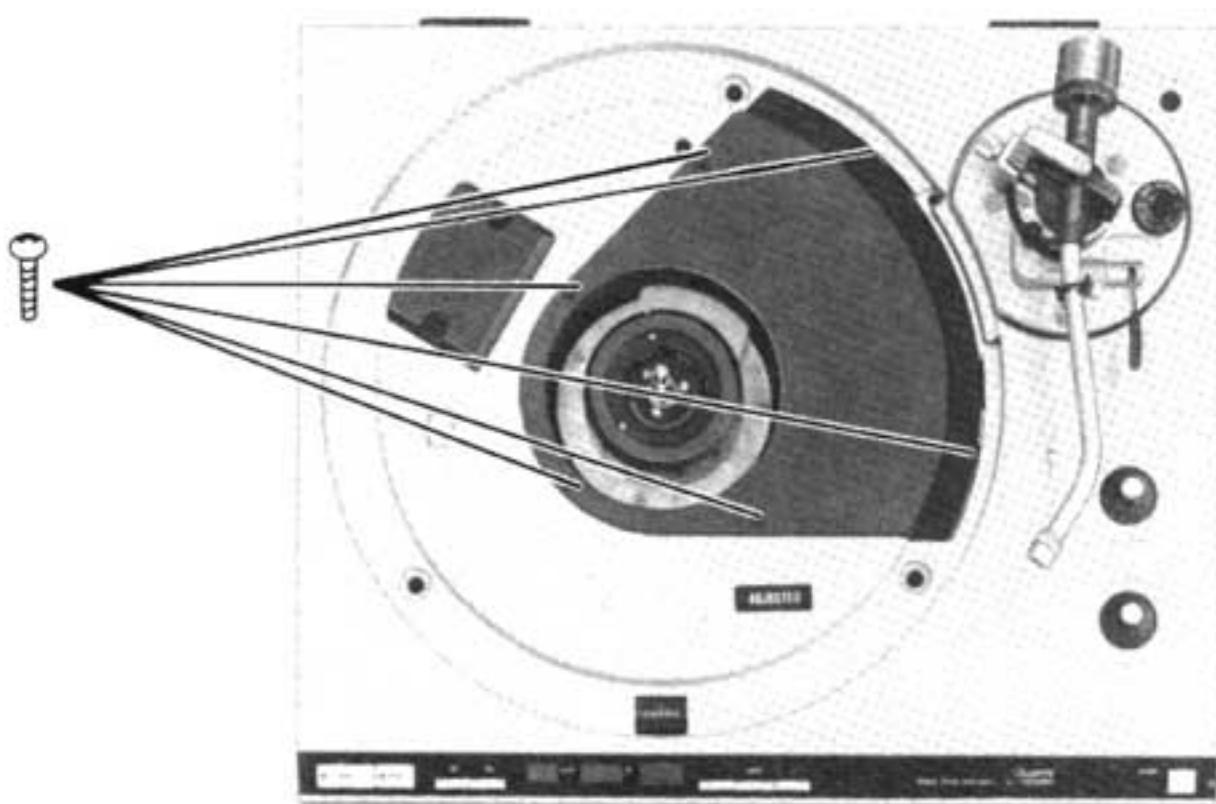


Fig. 8

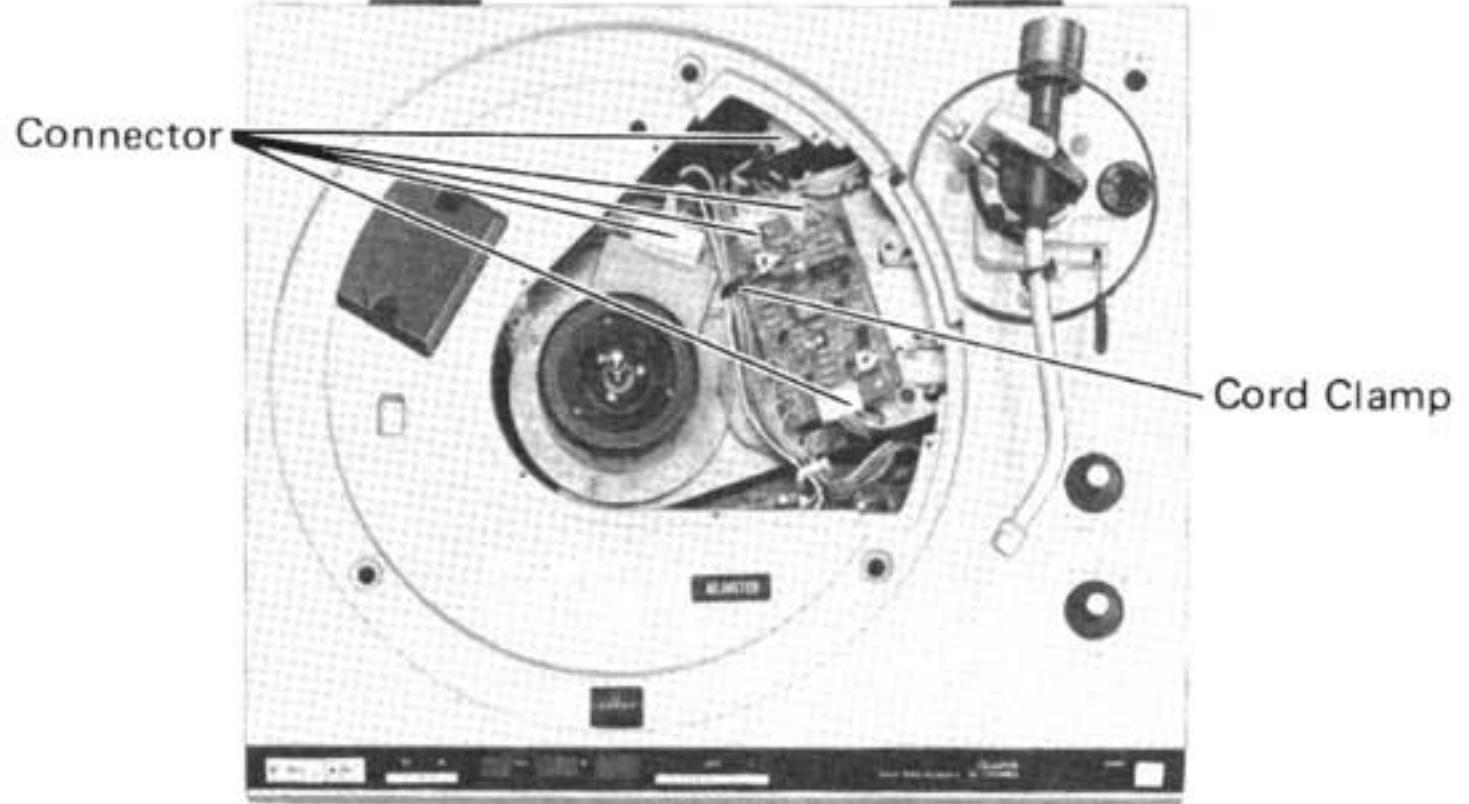
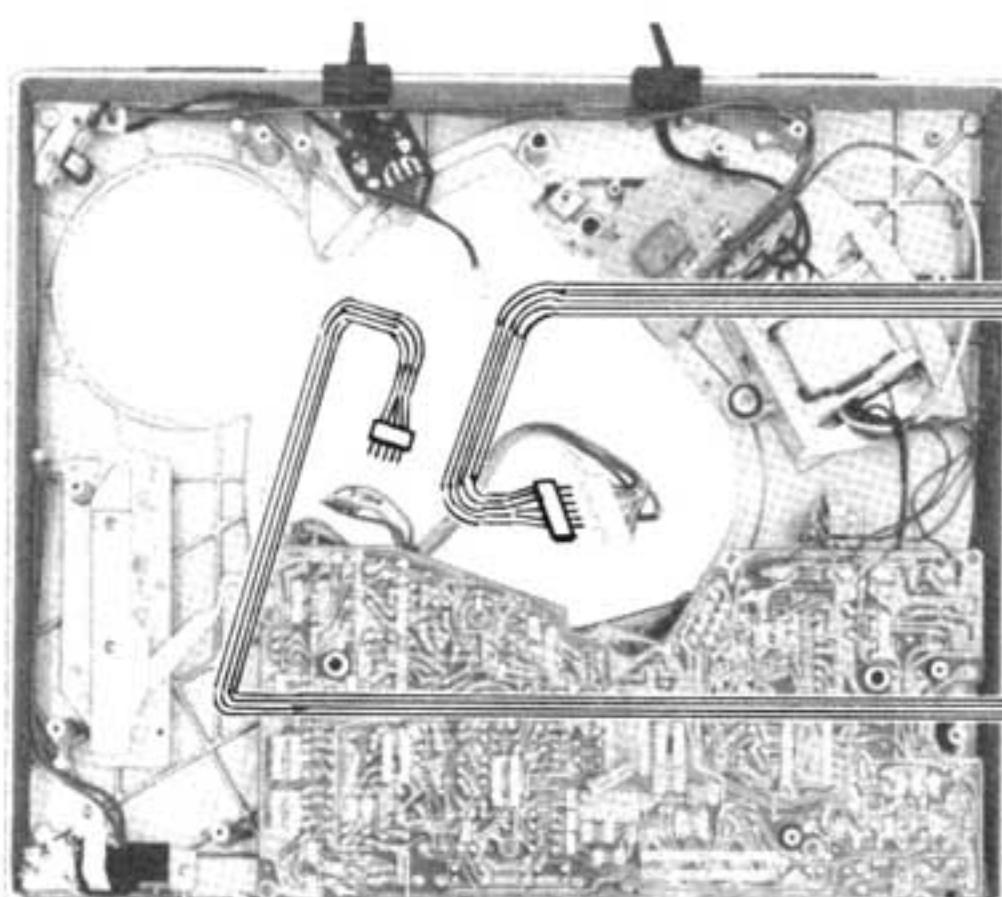


Fig. 9

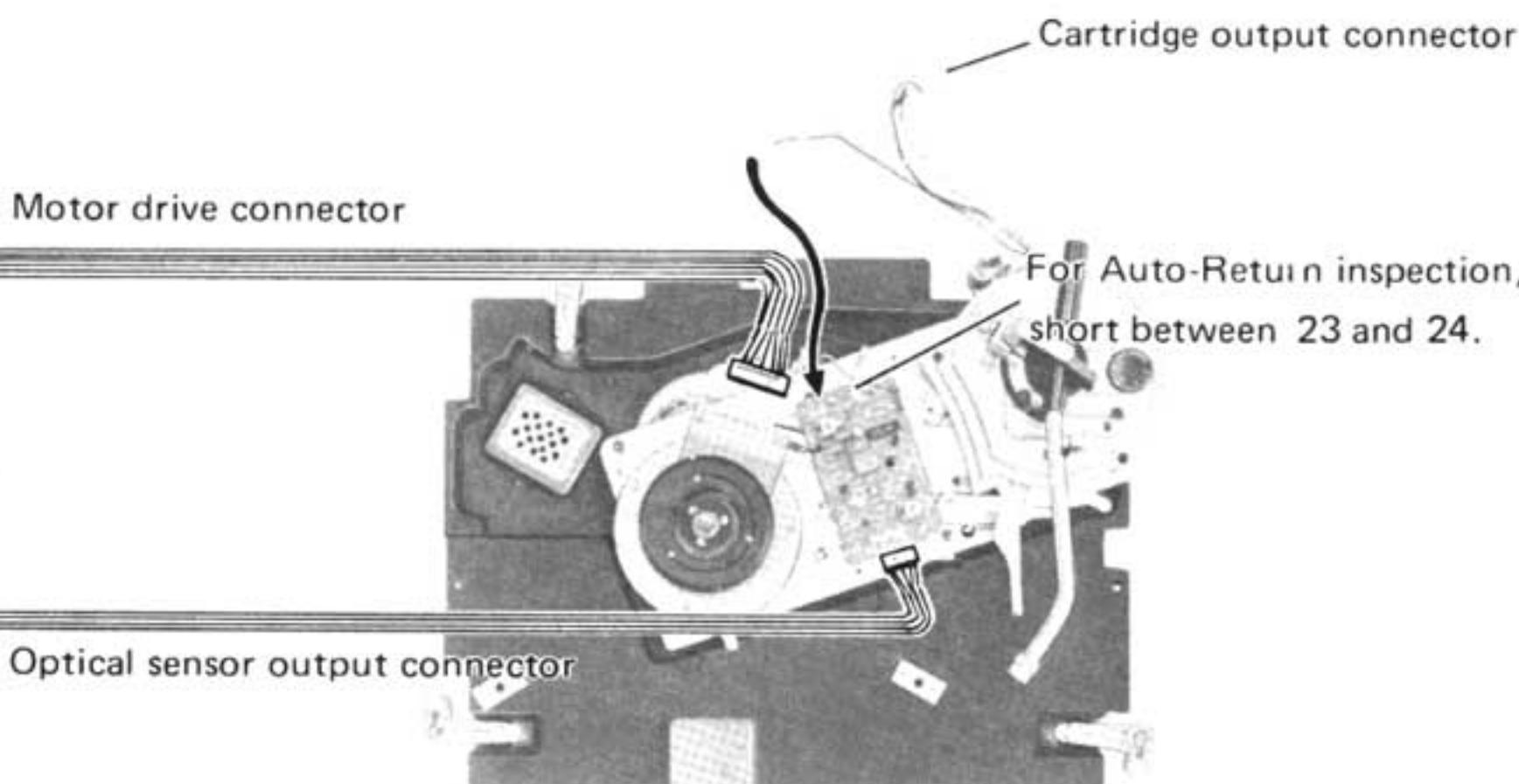
## ■ CONNECTOR CONNECTION POINTS FOR INSPECTION

Connect the disassembled main unit and main base as shown in the Figure below.



Motor drive connector

Optical sensor output connector



Cartridge output connector

For Auto-Return inspection,  
short between 23 and 24.

Fig. 10

# ■ HOW TO PLAY

## Manual play

Place a record on the turntable platter.

Push the 45 r.p.m. speed select button if you play a 45 r.p.m. record. (See Fig. 11).

Note:

Since the unit has been designed to select 33-1/3 r.p.m. automatically each time you push the power switch on, push the speed select button if you play a 45 r.p.m. record.

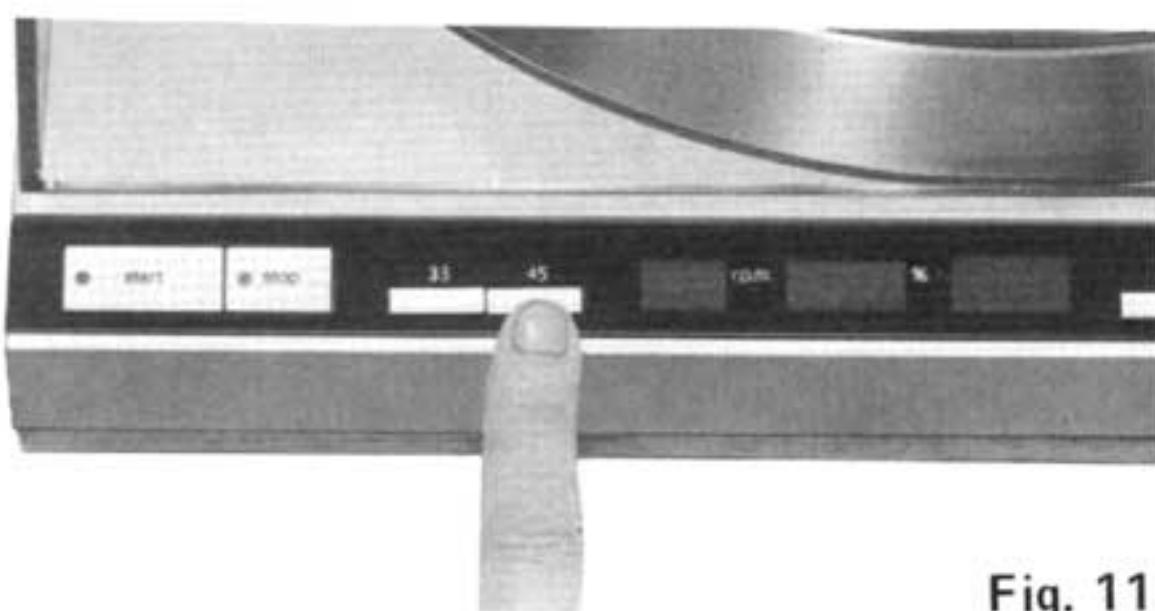


Fig. 11

Move the tonearm manually over the record, the turntable will start to rotate. Lower the cueing lever.

The tonearm will descend slowly onto the record and play will begin.

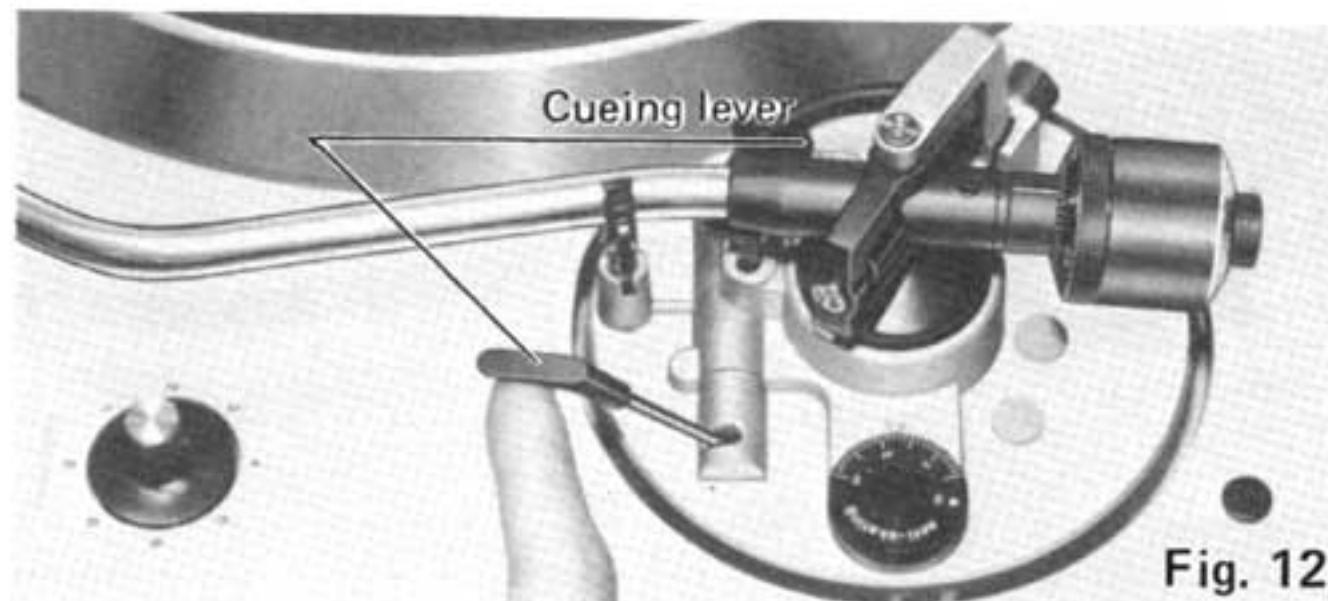


Fig. 12

When finished, the tonearm will automatically return to the arm rest (auto return) and the turntable platter will stop rotation.

Note:

- To shut the power off the power switch must be pushed again to the off (■).
- If the "memo-repeat" knob is in a position other than "0", play will be repeated by the number of time set, therefore, be sure to keep the "memo-repeat" knob in the "0" position.
- If you play a 45 r.p.m. record with a large center hole, use the furnished adaptor on the center spindle.

## Automatic play

Push the power switch to the ON position (■).

The speed indicator for 33-1/3 r.p.m. the pitch indicator and stroboscope will all light up.

Place a record on the turntable platter.

Release the arm clamp.

Remove the stylus cover if your cartridge has one.

Set the record size selector to the diameter of the record (7", 10" or 12") you wish to play.

Push the start button. (See Fig. 13).

The tonearm will move and descend according to the size selected and start play (Automatic start).



Fig. 13

When finished play, the tonearm will automatically return to the arm rest and the turntable platter will stop rotation.

Note:

- Records with dimensions other than 7" (17 cm), 10" (25 cm) and 12" (30 cm) diameter must be played "Manually".

## Repeat play

This unit employs a unique feature the "Memo-repeat". You can play a record repeatedly from one to six times or continuously by setting this knob to the desired position.

Set the "memo-repeat" knob to the desired number you wish to play. (See Fig. 14).

"R" position enables you to repeat play continuously.

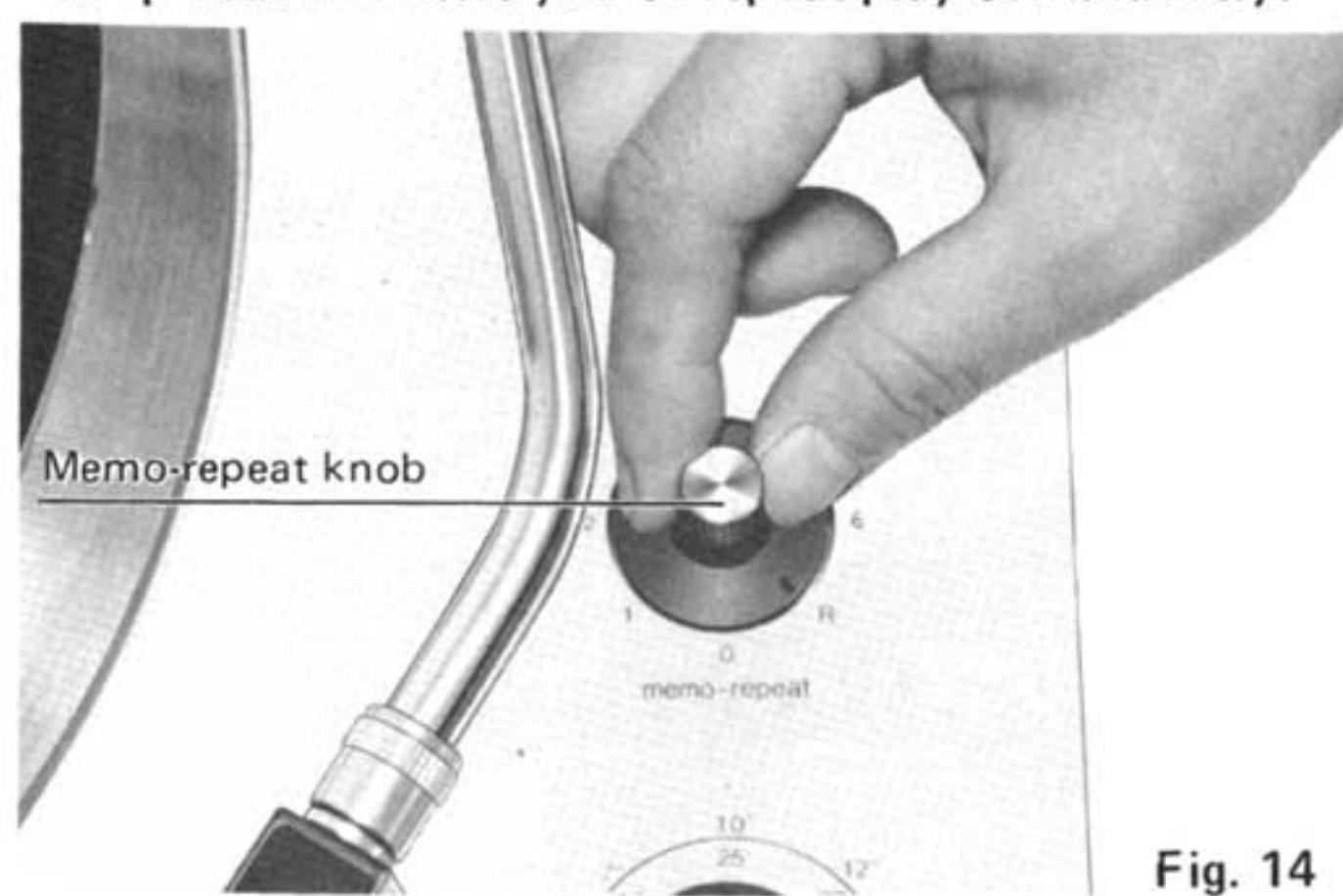


Fig. 14

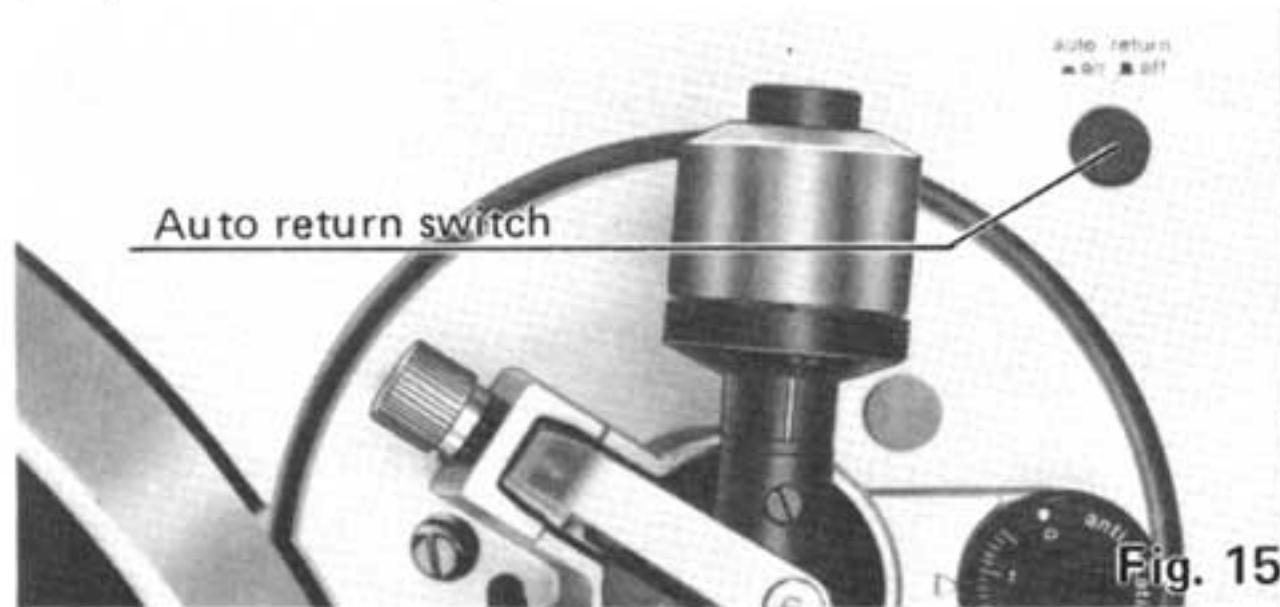
Note:

For suspension of play, be sure to push the stop button after having set the "memo-repeat" knob to "0".

## ■ HOW TO USE AUTO RETURN SWITCH

This unit employs a unique "auto return switch" (return cut switch).

- Should any phono disc whose central hole is off center be played, the tonearm will automatically return during the course of performance. In such a case, set the auto return switch to the OFF (■) position (see Fig. 15), and then the phono disc can be played to the final groove.



### Note:

For restoring the normal auto return function, set the switch back to the ON (●) position.

## ■ HOW TO SUSPEND AND STOP PLAY

- For temporary suspension of play, raise the cueing lever, and the stylus tip of the cartridge, will lift from the record.
- For suspension of play, push the stop button. The tonearm automatically returns to the arm rest and the turntable stops rotating.

### Note:

The stop button will light up after the tonearm returns to the arm rest.

## ■ ADJUSTMENTS-1

### Adjustment of the arm height. (See Fig. 16, 17)

- This tonearm has been locked in the highest position before shipping from the factory, adjust the arm height according to your cartridge height.
- Loosen the arm lock screw. And push the arm pivot bearing support downward until the tonearm is parallel with the record surface.

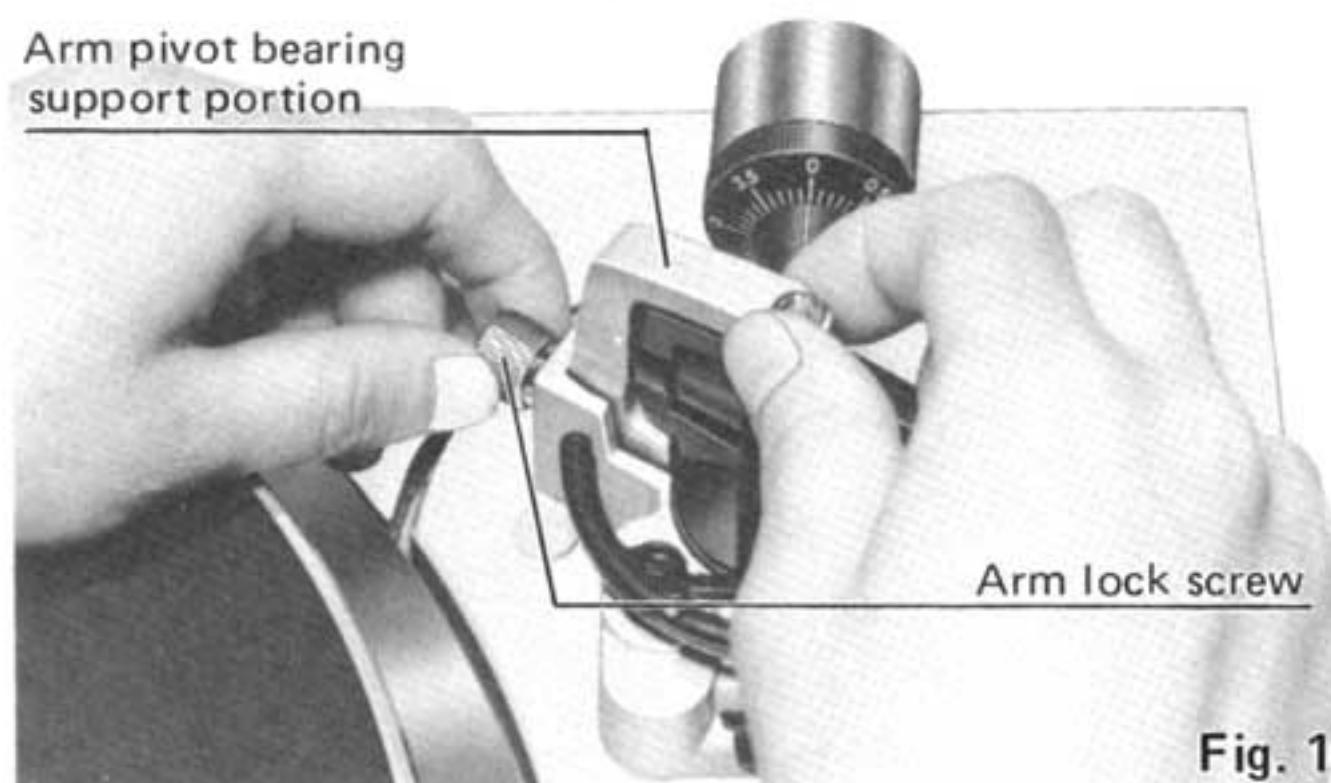


Fig. 16

- If the cartridge height is 18 mm as shown in the picture, lock the arm bearing support at the line indicated in the picture. (See Fig. 17) The arm height can be adjusted in 1 mm increments over a range of 6 mm.

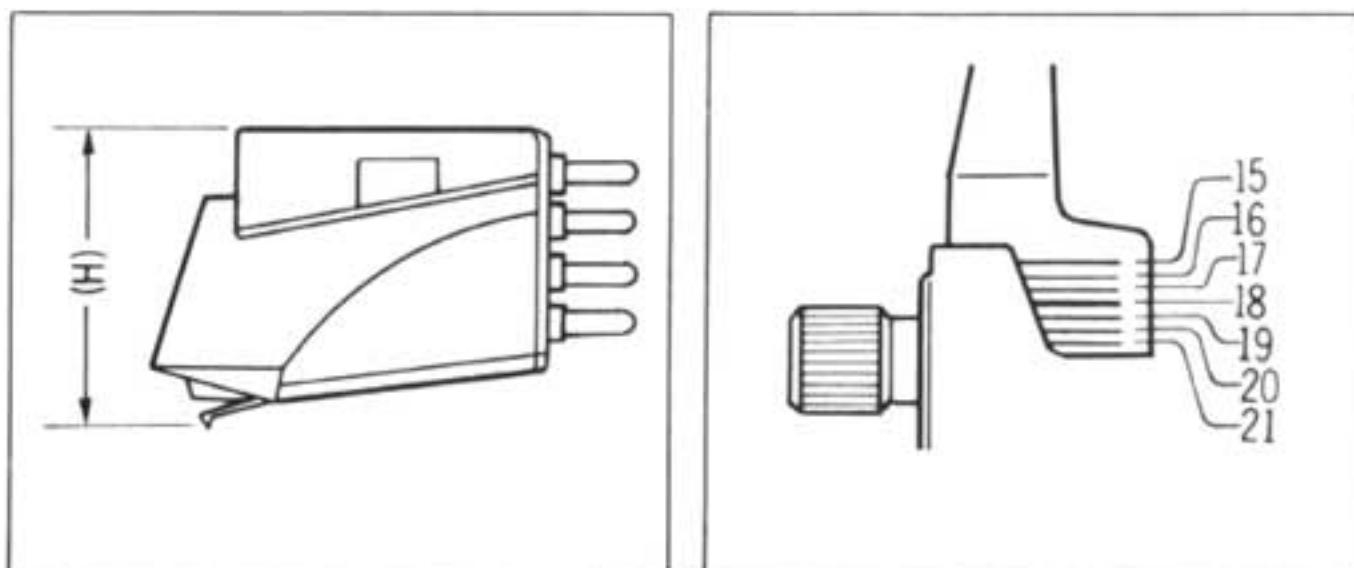


Fig. 17

## ■ ADJUSTMENTS-2

### Pitch control (turntable speed fine adjustment)

By the employment of the Quartz Synthesizer pitch control for being employed for the first time in the world, a high degree of pitch control accuracy over a range as wide as  $\pm 9.9\%$  in 0.1% increments can be obtained independently, with the quartz locked speed accuracy.

Additionally, the pitch variations which are clearly indicated by the LED digital indicator provide you with accurate and easy selection.

- The pitch control can be selected in increments of 0.1% which is below the threshold of human perception. This function can be very effective for minor extension or reduction of broadcasting time in professional applications.

- The pitch control also enables you to accurately and precisely tune with musical instruments, and by varying the pitch slightly to obtaining a different musical note from phono disc.

For a half tone change:

+5.9% (#)

-5.6% (b)

- Another feature of the variable pitch control over a wide range of  $\pm 9.9\%$  is that it makes singing along with a melody easy for a choral or playing a phono disc for accompaniment only.

By pressing the clear button which is located between the "+" and "-" pitch buttons, you can quickly return the set to normal playing speed.

#### Adjustment of the muting time and arm height.

(See Fig. 18 and 19)

This unit employs "muting switch" combination with arm lift to cut off the irritating noise when the stylus is set down on or lifted up from the record. You can adjust the muting time by adjusting the arm lift height (distance between the stylus tip and record surface when cueing lever is raised).

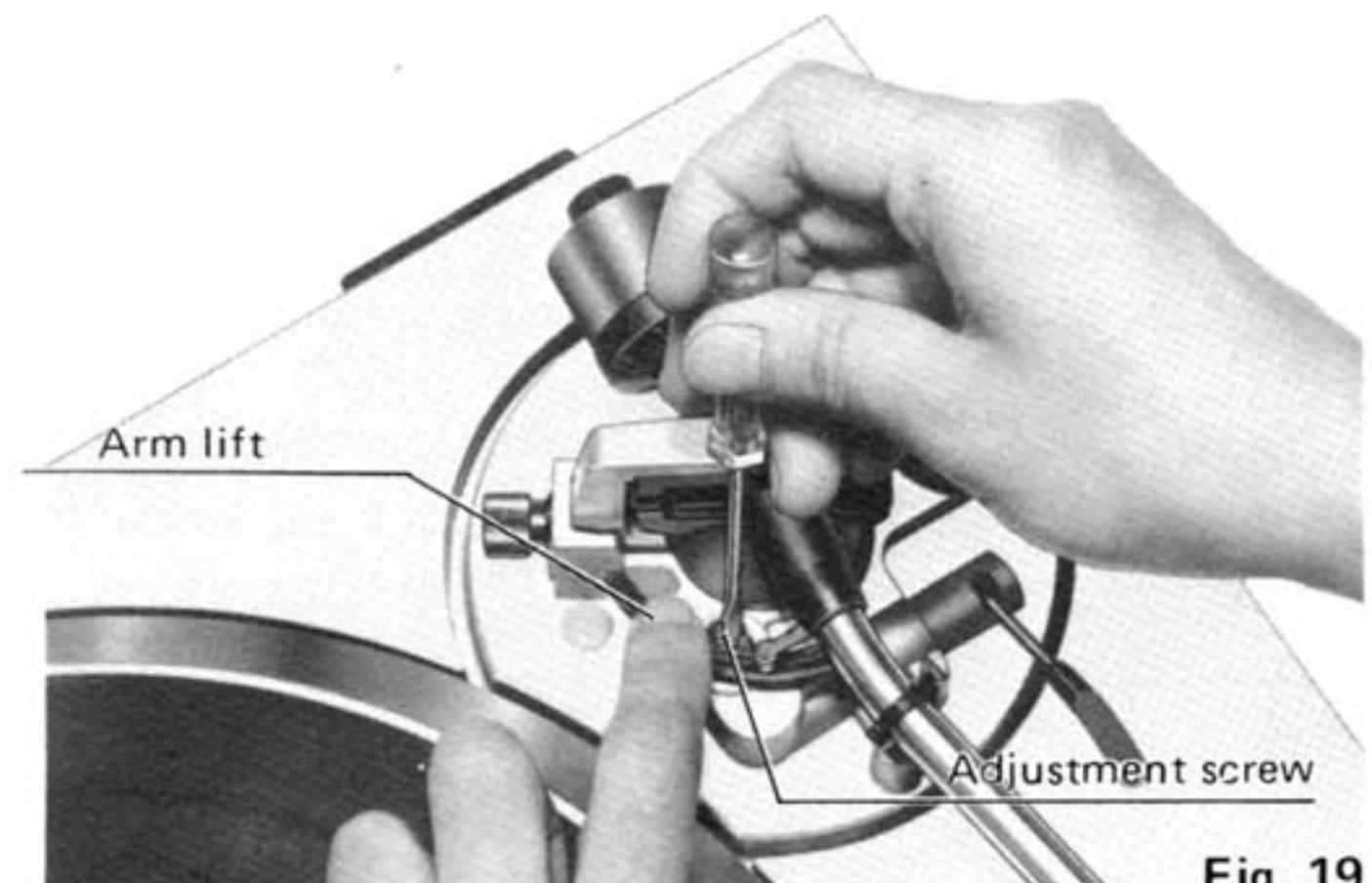
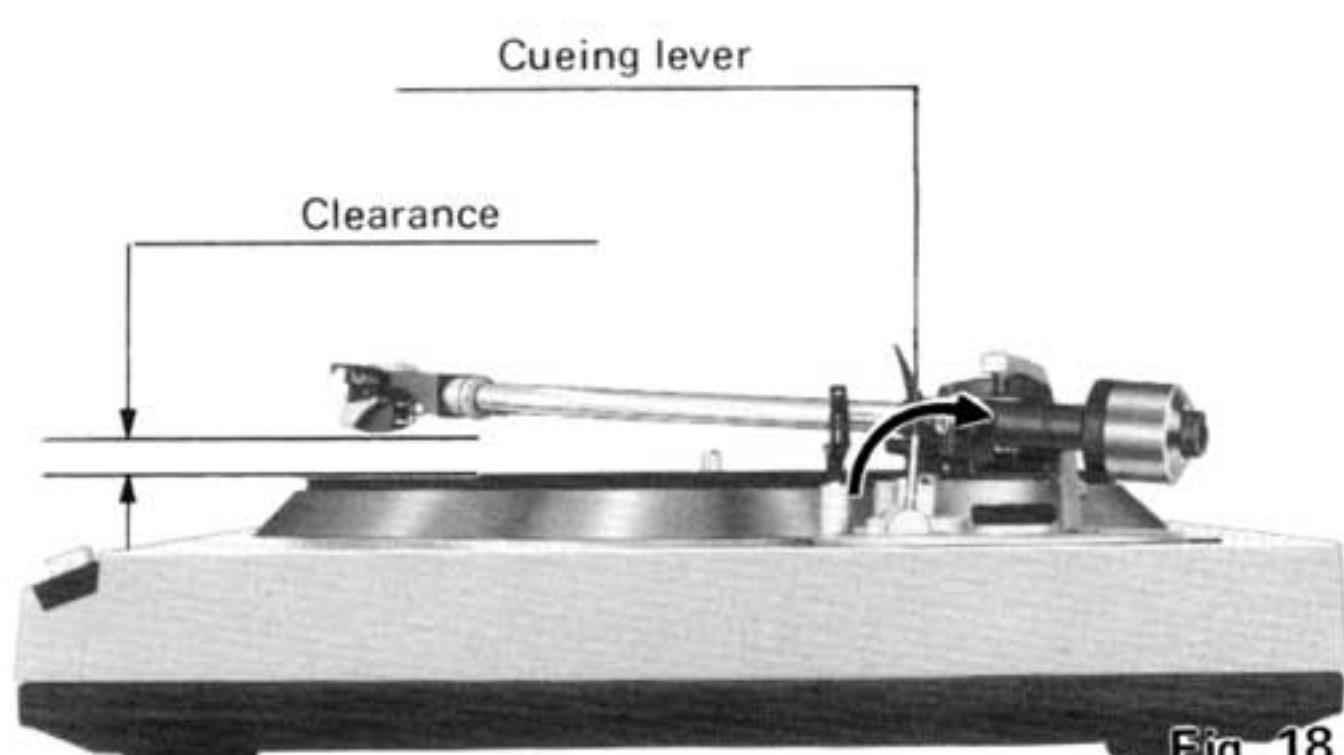
If the clearance becomes too narrow or too wide because of the physical size of the different cartridge on the market, turn the adjustment screw clockwise or counterclockwise, while pushing the arm lift down.

##### Clockwise rotation

— distance between the record and stylus tip is reduced, and muting time becomes longer.

##### Counterclockwise rotation

— distance between the record and stylus tip increases, and muting time becomes shorter.



#### Note:

As the adjusting screw has a hexagon head, be sure to make the adjustment while depressing the arm lift, and be sure that the hexagon head retracts correctly into the arm lift when released.

#### Adjustment for automatic start and automatic return positions.

Should the tonearm not set down or lift off at the correct points, make adjustments according to the following procedures.

#### Adjustment for automatic start position (See Fig. 20).

1) Keep the power switch turned OFF (■) to prevent the turntable from rotation.

2) Remove the rubber cap.

In cases where the stylus tip sets down outside of the record.

— Move counterclockwise.

In cases where the stylus tip sets down on the recorded groove. -Move clockwise.

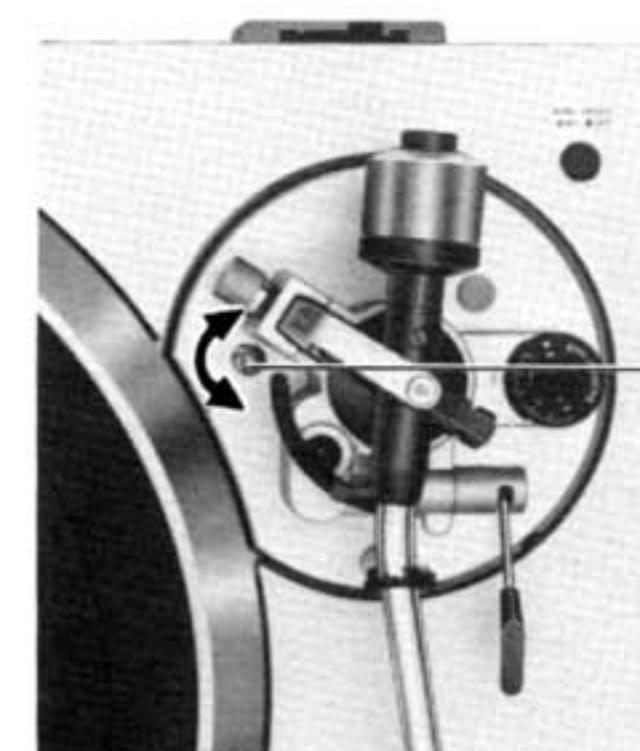


Fig. 20

#### Adjustment for automatic return position (See Fig. 21).

1) Keep the power switch turned OFF (■) to prevent the turntable from rotation.

2) Remove the rubber cap.

3) Move the tonearm toward the center spindle side, and make the adjustment by gradually turning the adjusting screw.

In cases where the tonearm tends to return before the playing has finished.

— Move counterclockwise.

In cases where the tonearm fails to return after the last groove of the record.

— Move clockwise.

#### Note:

Never turn the screw over a 180-degree angle.

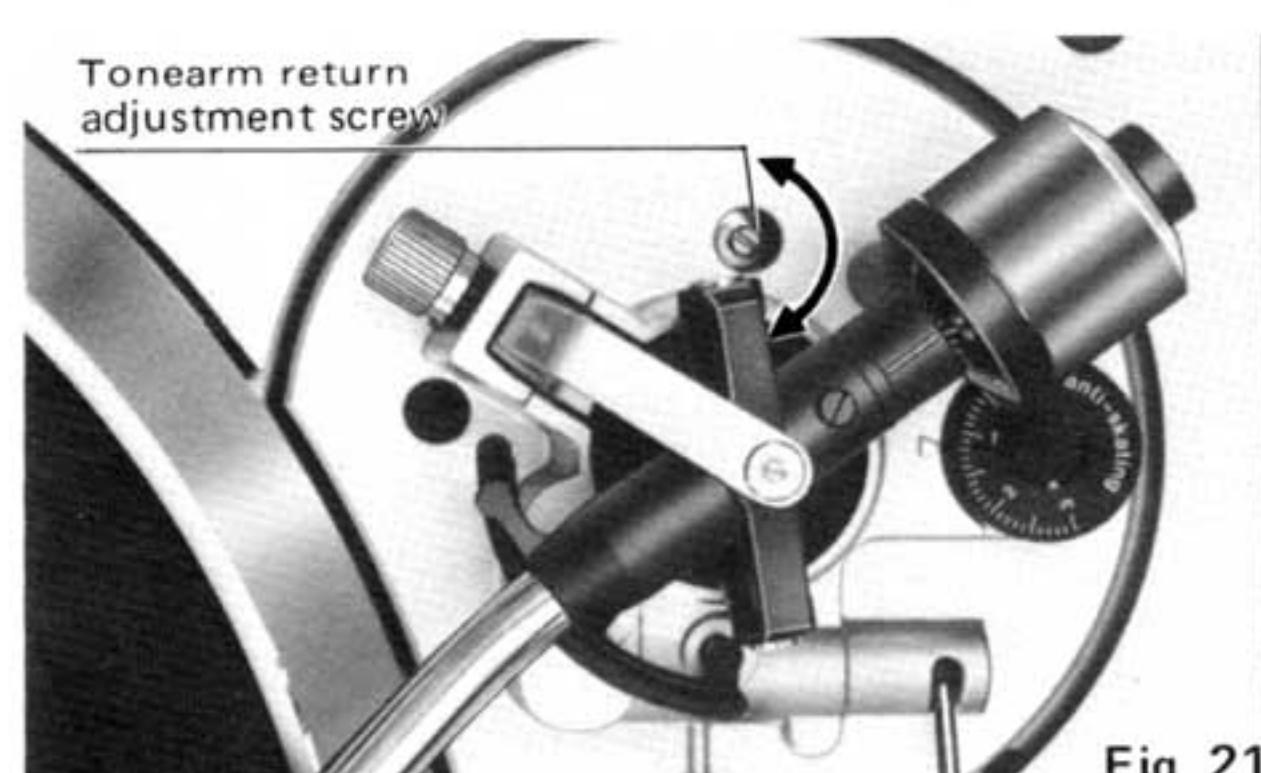
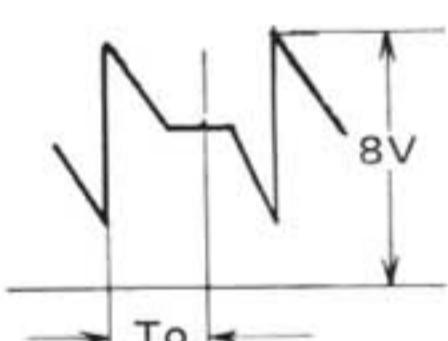
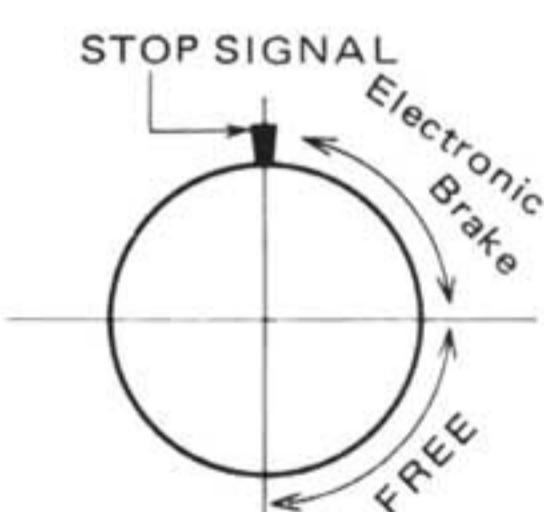
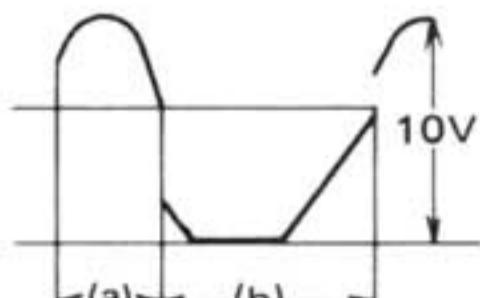
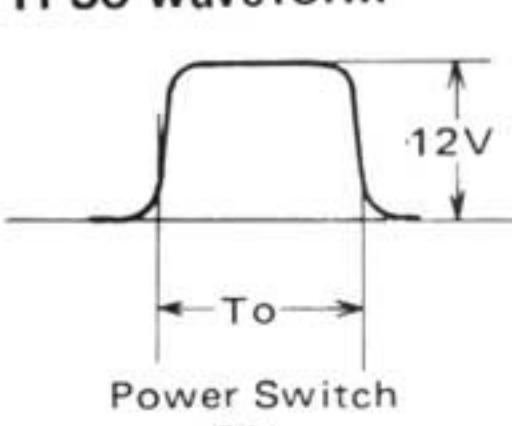


Fig. 21

# ■ ADJUSTMENTS-3


## Adjustment Points of Electrical System

NOTE: Make the following adjustments after replacing parts such as IC's, transistors, diodes, etc.

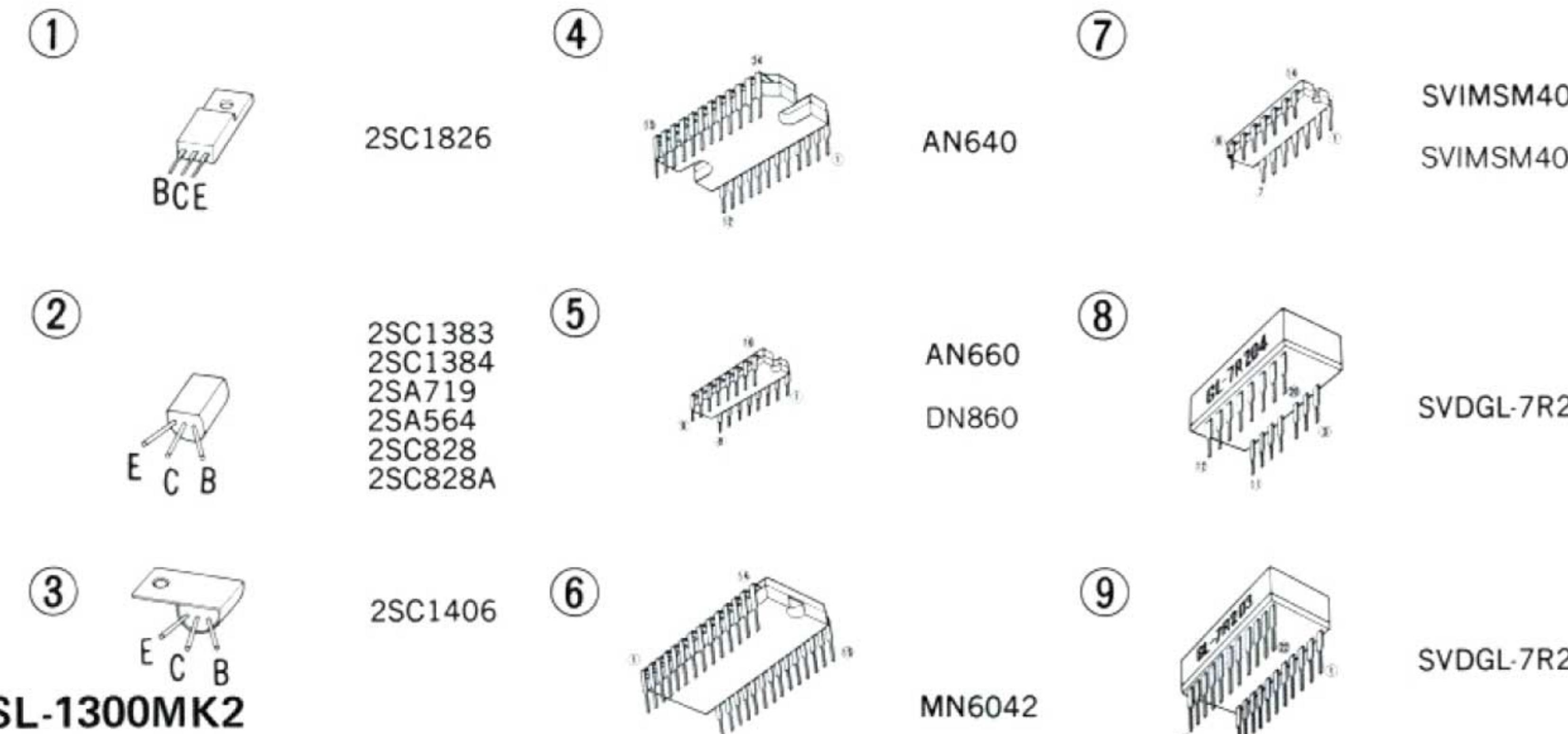
	Adjustment	Connection Points	Adjustment Point	Adjustment Method
A	Adjustment of standard voltage (VS)	DC voltmeter or Oscilloscope (+ → TP15 - → GRAND)	VR201	Turn start switch on to begin turntable rotation. For 33 rpm . . . adjust VR201 for DC $2.10V \pm 0.05V$ . For 45 rpm . . . confirm that there is DC $2.80 \sim 2.86V$ .
B	Adjustment of current source (IR)	DC voltmeter or Oscilloscope (+ → TP19 - → TP21)	VR202	Turn start switch on to begin turntable rotation. Adjust VR202 for 0V potential difference of TP19 and TP21.
C	Tracking adjustment	Oscilloscope (+ → TP18 - → GRAND)	VR101	<b>TP18 waveform</b>  For 33 rpm . . . adjust VR101 for $8 \leq T_0 \leq 8.5$ ms. For 45 rpm . . . confirm that $5.8 \leq T_0 \leq 6.4$ ms.
D	Braking adjustment	—	VR203	 Adjust VR203 for complete stop within $90^\circ \sim 180^\circ$ after stop signal initiated. (Turntable becomes free a few seconds after stop.)
E	Optical sensor gain adjustment	Oscilloscope (+ → TP32 - → GRAND)	VR501	<b>TP32 waveform</b>  With arm near center spindle, manually move with uniform motion, and adjust VR501 as that the (a) and (b) pitch of the waveform of TP32 is equal.
F	Auto-Return time adjustment	Oscilloscope (+ → TP38 - → GRAND)	VR502	<b>TP38 waveform</b>  Turn power switch on, and adjust VR502 so that the time ( $T_0$ ) from power on until the voltage of TP38 inverts is 1.5 second at 33 rpm. (1.1 second at 45 rpm) TP37: for 33 rpm . . . 0V for 45 rpm . . . 2V

# Schematic Diagram ..... Model SL-1300MK2

(This schematic diagram may be modified at any time with the development of new technology.)



## ■ TERMINAL GUIDE



**IMPORTANT SAFETY NOTICE**  
THE SHADeD AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR SAFETY.  
WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADeD AREAS OF THE SCHEMATIC.

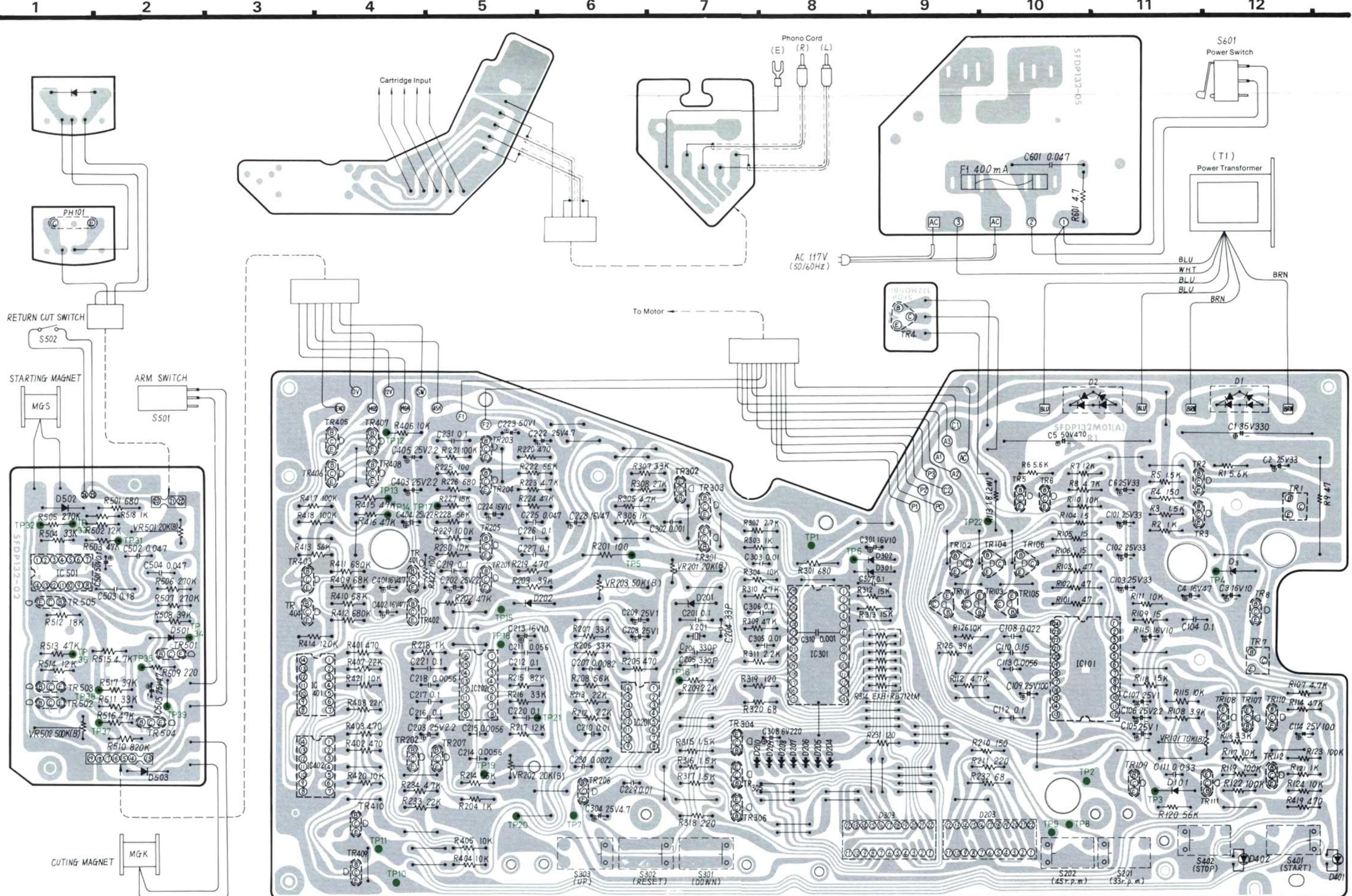
### Notes:

1. S201: Speed select switch (33 r.p.m.)
2. S202: Speed select switch (45 r.p.m.)
3. S301: Pitch Control switch (Down)
4. S302: Pitch Control switch (Reset)
5. S303: Pitch Control switch (Up)
6. S401: Start switch in "off" position.
7. S402: Stop switch in "off" position.
8. S501: Arm switch in "off" position.
9. S502: Return cut switch in "off" position.
10. S601: Power switch in "off" position.

**10 SL-1300MK2**

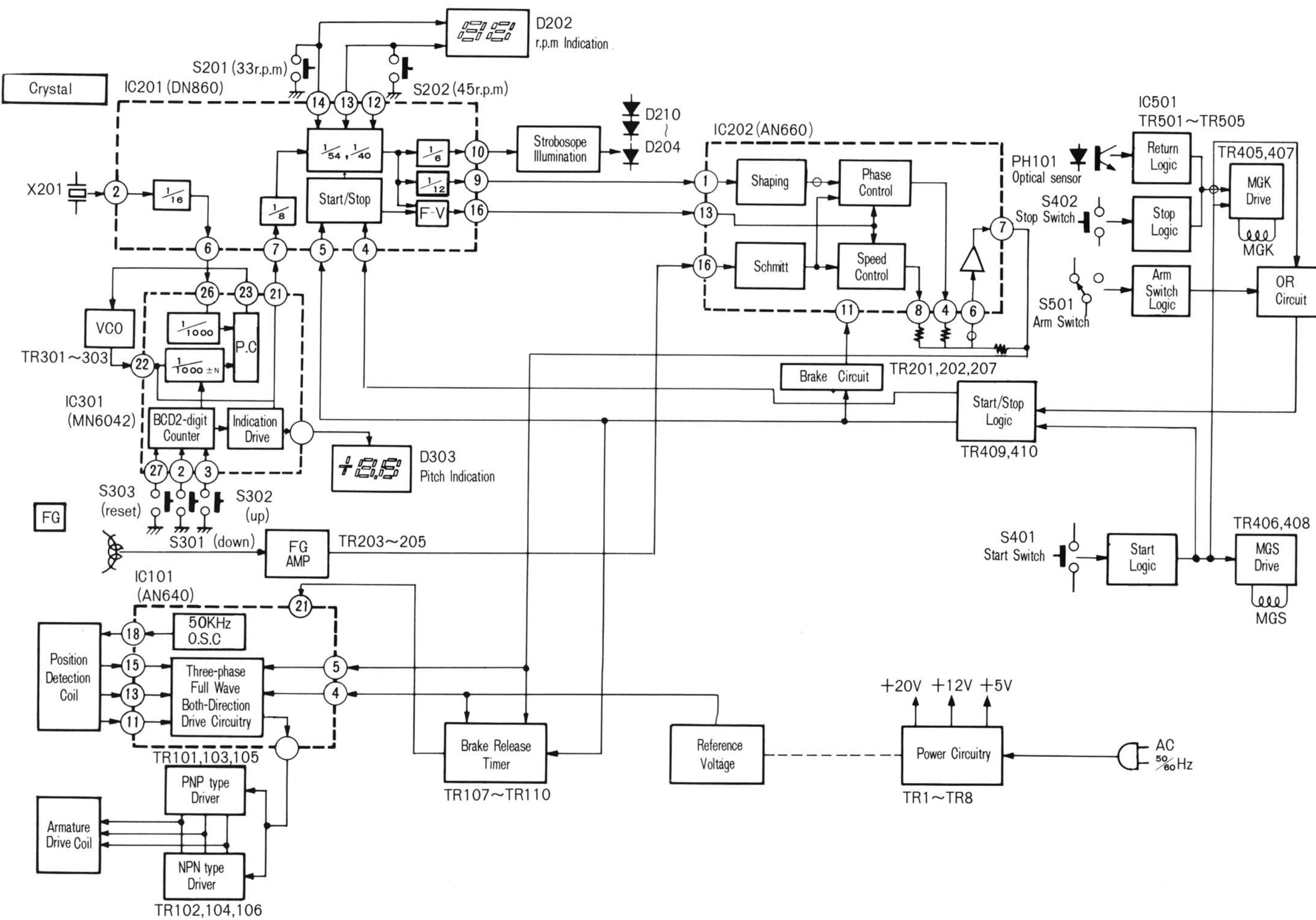
TR1, 4, 7	2SC1826	IC101	AN640
TR2, 3, 6, 8, 405, 406	2SC1328-T	IC201	DN860
TR5	2SC1384	IC202	AN660
TR102, 104, 106	2SC1406	IC401	MN6042
TR101, 103, 105	2SA752	IC402	SVIMSM4069
TR107, 107, 111	2SA666AI-R	IC501	SVIMSM4075
301, 302, 505	D1, 2	SVIMSM4011	SVDSIRBA20
TR109, 110, 112, 201 ~ 207, 303	D3, 301	SVDRD5.1EBS	SVDRD9.1EBS
401 ~ 404, 409, 410, 501 ~ 504	D101, 202, 302, 501 ~ 503	MA150	SVDGL-7R204
TR304 ~ 306	D201		SVDSR105C
TR407, 408	D203		SVDGL-7R203
	D203 ~ 210		SVDSR105C
	D303		
	D401, 402		

# **Printed Circuit Board ..... SL-1300MK2**



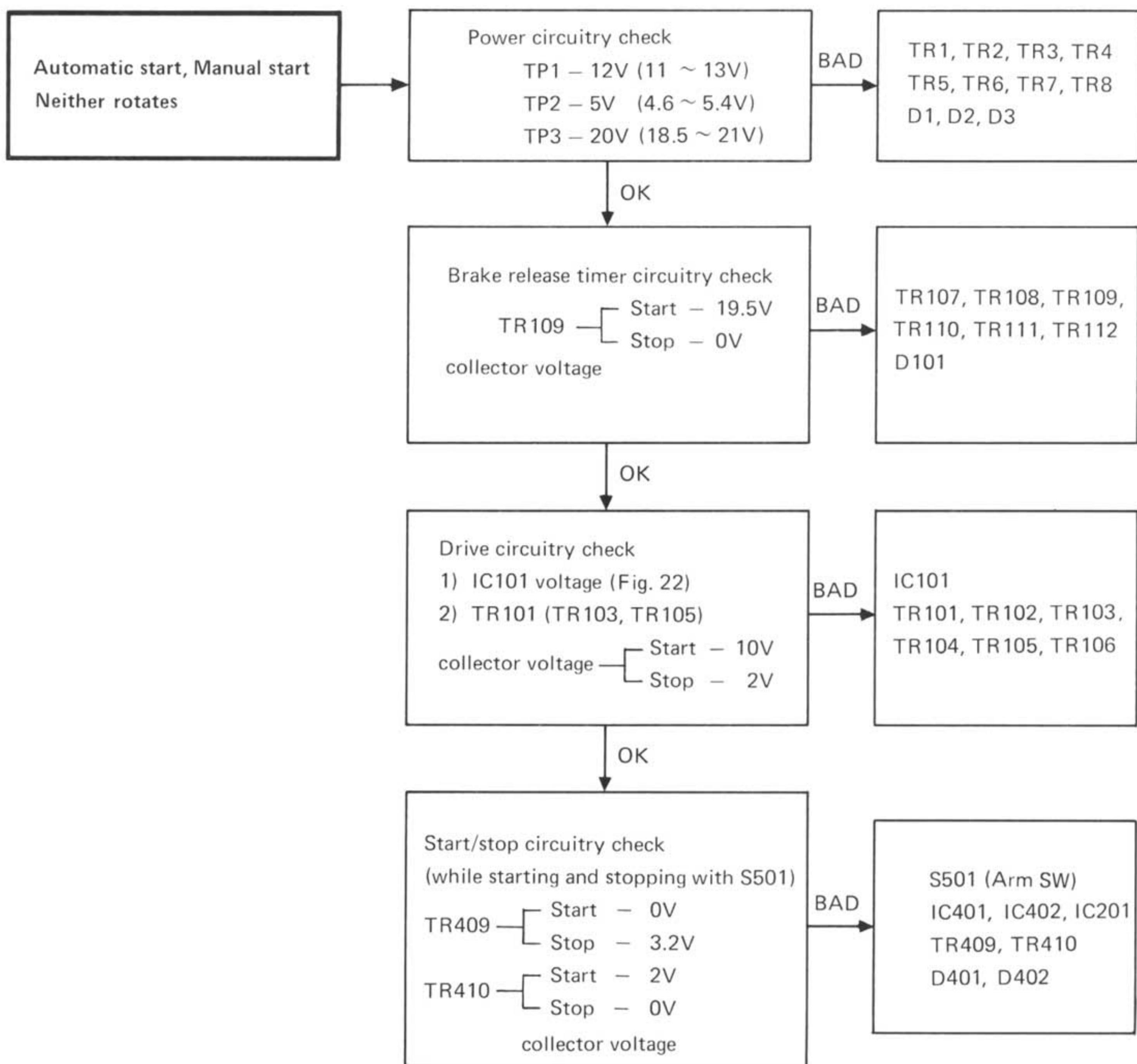
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2SC1826	2SC828A	2SC828A	2SC1826	2SC1383	2SC828A	2SC1826	2SC828A	2SA751	2SC1406	2SA751	2SC1406	2SA751	2SC1406	2SA564	2SC828	2SC828	2SA564	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	
E 12 V	E 12.6 V	E 4.9 V	E 20 V	E 20.6 V	E 4.9 V	E 5 V	E 5.6 V	E 0 V	E 20 V	E 0 V	E 20 V	E 0 V	E 0 V	E 0.1 V	E 0 V	E 0 V	C 10 V	C 10 V	C 10 V	C 10 V	C 10 V	C 10 V	E 0.75 V	
C 21 V	C 21 V	C 13.2 V	C 33.7 V	C 33.7 V	C 21.2 V	C 13 V	C 13 V	C 10 V	C 0 V	C 0.1 V	C 0 V	C 0 V	C 19.5 V	C 0 V	C 0 V	C 0 V	C 0 V	C 0 V	C 5.4 V					
B 12.6 V	B 13.2 V	B 5.5 V	B 20.6 V	B 21.2 V	B 5.5 V	B 5.6 V	B 6.2 V	B 0.1 V	B 0 V	B 0 V	B 0.7 V	B 0.7 V	B 0.7 V	B 0.7 V	B 0.7 V	B 0.7 V	B 1.4 V							
TR205	TR206	TR207	TR301	TR302	TR303	TR304	TR305	TR306	TR401	TR402	TR403	TR404	TR405	TR406	TR407	TR408	TR409	TR410	TR501	TR502	TR503	TR504	TR505	
2SC828	2SC828	2SC828	2SA564	2SA564	2SC828	2SA719	2SA719	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828A	2SC828A	2SC1384	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	2SA564
E 6.2 V	E —	E 0 V	E 1.3 V	E 1.3 V	E 0 V	E 5.2 V	E 5.2 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	E 0 V	
C 11 V	C —	C 2.9 V	C 0.7 V	C 0 V	C 0.8 V	C 0 V	C 4.4 V	C 4.6 V	C 12 V	C 12 V	C 0 V	C 0 V	C 12 V	C 0 V	C 0 V	C 12 V	C 12 V	C 0 V	C 10 V	C 10 V	C 12 V	C 12 V	C 0.9 V	
B 7 V	B —	B 0 V	B 0.6 V	B 0.8 V	B 0.7 V	B 4.6 V	B 4.6 V	B 0 V	B 0 V	B 0 V	B 0.6 V	B 0 V	B 0 V	B 0 V	B 0 V	B 0 V	B 0 V	B 0 V	B 10 V	B 3.2 V	B 0.2 V	B 0 V	B 12 V	

## ■ BLOCK DIAGRAM



# TROUBLE SHOOTING

(A)

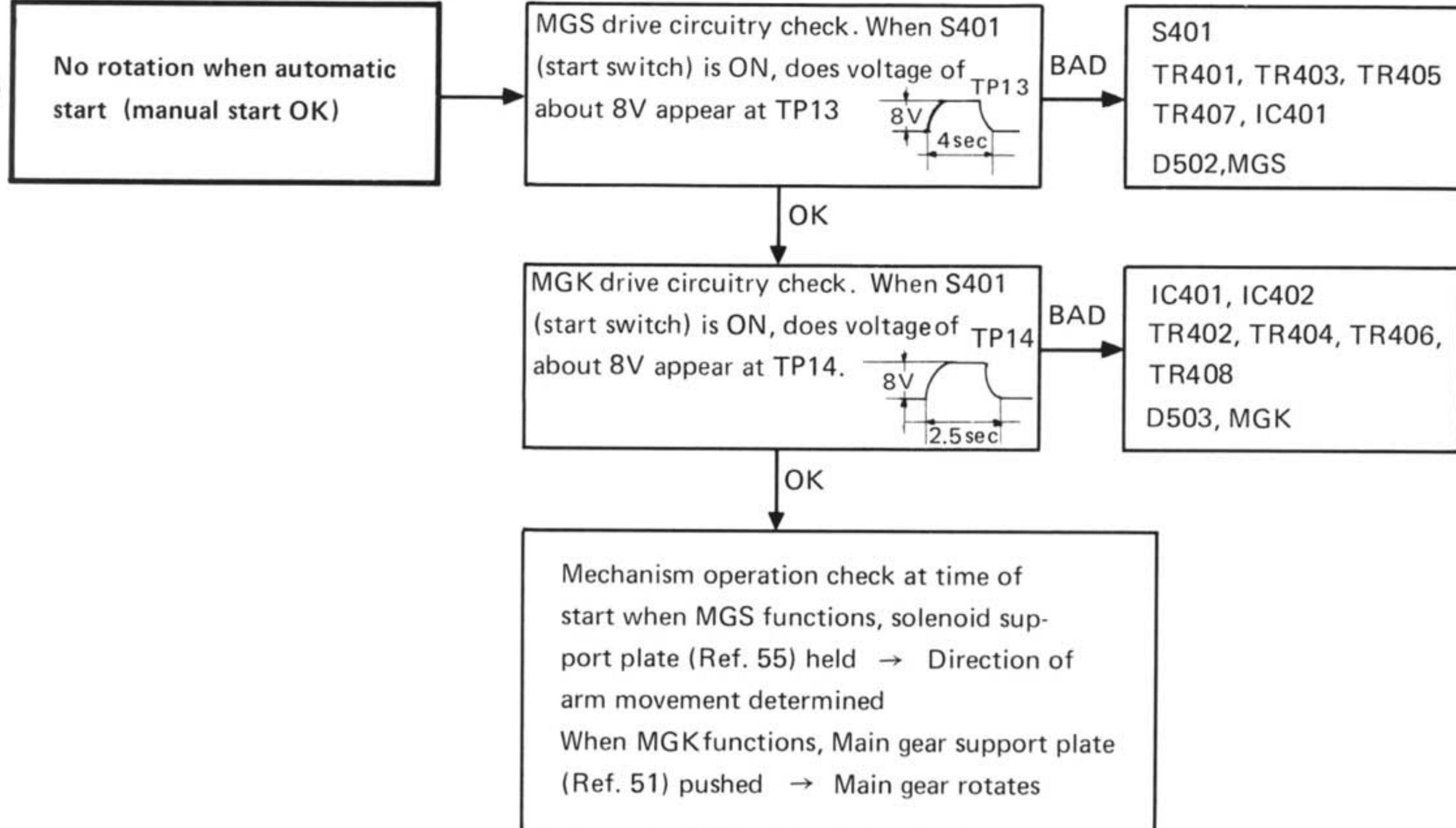


Reference voltage of each pin of IC101

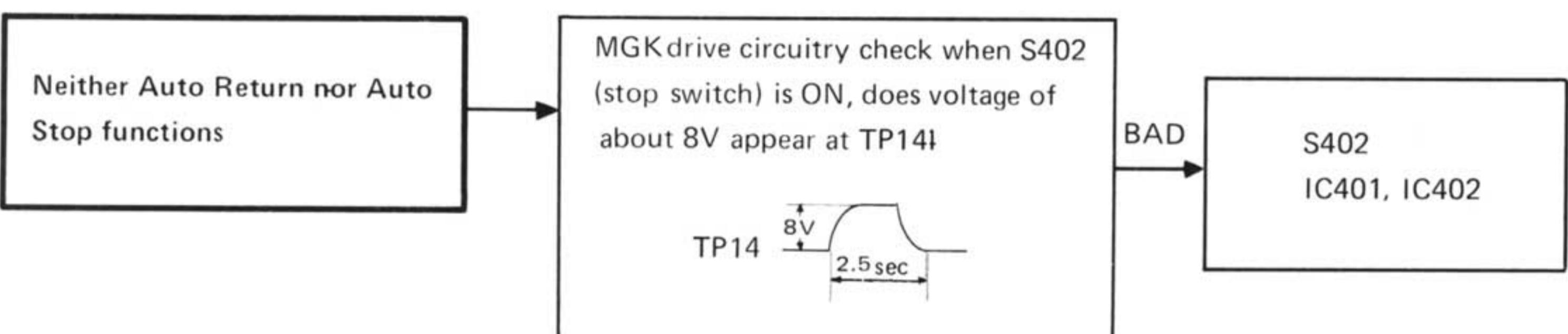
(Fig. 22)

	Start	Stop		Start	Stop		Start	Stop
①		0.1V			15.2V			15.5V
②			⑩	14.5V		⑯	20.6V	15.5V
③			⑪		Same as at left	⑰	20.5V	Same as at left
④	5.8V	6.1V	⑫	15.6V		⑱	15.3V	20.6V
⑤	5.9V	10.5V	⑬			⑲	1.4V	1.4V
⑥	4.7V	2.2V	⑭	14.9V		⑳	20.5V	16.4V
⑦	4.9V	4.9V	⑮			㉑	20V	20V
⑧	20.5V	20.5V	⑯	14.9V		㉒		
⑨		0.2V	⑰	0 V	0 V	㉓		

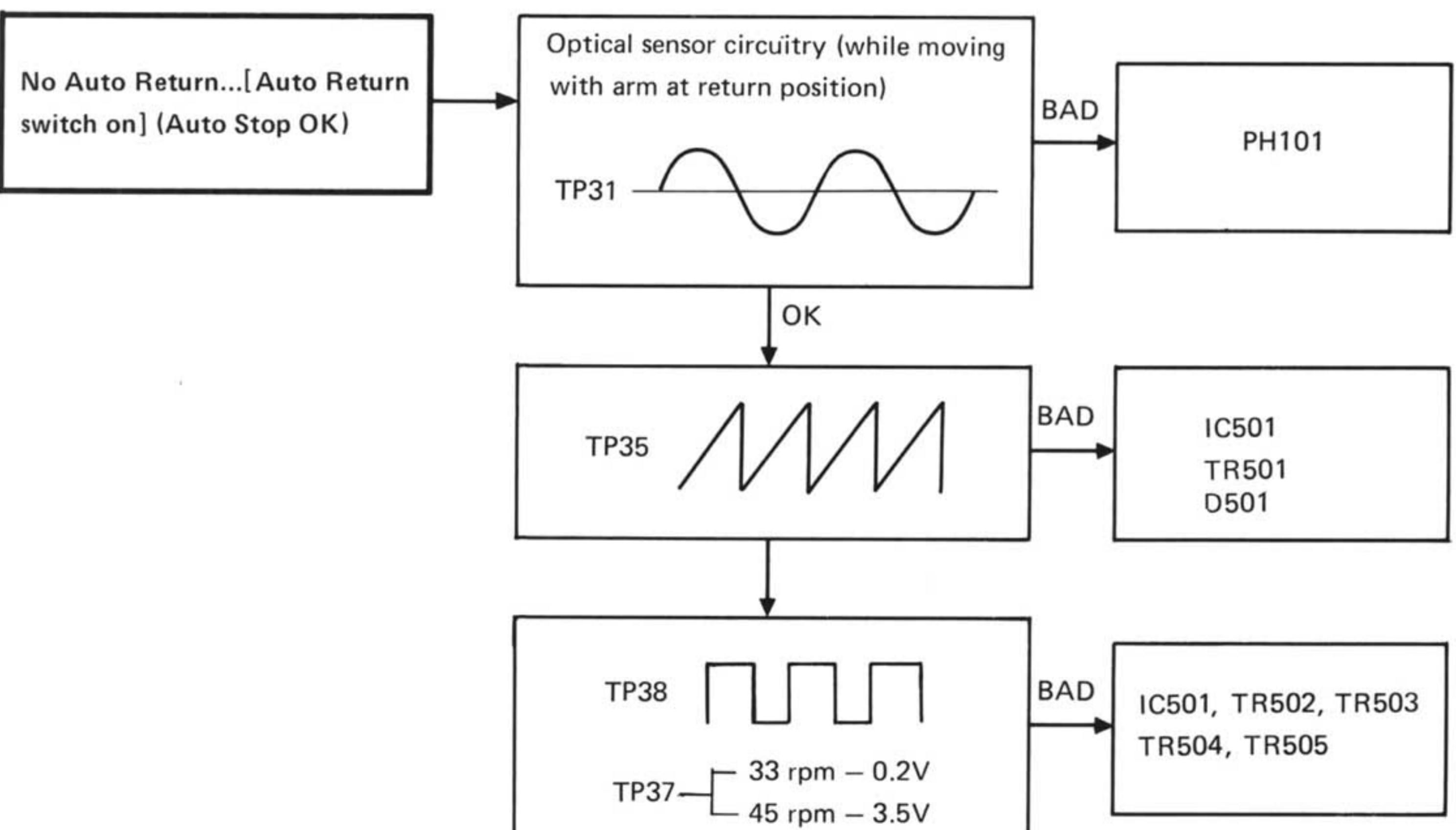
(B)



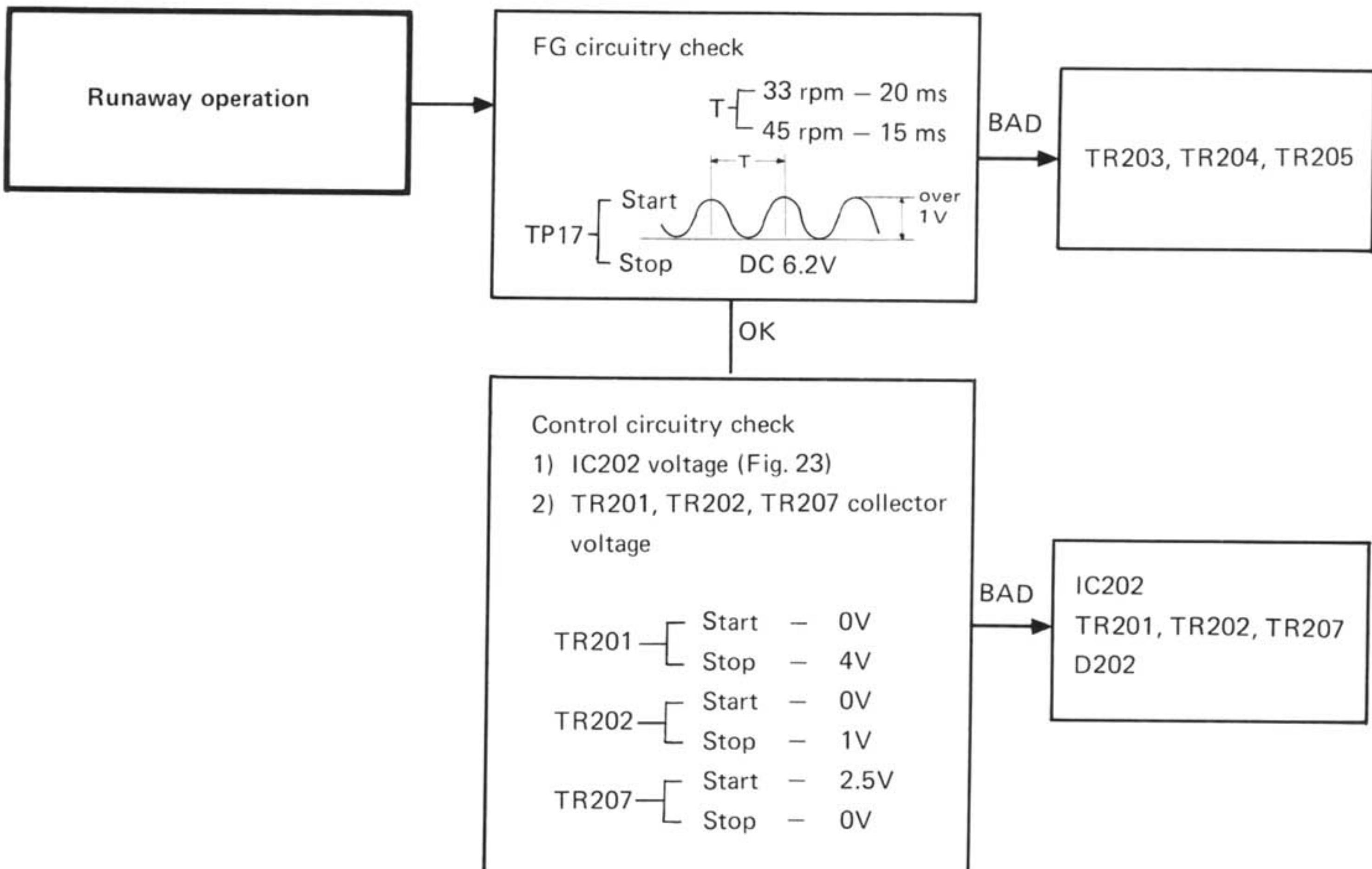
(C)



(D)



(E)

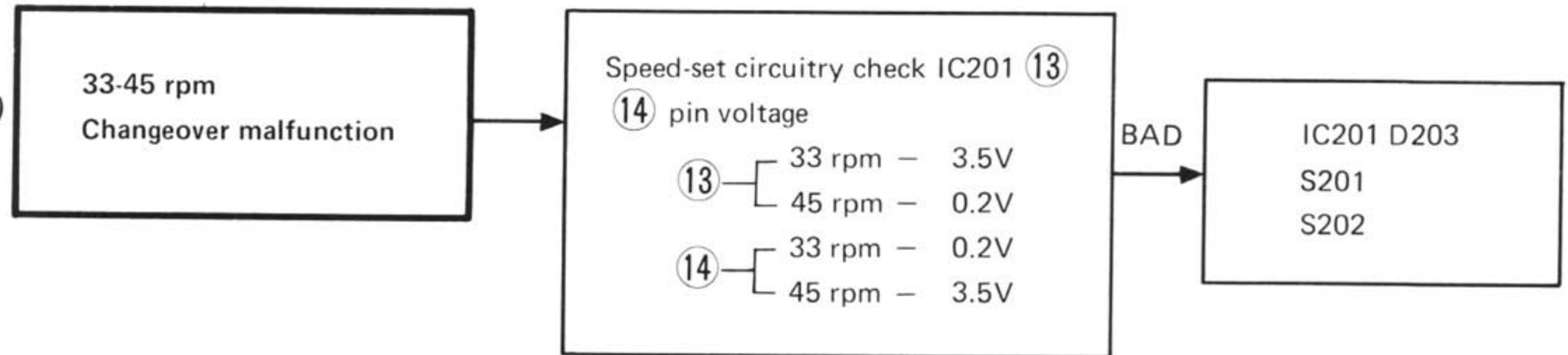


Reference voltage of each pin of IC202

(Fig. 23)

	Start	Stop		Start	Stop		Start	Stop	
①		0 V		⑥	6.3V	6.3V	⑫	2.1V	2.7V
②	Same at TP18	0 V		⑦	5.8V	10.5V	⑬	2.1V	2.7V
③		6.1V		⑧	6.3V	5.0V	⑭		7.5V
④	6.6V	6.2V		⑨		7.1V	⑮	11.7V	11.7V
⑤	11.7V	11.7V		⑩	0 V	0 V	⑯		5.5V
				⑪		7.5V			

(F)



(G)

Pitch control malfunction  
Stroboscope synchronization  
malfunction

Quartz-crystal oscillation power check  
TP5 – 9V (8.5 ~ 9.5V)

BAD

D201

OK

VCO power check  
TP6 – 5V (4.6 ~ 5.4V)

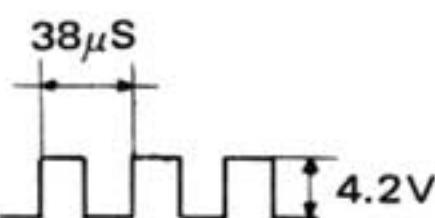
BAD

D301, D302

OK

Quartz-crystal oscillation circuitry  
check

1) TP16



2) IC201 voltage (Fig. 24)

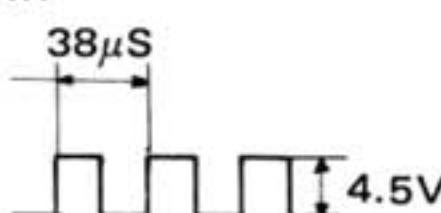
BAD

X201  
IC201

OK

Pitch control circuitry check

1) IC201 ⑦ pin



2) IC301 voltage (Fig. 25)

BAD

IC301  
TR301, TR302, TR303  
TR304, TR305, TR306  
D303

Reference voltage of each pin of IC201

(Fig. 24)

	Start	Stop		Start	Stop		Start	Stop
①	9.4V	9.4V						
②	0.24μs 	1.8V	Same as at left	3.8μs 	4.5V	Same as at left	0 V	0 V
③	0.24μs 	0.9V	Same as at left	20ms 	8V	0 V	3.5V	Same as at left
④	0 V	3.2V		20ms 	4.2V	4.3V	0.2V	0.2V
⑤	2.0V	0 V		10ms 	1V	Same as at left	7V	Same as at left
⑥	3.8μs 	4.2V	Same as at left	20ms 	7V	0 V		

Reference voltage of each pin of IC301

(Fig. 25)

	Start	Stop		Start	Stop		Start	Stop
①							2.4V	Same as at left
②	4.9V	4.9V		4ms 	4.8V	Same as at left	2.4V	Same as at left
③				2ms 	4.6V	Same as at left	2.4V	Same as at left
④ ⑧ ⑤ ⑨ ⑥ ⑩ ⑦	0 V	0 V					4ms 	5V
⑩ ⑬ ⑪ ⑭ ⑫ ⑮	3.5ms 	4V	Same as at left	3.8μs 	5.9V	Same as at left	3.8μs 	4.2V
⑯	3.5ms 	4.2V	Same as at left	3.8μs 	6V	Same as at left	5 V	5 V

# REPLACEMENT PARTS LIST

**Important Safety Notice**  
Components identified by shaded area have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

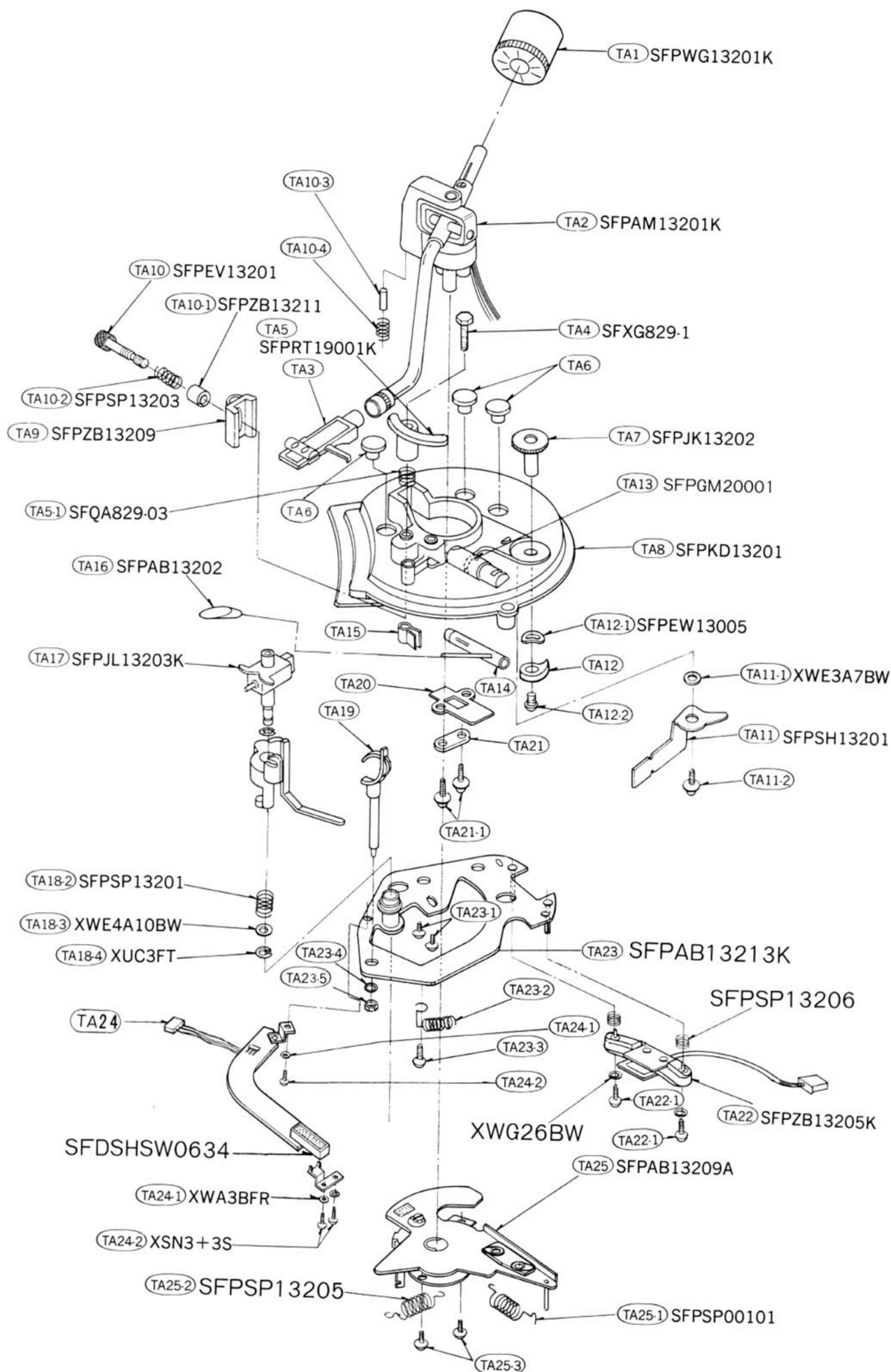
NOTE: 1. Part numbers are indicated on most mechanical parts.  
Please use this part number for parts orders.

Ref. No.	Part No.	Part Name & Description	Part Name & Description	Per Set	Remarks
<b>SWITCHES</b>					
S201, 202 S301, 302, 303 S401, 402 S501 S502 <b>S601</b>	EVQP4R04K EVQP4R04K EVQP4R04K SFDSA73502 ESB6015 <b>SFDSS55GL2</b> <b>SFDHSHW0634</b>	Speed Selector Switches Pitch Control Switches Start or Stop Switches Arm Switch Return Cut Switch <b>Power Switch</b> Muting Switch, Tone Arm		2 3 2 1 1 <b>1</b>	O O O O O O
R1 R2 R3 R4 R5 R6 R7 R8	<b>ERD25TJ562</b> <b>ERD25TJ102</b> <b>ERD25TJ152</b> <b>ERD25TJ151</b> <b>ERD25TJ152</b> <b>ERD25TJ562</b> <b>ERD25TJ123</b> <b>ERD25TJ472</b>	Carbon, 5.6kΩ, Carbon, 1kΩ, Carbon, 1.5kΩ, Carbon, 150Ω, Carbon, 1.5kΩ, Carbon, 5.6kΩ, Carbon, 12kΩ, Carbon, 4.7kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% Metal Film, 30W, Metal Film, 47Ω,	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1
R101, 102, 103	<b>ERX1ANJ470</b>	Metal Film, 15Ω, Metal Film, 47Ω,	1W, ± 5% 1W, ± 5%	3 3	3 3
R104, 105, 106	<b>ERX1ANJ150</b> <b>ERD25TJ472</b>	Carbon, 4.7kΩ, Carbon, 3.9kΩ, Carbon, 15Ω, Carbon, 10kΩ, Carbon, 4.7kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5%	1 1 1 1 1	1 1 1 1 1
R107	<b>ERD25TJ392</b>	Carbon, 4.7kΩ,	1/4W, ± 5%	1	1
R108	<b>ERD25TJ150</b>	Carbon, 15Ω,	1/4W, ± 5%	1	1
R109	<b>ERD25TJ103</b>	Carbon, 10kΩ,	1/4W, ± 5%	2	2
R110, 111	<b>ERD25TJ472</b>	Carbon, 4.7kΩ,	1/4W, ± 5%	1	1
R112	<b>ERX1ANJ1R8</b>	Metal Film, 1.8Ω,	1W, ± 5%	1	1
R113	<b>ERD25TJ473</b> <b>ERD25TJ103</b> <b>ERD25TJ332</b>	Carbon, 4.7kΩ, Carbon, 10kΩ, Carbon, 3.3kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5%	1 1 1	1 1 1
R114	<b>ERD25TJ103</b>	Carbon, 10kΩ,	1/4W, ± 5%	1	1
R115	<b>ERD25TJ153</b>	Carbon, 15kΩ,	1/4W, ± 5%	1	1
R116	<b>ERD25TJ104</b> <b>ERD25TJ563</b>	Carbon, 100kΩ, Carbon, 56kΩ,	1/4W, ± 5% 1/4W, ± 5%	1 1	1 1
R117	<b>ERD25TJ102</b>	Carbon, 1kΩ,	1/4W, ± 5%	1	1
R118	<b>ERD25TJ104</b>	Carbon, 100kΩ,	1/4W, ± 5%	1	1
R119	<b>ERD25TJ102</b>	Carbon, 10kΩ,	1/4W, ± 5%	1	1
R120	<b>ERD25TJ104</b>	Carbon, 39kΩ,	1/4W, ± 5%	1	1
R121	<b>ERD25TJ103</b>	Carbon, 10kΩ,	1/4W, ± 5%	2	2
R122, 123	<b>ERD25TJ393</b>	Carbon, 10kΩ,	1/4W, ± 5%	1	1
R124	<b>ERD25TJ103</b>	Carbon, 39kΩ,	1/4W, ± 5%	1	1
R125	<b>ERD25TJ103</b>	Carbon, 10kΩ,	1/4W, ± 5%	1	1
R126	<b>ERX1ANJ101</b>	Metal Film, 100Ω,	1W, ± 5%	1	1
R201					
D1, 2	<b>SVDSIRBA20</b>	Rectifier	2	0	
D3, 301	SVDRD5.1EBS MA150	5.1V Zener, Voltage Stabilizer Diodes	2	0	
D101, 202, 302, 501, 502, 503			6	0	
D201	SVDRD9.1EBS				
D203	SVDGL-7R204	9.1V Zener, Voltage Stabilizer	1	0	
D204, 205, 206, 207, 208, 209, 210, 401, 402	SVDSR105C SVDGL-7R203	Light Emitting Diode (r.p.m) Light Emitting Diode Light Emitting Diode (pitch)	1 9 1	0 0 0	
D303					
<b>CRYSTAL</b>					
X204	<b>SVOU306115</b>	4.19328MHz Oscillator	1	0	
<b>TRANSFORMER</b>					
T1	<b>SLT60EU3B</b>	Power Transformer	1	0	
<b>FUSE</b>					
F1	<b>XBA2F04NU100</b>	400mA (Fuse)	1	0	
	<b>ERD25TJ472</b> <b>ERD25TJ563</b> <b>ERD25TJ823</b>	Carbon, 22kΩ, Carbon, 56kΩ, Carbon, 82kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5%	1 1 1	1 1 1
	<b>ERD25TJ333</b> <b>ERD25TJ123</b> <b>ERD25TJ102</b>	Carbon, 33kΩ, Carbon, 12kΩ, Carbon, 1kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5%	1 1 1	1 1 1
	<b>ERD25TJ471</b> <b>ERD25TJ104</b> <b>ERD25TJ472</b>	Carbon, 470Ω, Carbon, 100kΩ, Carbon, 4.7kΩ,	1/4W, ± 5% 1/4W, ± 5% 1/4W, ± 5%	2 2 2	2 2 2
R213					
R214					
R215					
R216					
R217					
R218					
R219, 220					
R221					
R222					
R223					

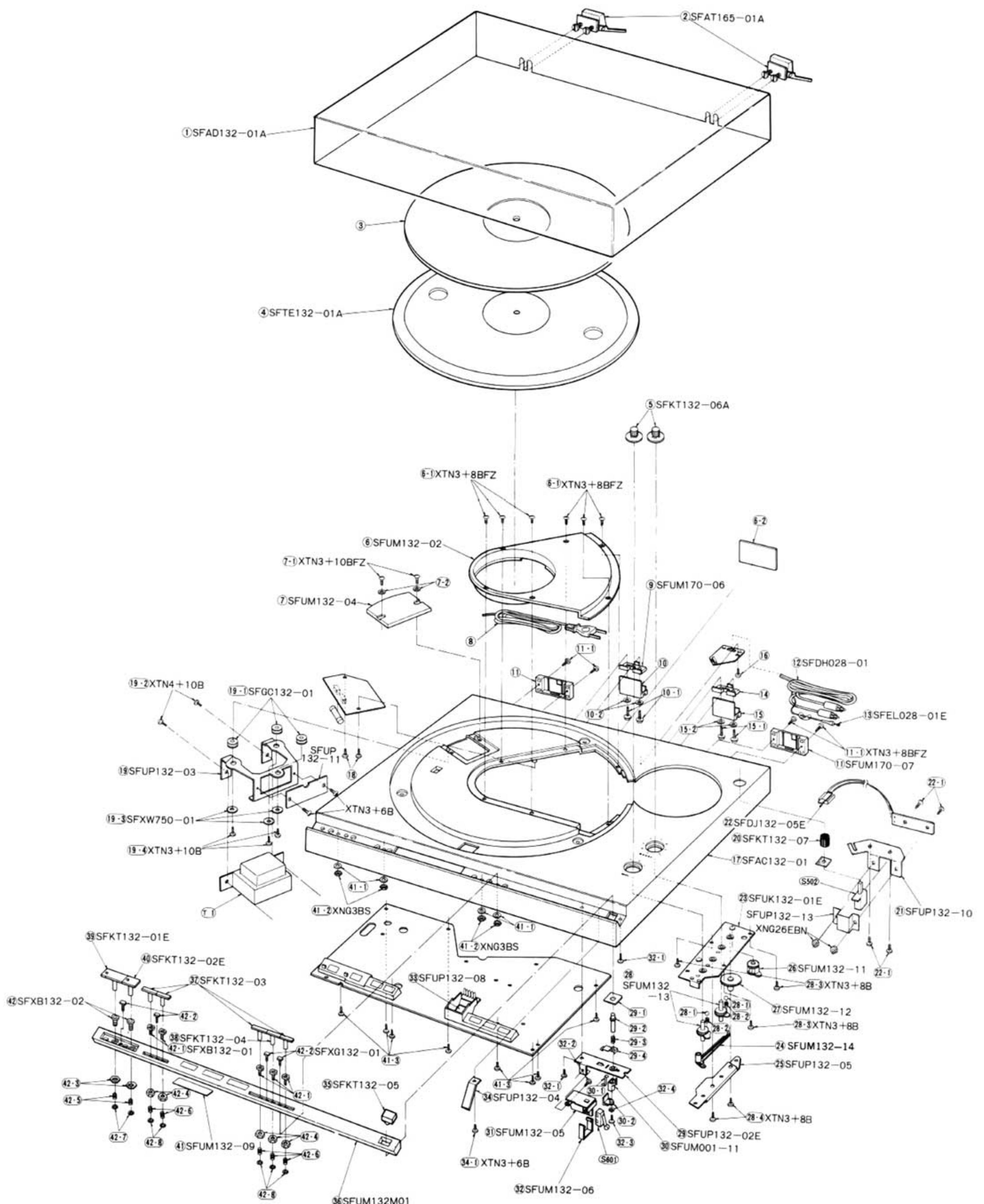
Ref. No.	Part No.	Part Name & Description	Per Set	Remarks	Part Name & Description		Per Set	Remarks
					Ref. No.	Part No.		
<b>VARIABLE RESISTORS</b>								
R224	ERD25TJ473	Carbon, 47kΩ, 1/4W, ± 5%	1		VR101	EVLS3AA000B14	Period Adjustment	1 ○
R225	ERD25TJ101	Carbon, 100Ω, 1/4W, ± 5%	1		VR201	EVLS3AA00B24	VS Adjustment	1 ○
R226	ERD25TJ681	Carbon, 680Ω, 1/4W, ± 5%	1		VR202	EVLS3AA00B24	IR Adjustment	1 ○
R227	ERD25TJ153	Carbon, 15kΩ, 1/4W, ± 5%	1		VR203	EVLS3AA00B54	Brake Adjustment	1 ○
R228	ERD25TJ563	Carbon, 56kΩ, 1/4W, ± 5%	1		VR501	EVLS3AA00B24	Gain Adjustment	1 ○
R229	ERD25TJ104	Carbon, 100kΩ, 1/4W, ± 5%	1		VR502	EVLS3AA00B55	Time Adjustment	1 ○
<b>CAPACITORS</b>								
R230	ERD25TJ103	C1 ECEB35V330	Electrolytic, 330μF, 35V	1	C2 ECEA25V33	Electrolytic, 33μF, 25V	1	
R231	ERD25TJ121	C3 ECEA16V10	Electrolytic, 10μF, 16V	1	C4 ECEA16V47	Electrolytic, 47μF, 16V	1	
R232	ERD25TJ680	C5 ECEB50V470	Electrolytic, 470μF, 50V	1	C6 ECEA25V33	Electrolytic, 33μF, 25V	1	
R233	ERD25TJ223	C101, 102, 103 C104	Electrolytic, 33μF, 25V	3	C105	ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%	1
R234	ERD25TJ472	C106	Electrolytic, 0.1μF, 50V, ±10%	1	C107	ECSZ25EF1	Electrolytic, 1μF, 25V	1
R301	ERD25TJ391	C108	Electrolytic, 0.022μF, 50V, ±10%	1	C109	ECQM1H2223KZ	Polyester, 0.022μF, 50V, ±10%	1
R302	ERD25TJ272	C110	Electrolytic, 0.022μF, 50V, ±10%	1	C111	ECEA25Z100	Polyester, 0.022μF, 50V, ±10%	1
R303	ERD25TJ102	C112	Electrolytic, 0.033μF, 50V, ±10%	1	C113	ECQM05154KZ	Polyester, 0.033μF, 50V, ±10%	1
R304	ERD25TJ103	C114	Electrolytic, 0.056μF, 50V, ±10%	1	C115	ECQM1H3333KZ	Polyester, 0.056μF, 50V, ±10%	1
R305	ERD25TJ472	C116	Electrolytic, 0.1μF, 50V, ±10%	1	C117	ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%	1
R306	ERD25TJ102	C118	Electrolytic, 0.056μF, 50V, ±10%	1	C119	ECQM1H562KZ	Polyester, 0.056μF, 50V, ±10%	1
R307	ERD25TJ332	C119	Electrolytic, 0.1μF, 50V, ±10%	1	C120	ECEA25V100	Electrolytic, 100μF, 25V	1
R308	ERD25TJ273	C121	Electrolytic, 0.1μF, 50V, ±10%	1	C122	ECEA16V10	Electrolytic, 10μF, 16V	1
R309, 310	ERD25TJ473	C123	Electrolytic, 0.1μF, 50V, ±10%	1	C201	ECKD1E104ZFZ	Ceramic, 0.1μF, 50V, ±10%	1
R311	ERD25TJ222	C202	Electrolytic, 2.2μF, 25V	1	C203	ECEA25V2R2	Electrolytic, 2.2μF, 25V	1
R312, 313	ERD25TJ153	C204	Electrolytic, 2.2μF, 25V	1	C205	ECCD1H3330K	Ceramic, 33pF, 50V, ±10%	1
R314	EXB RB7121M	C206	Electrolytic, 33pF, 50V, ±10%	1	C207	ECCD1H3331K	Ceramic, 330pF, 50V, ±10%	2
R315, 316, 317	ERD25TJ152	C208, 209	Electrolytic, 0.0082μF, 50V, ±10%	1	C209	ECQM1H8222KZ	Polyester, 0.0082μF, 50V, ±10%	2
R318	ERD25TJ221	C210	Electrolytic, 1μF, 25V	1	C210	ECSZ25EF1	Polyester, 0.01μF, 50V, ±10%	2
R319	ERD25TJ121	C211	Electrolytic, 0.01μF, 50V, ±10%	1	C211	ECQM1H103KZ	Polyester, 0.056μF, 50V, ±10%	1
R320	ERD25TJ680	C212	Electrolytic, 0.1μF, 50V, ±10%	1	C212	ECQM1H563KZ	Polyester, 0.1μF, 50V, ±10%	1
R401, 402, 403	ERD25TJ471	C213	Electrolytic, 10μF, 16V	1	C213	ECEA16V10	Ceramic, 10μF, 16V	1
R404, 405, 406	ERD25TJ103	C222	Electrolytic, 0.047μF, 50V, ±10%	1	C222	ECQM1H473KZ	Polyester, 0.047μF, 50V, ±10%	1
R407, 408	ERD25TJ223	C223	Electrolytic, 0.0056μF, 50V, ±10%	1	C223	ECEA50V1	Electrolytic, 4.7μF, 50V	1
R409, 410	ERD25TJ683	C224	Electrolytic, 1μF, 50V, ±10%	1	C224	ECEA16V10	Electrolytic, 10μF, 16V	1
R411, 412	ERD25TJ684	C225	Electrolytic, 0.047μF, 50V, ±10%	1	C225	ECQM1H104KZ	Polyester, 0.047μF, 50V, ±10%	1
R413	ERD25TJ563	C226, 227	Electrolytic, 0.1μF, 50V, ±10%	2	C226	ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%	2
R414	ERD25TJ124	C228	Electrolytic, 0.0056μF, 50V, ±10%	1	C228	ECEA16V47	Electrolytic, 4.7μF, 50V, ±10%	1
R415, 416	ERD25TJ473	C229	Electrolytic, 0.0056μF, 50V, ±10%	1	C229	ECQM1H103KZ	Polyester, 0.0056μF, 50V, ±10%	1
R417, 418	ERD25TJ104	C230	Electrolytic, 0.001μF, 50V, ±10%	1	C230	ECKD1E104ZFZ	Ceramic, 0.001μF, 50V, ±10%	1
R419	ERD25TJ471	C231	Electrolytic, 0.001μF, 50V, ±10%	1	C231	ECEA16V10	Electrolytic, 10μF, 16V	1
R420, 421	ERD25TJ103	C232	Electrolytic, 0.001μF, 50V, ±10%	1	C232	ECQM1H102KZ	Polyester, 0.001μF, 50V, ±10%	1
R422	ERD25TJ104	C233	Electrolytic, 0.001μF, 50V, ±10%	1	C233	ECEA16V10	Electrolytic, 10μF, 16V	1
R501	ERD50TJ681	C234	Electrolytic, 0.0056μF, 50V, ±10%	1	C234	ECQM1H562KZ	Polyester, 0.0056μF, 50V, ±10%	1
R502	ERD25TJ123	C235	Electrolytic, 0.0056μF, 50V, ±10%	1	C235	ECQM1H562KZ	Polyester, 0.0056μF, 50V, ±10%	1
R503	ERD25TJ473	C236, 217	Electrolytic, 0.0056μF, 50V, ±10%	2	C236	ECQM1H104KZ	Polyester, 0.0056μF, 50V, ±10%	2
R504	ERD25TJ333	C237	Electrolytic, 0.0056μF, 50V, ±10%	1	C237	ECQM1H562KZ	Polyester, 0.0056μF, 50V, ±10%	1
R505	ERD25TJ274	C238	Electrolytic, 0.0056μF, 50V, ±10%	1	C238	ECQM1H104KZ	Polyester, 0.0056μF, 50V, ±10%	1
R506, 507	ERD25TJ274	C239, 220	Electrolytic, 0.0056μF, 50V, ±10%	2	C239	ECKD1E104ZFZ	Ceramic, 0.0056μF, 50V, ±10%	2
R508	ERD25TJ393	C240	Electrolytic, 0.0056μF, 50V, ±10%	1	C240	ECEA50V4R7	Polyester, 0.0047μF, 50V, ±10%	1
R509	ERD25TJ221	C241	Electrolytic, 0.0056μF, 50V, ±10%	1	C241	ECQM1H104KZ	Polyester, 0.0047μF, 50V, ±10%	1
R510	ERD25TJ824	C242	Electrolytic, 0.0056μF, 50V, ±10%	1	C242	ECEA16V10	Electrolytic, 10μF, 16V	1
R511	ERD25TJ333	C243	Electrolytic, 0.0056μF, 50V, ±10%	1	C243	ECQM1H473KZ	Polyester, 0.0047μF, 50V, ±10%	1
R512	ERD25TJ183	C244	Electrolytic, 0.0056μF, 50V, ±10%	1	C244	ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%	2
R513	ERD25TJ473	C245	Electrolytic, 0.0056μF, 50V, ±10%	1	C245	ECEA16V47	Electrolytic, 4.7μF, 50V, ±10%	1
R514	ERD25TJ123	C246	Electrolytic, 0.0056μF, 50V, ±10%	1	C246	ECQM1H103KZ	Polyester, 0.0056μF, 50V, ±10%	1
R515	ERD25TJ472	C247	Electrolytic, 0.0056μF, 50V, ±10%	1	C247	ECKD1E104ZFZ	Ceramic, 0.0056μF, 50V, ±10%	1
R516	ERD25TJ473	C248	Electrolytic, 0.0056μF, 50V, ±10%	1	C248	ECEA16V10	Electrolytic, 10μF, 16V	1
R517	ERD25TJ393	C249	Electrolytic, 0.0056μF, 50V, ±10%	1	C249	ECQM1H102KZ	Polyester, 0.0056μF, 50V, ±10%	1
R518	ERD25TJ102	C250	Electrolytic, 0.0056μF, 50V, ±10%	1	C250	ECEA16V10	Electrolytic, 10μF, 16V	1
R601	ERD50TJ4R7	C251	Electrolytic, 0.0056μF, 50V, ±10%	1	C251	ECQM1H103KZ	Polyester, 0.0056μF, 50V, ±10%	1

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C304	<b>ECEA50V4R7</b>	Electrolytic, 4.7μF, 50V, ±10%	1	
C305	<b>ECQM1H103KZ</b>	Polyester, 0.01μF, 50V, ±10%	1	
C306	<b>ECQM1H104KZ</b>	Polyester, 0.1μF, 50V, ±10%	1	
C307	<b>ECKD1E104ZFZ</b>	Ceramic, 0.1μF, 50V, ±10%	1	
C308	<b>ECEA6V220</b>	Electrolytic, 220μF, 6V	1	
C310	<b>ECQM1H102KZ</b>	Polyester, 0.001μF, 50V, ±10%	1	
C401, 402	<b>ECEA16Z47</b>	Electrolytic, 47μF, 16V	2	
C403, 404	<b>ECEA50V2R2</b>	Electrolytic, 2.2μF, 50V	2	
C501	<b>ECEA50ZR1</b>	Electrolytic, 1μF, 50V	1	
C502	<b>ECQM1H473KZ</b>	Polyester, 0.047μF, 50V, ±10%	1	
C503	<b>ECQM1H184KZ</b>	Polyester, 0.18μF, 50V, ±10%	1	
C504	<b>ECQM1H473KZ</b>	Polyester, 0.047μF, 50V, ±10%	1	
C505	<b>ECEA25Z4R7</b>	Electrolytic, 4.7μF, 25V	1	
C601	<b>ECQF1A473MD</b>	Polyester, 0.047μF, 125V, ±20%	1	
<b>CABINET and CHASSIS PARTS</b>				
1	SFAD132-01A	Dust Cover	1	
2	SFAT165-01A	Hinge Ass'y	2	O
3	SFTG170-01	Turntable Mat	1	
4	SFTE132-01A	Turntable Knob, Operation	1	O O
5	SFKT132-06A	Cover, Panel	2	O O
6	SFUM132-02	Screw, Panel Cover	1	O
6-1	<b>XTN3+8BFZ</b>	Name Plate	6	*
6-2	SFN1132M01		1	
7	SFUM132-04	Cover, Power Transformer	1	O
7-1	<b>XTN3+10BFZ</b>	Screw, Power Transformer Cover	2	
7-2	<b>XWG3</b>	Washer, Power Transformer Cover	2	
8	<b>RJA10A</b>	AC Cord	1	
9	SFUM170-06	Spacer, AC Power Cord	1	
10	SFUM170-05	Bracket, AC Power Cord	1	
10-1	<b>XTN3+14BFZ</b>	Screw, AC Power Cord Bracket	2	
10-2	<b>XWG3</b>	Washer, AC Power Cord Bracket	2	
11	SFUM170-07	Cace, Hinge Ass'y	2	
11-1	<b>XTN3+8BFZ</b>	Screw, Hinge Ass'y Case	4	
12	SFDH028-01	Phone Cord	1	
13	SFELO28-01E	Ground Wire	1	
14	SFUM170-06	Spacer, Phone Cord	1	
15	SFUM170-11	Bracket, Phone Cord	1	
15-1	<b>XTN3+14BFZ</b>	Screw, Phone Cord Bracket	2	
15-2	<b>XWG3</b>	Washer, Phone Cord Bracket	2	
16	<b>XTN3+8B</b>	Screw, Phone P.C.B.	1	
17	SFAC132-01	Cabinet	1	O
18	<b>XTN3+8B</b>	Screw, P.C.B.	2	O
19	SFUP132-03	Bracket, Power Transformer	1	O
19-1	SFGC132-01	Spacer (Rubber), Power Transformer	1	O
19-2	<b>XTN4+10B</b>	Screw, Power Transformer	2	
19-3	SFXW750-01	Washer, Power Transformer	3	
19-4	<b>XTN3+10B</b>	Knob, Manual Switch	1	O O O
20	SFKT132-07	Bracket, Manual Switch	1	O O O
21	SFUP132-10	Connector, 2P Ass'y	1	O O O
22	SFDJ132-05E	Screw, Manual Switch	4	O O O
22-1	<b>XTN3+8B</b>	Operation Plate Ass'y	1	O O O
23	SFUK132-01E	Base, Automatic Mechanism	1	O O O

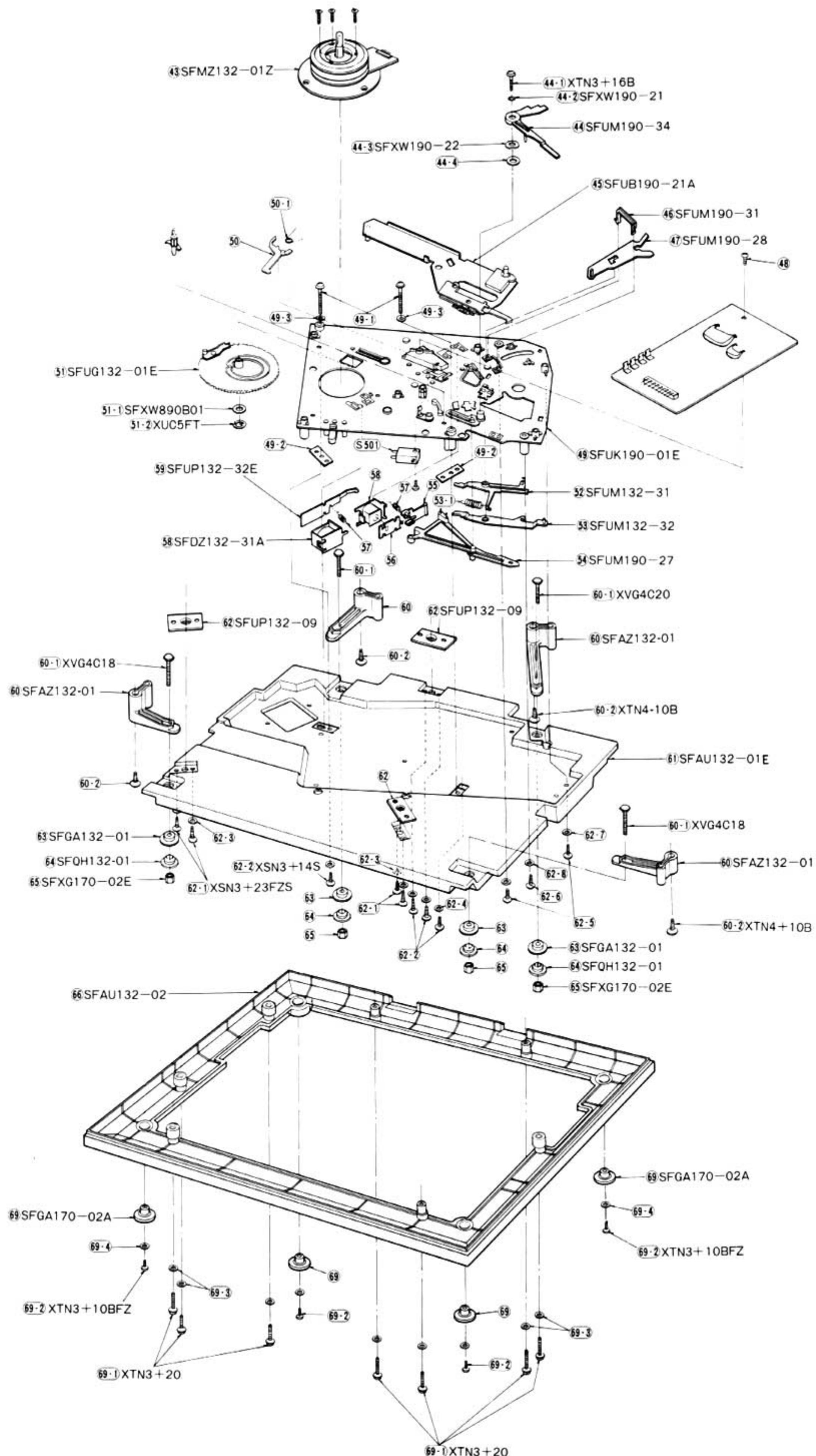
## ■ EXPLODED VIEW



# ■ EXPLODED VIEW



## ■ EXPLODED VIEW



Ref. No.	Part No.	Part Name & Description	Per Set	Remarks	Part Name & Description	Per Set	Remarks
		Ref. No.	Part No.		Ref. No.	Part No.	
49-1	<b>XTN4+35B</b> SFUP190-02	Screw, Automatic Mechanism Bracket, Automatic Mechanism	2		TA10-3	SFPZB13212	
49-2	<b>XWG4</b>	Washer, Automatic Mechanism	2		TA10-4	SFPSP13204	
49-3	SFUM190-26	Support, Gear Setting	2		TA11	SFPSH13201	
50	SFQS190-21	Spring, Gear Setting Support	1		TA11-1	XWE3A7BW	
50-1	SFUG132-01E	Main Gear Ass'y	1	O	TA11-2	<b>XTN3+5B</b>	SFPJK17002
51	SFXW890B01	Washer, Main Gear	1		TA12	SFPEW13005	SFPGM20001
51-1	<b>XUC5FT</b>	Circclip, Main Gear	1		TA12-1	<b>XTN26+5B</b>	SFPJL13201K
51-2	SFUM132-31	Lever, Start Set	1		TA12-2		
52	SFUM132-32	Support, Start Set Lever	1		TA13		
53					TA14		
53-1	SFQH130-14	Spring, Start Set Lever Support	1		TA15	SFPZB13204	
54	SFUM190-27	Lever, Switching	1		TA16	SFPAB13202	
55	SFUM132-33	Support, Solenoid	1		TA17	SFPJL13203K	
56	SFUP132-31E	Support, Solenoid	1	O			
57	SFQH910-05	Spring, Solenoid	2				
58	SFDZ132-31A	Solenoid Ass'y	2				
59	SFUP132-32E	Support, Solenoid	2	O			
60	SFAZ132-01	Insulator (A)	2	O			
60-1	XVG4C18	Screw, Insulator (A)	4	O			
60-2	<b>XTN4+10B</b>	Screw, Insulator (A)	4	O			
61	SFAU132-01E	Base, Main	1	O			
62	SFUP132-09	Bracket, Main Base	3	O			
62-1	<b>XSN3+23FZS</b>	Screw, Main Base Bracket	4	O			
62-2	<b>XSN3+14S</b>	Screw, Main Base Bracket	4	O			
62-3	<b>XWG3</b>	Washer, Main Base Bracket	4	O			
62-4	<b>XWG3</b>	Washer, Main Base Bracket	4	O			
62-5	<b>XTN4+35B</b>	Screw, Main Base	2	O			
62-6	<b>XTN3+35B</b>	Screw, Main Base	6	O			
62-7	<b>XWG4</b>	Washer, Main Base	2	O			
62-8	<b>XWG3</b>	Washer, Main Base	6	O			
63	SFGA132-01	Rubber, Insulator (A)	4	O			
64	SFQH132-01	Spring, Insulator (A)	4	O			
65	SFXG170-02E	Nut, Insulator (A)	4	O			
66	SFAU132-02A	Bottom, Cover	1	O			
69	SFGA170-02A	Insulator (B)	4	O			
69-1	<b>XTN3+20</b>	Screw, Bottom Cover	7	O			
69-2	<b>XTN3+10BFZ</b>	Screw, Insulator (B)	4	O			
69-3	<b>XWG3</b>	Washer, Bottom Cover	7	O			
69-4	<b>XWG4</b>	Washer, Insulator (B)	4	O			
TA1	SFPWG13201K						
TA2	SFPAM13201K	<b>TONE ARM and ARM BASE</b>					
TA3	SFPC10001K	Balance Weight Ass'y	1	O			
TA4	SFXG829-1	Tone Arm Ass'y	1	O			
TA5	SFPRT19001K	Head Shell	1	O			
TA5-1	SFQA829-03	Screw, Tone Arm Lift Adjustment	1	O			
TA6	SFGK132M01	Lift Ass'y	1	O			
TA7	SFPJK13202	Spring, Lift Ass'y	1	O			
TA8	SFPKD13201	Cap, Rubber	3	O			
TA9	SFPZB13209	Knob, Anti-skate Force Control	1	O			
TA10	SFPEV13201	Arm Base	1	O			
TA10-1	SFPZB13211	Bracket, Tone Arm	1	O			
TA10-2	SFSPSP13203	Screw, Tone Arm Bracket	1	O			
P1	SFHHP132M01	Cover, Spring	1	O			
P2	SFHII132-01	Spring, Tone Arm Bracket Screw	1	O			
P3	SFHII132-02	Pad, Front	1	O			
P4	SFHD132-02	Pad, Rear	1	O			
		<b>PACKING PARTS</b>					
		Carton					
		Pad, Turntable					

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
P5	SFHD132-01	Pad, Top	1	○
P6	SFHH170-03	Parts Box	1	
P7	SFHD170-03	Pad, Top, Parts Box	1	
P7-1	SFYC22A30	Polyethylene Cover	1	
P8	XST6D30B	Screw, Clamp	3	○
P9	SFYF60A60	Polyethylene Bag, Player Unit	1	
P9-1	SFYH40X45	Polyethylene Bag, Turntable	1	
P9-2	SFYH10X30	Polyethylene Bag, AC Cord	2	○

## ■ PACKINGS

