

Service Manual

Automatic Turntable System

Turntable System
SL-BD2**Color**

(S)..... Silver Type
(K) Black Type

TAP is the standard mark for the "P-mount" plug-in-connector system. Products carrying this mark are interchangeable and compatible with each other.

SPECIFICATIONS

■ Turntable section

Type: Semi-automatic turntable
Features: Auto return
 Auto stop
Drive method: Belt drive
Motor: DC motor
Drive control method: Frequency generator
 servo control
Turntable platter: Aluminum die-cast
 Diameter 31.2 cm
Turntable speeds: 33-1/3 rpm and 45 rpm
Wow and flutter: 0.045% WRMS (JIS C5521)
 $\pm 0.06\%$ peak
 (IEC 98A Weighted)
Rumble: -70 dB (IEC 98A Weighted)

■ Tonearm section

Type: Statically balanced straight
 tonearm
 Plug-in connector cartridge
 system
Effective length: 230 mm
Overhang: 15 mm

Tracking error angle: Within $2^{\circ}32'$ at the outer groove
 of 30 cm record
 Within $0^{\circ}32'$ at the inner groove
 of 30 cm record
Effective mass: 13.5 g (including cartridge)
Stylus pressure: 1.25 g (Fixed)
**Applicable cartridge
 weight:** 6 g
**Phono cable
 capacitance:** 90 pF

■ Cartridge section

Type: Moving magnet stereo cartridge
Magnetic circuit: All laminated core
Frequency response: 10 Hz ~ 35 kHz
Output voltage: 2.5 mV at 1 kHz, 5 cm/s. zero to
 peak lateral velocity
 (7 mV at 1 kHz, 10 cm/s. zero to
 peak 45° velocity [DIN 45 500])
Channel separation: 22 dB at 1 kHz
Channel balance: Within 2 dB at 1 kHz
**Recommended load
 impedance:** 47 k Ω ~100 k Ω
Compliance (dynamic): 12×10^{-6} cm/dyne at 100 Hz
Stylus pressure range: 1.25 ± 0.25 g (12.5 ± 2.5 mN)
Weight: 6 g (cartridge only)
Replacement stylus: EPS-30CS

Color	Area
(S), (K)	[E] Switzerland and Scandinavia
(S), (K)	[EK] United Kingdom
(S), (K)	[XL] Australia
(S), (K)	[EG] F.R. Germany
(S), (K)	[EB] Belgium
(S), (K)	[EH] Holland
(S), (K)	[EF] France
(S), (K)	[Ei] Italy
(S), (K)	[EC] Czechoslovakia
(S), (K)	[XA] Southeast Asia, Oceania, Africa, Middle Near East and Central South America
(S), (K)	[PA] Far East PX
(S), (K)	[PE] European Military
(S), (K)	[PC] European Audio Club

Technics

Panasonic Tokyo Office
 Matsushita Electric Trading Co., Ltd.
 1-2, 1-chome, Shibakoen, Minato-ku, Tokyo 105 Japan

Matsushita Electric Trading Co., Ltd.
 P.O. Box 288, Central Osaka Japan

■ General

Power supply:	For United Kingdom and Australia: 240V, AC 50 Hz For continental Europe: 220V, AC 50 Hz For others: ~110—127/220—240V, AC 50/60 Hz
Power consumption:	3 W

Dimensions: (W×H×D)	43 × 9.3 × 37.5 cm Maximum height when dust cover is open. 43 × 36 × 41 cm
Weight:	3.6 kg (7.9 lb.)

Specifications are subject to change without notice for further improvement.
Weight and dimensions shown are approximate.

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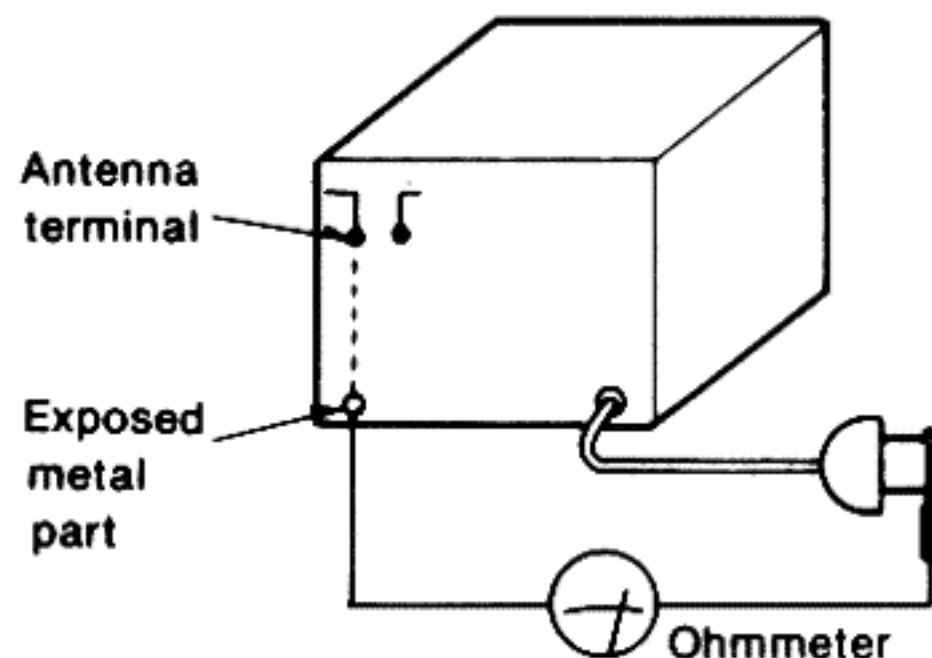
■ SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

● INSULATION RESISTANCE TEST

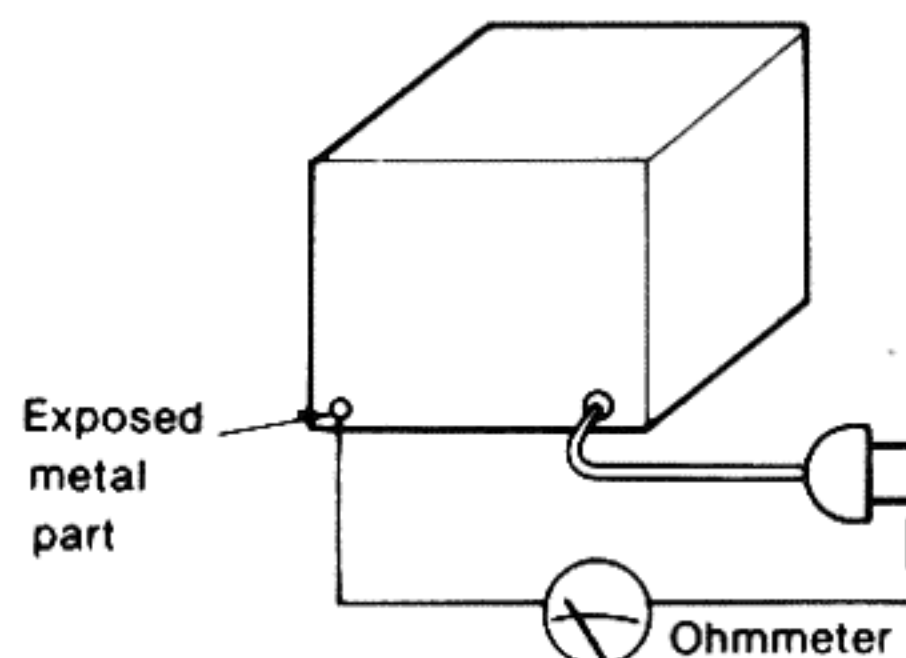
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3M\Omega$ and $5.2M\Omega$ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance = $3M\Omega$ — $5.2M\Omega$



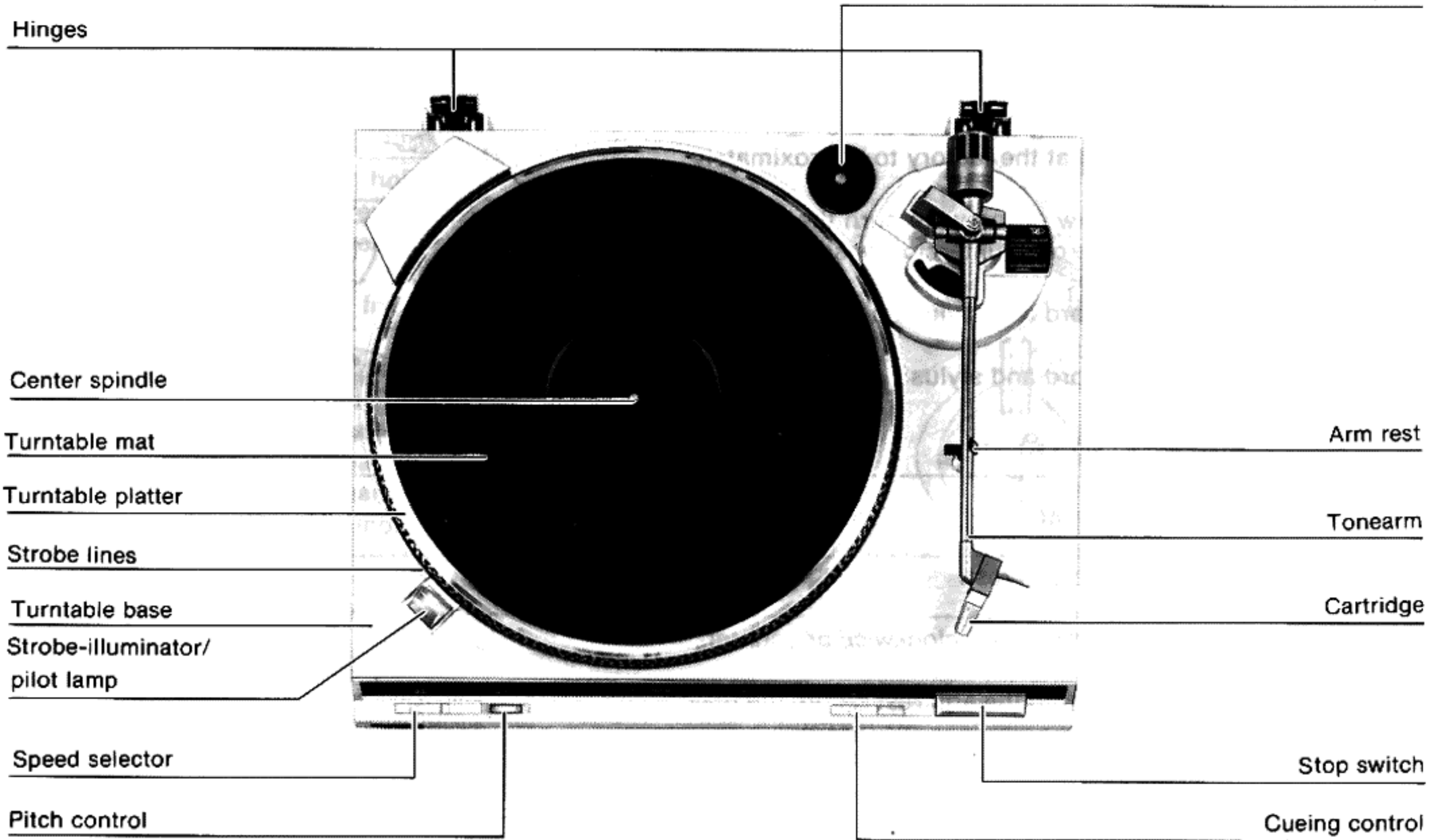
(Fig. B)

Resistance = Approx ∞

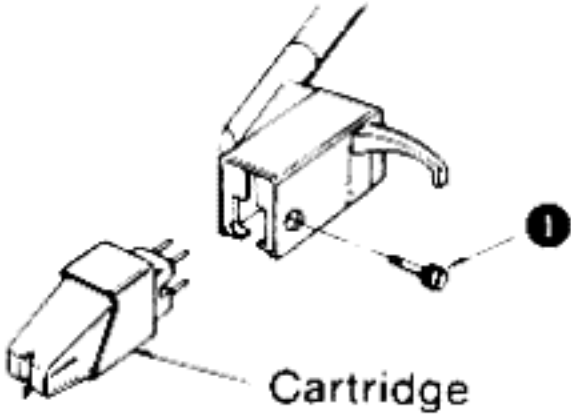
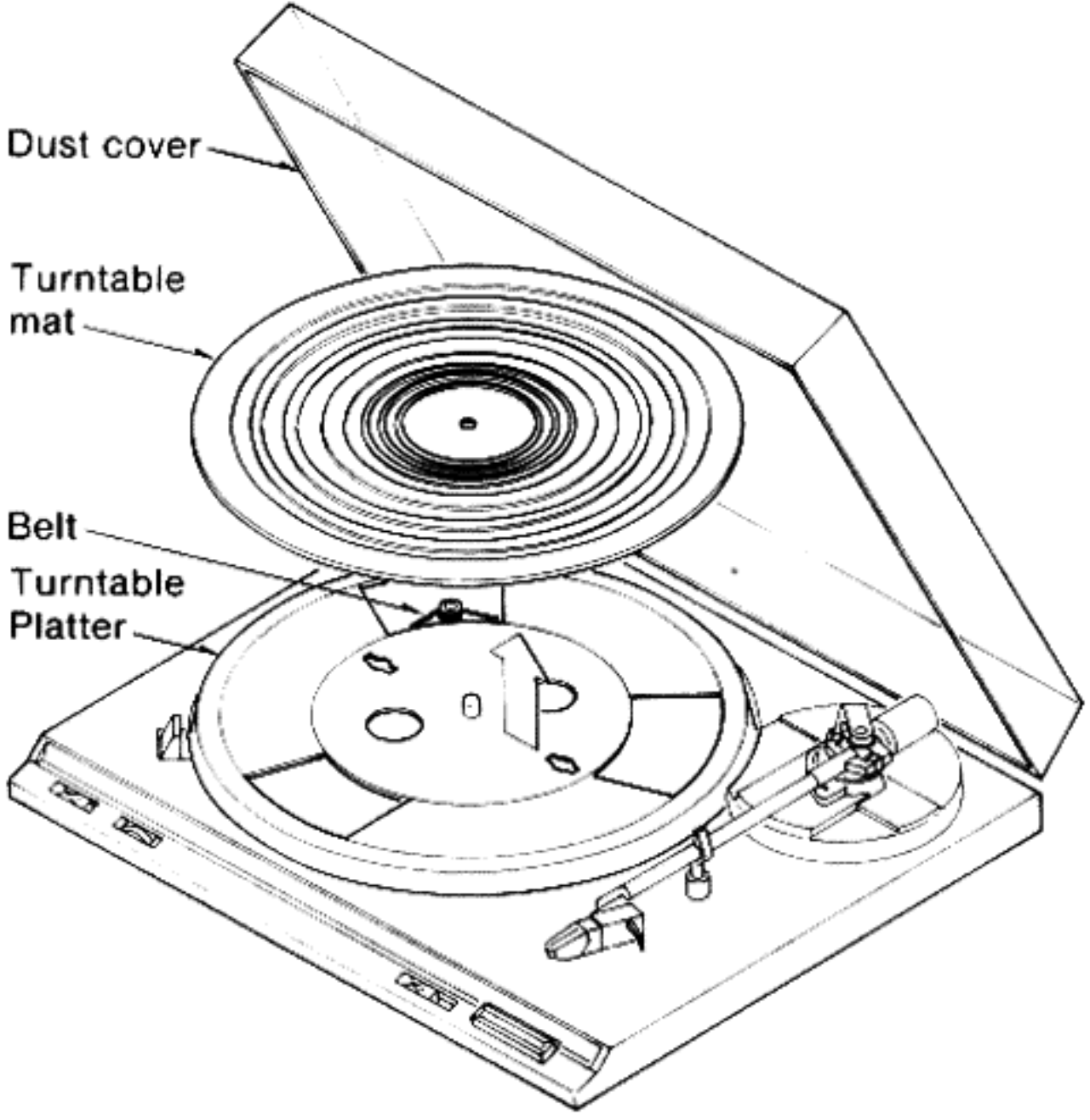
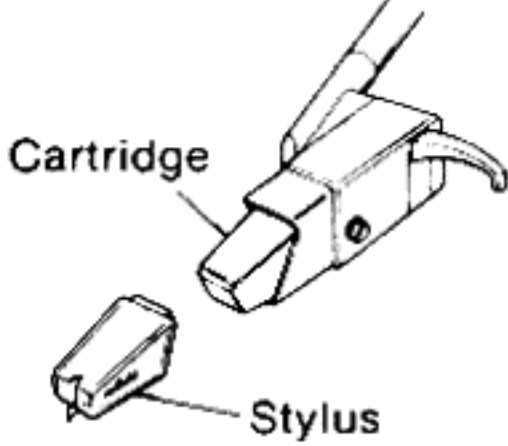
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

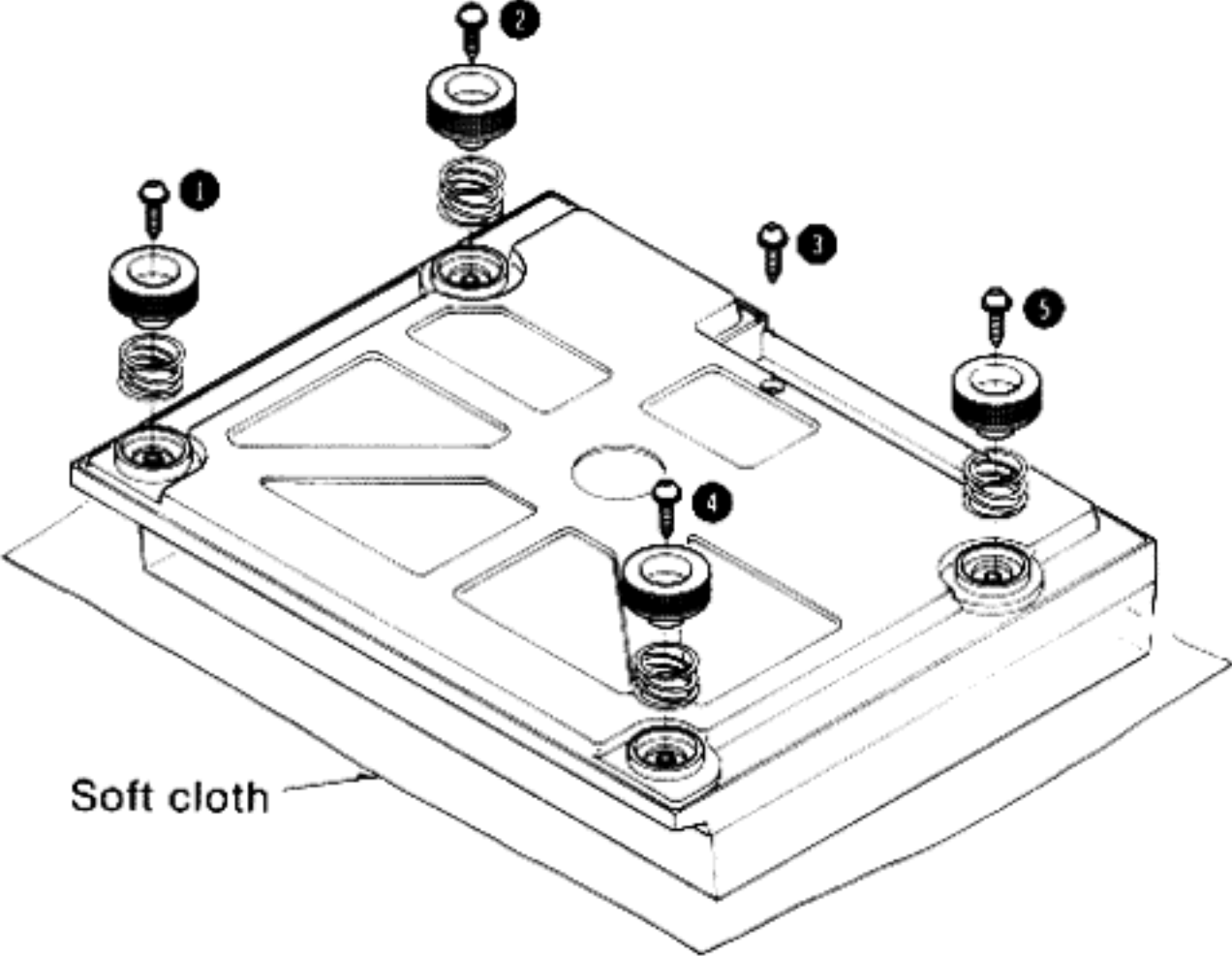
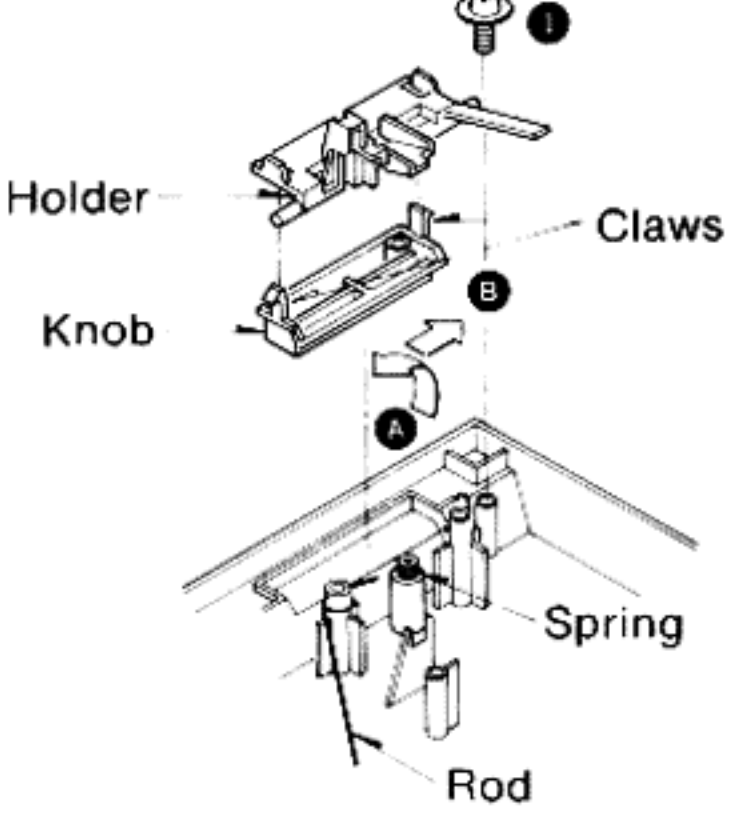
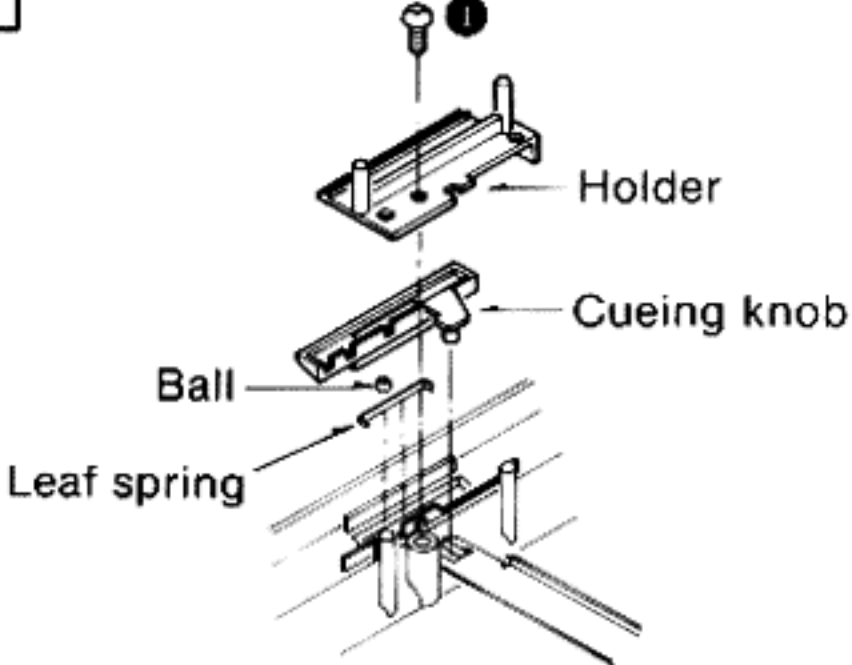
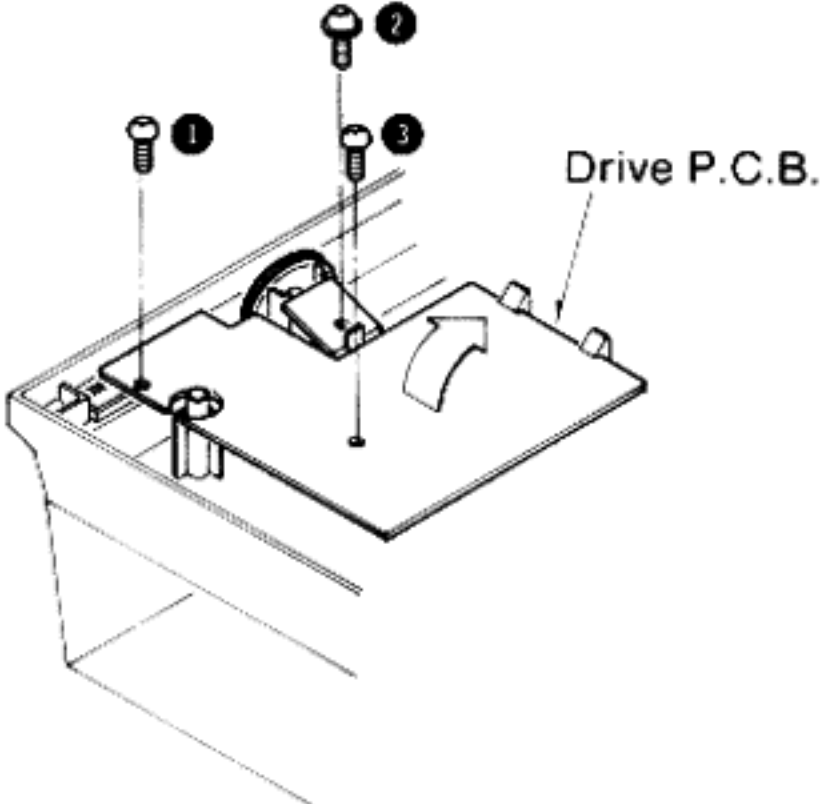
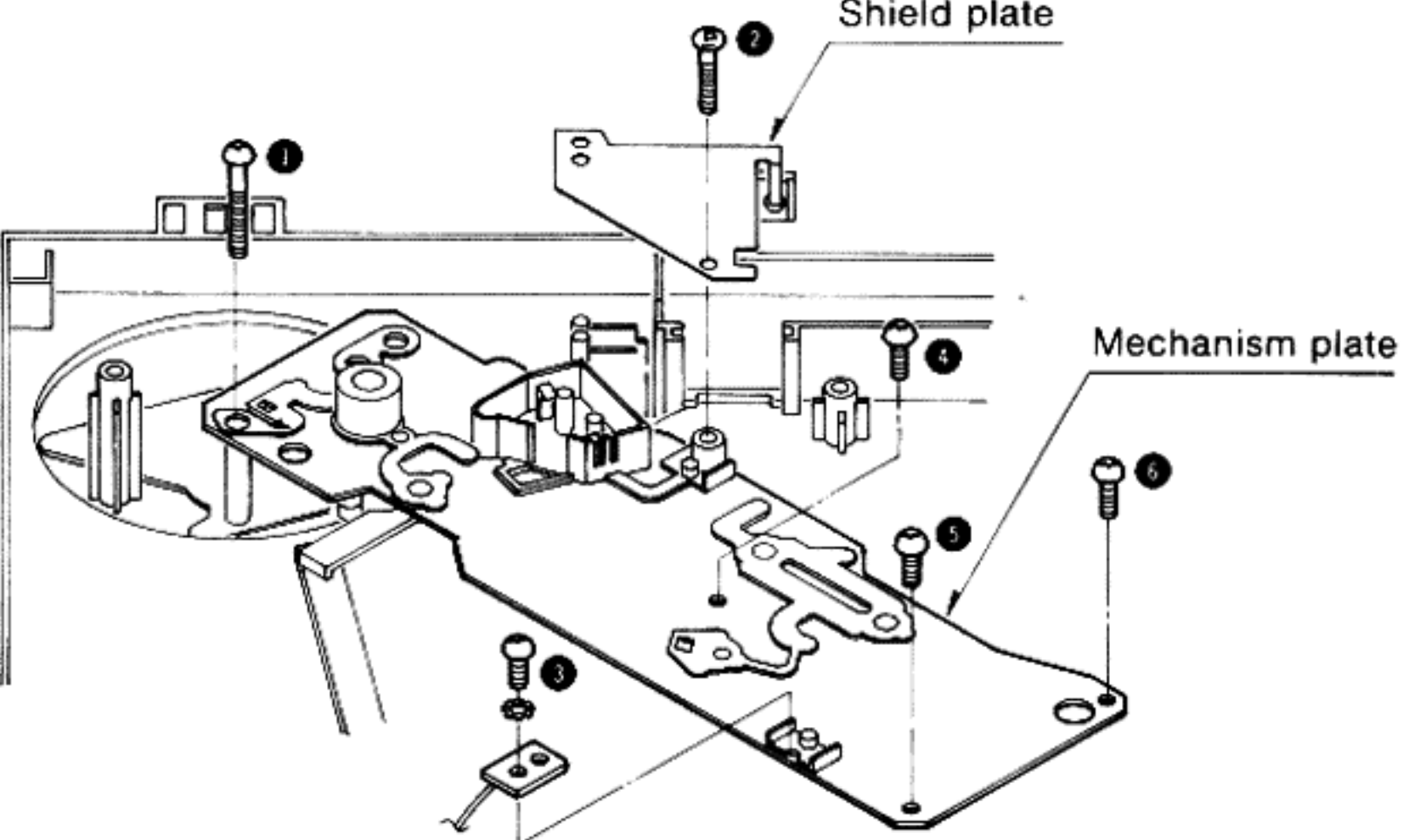
■ LOCATION OF CONTROLS

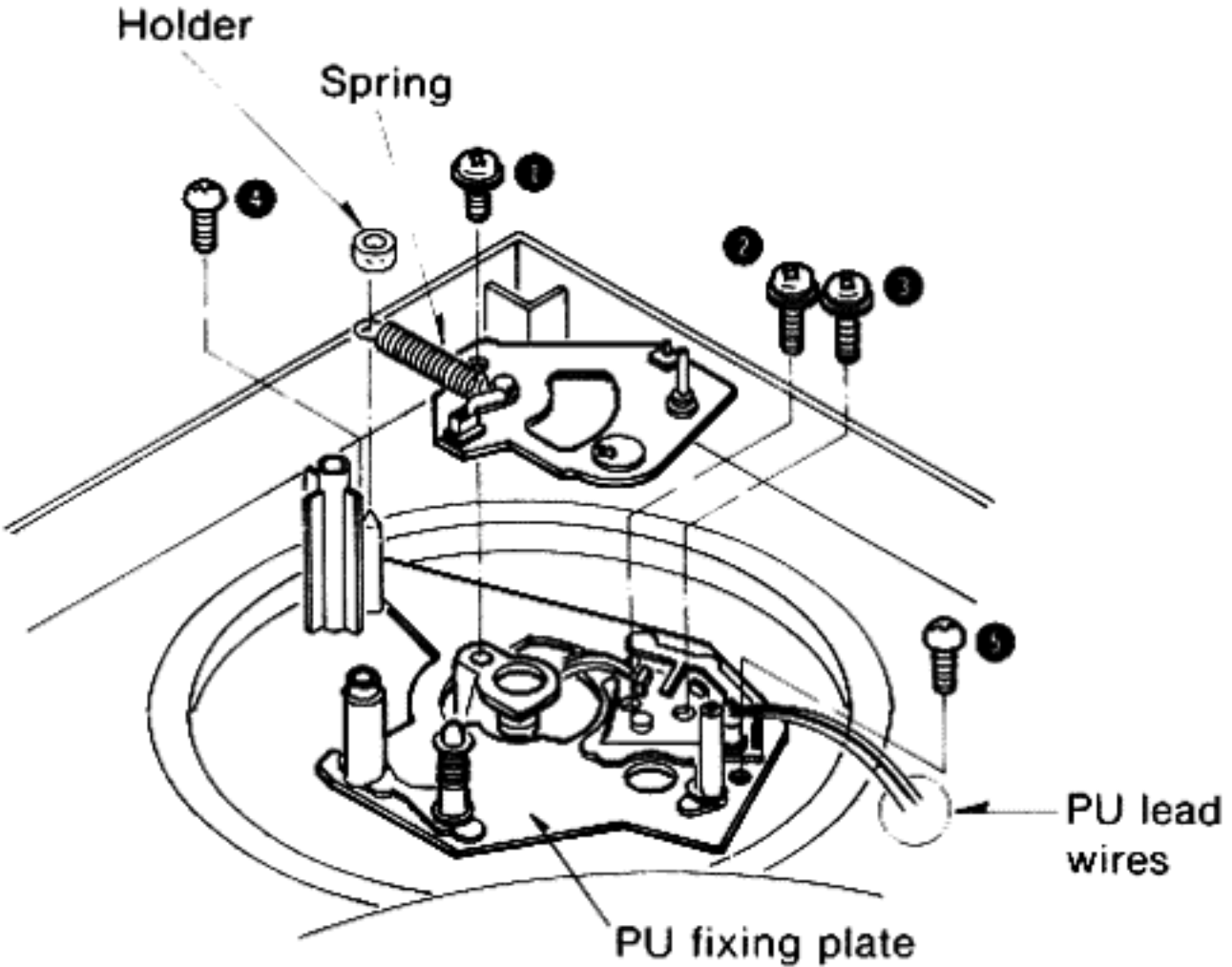
45-rpm adaptor

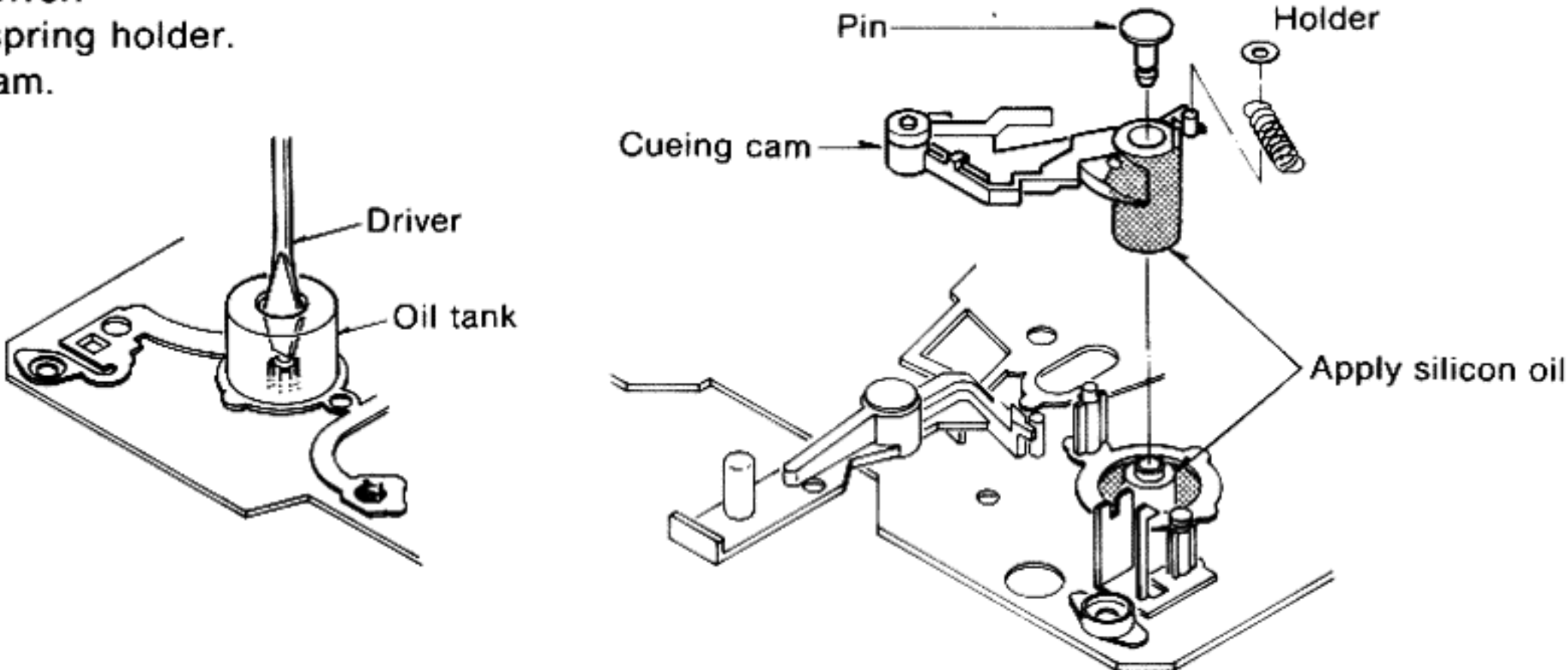
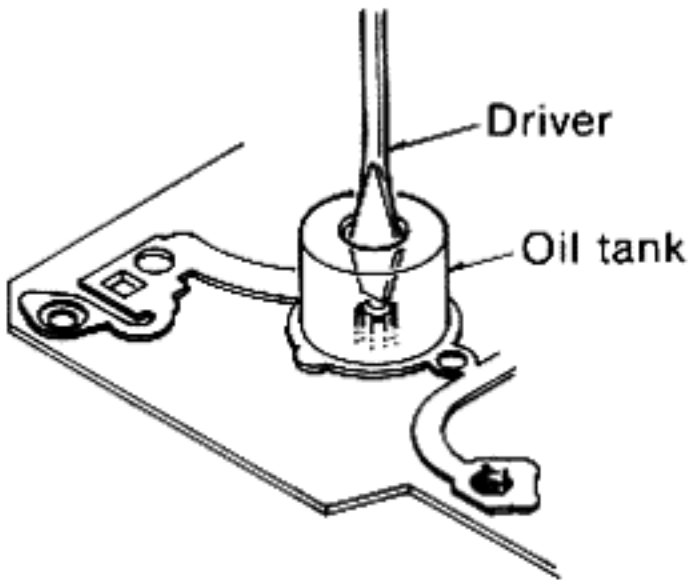


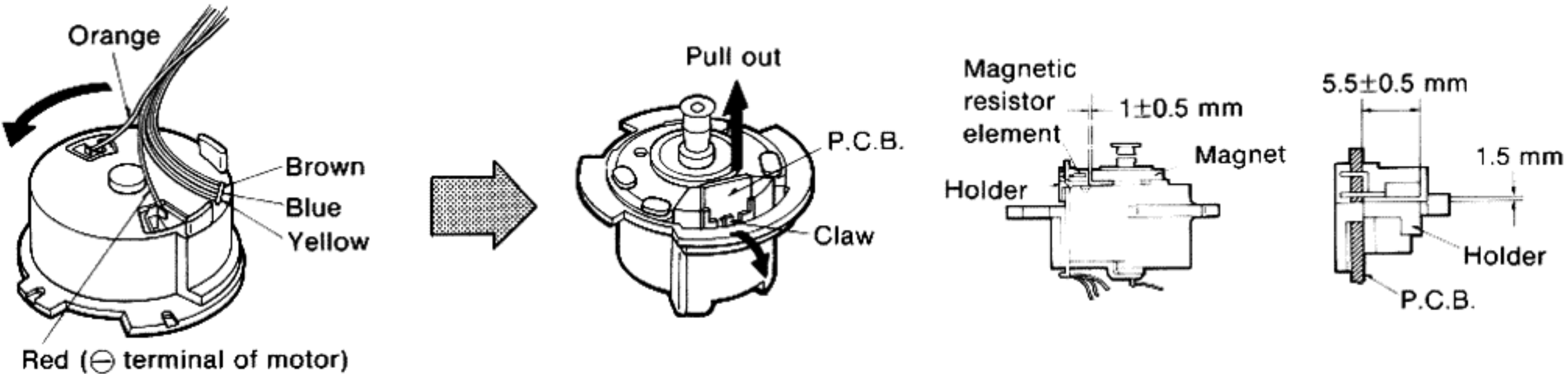
■ DISASSEMBLY INSTRUCTIONS

Ref. No 1	How to remove the cartridge	Ref. No 3	How to remove the turntable platter
Procedure 1	<ol style="list-style-type: none"> 1. Remove the setscrew ❶. 2. Pull out the cartridge, taking care that your hand does not touch the stylus tip. 	Procedure 3	<ol style="list-style-type: none"> 1. Open the dust cover and remove the turntable mat. 2. Remove the belt 3. Lift up the turntable platter. 
Ref. No 2	How to remove the stylus		
Procedure 2	<ul style="list-style-type: none"> • Pull out the stylus, taking care not to touch the stylus tip. 		

Ref. No 4	How to remove the bottom board	Ref. No 6	How to remove the stop switch knob
Procedure 3 ▶ 4	<ol style="list-style-type: none"> 1. Turn over the unit on a soft cloth. 2. Remove the 5 setscrews (❶ ~ ❷). 	Procedure 3 ▶ 4 ▶ 6	<ol style="list-style-type: none"> 1. Remove the setscrew ❶. 2. Remove the holder (with knob) in the direction of the arrows (A, B). 3. Release the 2 claws.
 <p>Soft cloth</p>		 <p>Holder Knob Claws Spring Rod</p> <p>Note: When attaching the stop knob, do not forget to attach the spring.</p>	
Ref. No 5	How to remove the cueing knob	Ref. No 7	How to remove the drive P.C.B.
Procedure 3 ▶ 4 ▶ 5	<ul style="list-style-type: none"> • Remove the setscrew ❶. 	Procedure 3 ▶ 4 ▶ 7	<ol style="list-style-type: none"> 1. Remove the 3 setscrews (❶ ~ ❸). 2. Remove the drive P.C.B. in the direction of the arrow.
 <p>Holder Cueing knob Ball Leaf spring</p> <p>Caution: When removing the cueing knob, please note the ball bearing which is held between the leaf spring and knob and take care not to drop or lose it.</p>		 <p>Drive P.C.B.</p>	
Ref. No 8	How to remove the mechanism plate		
Procedure 3 ▶ 4 ▶ 8	<ol style="list-style-type: none"> 1. Remove the 6 setscrews (❶ ~ ❷). 2. Lift up the mechanism plate. 		
 <p>Shield plate Mechanism plate</p>			

Ref. No 9	How to remove the tonearm and PU fixing plate	
Procedure 3→4→8→9	<ol style="list-style-type: none"> 1. Unsolder the 5 PU lead wires from the phono terminal. 2. Remove the spring holder. 3. Remove the setscrew ①. 4. To remove the tonearm, remove the 2 setscrews (②, ③). 5. To remove the PU fixing plate, remove the 2 setscrews (④, ⑤). <p>* PU lead wiring method WhiteL channel (+) terminal Blue.....L channel (-) terminal RedR channel (+) terminal GreenR channel (-) terminal Black.....Ground terminal</p>	

Ref. No 10	How to remove the cueing cam	<p>Note: If the cueing time of the tonearm becomes too short, or if the cueing cam is replaced, apply silicon oil (Part No. SZZ0L12) according to the following procedure.</p> <ol style="list-style-type: none"> 1. Remove the cueing cam. 2. Apply silicon oil to the cueing cam and oil tank. 
Procedure 3→4→8→10	<ol style="list-style-type: none"> 1. Push the pin with a driver. 2. Remove the pin and spring holder. 3. Remove the cueing cam. 	

Ref. No 11	How to remove the magnetic resistor element	<p>Note: If the magnetic resistor element has been replaced, observe the following mounting precaution.</p> <ul style="list-style-type: none"> •The magnetic resistor element is supplied with the center lead bent. Be sure the seat the bent lead flush to the P.C.B. •This will ensure the proper clearance ($1\pm 0.5\text{mm}$) between the magnet and the magnetic resistor element as shown below. 
Procedure 3→4→11	<ol style="list-style-type: none"> 1. Remove the motor assembly in the direction of the arrow. 2. Unsolder the 3 lead wires from the magnetic resistor P.C.B. <ol style="list-style-type: none"> 1. Release the claw and pull out the P.C.B. 2. Unsolder the 3 terminals of the magnetic resistor element. 	

■ MEASUREMENTS AND ADJUSTMENTS

• Arm-lift height adjustment

The arm-lift height (distance between the stylus tip and the record surface when the cueing control is at the "∇" position) has been adjusted at the factory to approximately 5 to 7 mm (3/16"–9/32").

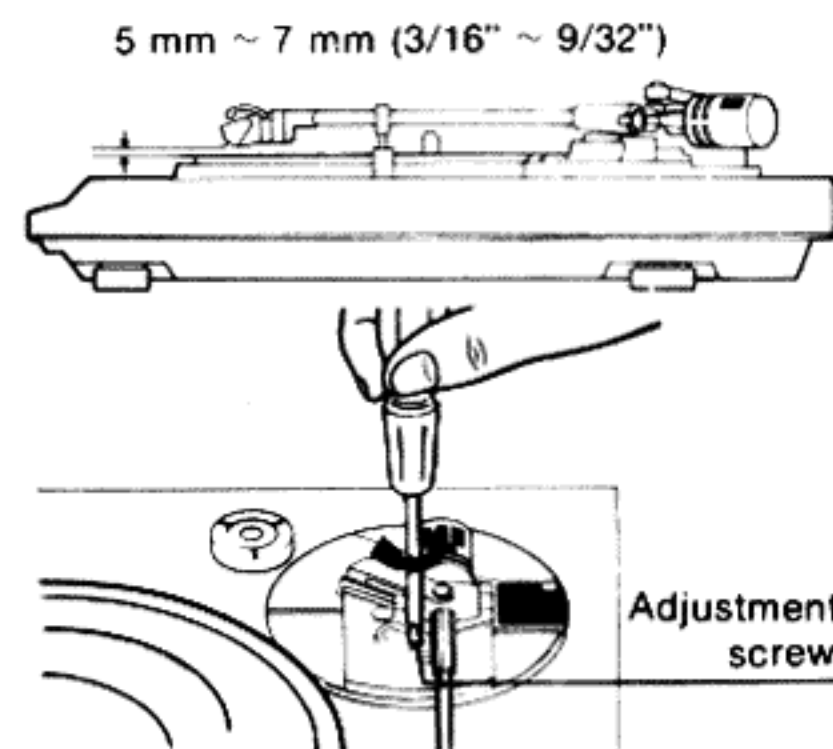
If the clearance is too narrow or too wide, turn the adjustment screw clockwise or counterclockwise.

Clockwise rotation

—distance between the record and stylus tip is decreased.

Counterclockwise rotation

—distance between the record and stylus tip is increased.



• Automatic return adjustment

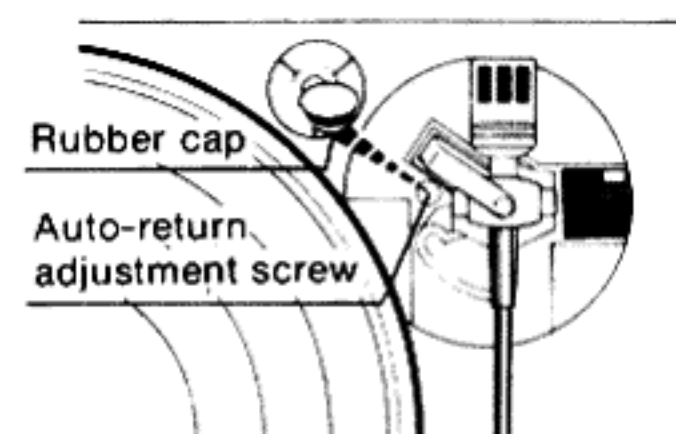
1. Clamp the tonearm to the arm rest.
2. Remove the rubber cap.
3. Turn the screw with a screwdriver, clockwise or counterclockwise as necessary.

If the tonearm tends to return to the arm rest before the play has finished,

—turn **counterclockwise**.

If the tonearm fails to return after the final groove,

—turn **clockwise**.

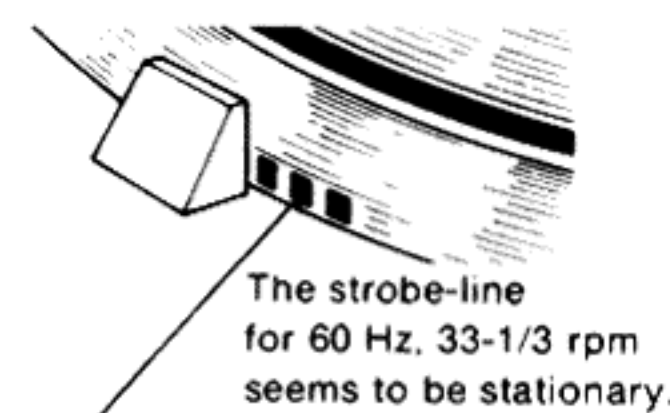
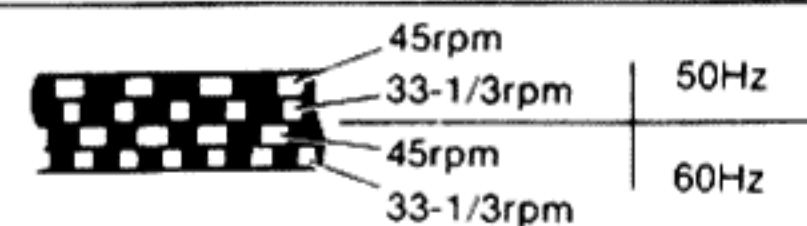


• Speed adjustment (pitch control)

There are strobe-lines cut on this turntable platter to indicate correct rotational speed.

If the strobe-line appears to be moving as the turntable rotates, adjust while playing a record.

1. Set the speed selector to the speed to be adjusted.
2. Push the power switch. The strobe-illuminator/pilot lamp will light up and the platter will rotate.
3. Watch the dot pattern on the side of the platter. Turn the pitch control one way or the other until the dots appear to stand still. This is the correct speed.
4. Turning the pitch control in the "+" direction increases the speed.
5. Turning the pitch control in the "-" direction decreases the speed.



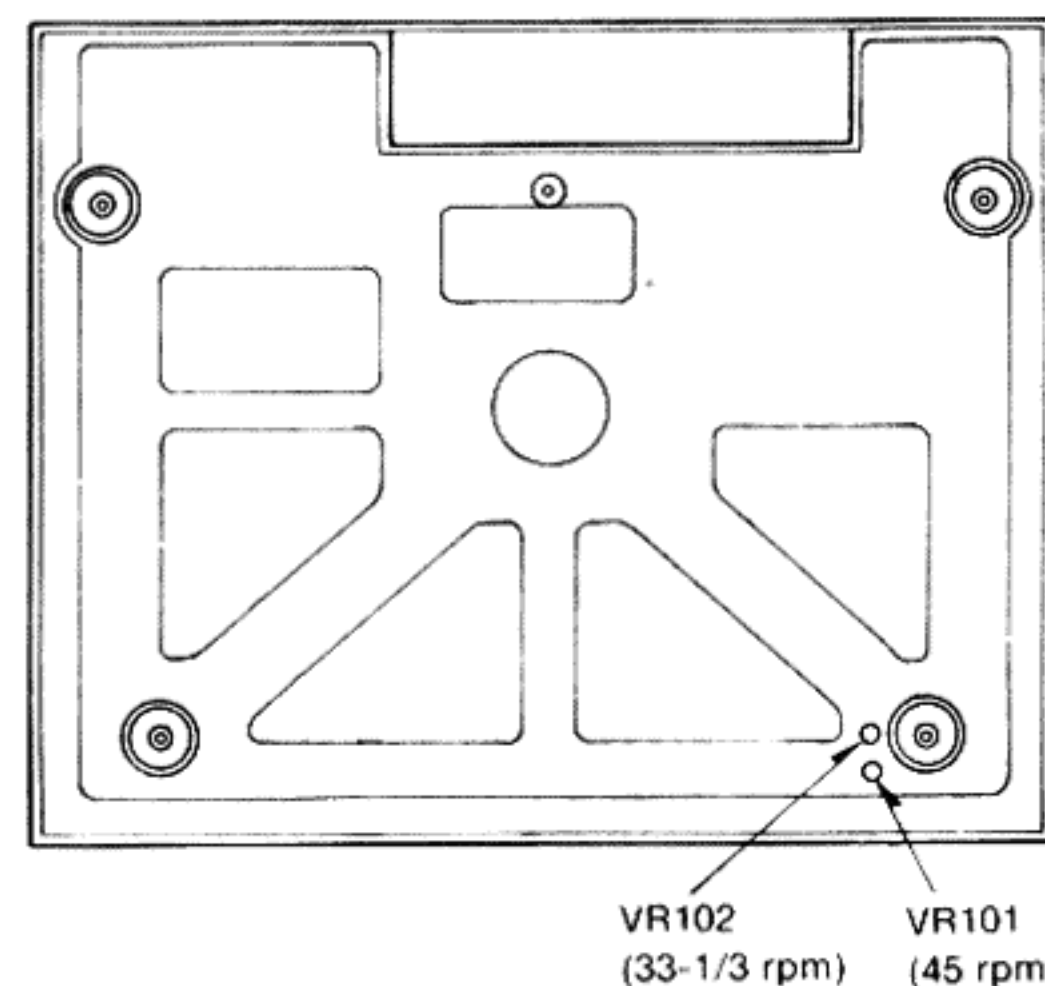
In the U.S.A. and CANADA use 60 Hz lines.
The 50 Hz lines are for European countries.

• Rotating speed

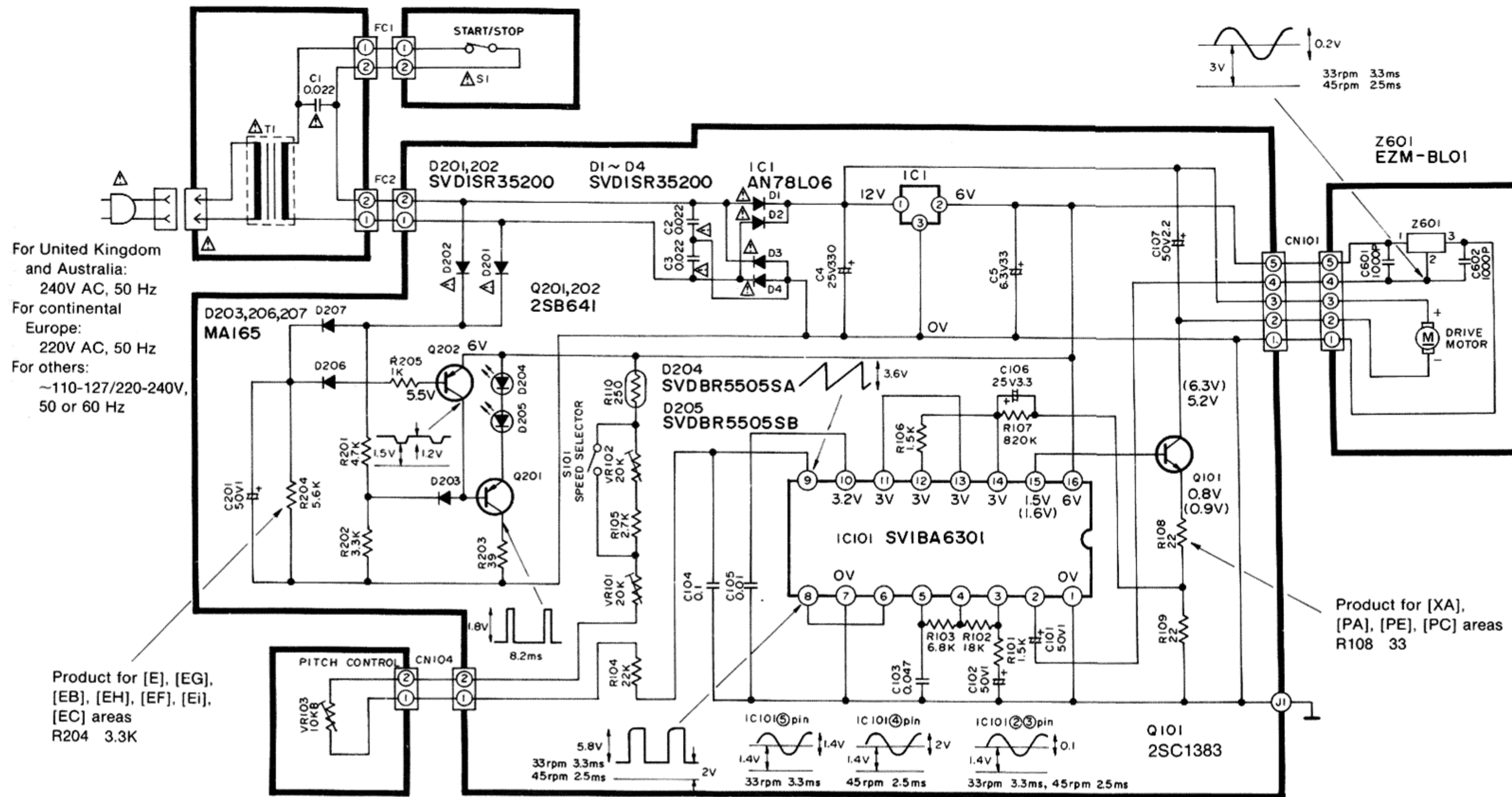
When the turntable drive/control IC (IC101) or the variable resistors (VR101, 102) are changed, or if the rated rotation is not reached even when the pitch control knob is turned, adjust the rotating speed in the following procedure.

1. Set the speed selector switch to the "45" position.
2. Turn VR101 with a screwdriver from the bottom of the set to the rated rotation (45 rpm) and check the rotation with a strobe while adjusting the speed.
3. Set the speed selector switch to the "33" position.
4. Turn VR102 with a screwdriver from the bottom of the set to the rated rotation (33-1/3 rpm) and check the rotation with a strobe while adjusting the speed.

Note: Be sure to make the adjustment for 45 rpm first.



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



For United Kingdom and Australia: 240V AC, 50 Hz
 For continental Europe: 220V AC, 50 Hz
 For others: ~110-127/220-240V, 50 or 60 Hz

Product for [E], [EG], [EB], [EH], [EF], [EI], [EC] areas
 R204 3.3K

Notes:

- S1: Power switch in "on" position.
- S101: Speed selector switch in "33" position.
- The values are of the reference voltage for the turntable rotation (33 rpm) of this unit, measured by a DC voltmeter (high impedance) on the basis of chassis. So, some error might be included depending on the internal impedance of the measuring instrument and the unit measured.
 * (): voltage in 45 rpm.
- Important safety notice: Components identified by a Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- VR101 is the 45 rpm speed adjustment variable resistor.
- VR102 is the 33-1/3 rpm speed adjustment variable resistor.
- This schematic diagram may be modified at any time with the development of new technology.

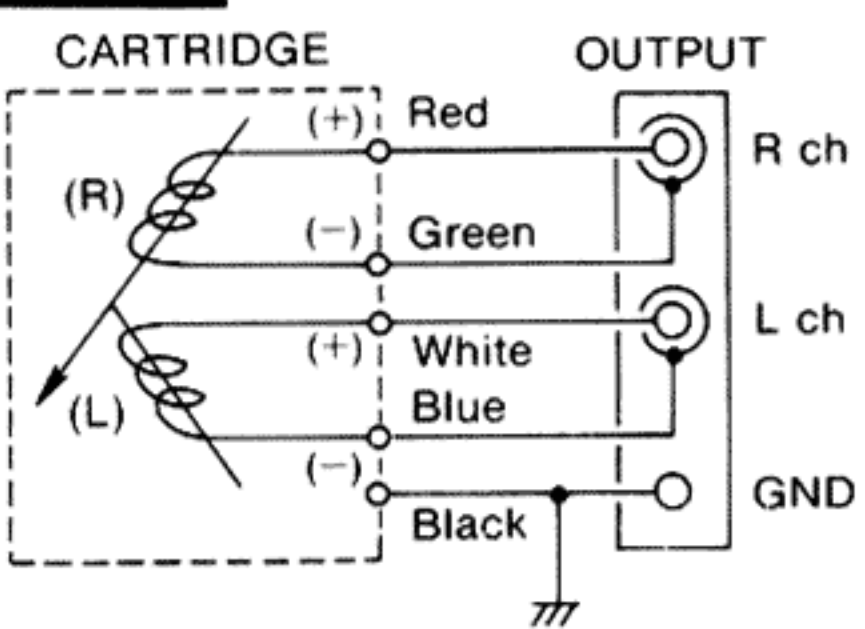
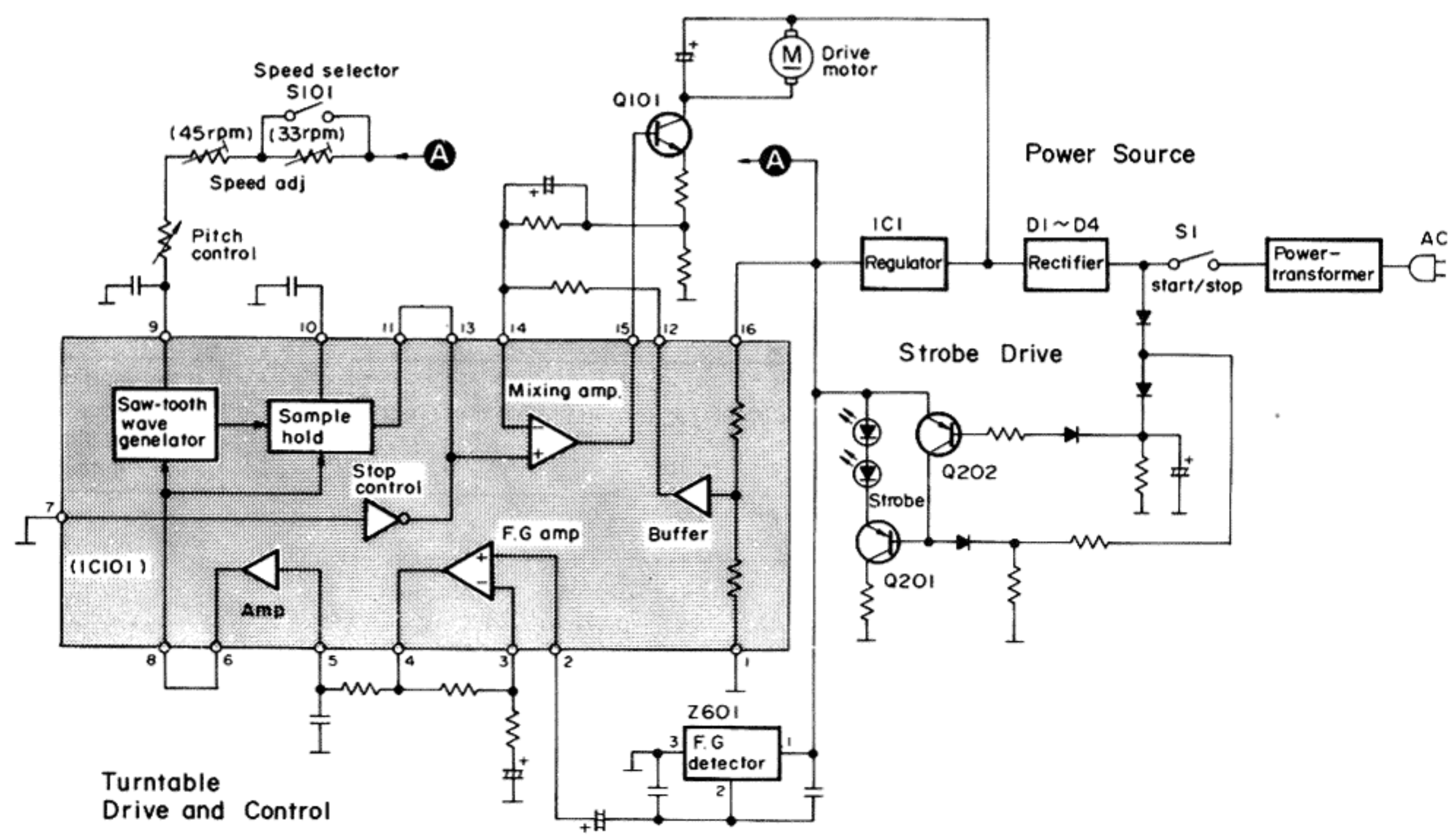
Terminal guide of IC's, transistors and diodes

<p>SVIBA6301</p>	<p>AN78L06</p> <p>1. Input 2. Output 3. Common</p>	<p>SVDBR5505SA SVDBR5505SB</p> <p>A K</p>
<p>2SD638 2SB641</p> <p>B C E</p>	<p>SVD1SR35200V</p> <p>K A</p>	<p>MA165</p> <p>K A</p>

Caution!

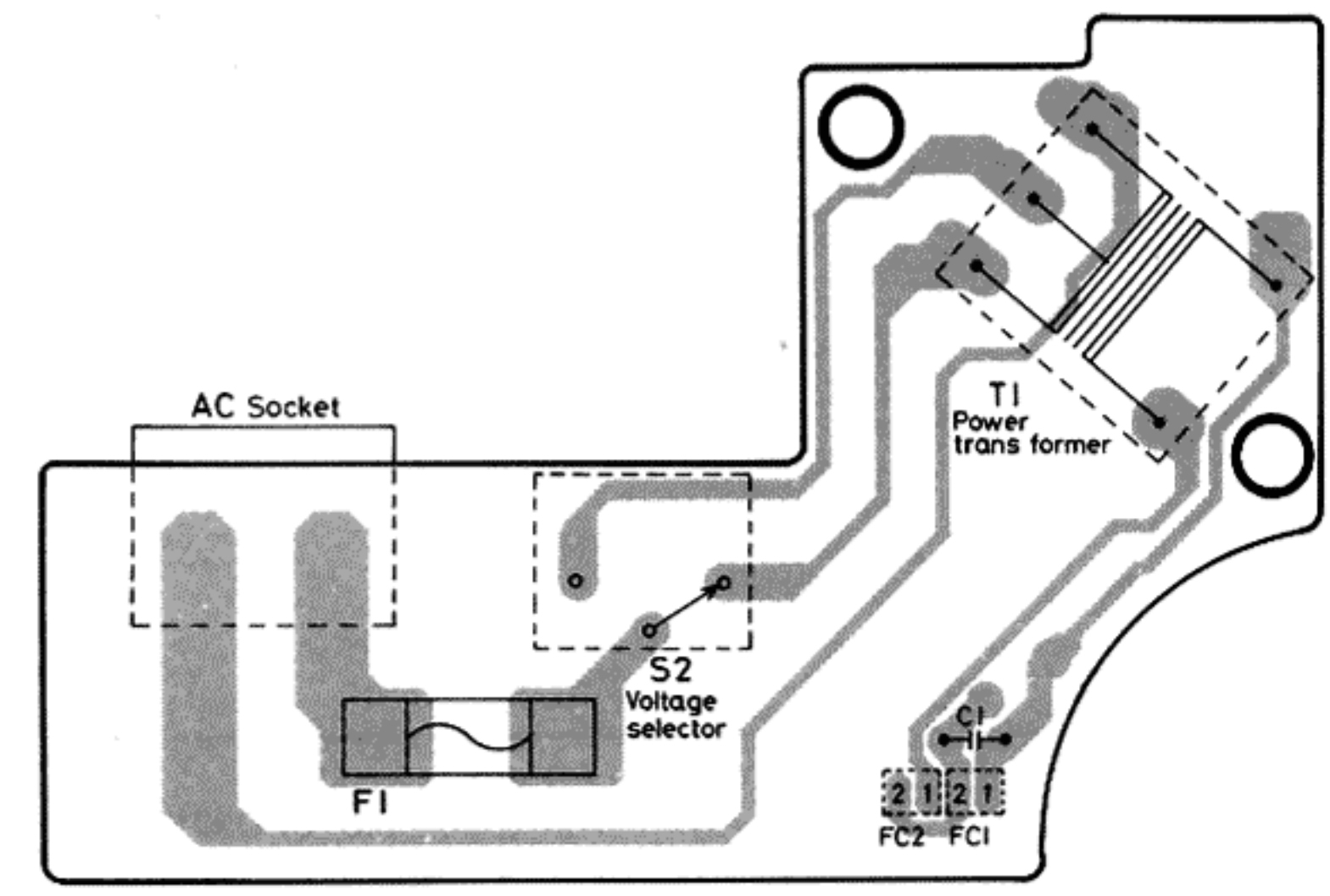
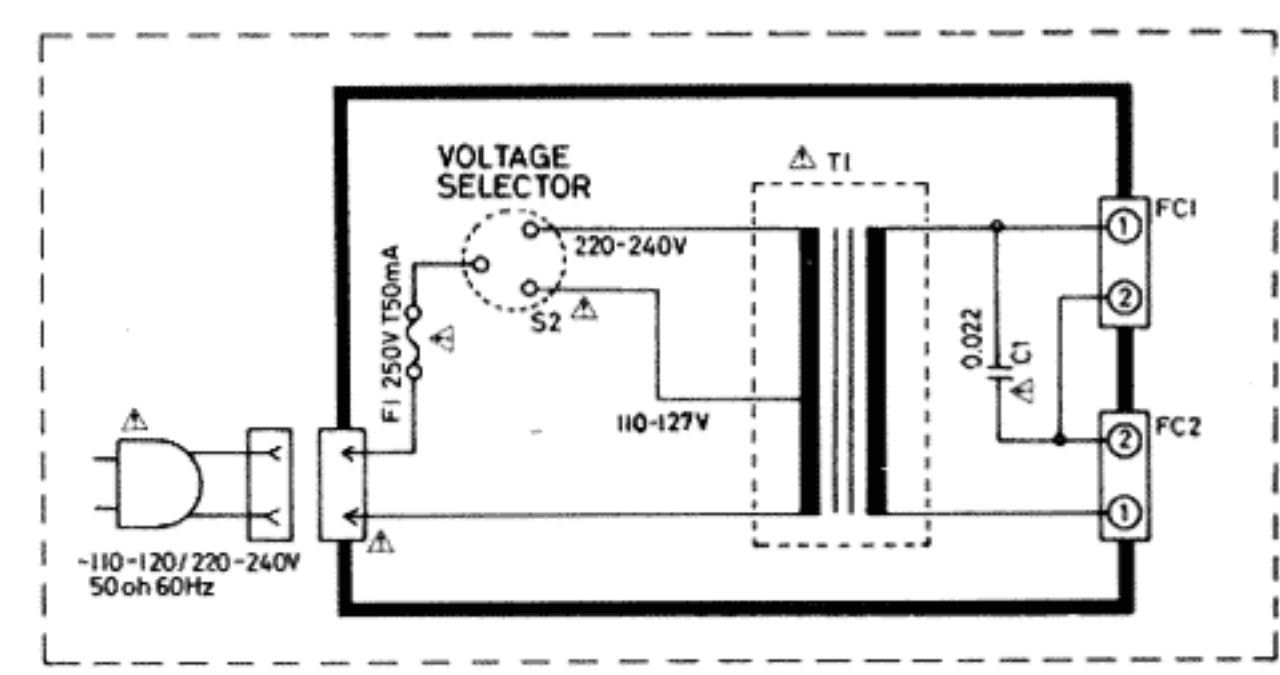
- IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
 - Ground the soldering iron.
 - Put a conductive mat on the work table.
 - Do not touch the legs of IC or LSI with the fingers directly.

BLOCK DIAGRAM

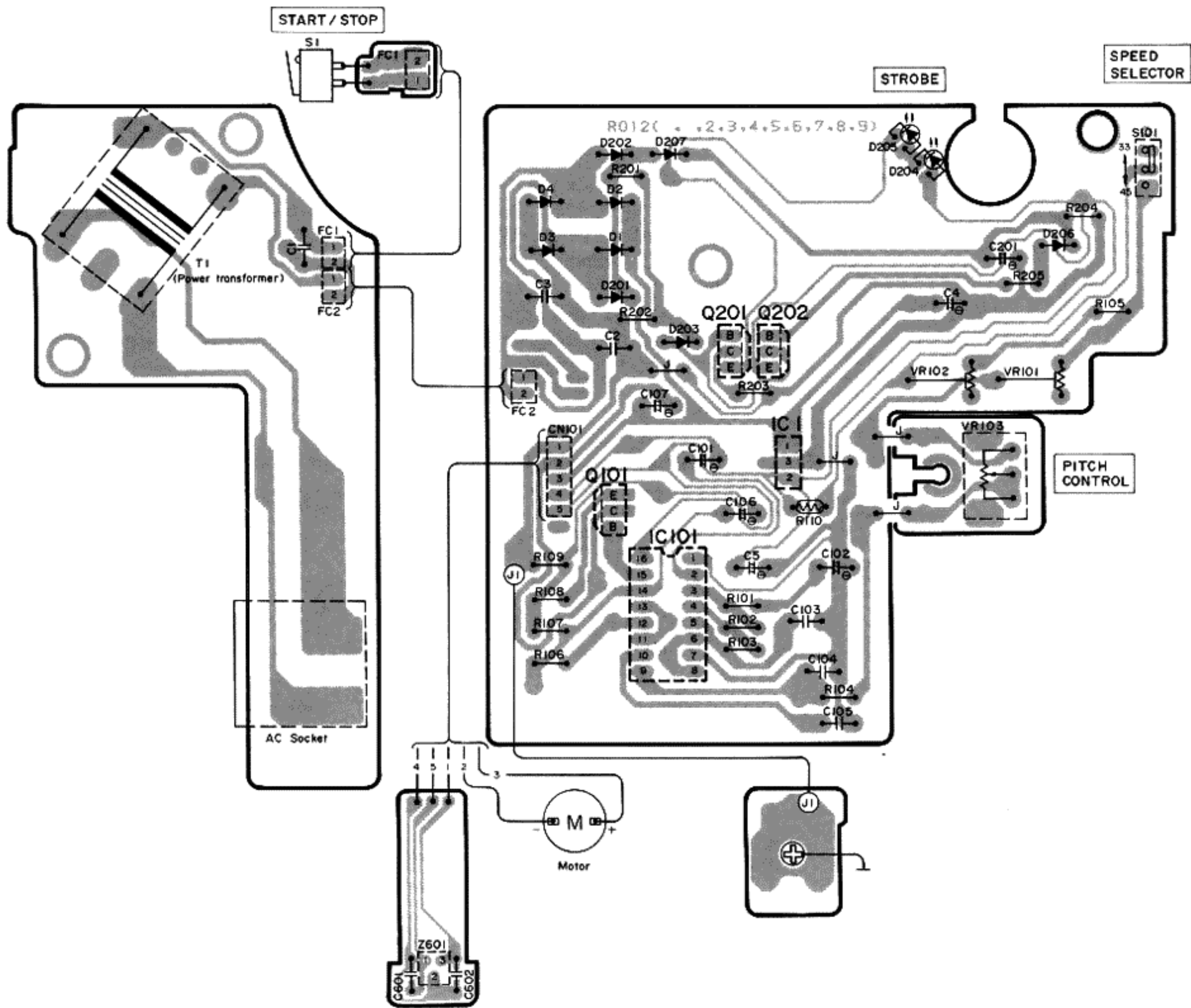


Power source circuit

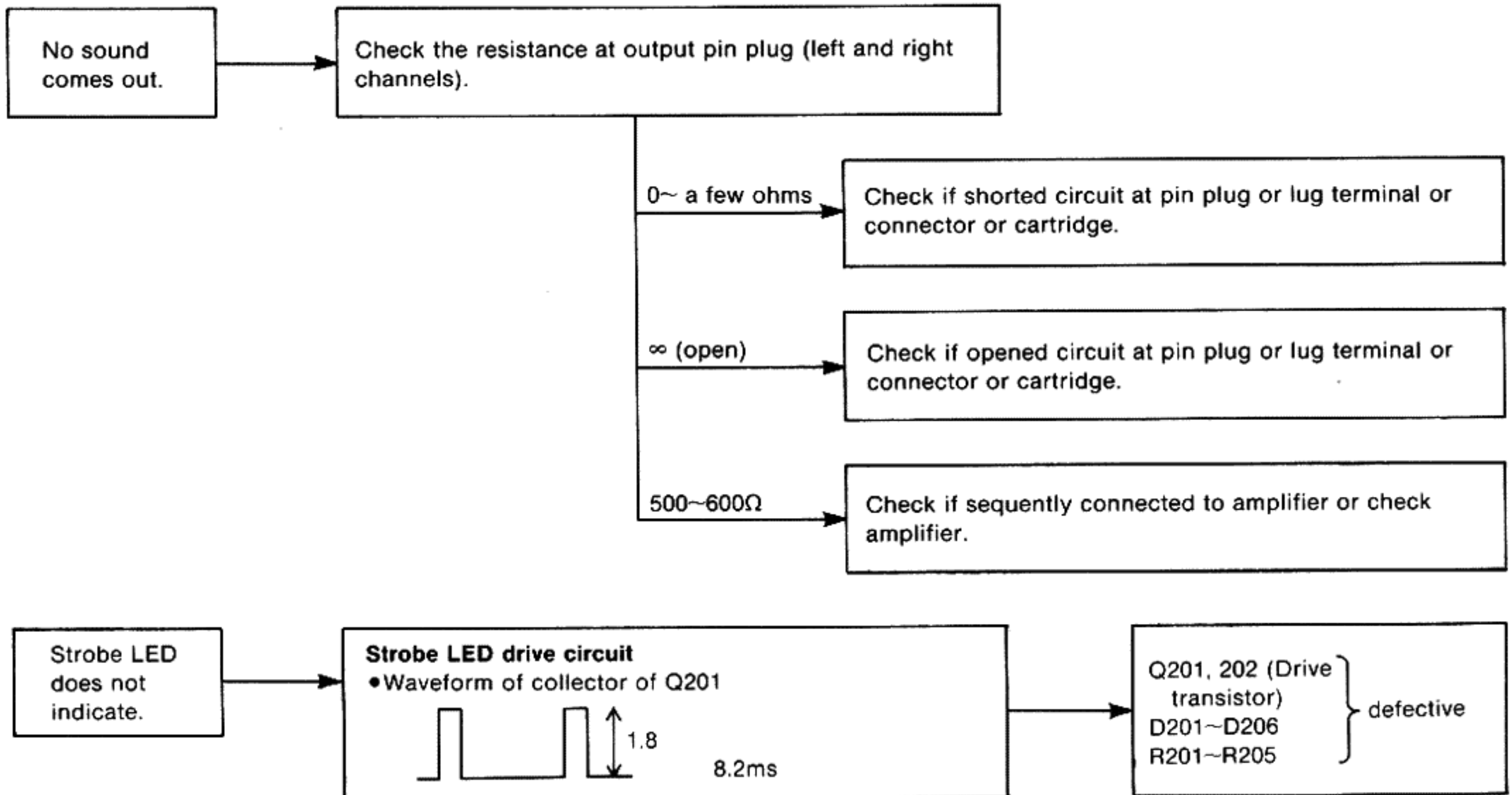
For [XA], [PA], [PE], [PC] areas

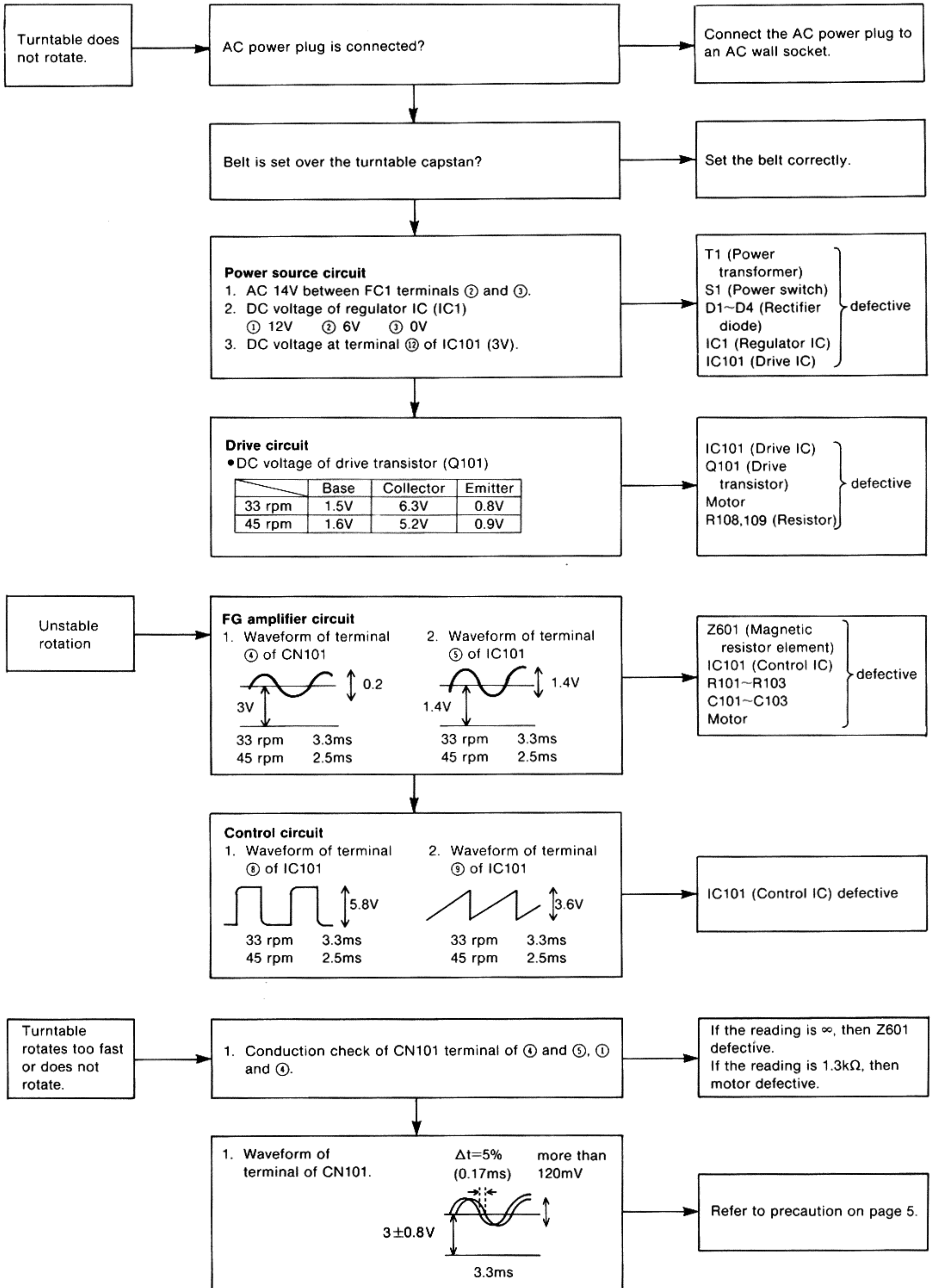


■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



■ TROUBLESHOOTING

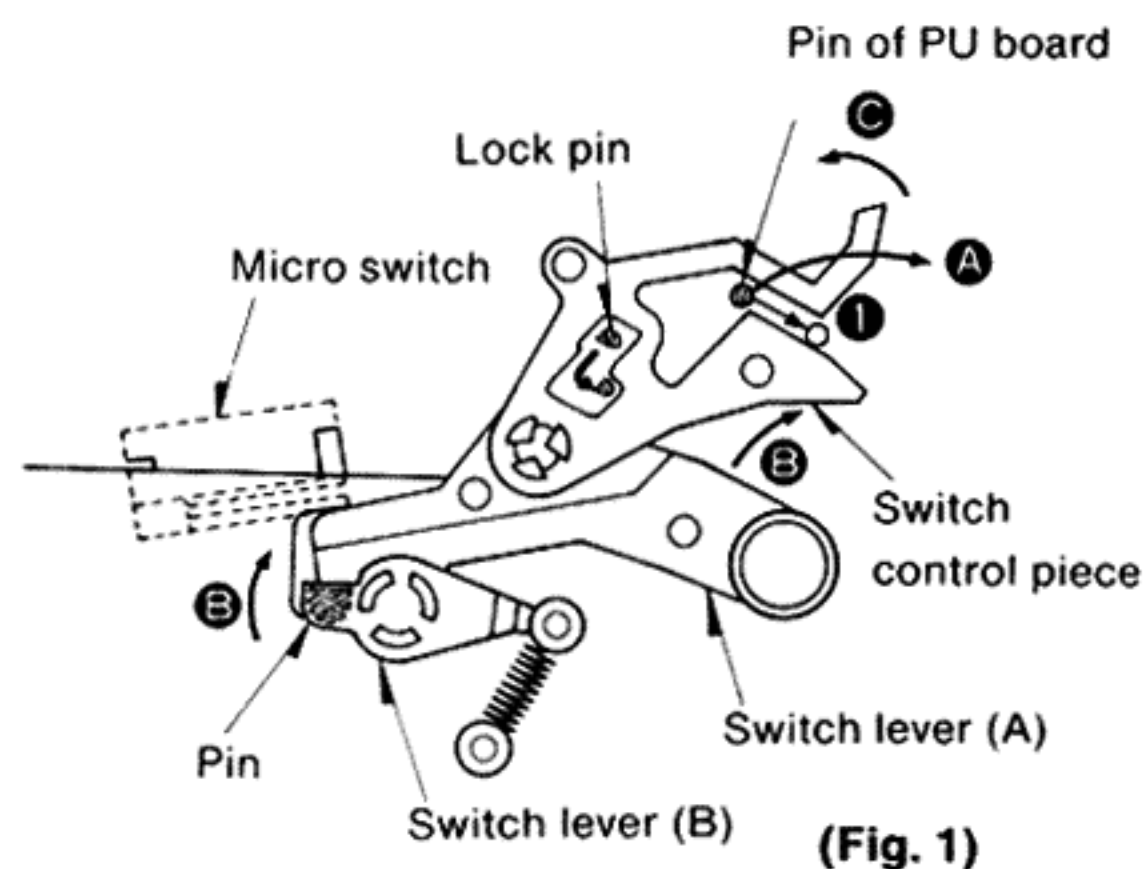




OPERATIONAL DESCRIPTION OF MECHANISM

Manual start (Fig. 1)

- Shift the tonearm to the turntable side.
 - The PU board rotates and the pin of PU board applies a force to the switch control piece in the direction of arrow **A**.
- The switch control piece, switch levers (A) and (B) move in the direction of arrow **B**.
- The pin of switch lever (B) holds the contact of microswitch (power).
 - Drive circuit power supply turns ON and motor starts operating.
- When the pin of PU board moves to point **1**, the switch control piece moves in the direction of arrow **C**, and the switch control piece is locked by the lock pin of the mechanism board.
 - Microswitch keeps turning ON.

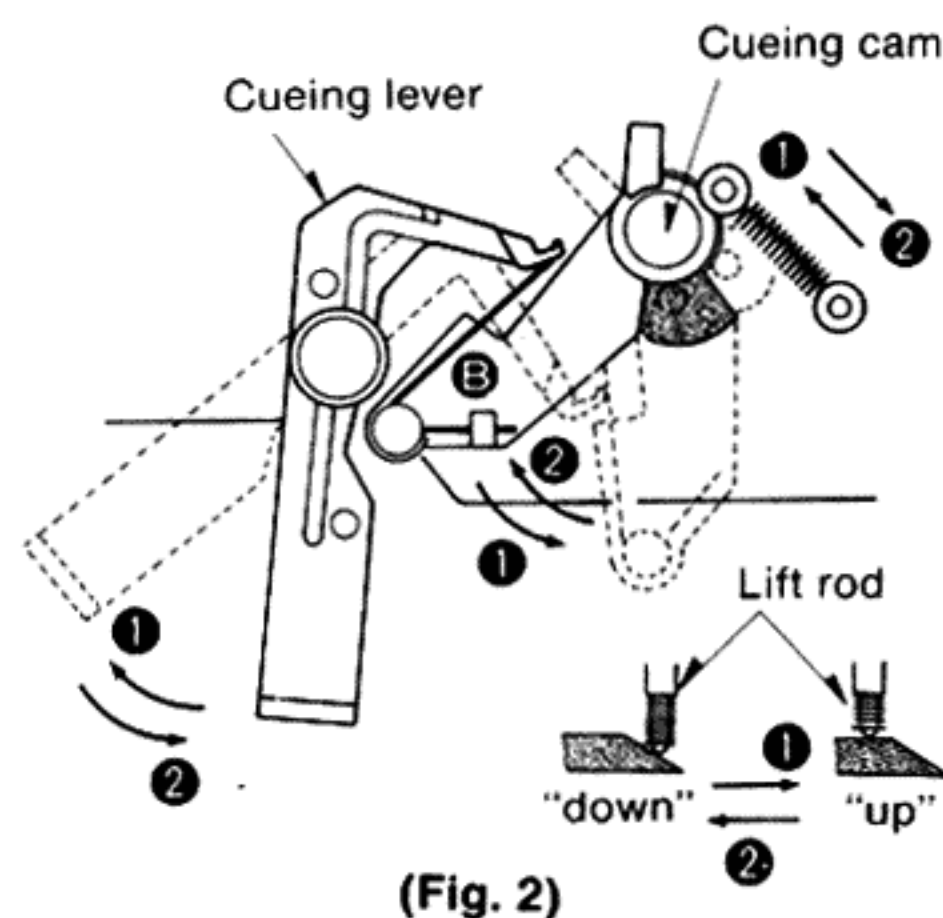


Cueing up/down (Fig. 2)

- When the cueing knob is set to up/down position, the cueing lever and cueing cam rotate via the cueing rod.
 - Rotation in the direction of arrow **1**: Cueing up
 - Rotation in the direction of arrow **2**: Cueing down
- The lift rod is pushed up or down by the cueing cam operation.

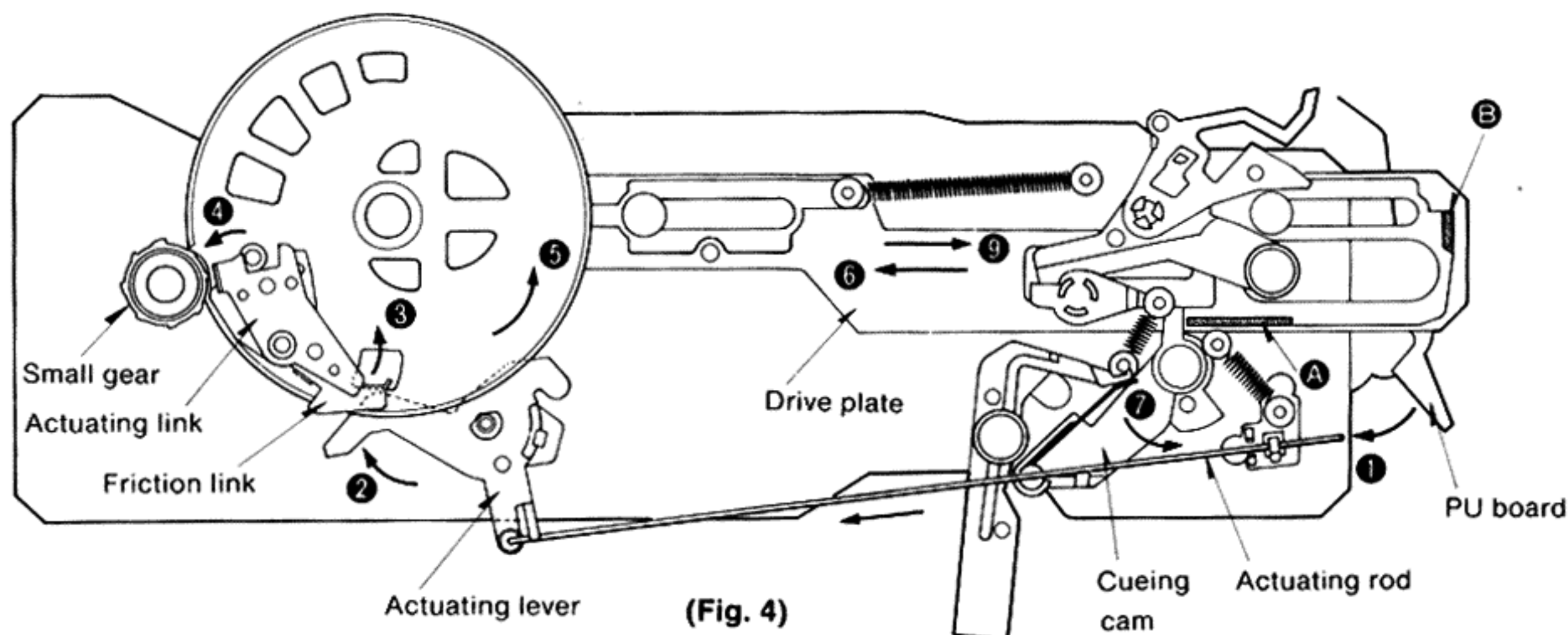
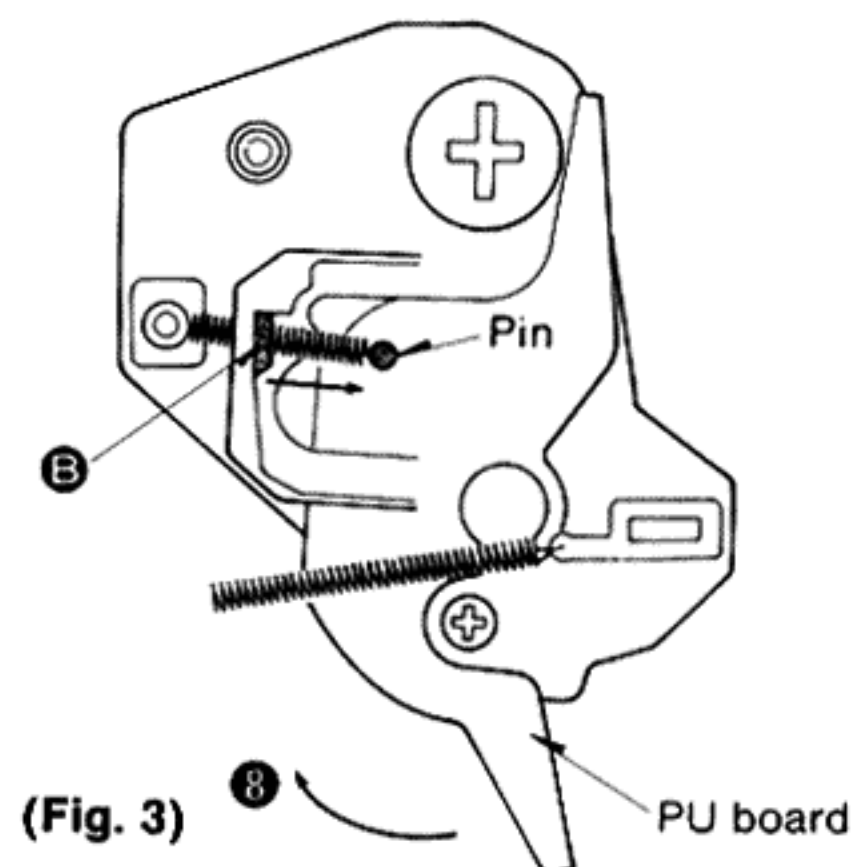
Note:

The cueing cam takes about 6~8 sec. to move from point **A** to point **B**. (Cueing up to cueing down)



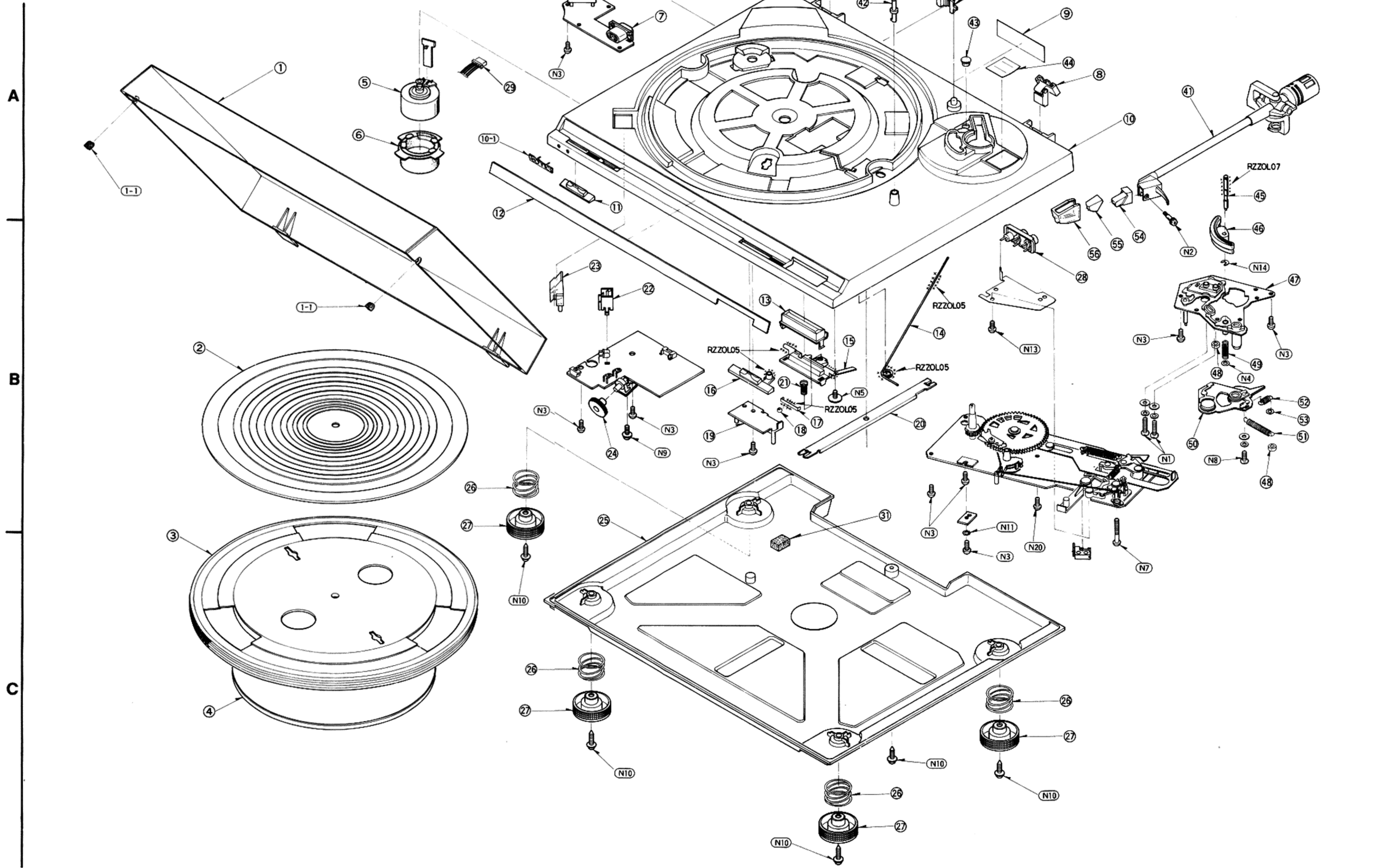
Auto return (Fig. 3, 4)

- Tonearm moves to the center of turntable.
 - PU board rotates to hold the actuating rod. (Arrow **1**)
- Actuating lever rotates. (Arrow **2**)
 - Friction link and actuating link are pushed out (direction **3** and **4**), then small gear engages with main gear to rotate the latter.
- Main gear rotation causes the drive plate to move in the direction of arrow **5**.
 - The projection **A** of drive plate pushes the cueing cam to rotate it for cueing up.
 - The projection **B** of drive plate touches the pin of PU board to rotate it in the direction of arrow **8**, thereby shifting the tonearm back to the rest position.
- As the main gear rotates further, drive plate moves in the direction of arrow **9**, thereby resetting the mechanism.



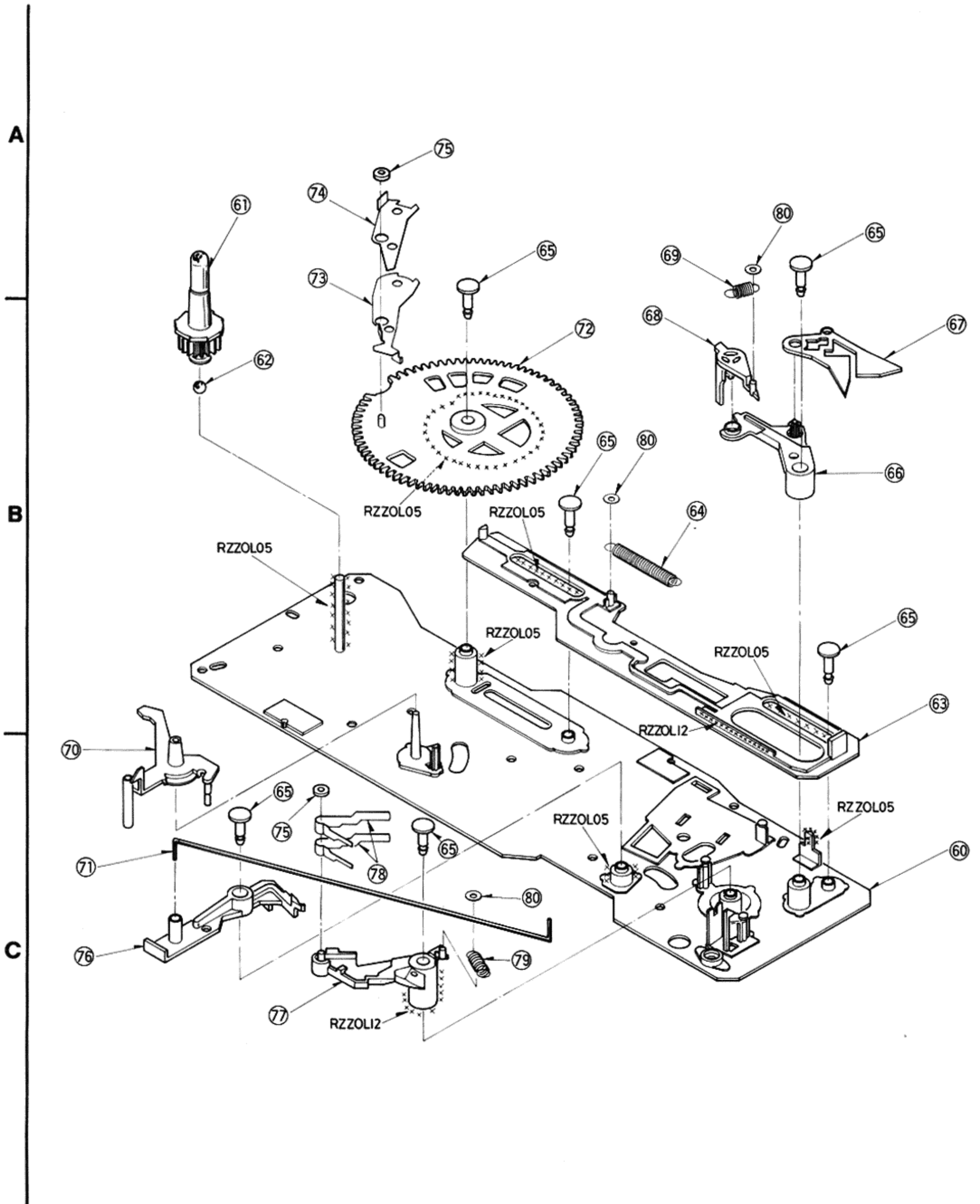
EXPLODED VIEW

• Cabinet and chassis parts



A	1-1	1	6 5	10-1 12 29	11	7	8	42	43	30	9 44	8	10	41	45
B		2	1-1	27 26	23 25 24	22	16 19	13 21 18 17	15	31	20 14		28 56 55 54	50	48 46 49 48 47 51 52 53
C		3 4		27 26						26 27			26 27		

• Mechanism parts



A	61	73 74	75	65	69	80	65
B	62			72	65	80 68	64
C	70 71 76	65 75 77	78	65	79 80		60

REPLACEMENT PARTS LIST

- Notes:**
- Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 - Important safety notice:
Components identified by a Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
 - $\text{\textcircled{K}}$ -marked parts are used for black type only, while $\text{\textcircled{O}}$ -marked parts are used for silver type only.
 - Parts other than $\text{\textcircled{K}}$ - and $\text{\textcircled{O}}$ -marked are used for both black and silver types.

- Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
- The " $\text{\textcircled{S}}$ " mark is service standard parts and may differ from production parts.
- The parenthesized numbers in the column of description stand for the quantity per set.

Black type model No. SL-BD2 (K)

Ref. No.	Part. No.	Description
INTEGRATED CIRCUITS		
IC1	AN78L06	Regulator
IC101	SVIBA6301	Drive and Control
TRANSISTORS		
Q101	2SC1383	Switching
Q201, 202	2SB641	Strobe Drive
DIODES		
D1,2,3,4	Δ SVD1SR35200V	Rectifier
D201,202	Δ SVD1SR35200V	Rectifier
D203	MA165	Switching
D204	SVDBR5505SA	Strobe
D205	SVDBR5505SB	Strobe
D206, 207	MA165	Switching
SWITCHES		
S1	Δ SFSDS72R01	Power
S2	Δ SFDSHXW02066	Voltage Selector
	[XA, PA] [PE, PC] only	
S101	SFDSHSW0834	Speed Selector
VARIABLE RESISTORS		
VR101,102	EVN61AA00B24	Speed Adjustment, 20 k Ω (B)
VR103	EVJE1AF20B14	Pitch Control, 10 k Ω (B)
MAGNETIC RESISTOR ELEMENT		
Z601	EZM-BL01	F-G Detector
POWER TRANSFORMER		
T1	Δ SLT35KE61E	Power Source
	[EK, XL]	
T1	Δ SLT35KE62E	Power Source
	[PA, PE] [PC, XA]	
T1	Δ SLT35KE64E	Power Source
	[other]	
THERMISTERS		
R110	ERTD2FFK251S	250 Ω
FUSE		
F1	Δ XBAS2C005TIW	250V, T50 mA
	[XA, PA] [PE, PC] only	
RESISTORS		
R101	ERDS2TJ152	Carbon, 1/4W, 1.5 k Ω , $\pm 5\%$
R102	ERDS2TJ183	Carbon, 1/4W, 18 k Ω , $\pm 5\%$
R103	ERDS2TJ682	Carbon, 1/4W, 6.8 k Ω , $\pm 5\%$
R104	ERDS2TJ223	Carbon, 1/4W, 22 k Ω , $\pm 5\%$
R105	ERDS2TJ272	Carbon, 1/4W, 2.7 k Ω , $\pm 5\%$

Ref. No.	Part. No.	Description
R106	ERDS2TJ152	Carbon, 1/4W, 1.5 k Ω , $\pm 5\%$
R107	ERDS2TJ824	Carbon, 1/4W, 820 k Ω , $\pm 5\%$
R108	ERDS2TJ330	Carbon, 1/4W, 33 Ω , $\pm 5\%$
	[XA, PA] [PE, PC]	
R108	ERDS2TJ220	Carbon, 1/4W, 22 Ω , $\pm 5\%$
	[other]	
R109	ERDS2TJ220	Carbon, 1/4W, 22 Ω , $\pm 5\%$
R201	ERDS2TJ472	Carbon, 1/4W, 4.7 k Ω , $\pm 5\%$
R202	ERDS2TJ332	Carbon, 1/4W, 3.3 k Ω , $\pm 5\%$
R203	ERDS2TJ390	Carbon, 1/4W, 39 Ω , $\pm 5\%$
R204	ERDS2TJ562	Carbon, 1/4W, 5.6 k Ω , $\pm 5\%$
	[EK, XL] [XA, PA] [PE, PC]	
R204	ERDS2TJ332	Carbon, 1/4W, 3.3 k Ω , $\pm 5\%$
	[other]	
R205	ERDS2TJ102	Carbon, 1/4W, 1 k Ω , $\pm 5\%$
CAPACITORS		
C1, 2, 3	Δ ECQG1223KZ	Polyester, 100V, 0.022 μ F, $\pm 10\%$
C4	ECEA1EU331	Electrolytic, 25V, 330 μ F
C5	ECEA0JU330	Electrolytic, 6.3V, 33 μ F
C101, 102	ECEA1HU010	Electrolytic, 50V, 1 μ F
C103	ECQM1H473KV	Polyester, 50V, 0.047 μ F, $\pm 10\%$
C104	ECQP1104JZ	Polypropylene, 100V, 0.1 μ F, $\pm 5\%$
C105	ECQM1H103KV	Polyester, 50V, 0.01 μ F, $\pm 10\%$
C106	ECEA1EU3R3	Electrolytic, 25V, 3.3 μ F
C107	ECEA1HU2R2	Electrolytic, 50V, 2.2 μ F
C201	ECEA1HU010	Electrolytic, 50V, 1 μ F
C601, 602	ECUX1H102MBM	Chip Ceramic, 50V, 0.001 μ F, $\pm 20\%$
CABINET AND CHASSIS PARTS		
1	SFADZ15R01E	Dust Cover (With Cushion Rubber) (1)
1-1	SFGZD04N01	Rubber Cushion, Dust Cover (2)
2	SFTGBD2N01	Turntable Mat (1)
3	SFTEBD2N01	Turntable Platter (1)
4	SFGBZ15R01	Belt (1)
5	SFMHBD2N01E	Motor (1)
6	SFUMBD2N08	Cushion Rubber, Motor (1)

Ref. No.	Part. No.	Description
7	Δ SFDJHSC0509	AC Socket (1)
	[XL, XA] [PA, PE] [PC]	
7 [other]	Δ SFDJHSC0515	AC Socket (1)
8	SFATZ15R01A	Hinge (2)
9 [E, EC]	SFNNBD2S01	Name Plate (1)
9 [EG]	SFNNBD2R01	Name Plate (1)
9 [EK, XL]	SFNNBD2G01	Name Plate (1)
9 [XA]	SFNNBD2X01	Name Plate (1)
9 [PA, PE]	SFNNBD2P01	Name Plate (1)
9 [PC]	SFNNBD2P02	Name Plate (1)
9	SFNNBD2Q01	Name Plate (1)
	[EB, EH] [EF, Ei]	
10	$\text{\textcircled{O}}$ SFACBD2N01E	Cabinet (Silver Type) (1)
10	$\text{\textcircled{K}}$ SFACBD2N21E	Cabinet (Black Type) (1)
10-1	$\text{\textcircled{O}}$ SFKBBD2N01	Badge (Silver Type) (1)
10-1	$\text{\textcircled{K}}$ SFKBBD2N21	Badge (Black Type) (1)
11	SFKTBD2N03	Knob, Speed Selector (1)
12	$\text{\textcircled{O}}$ SFKKBD2N01	Ornament Plate (Silver Type) (1)
12	$\text{\textcircled{K}}$ SFKKBD2N21	Ornament Plate (Black Type) (1)
13	SFKTBD2N01	Knob, Stop (1)
14	SFUZZ15R01	Rod, Stop Knob (1)
15	SFUMBD2N01	Base, Stop Knob (1)
16	SFKTBD2N02	Knob, Cueing (1)
17	SFQPZ15R02	Spring Plate (1)
18	SFYB-5-32	Ball (1)
19	SFUMBD2N02	Bracket, Cueing Knob (1)
20	SFUMBD2N03	Lever, Cueing (1)
21	SFQHZ15R01	Spring, Stop Knob (1)
22	SFUMBD2N06	Holder, LED (1)
23	SFUMBD2N07	Strobe (1)
24	SFKTBD2N04	Knob, Speed Adjuster (1)
25	SFAUBD2N01	Bottom Cover (1)
26	SFQCBD2N01	Spring, Insulator (4)
27	SFGABD2N01	Insulator (4)
28	SFDJBD2N01	Jack, Output (1)
29	SFDJBD2N02E	Connector Ass'y (5P) (1)
30	SFACBD2N011	Cover (1)
	Except for [PA, PE] [PC, XA]	
31	SFNUZBD2N01	Rubber Cushion (1)
TONARM PARTS		
41	$\text{\textcircled{O}}$ SFPAMBD201A	Tonearm (Silver Type) (1)
41	$\text{\textcircled{K}}$ SFPAMBD202A	Tonearm (Black Type) (1)
42	SFKUZ15R01	Tonearm Rest (1)
43	$\text{\textcircled{O}}$ SFGK170-01	Cap (Silver Type) (1)
43	$\text{\textcircled{K}}$ SFGK171F01	Cap (Black Type) (1)

Ref. No.	Part. No.	Description	
44	SFKKBD2N02	Plate, Cancellor	(1)
45	SFXJBD2N51	Shaft, Arm Lift	(1)
46	SFUMBD2N51	Arm Lift	(1)
47	SFUPBD2N51E	Arm Base	(1)
48	SFGZZ15R02	Cap	(2)
49	SFQAZ15R53	Spring	(1)
50	SFUPBD2N52E	Plate, Pick-up Mounting	(1)
51	SFQHZ15R55	Spring	(1)
52	SFQHZ15R51	Spring	(1)
53	SFUMZ15R57	Stopper	(1)
54	EPC-P28S	★Cartridge	(1)
[PA, PE] [PC]			
54 [other]	EPC-P30S	★Cartridge	(1)
55	EPC-28CS	★Stylus	(1)
[PA, PE] [PC]			
55 [other]	EPC-30CS	★Stylus	(1)
56	SFCNC05101	Cover, Stylus	(1)
[PA, PE] [PC]			
56 [other]	SFCNC03301	Cover, Stylus	(1)
AUTOMATIC MECHANISM PARTS			
60	SFUKBD2N51E	Mechanism Plate	(1)
61	SFTUN05N02A	Turntable Shaft	(1)
62	SFYB-5-32	Ball	(1)
63	SFUBZ15R51	Plate, Drive	(1)
64	SFQHZ15R54	Spring, Drive Plate	(1)
65	SFUMZ15R56	Pin	(5)
66	SFUMZ15R54	Switch Lever (A)	(1)
67	SFUMZ15R59	Switch Lever (B)	(1)
68	SFUMZ15R55	Switch Lever (C)	(1)
69	SFQHZ15R52	Spring	(1)
70	SFUMZ15R52	Lever, Actuating	(1)
71	SFQSZ15R51	Rod, Actuating	(1)
72	SFUGZ15R51	Main Gear	(1)

Ref. No.	Part. No.	Description	
73	SFURZ15R52	Link, Main Gear (A)	(1)
74	SFURZ15R51	Link, Main Gear (B)	(1)
75	SFUMZ15R61	Washer	(1)
76	SFUMZ15R51	Lever, Cueing	(1)
77	SFUMZ15R60	Cam, Cueing	(1)
78	SFQPZ15R53	Spring Plate	(2)
79	SFQHZ15R56	Spring Cueing	(1)
80	SFXWZ15R51	Washer	(3)
SCREWS AND WASHERS			
N1	XYN3+F12	Screw, ⊕3×12	(2)
N2	SFPEV0Q601	Screw, Cartridge	(1)
N3	XTV3+8G	Screw, ⊕3×8	(9)
N4	SFXWZ15R51	Washer	(1)
N5	SFXGQ06N02	Screw	(1)
N7	XTV3+30J	Screw, ⊕3×30	(1)
N8	SFXGQ34N02	Screw	(1)
N9	XTW3+10Q	Screw, ⊕3×10	(1)
N10	XTW3+14QFYR	Screw, ⊕3×14	(5)
N11	XWC3B	Washer, φ3	(1)
N12	XYE3+EJ8	Screw, ⊕3×8	(1)
N13	XTV3+16BFZ	Screw, ⊕3×16	(1)
N14	XUC3FY	Washer, φ3	(1)
ACCESSORIES			
A1	SFNUBD2S01	Instruction Book	(1)
[E, EH] [EB, EC]			
A1 [EK]	SFNUBD2G01	Instruction Book	(1)
A1	SFNUBD2X01	Instruction Book	(1)
[XL, XA]			
A1 [EG]	SFNUBD2R01	Instruction Book	(1)
A1	SFNUBD2P01	Instruction Book	(1)
[PA, PE] [PC]			
A1 [EF]	SFNUBD2F01	Instruction Book	(1)
A1 [Ei]	SFNUBD2I01	Instruction Book	(1)
A2	SFDHBD2N01	Output Cord	(1)
A3	SFDLJ02N11E	Ground Wire	(1)
A4	SFWE212-01	45 Adaptor	(1)

Ref. No.	Part. No.	Description	
A5 [XL]	△ SFDAC05L01	AC Cord	(1)
A5 [EK]	△ SFDAC05G02	AC Cord	(1)
A5 [XA]	△ SFDAC05X02	AC Cord	(1)
A5	△ SFDAC05N01	AC Cord	(1)
[PA, PE] [PC]			
A5 [other]	△ SFDAC05E02	AC Cord	(1)
A6 [XA]	△ SFDKI19118	Plug	(1)
only			
A7	△ QJP0603S	Adaptor	(1)
[PA, PE] [PC]			
only			
PACKING PARTS			
P1 [EF]	○ SFHPBD2C01	Carton Box (Silver Type)	(1)
P1	○ SFHPBD2M01	Carton Box (Silver Type)	(1)
[other]			
P1 [EF]	⊗ SFHPBD2F21	Carton Box (Black Type)	(1)
P1	⊗ SFHPBD2M21	Carton Box (Black Type)	(1)
[other]			
P2	SFHBD2N01	Pad, Left	(1)
P3	SFHBD2N02	Pad, Right	(1)
P4	SFHKBD2N01	Clamper, Turntable	(2)
P5	SFHZBD2N01	Clamper, Tonearm (Back)	(1)
P6	SFHZZ15R03	Clamper, Tonearm	(1)
P7	SFHZZ15R02	Clamper, Cord	(1)
P8	SFYF75A45	Polyethylene Sheet	(1)
P9	SFYH60×60	Polyethylene Bag, Unit	(1)
P10	SFYH52×50	Polyethylene Bag, Dust Cover	(1)
P11	SFYH17×16	Polyethylene Bag, Cord	(1)
P12	SFYF05A06	Polyethylene Bag, 45 Adaptor	(1)
P13	SFHZQ63M01	Pad, Weight	(1)