

Service Manual

SL-B2/K



Turntable System
SL-B2
(XA),(XG),(XGF),(XGB),
(XGE),(XAL),(E)
SL-B2K
(XA),(XG),(E)

- The models SL-B2 (XA) and SL-B2K (XA) are available in Asia, Latin.
- America, Middle East and Africa only.
- The models SL-B2 (XG) and SL-B2K (XG) are available in European only.
- The model SL-B2 (XGF) is available in France only.
- The model SL-B2 (XGB) is available in Belgium only.
- The model SL-B2 (XGE) is available in United Kingdom only.
- The model SL-B2 (XAL) is available Australia only.
- The models SL-B2 (E) and SL-B2K (E) are available in Scandinavia only.
- SL-B2 is of silver finish.
- SL-B2K is of black finish.

SPECIFICATIONS Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

General

Power supply: ~110-120/220-240V, 50 or 60 Hz
Power consumption: 3W
Dimensions: 43.0 x 13.0 x 37.5 cm
(W·H·D) (16-59/64" x 5-7/64" x 14-49/64")
Weight: 4.5 kg (9.9 lb.)

Turntable section

Type: Automatic turntable
Auto return
Auto stop
Belt drive
Drive method: Frequency Generator Servo
Motor: DC motor
Turntable platter: Aluminum die-cast. 30.4 cm
Turntable speeds: 33-1/3 rpm and 45 rpm
Pitch control: 6% adjustment range
Wow and flutter: 0.045% WRMS (JIS C5521)
±0.06% peak
(IEC 98A Weighted)
Rumble: -70 dB (IEC 98A Weighted)

Tonearm section

Type: Universal tonearm
Effective length: 230 mm (9-1/16")
Overhang: 15 mm (19/32")
Friction: Less than 7mg
(lateral, vertical)
Effective mass: 12g (without cartridge)

Tracking error angle: Within 2°32' at the outer groove of 30 cm (12") record
Within 0°32' at the inner groove of 30 cm (12") record
22°

Offset angle:
Stylus pressure adjustment range: 0-2.5 g
Applicable cartridge weight range: 6-9.5 g
14.5-17.5 g (including headshell)
Headshell weight: 8 g

Cartridge section

Model No. EPC-270C
Type: Moving magnet
Frequency response: 20 Hz to 25 kHz
20 Hz to 15 kHz ±2 dB
3.2 mV at 1 kHz
5 cm/s. zero to peak lateral velocity
Output voltage: [9 mV at 1 kHz 10 cm/s. zero to peak 45° velocity DIN 45 500)]
Channel separation: 25 dB at 1 kHz
Channel balance: Within 2 dB at 1 kHz
Compliance (dynamic): 10 x 10⁻⁶ cm/dyne at 100 Hz
Stylus pressure: 1.75 ±0.25 g (17.5 ±2.5mN)
Load impedance: 47 kΩ to 100 kΩ
Weight: 6.0 g (cartridge only)
Replacement stylus: ESP-270SD

TECHNISCHE DATEN Änderungen der technischen Daten vorbehalten.
Die angegebene Gewichts- und Abmessungsdaten sind ungefähre Werte.

Allgemeine Daten

Stromversorgung: ~110-120/220-240 V. 50/60 Hz Wechselstrom
Leistungsaufnahme: 3W
Abmessungen (B·H·T): 43.0 x 13.0 x 37.5 cm
Gewicht: 4.5 kg

Plattenspieler

Typ: Automatischer Plattenspieler
Rückführautomatik
Stopautomatik
Riemenantrieb
Antrieb: Frequenzgenerator-Servo-
Motor: Gleichstrommotor
Plattenteller: Aluminium-Spritzguß, 30,4 cmφ

Plattenteller-Drehzahlen: 33-1/3 und 45 U./min

Drehzahl-Feinregulierung: 6% Einstellbereich
Gleichlaufschwankungen: 0,045% WRMS (JIS C5521)
±0,06% Spitze
(IEC 98A bewertet)

Rumpel-Fremdspannungsabstand: -70 dB (IEC 98A bewertet)

Tonarm

Typ: Universal-Tonarm
Effektive Länge: 230 mm
Überhang: 15 mm
Lagerreibung: Weniger als 7 mg
(horizontal, vertikal)
Effektive Masse: 12 g (ohne Tonabnehmer)

Spurfehlwinkel: 2°32' bei der Einlaufrille einer 30 cm-Platte
0°32' bei der Auslaufrille einer 30 cm-Platte
22°

Kröpfungswinkel:
Auflagekraft-Einstellbereich: 0-2,5 g
Zulässiger Tonabnehmer-Gewichtsbereich: 6-9,5 g
14-17,5 g (einschließlich Tonarmkopf)

(mit Zusatzgewicht): 3-6,5 g
10,5-14 g (einschließlich Tonarmkopf)
Tonarmkopf-Gewicht: 8 g

Tonabnehmer

Modell-Nummer: EPC-270C
Typ: Magnetischer Tonabnehmer
Frequenzgang: 20 Hz bis 25 kHz
20 Hz bis 15 kHz ±2 dB
3,2 mV bei 1 kHz
5 cm/s. Null-zu-Spitze, lateral
[9 mV bei 1 kHz 10 cm/s. Null-zu-Spitze, 45° (DIN 45 500)]
Ausgangsspannung: 25 dB bei 1 kHz
Innerhalb 2 dB bei 1 kHz
Kanaltrennung: 25 dB bei 1 kHz
Kanalabweichung: Innerhalb 2 dB bei 1 kHz
Nachgiebigkeit (dynamisch): 10 x 10⁻⁶ cm/dyn bei 100 Hz
Auflagekraft: 1,75 ±0,25 g (17,5 ±2,5 mN)
Impedanz: 47 kΩ bis 100 kΩ
Gewicht: 6,0 g (ohne Tonarmkopf)
Ersatznadel: EPS-270SD

SPECIFICATIONS Les spécifications sont susceptibles d'être modifiées sans préavis.
Les poids et les dimensions donnés sont approximatifs.

Généralités

Alimentation: Alternatif 110-120/220-240V, 50 ou 60 Hz
Consommation: 3 W
Dimensions: 43,0 x 13,0 x 37,5 cm
(L · H · P)
Poids: 4,5 kg

Platine de lecture

Type: Platine automatique
Retour automatique
Arrêt automatique

Système d'entraînement:

Moteur: Entraînement à courroie
Servo-moteur C.C. à générateur de fréquences
Plateau de lecture: Aluminium moulé sous pression, 30,4 cm
33-1/3 et 45 t/p.m
Plage de réglage de 6%

Vitesses de rotation:

Réglage d'écart: 33-1/3 et 45 t/p.m
Pleurage et scintillement: 0,045% de valeur efficace (JIS C5521)
±0,06% de crête
(IEC 98A Pondéré)
-70 dB (IEC 98A Pondéré)

Ronflement:

Bras de lecture

Type: Bras de lecture universel
Longueur effective: 230 mm
Porte-à-faux: 15 mm
Frottement: Moins de 7 mg (latéral et vertical)
Masse réelle: 12 g (sans la cellule pick-up)

Angle d'erreur de piste: En deça de 2°32' au sillon extérieur d'un disque de 30 cm
En deça de 0°32' au sillon intérieur d'un disque de 30 cm
22°

Angle de décalage:
Plage de réglage de la pression d'appui: 0-2,5 g
Gamme du poids de la cellule pick-up utilisable: 6-9,5 g
14-17,5 g
(y compris la coque porte-cellule)
Poids de la cellule: 8 g

Cellule pick-up

No. du modèle: EPC-270C
Type: Aimant mobile
Réponse en fréquence: 20 Hz à 25 kHz
20 Hz à 15 kHz ±2 dB
3,2 mV à 1 kHz; 5 cm/s., zéro à vitesse latérale de crête
(9 mV à 1 kHz
10 cm/s., zéro à vitesse 45° de crête [DIN 45 500])
Tension de sortie: 25 dB à 1 kHz
Séparation de canal: En deça de 2 dB à 1 kHz
Equilibrage des canaux: 10 x 10⁻⁶ cm/dyne à 100 Hz
Elasticité (dynamique): 1,75 ± 0,25 gramme (17,5±2,5 mN)
Pression de la pointe de lecture: 47 kΩ to 100 kΩ
6,0 grammes (cellule seule)
Impédance de charge: 6,0 grammes (cellule seule)
Poids: 6,0 grammes (cellule seule)
Pointe de lecture de remplacement: ESP-270SD

CONTENTS

PARTS IDENTIFICATION	3	PARTS ARRANGEMENT DIAGRAM	9
FEATURES	3	SCHEMATIC DIAGRAM	10
HOW TO OPERATE	4	PRINTED CIRCUIT BOARD WIRING VIEW	11
DISASSEMBLY PROCEDURE	5	REPLACEMENT PARTS LIST	12
ADJUSTMENTS	5 ~ 7	EXPLODED VIEWS	13 ~ 14
TROUBLE SHOOTING	8	EXPLODED VIEWS	15

PARTS IDENTIFICATION

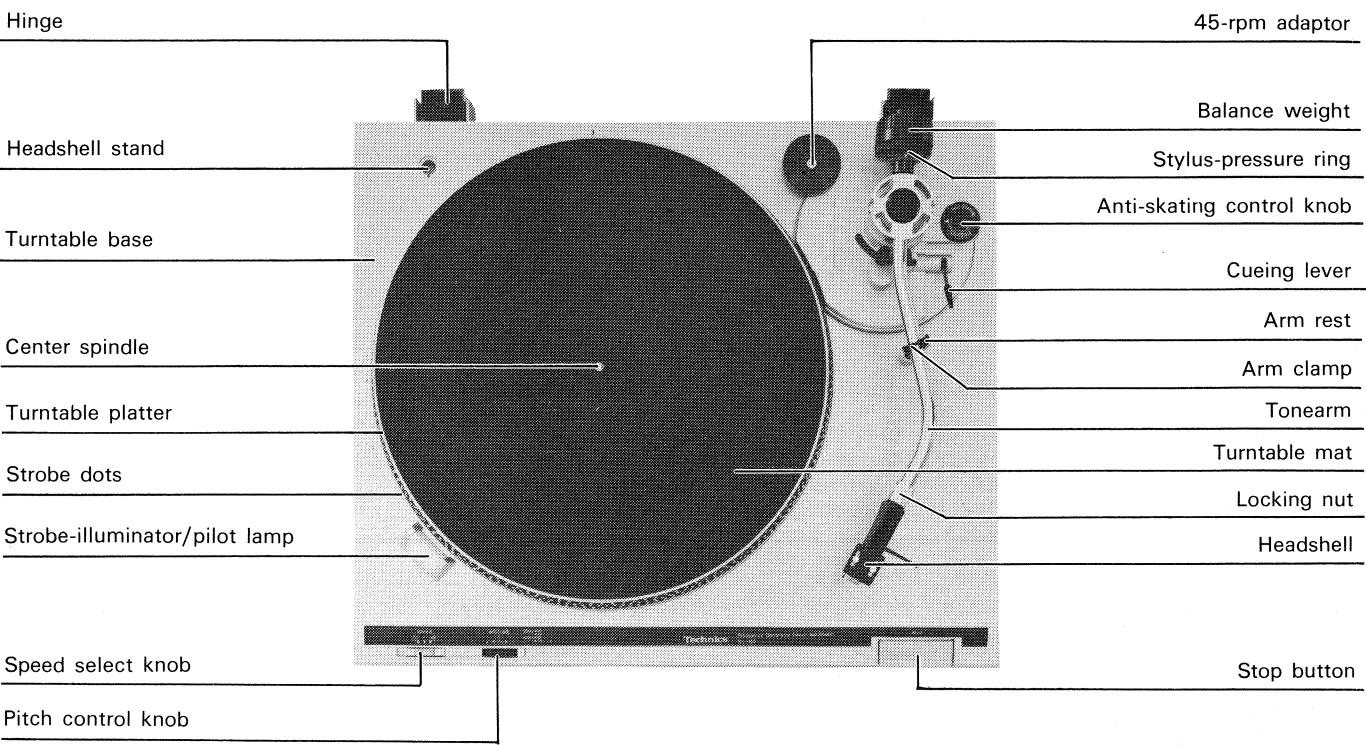


Fig. 1

FEATURES

- Front panel controls provide exceptional convenience
- “TNRC”* base material provides an acoustic shield
*“TNRC” Technics Non-Resonance Compound
- Electronic speed switching
- Pitch control with illuminated stroboscope
- Viscous-damped cueing
- Anti-skating control
- Hinged, detachable dust cover
- Automatic tonearm return

HOW TO OPERATE

1. Place a record on the turntable mat.
2. Set the speed select knob to the desired record speed. (See Fig. 2)

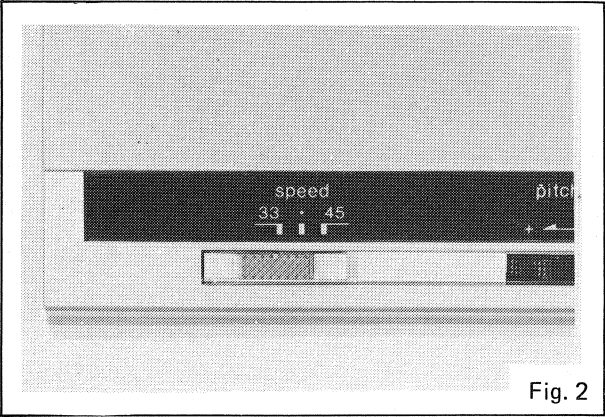


Fig. 2

3. Remove the stylus protector, if your cartridge has a detachable one.
4. Release the arm clamp.
5. Set the cueing lever to the up position. (See Fig. 3.)

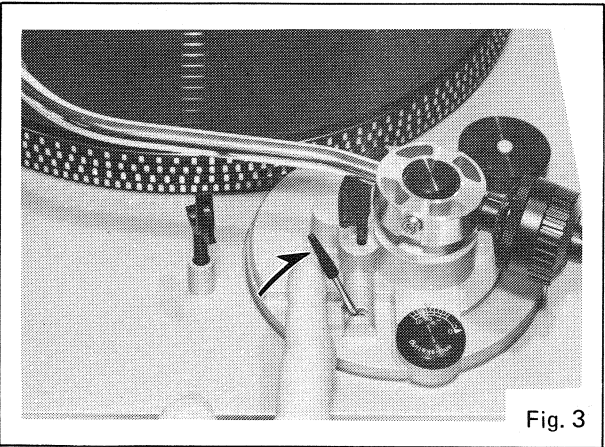


Fig. 3

6. Move the tonearm over the desired groove. The strobe-illuminator/pilot lamp will light up and the turntable platter will start to rotate.
7. Set the cueing lever to the down position. (See Fig. 4.) The tonearm will descend slowly onto the record and play will begin.

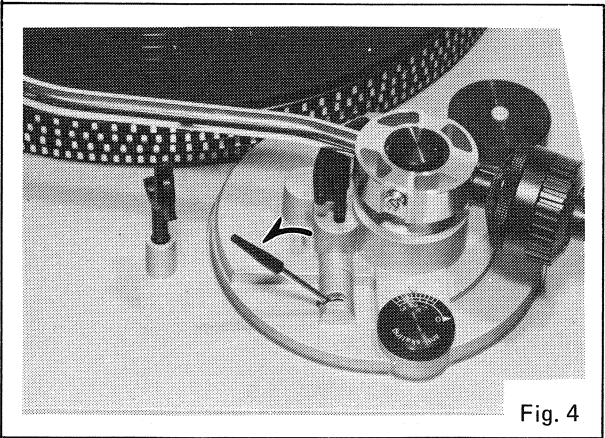


Fig. 4

8. When play is finished, the tonearm will automatically return to the arm rest (auto-return), and the turntable platter will stop rotation. The turntable platter will continue to rotate briefly due to its own inertia. If the unit is not to be used for some time, set the speed select knob to the neutral “●” position. Attach the stylus protector, if you have one, to guard the stylus tip from damage.

How to stop play

Push the stop button. (See Fig. 5.) The tonearm automatically returns to the arm rest, and the turntable stops rotating.

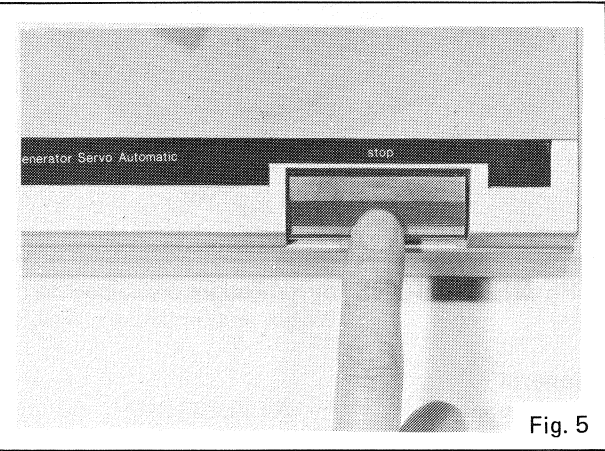


Fig. 5

How to suspend play

Set the cueing lever to the up position. The stylus tip of the cartridge will be lifted from the record.

When you play a 45-rpm record with a large center hole

Place the 45-rpm adaptor on the center spindle. Set the speed select knob to the “45” position.

■ DISASSEMBLY PROCEDURE

How to remove the bottom board (See Fig. 6)

- 1) Remove the head shell and turntable.
- 2) Secure the tonearm with the arm clumper.
- 3) Turn over the set taking care not damage dust cover.
- 4) Remove the 7 bottom setscrews (A).

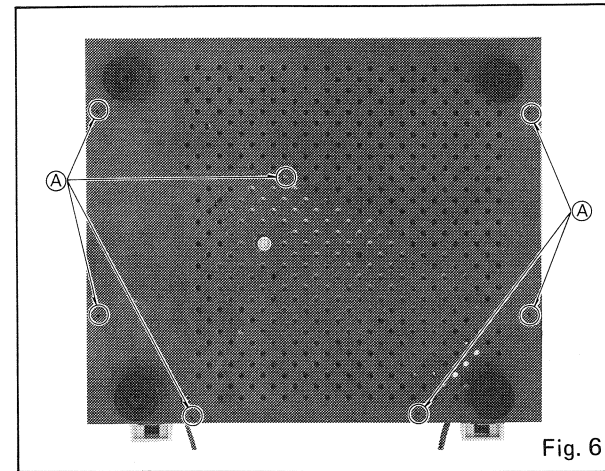


Fig. 6

Removal of automatic mechanism ass'y (See Fig. 7)

- 1) Remove the bottom board.
- 2) Remove the 5 setscrews (B) of the automatic mechanism ass'y.

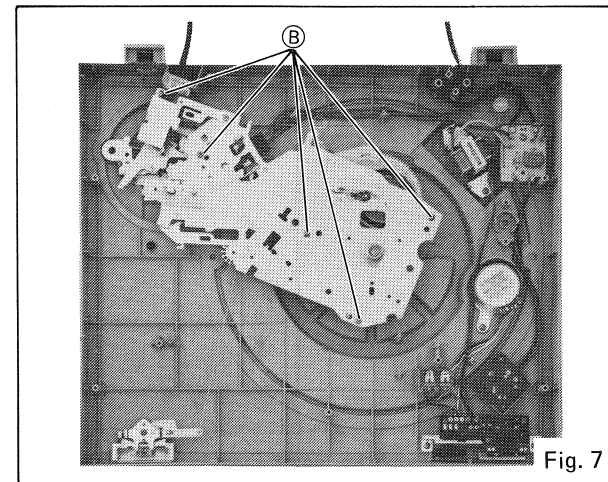


Fig. 7

How to remove the tonearm (See Fig. 8)

- 1) Remove the mechanism ass'y.
- 2) Disconnect the 5 leads from the arm (C).
- 3) Loosen the fixing plate ass'y setscrew with a hexagon wrench and then pull out the fixing plate ass'y (D).
- 4) Remove the tonearm washes (E) and (F). Then the tonearm can be removed.

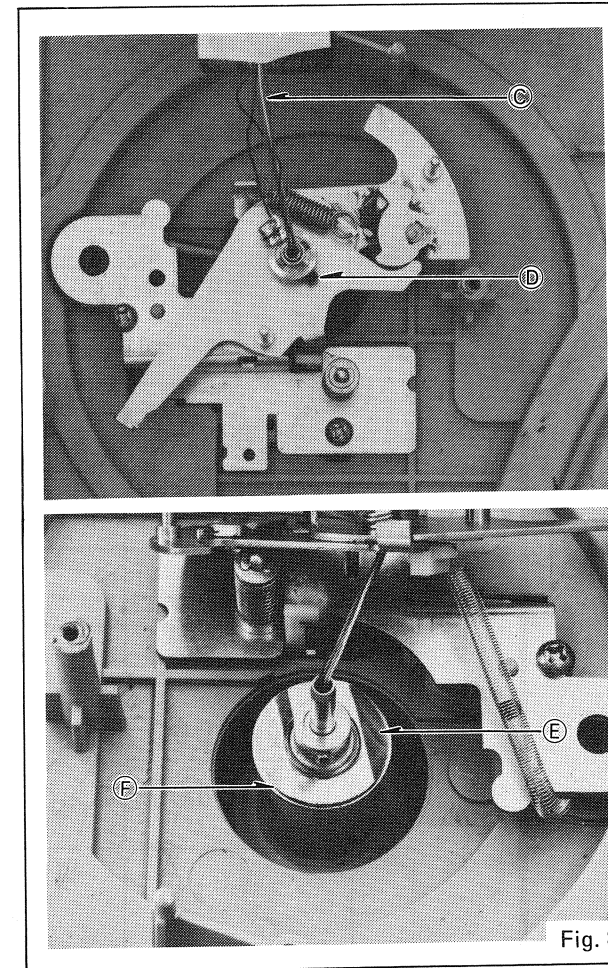


Fig. 8

■ ADJUSTMENTS

Adjustment of the arm-lift height (See Figs. 9 and 10.)

The arm-lift height (distance between the stylus tip and record surface when cueing lever is raised) has been adjusted at the factory before shipping to approximately 10 mm. If the clearance becomes too narrow or too wide, turn the adjustment screw clockwise or counterclockwise, while pushing the arm lift down.

Clockwise rotation

- distance between the record and stylus tip is decreased.

Counterclockwise rotation

- distance between the record and stylus tip is increased.

Note:

As the adjusting screw has a hexagonal head, be sure to make the adjustment while depressing the arm lift, or the screw will not move freely.

Also be sure that the hexagonal head retracts correctly into the arm lift when the latter is released.

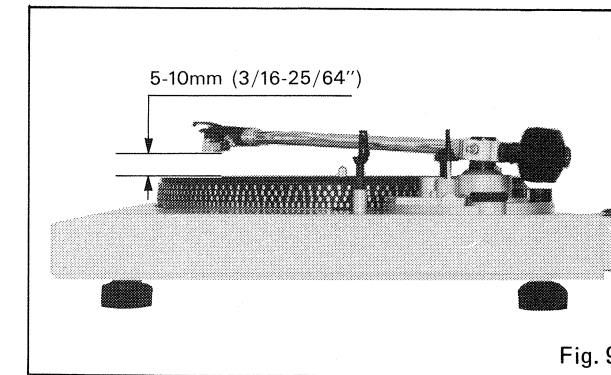


Fig. 9

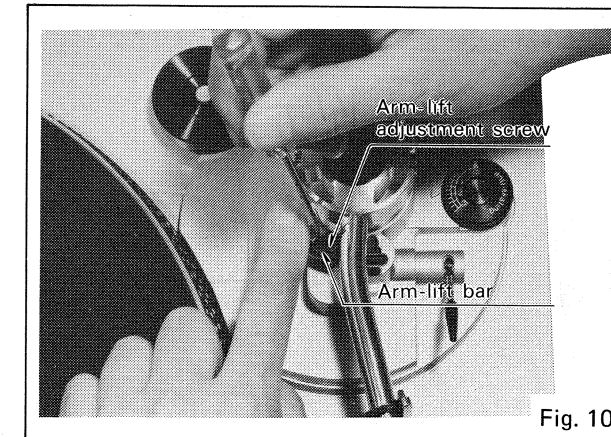


Fig. 10

Adjustment for automatic return position (See Fig. 11.)

(Remove the rubber cap.)

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

- rotate clockwise.

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

- rotate counterclockwise.

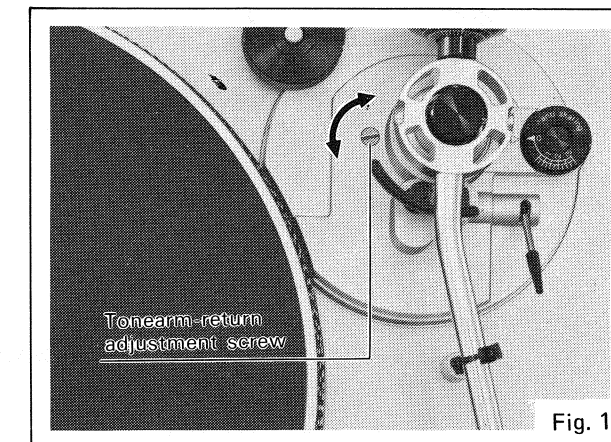


Fig. 11

Speed adjustment (with pitch-control knob) (See Fig. 12.)

Strobe dots are set on the rim of the turntable platter according to the power-line frequency and the speed of the records.

Make adjustment, referring to the strobe-dot indication.

1. Set the speed select knob to the speed to be adjusted.
2. Release the arm clamp and move the tonearm toward the record.

The strobe-illuminator/pilot lamp will light up and the turntable platter will rotate.

3. While turning the pitch-control knob either to the "+" side or "-" side, adjust so that the strobe dots of the turntable platter look as if they were stationary. This represents the correct speed.

"+" direction

The speed of the turntable platter will increase. Turn the knob in this direction if the strobe dots seem to be "falling back", i.e. seem to be moving counterclockwise. When the dots appear to be stationary, turntable speed is accurate.

"-" direction

The speed of the turntable platter will decrease. Turn the knob in this direction if the dots seem to be "running ahead", i.e. seem to be moving clockwise, until they appear stationary.

Moreover, the speed fine control knob can be used for both 33-1/3 rpm and 45 rpm.

Adjustment is to be made according to the selected speed (33-1/3 or 45 rpm.)

Note:

Strobe dot pattern

The strobe-illuminator/pilot lamp of this unit employs the standard commercial power source. The frequency of such power source, when actually measured, has a fluctuation of about 0.2%.

As such a fluctuation of the power source affects the strobe illuminator, the strobe dot pattern also seems to fluctuate to a certain extent. But the unit is not affected by these fluctuations of the power source, since a DC motor is employed.

In other words, rotation of the platter will be constant, and slight shifts in the movement of the dots simply reflect normal drift in the power-source frequency.

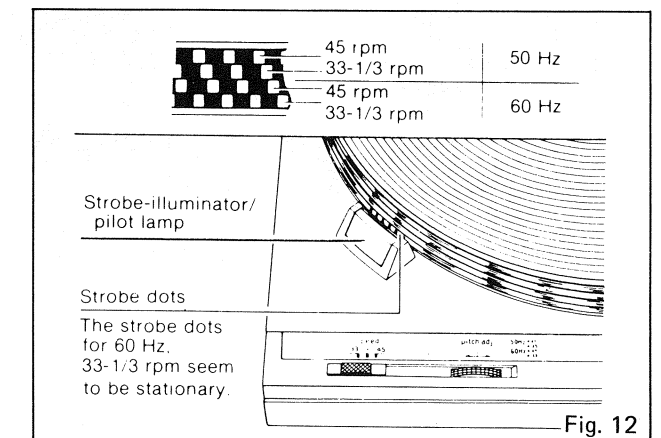


Fig. 12

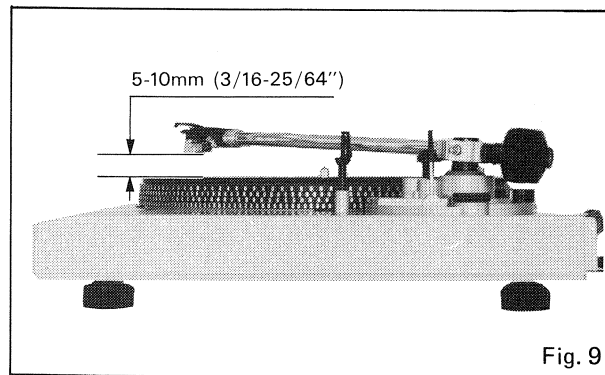


Fig. 9

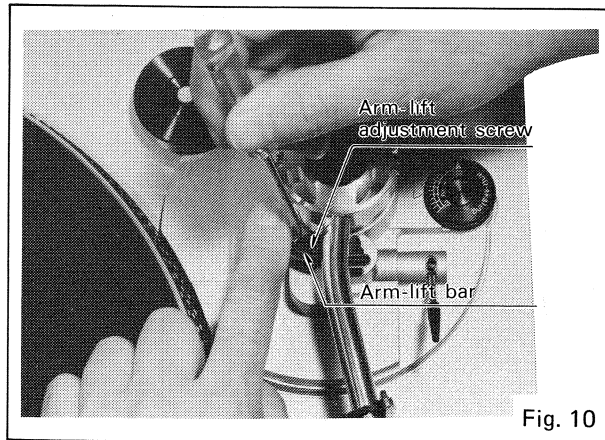


Fig. 10

Adjustment for automatic return position (See Fig. 11.)

(Remove the rubber cap.)

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

— rotate clockwise.

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

— rotate counterclockwise.

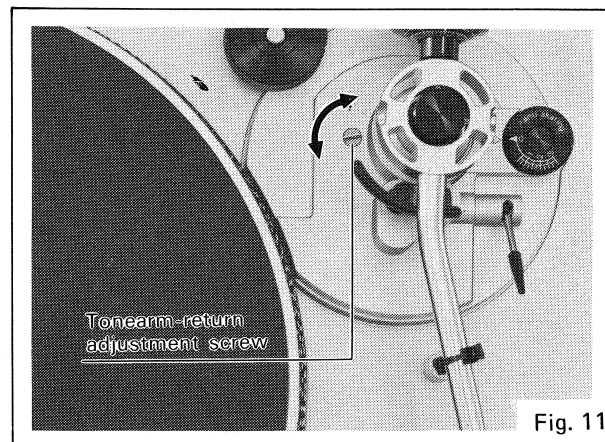


Fig. 11

Speed adjustment (with pitch-control knob) (See Fig. 12.)

Strobe dots are set on the rim of the turntable platter according to the power-line frequency and the speed of the records.

Make adjustment, referring to the strobe-dot indication.

1. Set the speed select knob to the speed to be adjusted.
2. Release the arm clamp and move the tonearm toward the record.
The strobe-illuminator/pilot lamp will light up and the turntable platter will rotate.
3. While turning the pitch-control knob either to the "+" side or "-" side, adjust so that the strobe dots of the turntable platter look as if they were stationary. This represents the correct speed.

"+" direction

The speed of the turntable platter will increase. Turn the knob in this direction if the strobe dots seem to be "falling back", i.e. seem to be moving counterclockwise. When the dots appear to be stationary, turntable speed is accurate.

"-" direction

The speed of the turntable platter will decrease. Turn the knob in this direction if the dots seem to be "running ahead", i.e. seem to be moving clockwise, until they appear stationary.

Moreover, the speed fine control knob can be used for both 33-1/3 rpm and 45 rpm.

Adjustment is to be made according to the selected speed (33-1/3 or 45 rpm.)

Note:

Strobe dot pattern

The strobe-illuminator/pilot lamp of this unit employs the standard commercial power source. The frequency of such power source, when actually measured, has a fluctuation of about 0.2%.

As such a fluctuation of the power source affects the strobe illuminator, the strobe dot pattern also seems to fluctuate to a certain extent. But the unit is not affected by these fluctuations of the power source, since a DC motor is employed.

In other words, rotation of the platter will be constant, and slight shifts in the movement of the dots simply reflect normal drift in the power-source frequency.

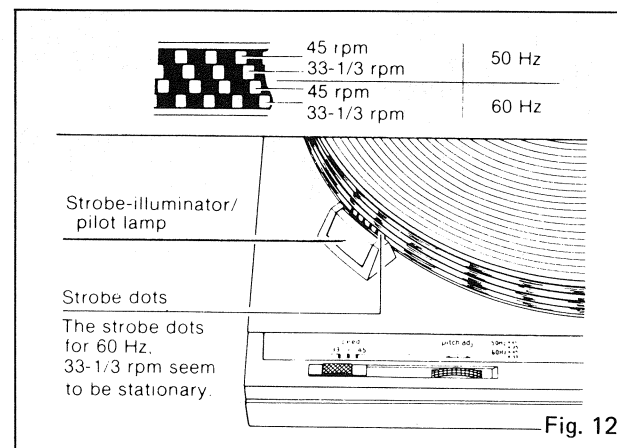


Fig. 12

■ JUSTIERUNGEN

Justierung der Tonarmlifthöhe (Vgl. Abb. 9 und 10.)

Die Tonarmlifthöhe, d.h. der Abstand zwischen Nadelspitze und Schallplattenoberfläche, wenn der Lift-Hebel angehoben ist, ist werkseitig auf ungefähr 10 mm eingestellt worden.

Falls der Abstand zu groß oder zu klein wird, drehen Sie die Justierschraube im Uhrzeigersinn oder Gegenuhrzeigersinn während Sie die Tonarmliftführung nach unten drücken.

Drehung im Uhrzeigersinn

— Der Abstand wird kleiner.

Drehung im Gegenuhrzeigersinn

— Der Abstand wird größer.

Anmerkung:

Da die Justierschraube einen Sechskantkopf hat, muß die Tonarmliftführung während des Justierens unbedingt gedrückt gehalten werden, damit sich die Schraube leicht drehen läßt.

Vergewissern Sie sich, daß der Sechskantkopf in die Tonarmliftführung zurückkehrt, wenn diese losgelassen wird.

Justierung des Abschaltpunktes der Automatik (Vgl. Abb. 11.)

(Die Gummikappe abnehmen)

Falls der Tonarm zu früh zurückkehrt.

— Im Uhrzeigersinn drehen.

Falls der Tonarm nach Erreichen der Auslaufrille nicht zurückkehrt.

— Im Gegenuhrzeigersinn drehen.

Drehzahl-Feineinstellung (mit dem Drehzahl-Feineinsteller) (Vgl. Abb. 12.)

Die Stroboskoppunkte sind auf dem Plattentellerrand entsprechend der Stromfrequenz und der Drehzahl der Schallplatten angebracht.

Richten Sie sich bei der Drehzahl-Feineinstellung nach dem Stroboskopbild.

1. Stellen Sie den Drehzahl-Wahlschieber auf die zu regulierende Drehzahl ein.
2. Lösen Sie die Tonarm-Arretierklammer, und schwenken Sie den Tonarm zur Schallplatte.
Die Stroboskoplampe/Einschaltkontrolle leuchtet auf, und der Plattenteller dreht sich.
3. Regulieren Sie durch Drehen des Einstellknopfes in "+" oder "-" Richtung solange, bis die Stroboskoppunkte den Anschein vermitteln, daß sie stillstehen. Dieser Zustand stellt die korrekte Drehzahl dar.

"+" Richtung

Die Drehzahl des Plattentellers erhöht sich. Drehen Sie den Knopf in diese Richtung, wenn die Stroboskoppunkte "zurückzufallen", d.h. im Gegenuhrzeigersinn zu fließen scheinen. Wenn die Punkte stillzustehen scheinen, ist die Geschwindigkeit korrekt.

"-" Richtung

Die Drehzahl des Plattentellers verringert sich. Drehen Sie den Knopf in diese Richtung, wenn die Stroboskoppunkte "vorauszufliegen", d.h. im Uhrzeigersinn zu fließen scheinen. Regulieren Sie, bis sie stillzustehen scheinen.

Der Drehzahl-Feineinsteller kann zudem für beide Drehzahlen, 33-3/1 und 45 U/min, benutzt werden.

Die Feineinstellung wird entsprechend der gewählten Drehzahl (33-1/3 oder 45 u/min) vorgenommen.

Anmerkung:

Stroboskoppunktemuster

Die Stroboskoplampe/Kontrolllampe dieses Gerätes arbeitet mit normalem Netzstrom. Die Netzfrequenzschwankungen liegen in einem Bereich von ungefähr ±0,2%.

Da eine solche Netzschwankung die Stroboskoplampe beeinflusst, scheint das Punktemuster auch zu einem gewissen Grad zu fließen. Die Drehzahl des Plattentellers wird jedoch durch diese Schwankung nicht beeinflusst, da ein Gleichstrommotor den Plattenteller antreibt. Anders ausgedrückt, die Umdrehungsgeschwindigkeit des Plattentellers bleibt konstant, und die geringfügige Bewegung der Stroboskoppunkte entspricht lediglich der normalen Schwankung der Netzfrequenz.

■ REGLAGES

Mise au point de la hauteur de l'élévateur du bras (Voir Figs. 9 et 10.)

La hauteur de l'élévateur du bras (distance entre l'extrémité de la pointe de lecture et la surface du disque lorsque le levier de relevage du bras est soulevé) a été réglée en usine avant son départ sur une valeur approximative de 10 mm. Si l'écartement devient trop étroit ou trop large, tourner la vis de réglage dans le sens des aiguilles d'une montre ou en sens inverse, tout en abaissant l'élévateur du bras.

Rotation dans le sens des aiguilles d'une montre.

— La distance entre la surface du disque et l'extrémité de la pointe de lecture diminue.

Rotation dans le sens contraire des aiguilles d'une montre.

— La distance entre la surface du disque et l'extrémité de la pointe de lecture augmente.

Nota:

Comme la vis de réglage possède une tête hexagonale, s'assurer d'effectuer la mise au point tout en abaissant l'élévateur du bras, sinon la vis ne bougera pas librement. Vérifier aussi que la tête hexagonale se retire correctement dans l'élévateur du bras quand ce dernier est libéré.

Mise au point pour une position de retour automatique (Voir Fig. 11.)

(Retirer le capuchon en caoutchouc.)

Dans le cas où le bras de lecture tend à revenir avant que l’audition ne soit terminée.

– Déplacer dans le sens des aiguilles d’une montre.

Dans le cas où le bras de lecture ne peut revenir en arrière après que le dernier sillon du disque ait été joué.

– Déplacer dans le sens contraire des aiguilles d’une montre.

Réglage de la vitesse (avec la manette de réglage de précision (Voir Fig. 12.)

Les points du stroboscope sont réglés sur le bord du plateau du tourne-disque en fonction de la fréquence de réseau et de la vitesse des disques.

Il faut effectuer le réglage de la vitesse en se référant aux indications des points du stroboscope.

- 1. Régler la manette sélectrice de vitesse sur la vitesse devant être mise au point.
- 2. Libérer le clip de retenue du bras et déplacer le bras de lecture vers le disque.

La lampe-témoin/illuminomètre stroboscopique s’éclairera et le plateau commencera à tourner.

- 3. Tout en tournant la manette de réglage de précision suffisamment, soit dans le sens “+” soit dans le sens “-”, ajuster de façon à ce que les points du stroboscope du plateau paraissent stationnaires.

Cet état représente la vitesse correcte.

Sens “+”

La vitesse du plateau augmentera. Tourner la manette dans cette direction si les points stroboscopiques sem-

blent “reculer”, c.-à-d. se déplacer dans le sens inverse des aiguilles d’une montre. Lorsque les points paraissent immobiles, la vitesse du plateau est exacte.

Sens “-”

La vitesse du plateau diminuera. Tourner la manette dans cette direction si les points stroboscopiques semblent “s’écouler vers l’avant”, c.-à-d. se déplacer dans le sens des aiguilles d’une montre, jusqu’à ce qu’ils paraissent stationnaires.

En outre, le bouton de réglage précis de vitesse peut être utilisé à la fois pour le 33-1/3 et le 45 t/p.m.

La mise au point se fait selon la vitesse choisie (33-1/3 t/p.m. ou 45 t/p.m.).

Nota:

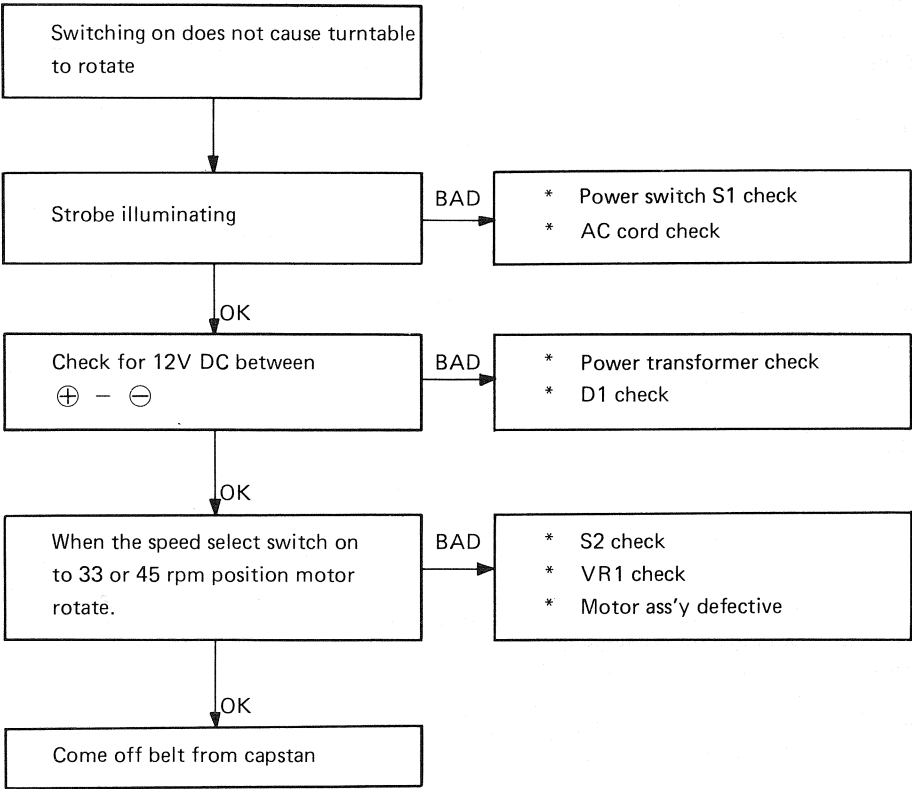
Image des points stroboscopiques.

La lampe-témoin/illuminomètre stroboscopique de cet appareil utilise une alimentation commerciale standard. La fréquence d’une pareille source d’énergie, lorsqu’elle est effectivement mesurée, montre une variation d’à peu près 0.2%.

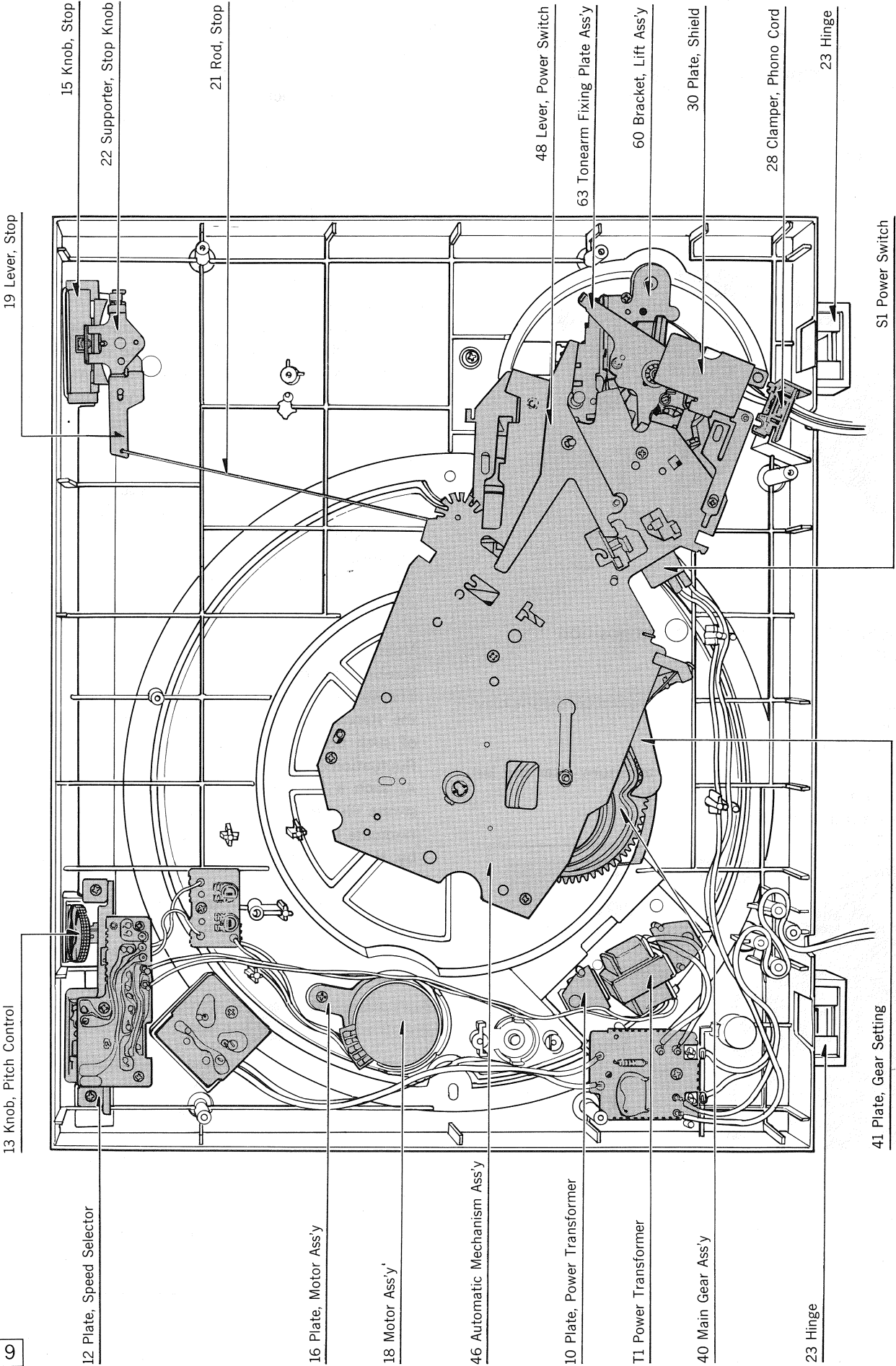
Comme une telle variation de la source d’énergie affecte l’illuminomètre stroboscopique, l’image des points stroboscopiques semble varier aussi sur une certaine étendue. Mais l’appareil n’est pas affecté par ces variatons de la source d’énergie, étant donné qu’un moteur à courant continu est utilisé.

En d’autres mots, la rotation du plateau restera constante et les légers déplacements dans le mouvement des points ne reflètent simplement qu’une déviation normale dans la fréquence de la source d’énergie.

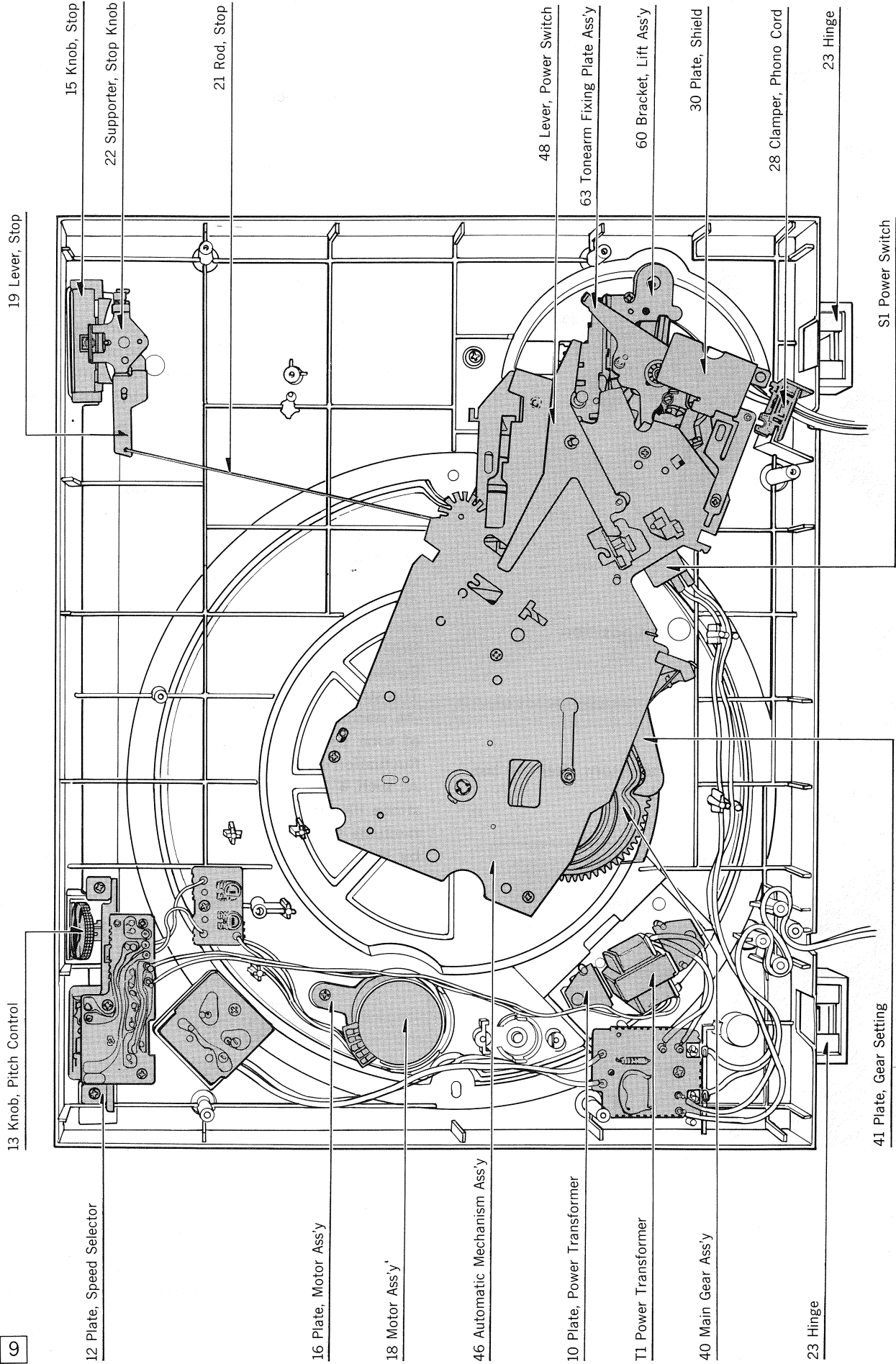
■ TROUBLE SHOOTING



■ PARTS ARRANGEMENT DIAGRAM

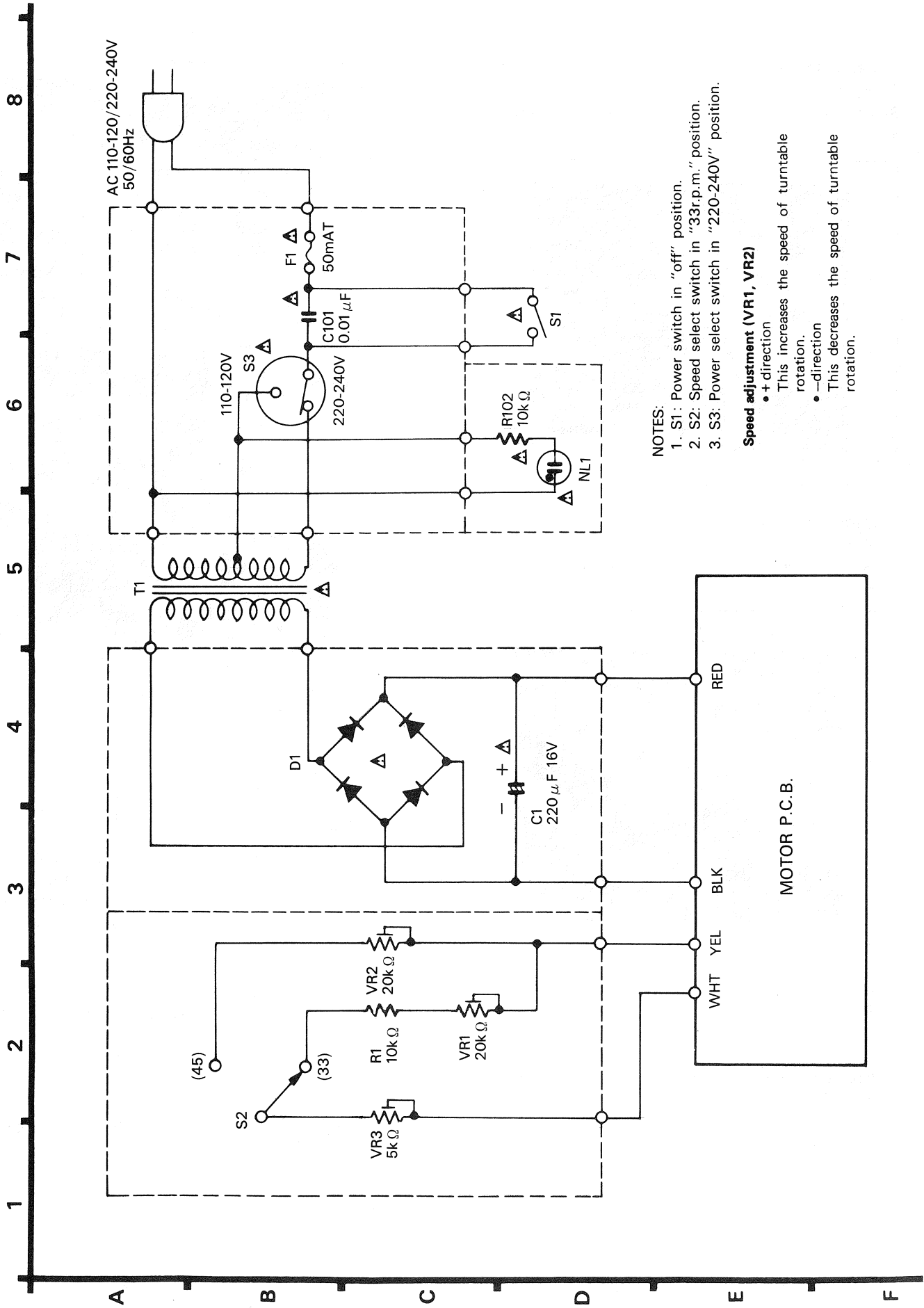


■ PARTS ARRANGEMENT DIAGRAM

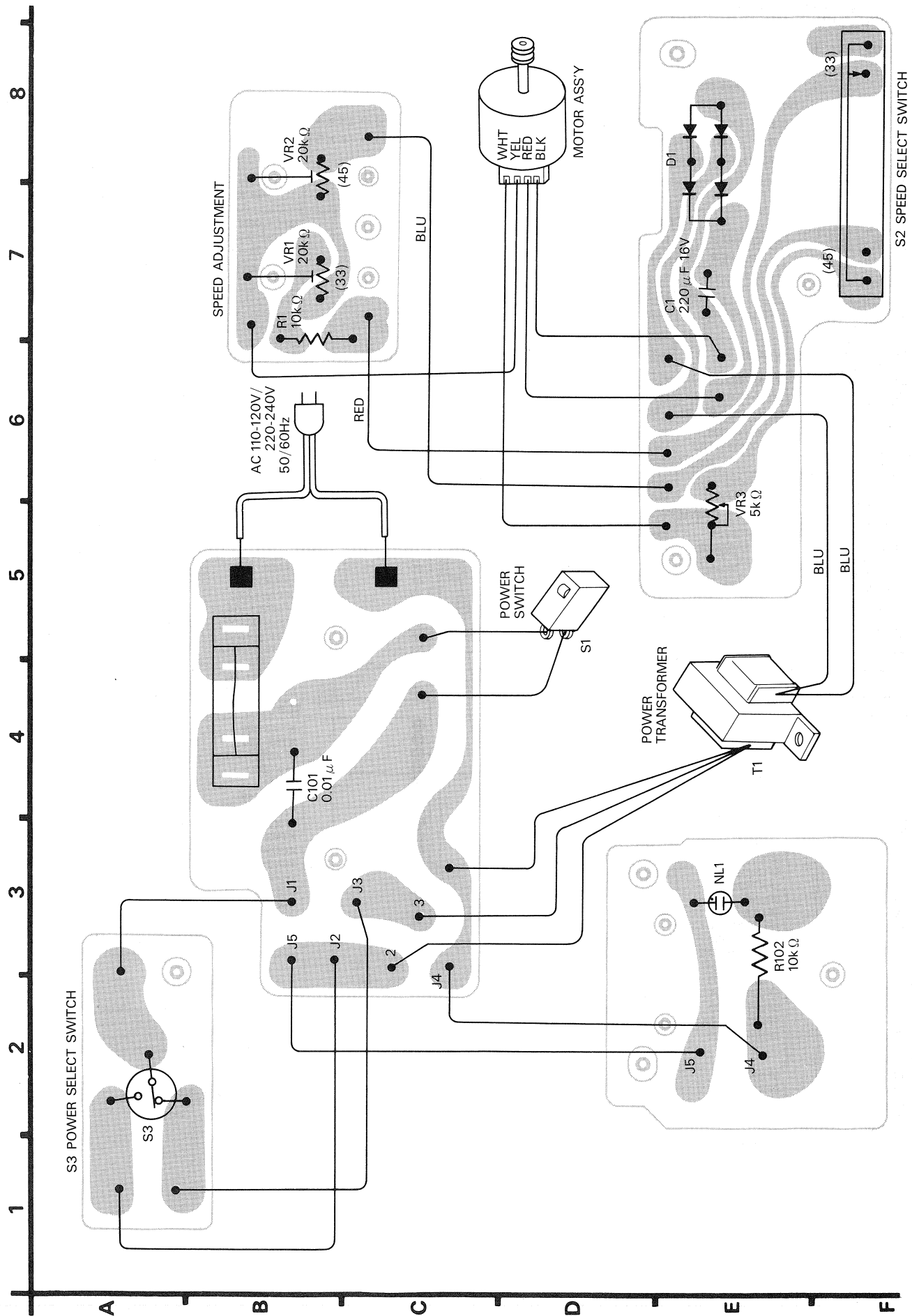


■ SCHEMATIC DIAGRAM

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



PRINTED CIRCUIT BOARD WIRING VIEW



■ REPLACEMENT PARTS LIST

NOTES: 1. Part numbers are indicated on most mechanical parts.

Please use this part number for parts orders.

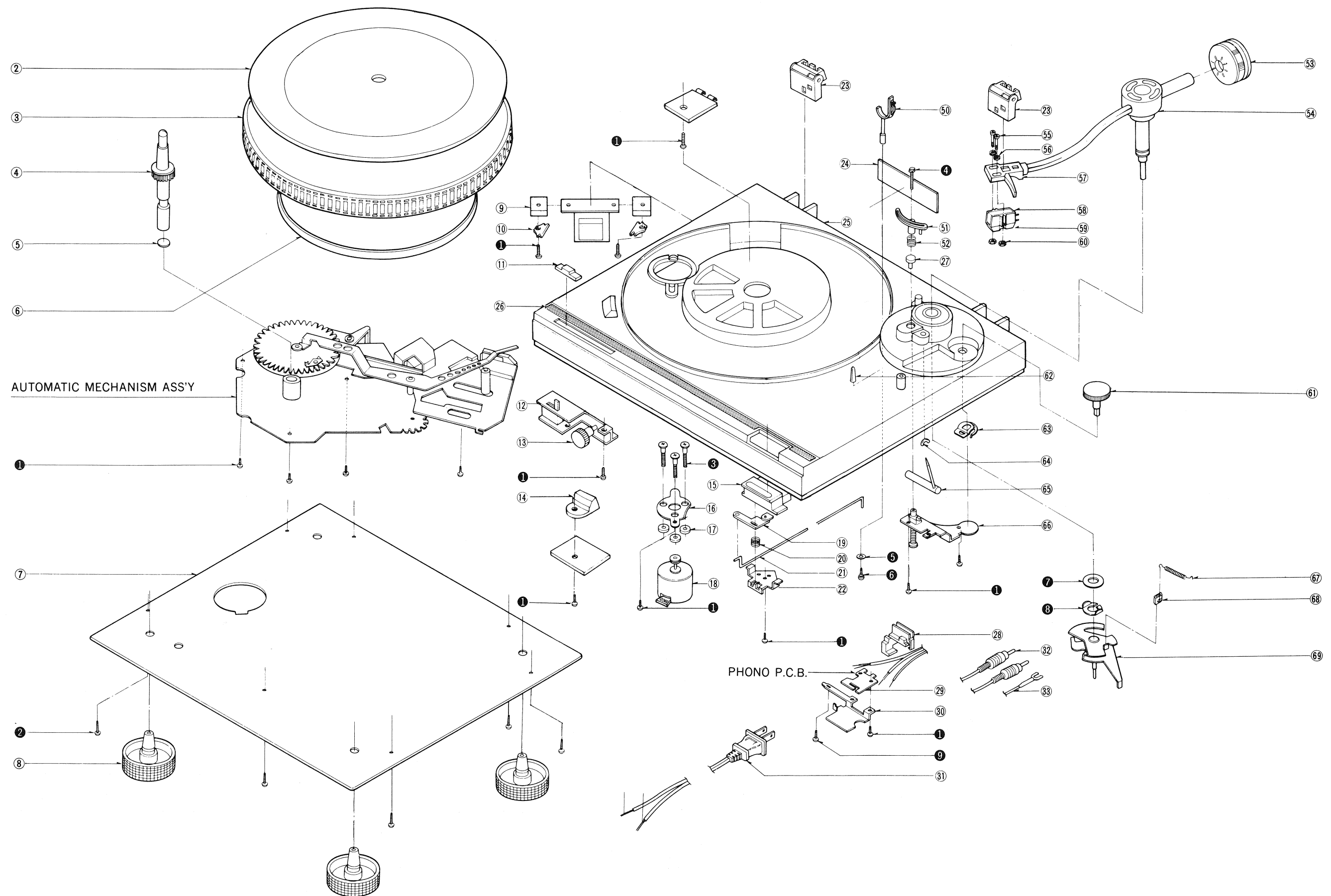
2. Δ indicates that only parts specified by the manufacturer be used for safety.

3. SL-B2 (XA) → [XA] SL-B2 (XGB) → [XGB] SL-B2K (XA) → [KXA]
 SL-B2 (XG) → [XG] SL-B2 (XGE) → [XGE] SL-B2K (XG) → [KXG]
 SL-B2 (XGB) → [XGB] SL-B2 (E) → [E]

Ref. No.	Part No.	Part Name & Description
DIODE		
D1	SVDS1RBA20	Rectifier
POWER TRANSFORMER		
T1	Δ SLTMP033D	Power Transformer
SWITCHES		
S1 [XA, XG, KXG, XGF, XGB, KXA]	Δ SFDSA764039	Switch, Power
S1 [CE, XGE, KE, XAL]	Δ V1A445	Switch Power
S2	Δ EVAH28S10AAY	Switch, Speed Select
S3	Δ SFDShXW13312	Switch, Power Voltage Select
VARIABLE RESISTORS		
VR1, 2	EVN31AA00B24	Variable Resistor, 20k Ω (B)
VR3	EVHX8AF15B53	Variable Resistor, 5k Ω (B)
RESISTORS		
R1	ERO25CKF1002	Metal film, 10k Ω , 1/4W, $\pm$ 1%
R102	ERG1ANJ103	Metal oxide, 10k Ω , 1W, $\pm$ 5%
CAPACITORS		
C1	ECEA1CS221	Electrolytic, 220 μ F, 16V
C101 [XA, XG, KXG, XGF, XGB, KXA]	ECQE2A472MZ	Polyester, 0.047 μ F, 125V, $\pm$ 20%
C101 [E, XGE, KE, XAL]	ECKDHS472MD	Ceramic, 0.0047 μ F, 400V, $\pm$ 20%
LAMP		
NL1	SFDNE2HU	Lamp, Neon
FUSE		
F1	XBA2C005TRO	Fuse, 50mA
CABINET and CHASSIS PARTS		
1	SFADD20-01E	Dust Cover
2	SFTGB20-01	Turntable Mat
3	SFTE301-02	Turntable
4	SFTJ202-01E	Shaft, Turntable
5	SFME301-01	Spacer, Shaft
6	SFGB321-1	Belt
7	SFAUB20-01	Bottom Board
8	SFGA202-01	Audio Insulator
9	SFGCB20X01	Cushion, Power Transformer
10	SFUPB20-03	Plate, Power Transformer
11	SFKTB20-02	Knob, Operation
12	SFUPB20-02	Plate, Speed Select Switch
13	SFKTB20-03	Knob, Pitch Control
14	SFUM212-07	Cover, Neon
15	SFKTB20-01	Knob, Stop
16	SFUPB20-04	Plate, Motor
17	SFGCB20-02	Rubber, Motor, Cushion
18	SFMHB20-01E	Motor Ass'y W/Capstan
19	SFUMD20-01	Lever, Stop Knob
20	SFQAD20-01	Spring, Stop Knob
21	SFUZB20-01	Rod, Stop
22	SFUPD20-03	Supporter, Stop Knob
23	SFAT301-01A	Hinge
24 [XA, XG, KXG, XGF, XGB, KXA]	SFNNB20X01	Name Plate
24 [E, KE]	SFNNB20S01	Name Plate
24 [XGE, XAL]	SFNNB20G02	Name Plate
25	SFACB20-01	Cabinet
25 [KE, KXG] only	SFACB20K01	Cabinet
26	SFKKB20-01	Ornament, Cabinet
27	SFGK170-01	Cap, Rubber
27 [KE, KXG] only	SFGK171F01	Cap, Rubber
28	SFUM212-08	Clamper, Phono Cord
29	SFDP212-02	P.C.B., Phono Cord
30	SFUP683R04	Plate, Shield
31 [XA, E, KE, XG, KXG, XGF, XGB, KXA]	RJA23ZC	AC Cord
31 [XGE]	RJA45ZC	AC Cord

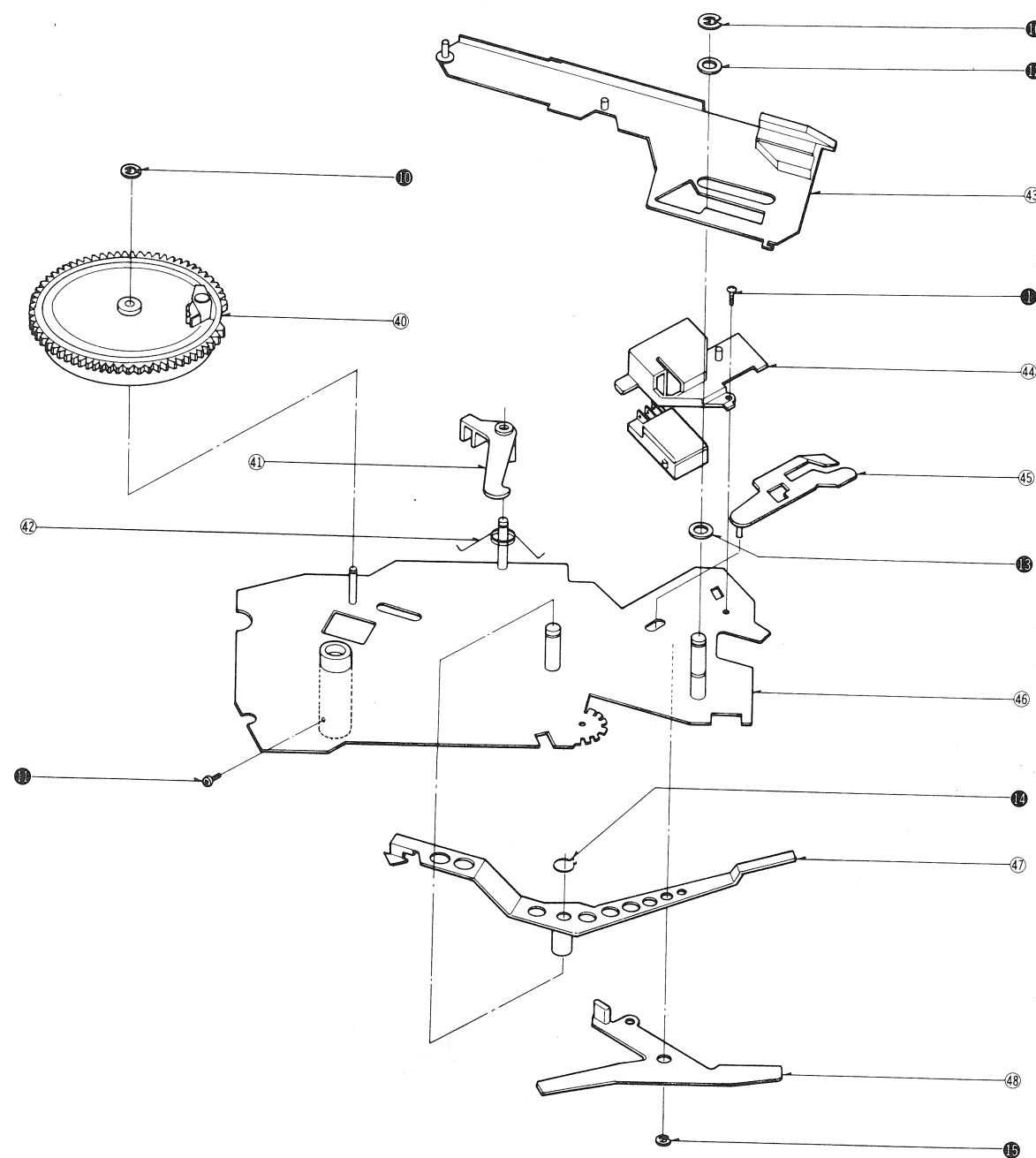
Ref. No.	Part No.	Part Name & Description
31 [XAL]	QFC1208M	AC Cord
32	SFDH212-01	Phono Cord
33	SFEL028-01E	Ground Wire
AUTOMATIC MECHANISM ASS'Y		
40	SFUG202-11E	Main Gear Ass'y
41	SFUM202-11	Supporter, Gear Setting
42	SFQS202-11	Spring, Gear Setting
43	SFUBH31-01E	Operating Plate Ass'y
44	SFUMQ20-18	Cover, Switch
45	SFUMQ20-16	Plate, Switch
46	SFUKH31-01E	Automatic Mechanism Ass'y
47	SFUCH31-01E	Actuating Plate Ass'y
48	SFUMQ20-17	Lever, Switch
ONEARM and ARM BASE		
50	SFKU212-01E	Arm Rest
51	SFPRT13004K	Lift Ass'y
52	SFQA829-03	Spring, Lift Ass'y
53	SFPWG21001K	Balance Weight
54	SFPAM21101A	Tonearm
55	SFPEV9801	Stylus
56	SFPEW9601	Washer, Cartridge
57	SFPCC21101A	Head Shell
58	EPC270CK	Cartridge
59	EPS270ED	Screw, Cartridge
60	SFPEN3302	Nut, Cartridge
61	SFPJK29001	Knob, Anti-skate Force Control
62	SFPAB12002	Knob, Cueing Lever
63	SFUP301-04	Supporter, Anti-skate Force Control
64	SFGZD20-02	Rubber, Cueing
65	SFPJL00101K	Lever, Cueing
66	SFUPH31-01A	Bracket, Lift Ass'y
67	SFQH301-01	Spring, Anti-skate Force Control
68	SFUM301-04	Supporter, Spring
69	SFUPH31-02A	Tonearm Fixing Plate Ass'y
SCREWS, WASHERS and CIRCLIPS		
①	XTV3+10B	Screw
②	XTS3+16B	Screw
③	SFXGB20-01	Screw
④	SFXGB29-1	Screw
⑤	XWG3	Washer
⑥	XTV3+14B	Screw
⑦	FXWH31-01	Washer
⑧	SFXWH31-01	Washer
⑨	XTN3+8B	Screw
⑩	XUC5FT	Circlip
⑪	XSN3+4S	Screw
⑫	SFXW623-2	Washer
⑬	SFXW130-13	Washer
⑭	XUB4FT	Circlip
⑮	XUC3FT	Circlip
ACCESSORIES		
A1 [XA, XG, KXG, XGF, XG, XGB, XAL, KXA]	SFNUB20X01	Instruction Book
A1 [E, KE]	SFNUB20S01	Instruction Book
A1 [XGE]	SFNUB20G01	Instruction Book
A2	SFWE212-01	Adaptor, 45r.p.m.
A3	SFYF05A06	Polyethylene Bag
A4 [XA, KXA] only	SFDKI19118	2P Plug
PACKING PARTS		
P1 [XA, E, XGE, XG, XGB, XAL]	SFHPB20M01	Carton Box
P1 [KE, KXG, KXA]	SFHPB20K01	Carton Box
P1 [XGF]	SFHPB20C01	Carton Box
P2	SFHHB20-01	Pad, Front
P3	SFHHB20-02	Pad, Rear
P4	SFHS320-01	Pad, Corner
P5	SFHDB20-01	Pad, Top
P6	SFHC212-02	Pad, Turntable
P7	SFYH60X60	Polyethylene Bag, Player Unit & Dust Cover
P8	SFYH40X45	Polyethylene Bag, Turntable
P9	SFYF05A06	Polyethylene Bag, 45r.p.m. Adaptor

■ EXPLODED VIEWS



■ EXPLODED VIEWS

Automatic Mechanism



— NOTE —

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.