

The home of the turntable

THE VINYL ENGINE®

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precision designed & engineered high fidelity record playing equipment and accessories

MICRO SEIKI
DD-24
OPERATING MANUAL

Parts Nomenclature

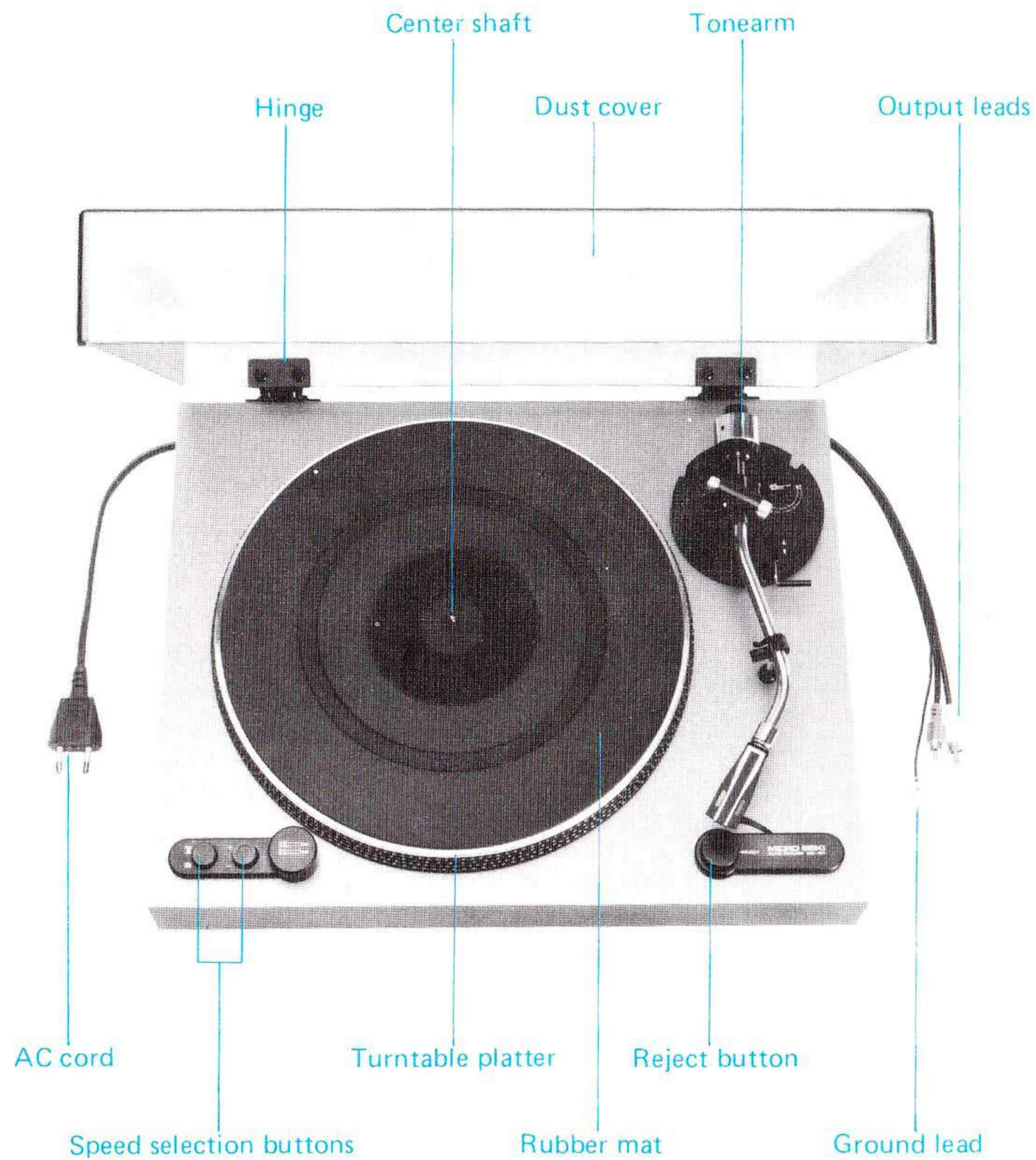


Photo 1

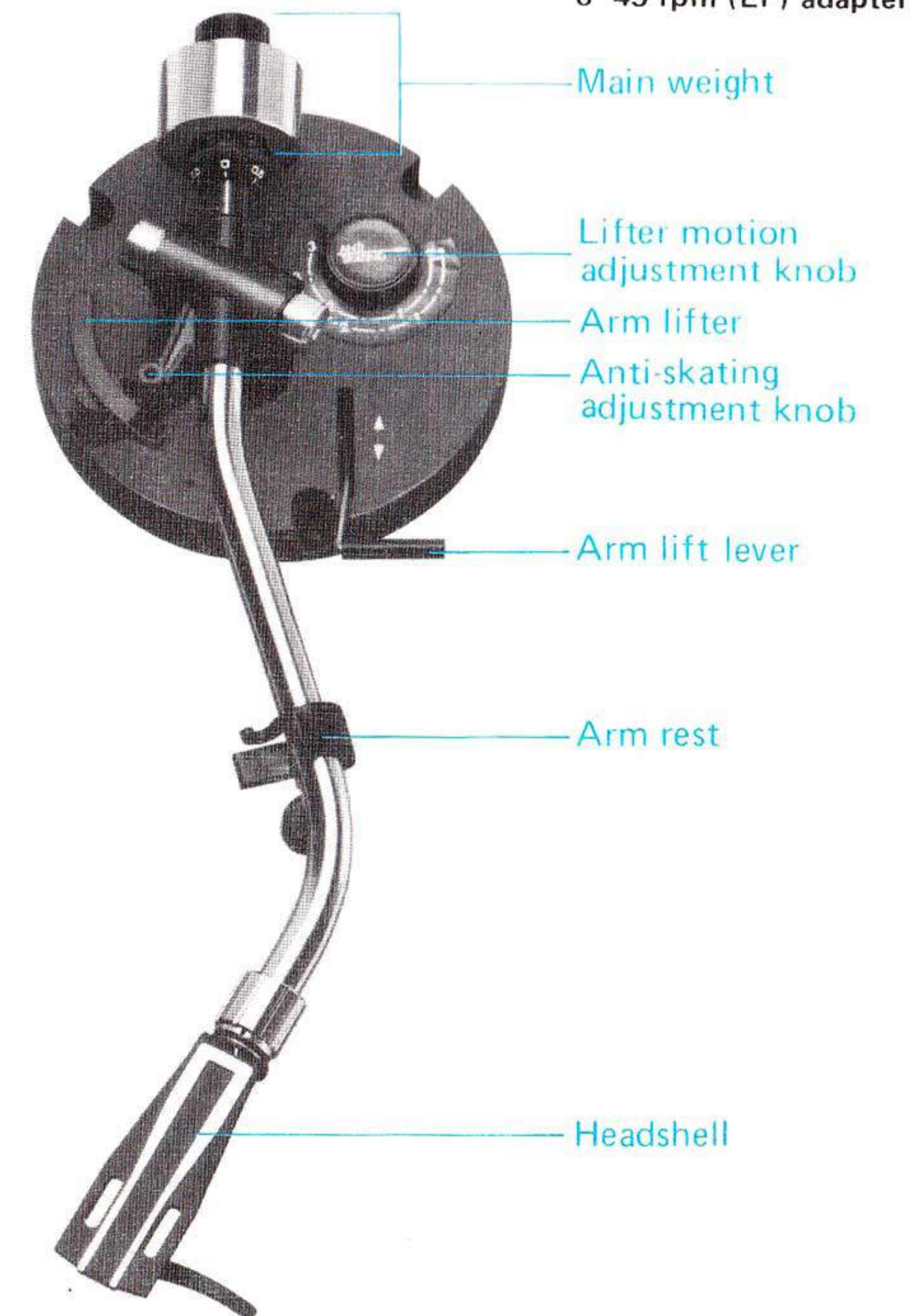


Photo 2

Accessory components

- 1 Platter
- 2 Rubber mat
- 3 Headshell
- 4 Main weight
- 5 Dust cover
- 6 45 rpm (EP) adapter

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD:
DO NOT EXPOSE THIS APPLIANCE TO
RAIN OR MOISTURE!

Turntable & Tonearm Assembly

● Turntable assembly

Mount the platter on the center spindle and place the rubber mat on the platter. (Never put on the power unless the platter is placed on the motor spindle.)

● Cartridge installation and adjustment

1. Installation

A cartridge is not necessarily included at the time of purchase.

Following the method illustrated in fig. 1, install a cartridge using screws of a suitable length.

(Insert the spacer between the cartridge and headshell in case the tonearm is not horizontal against the record surface, due to the cartridge height.)

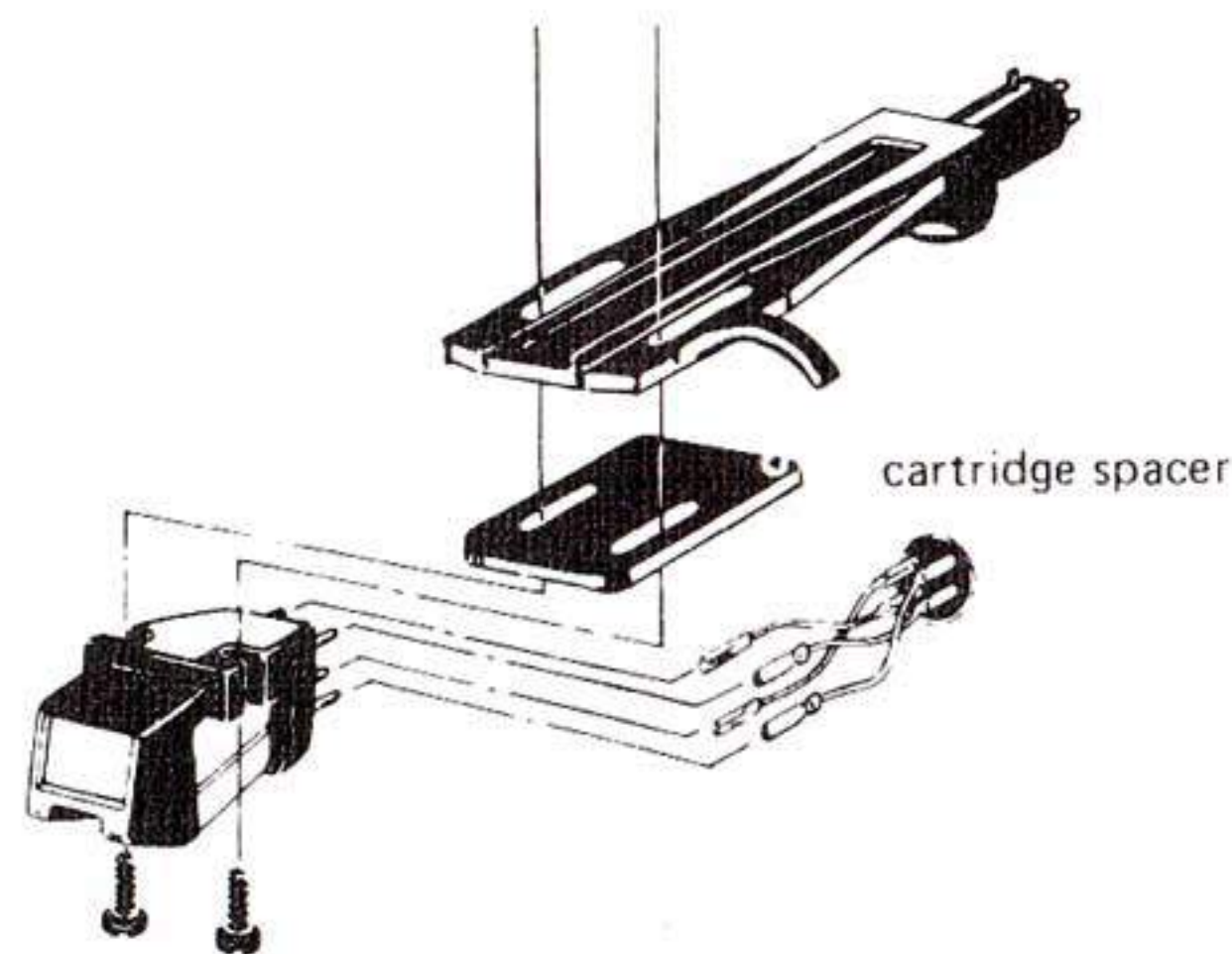


Fig. 1

2. Cartridge connection

Connect the headshell leads to the cartridge using tweezers as shown above. Take care to make the connections correctly, as error will lead to hum or output signal failure. The lead colors are as follows:

White	Left channel (+)
Blue	Left channel (—)
Red	Right channel (+)
Green	Right channel (—)

● Overhang adjustment

Overhang refers to the distance by which the stylus exceeds the center shaft of the platter. The turntable tonearm is designed so that tracking error is minimized when the overhang equals 15 mm. In order to obtain the proper overhang 15 mm, set the cartridge onto the shell as shown in the photo 3. Be sure the distance between the stylus tip and the shell end to become 52 mm. (See Fig. 2 & Photo 3)

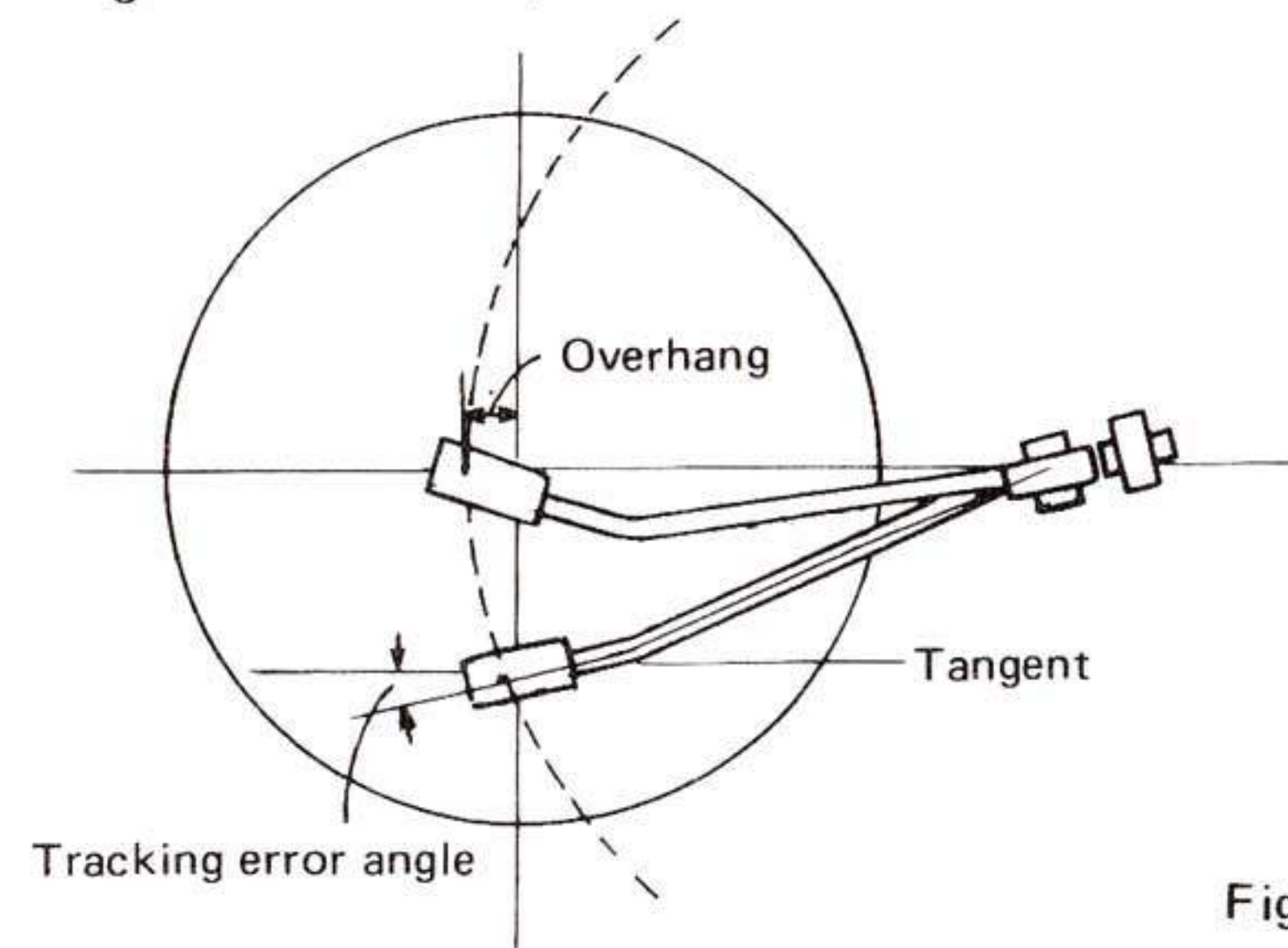


Fig. 2



Photo 3

● Tonearm assembly

Secure the tonearm in the arm rest. Then plug the main weight onto the end of the tonearm shaft, turning it in the direction shown by the arrow in Photo 4.

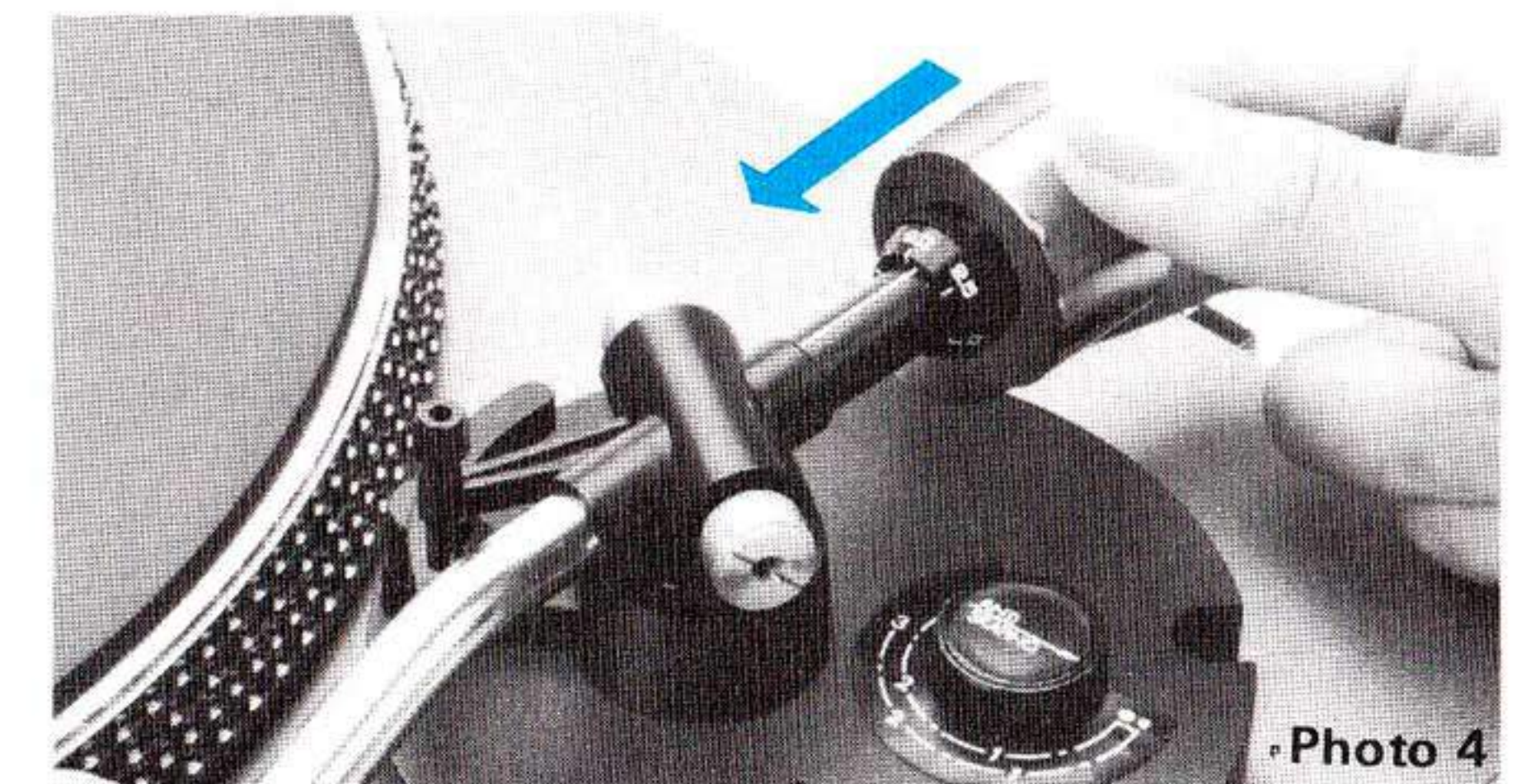


Photo 4

Next, without exerting undue pressure on the tonearm rotation section, insert the headshell into the front-end of the tonearm shaft and secure it by turning the lock nut. (Photo 5)

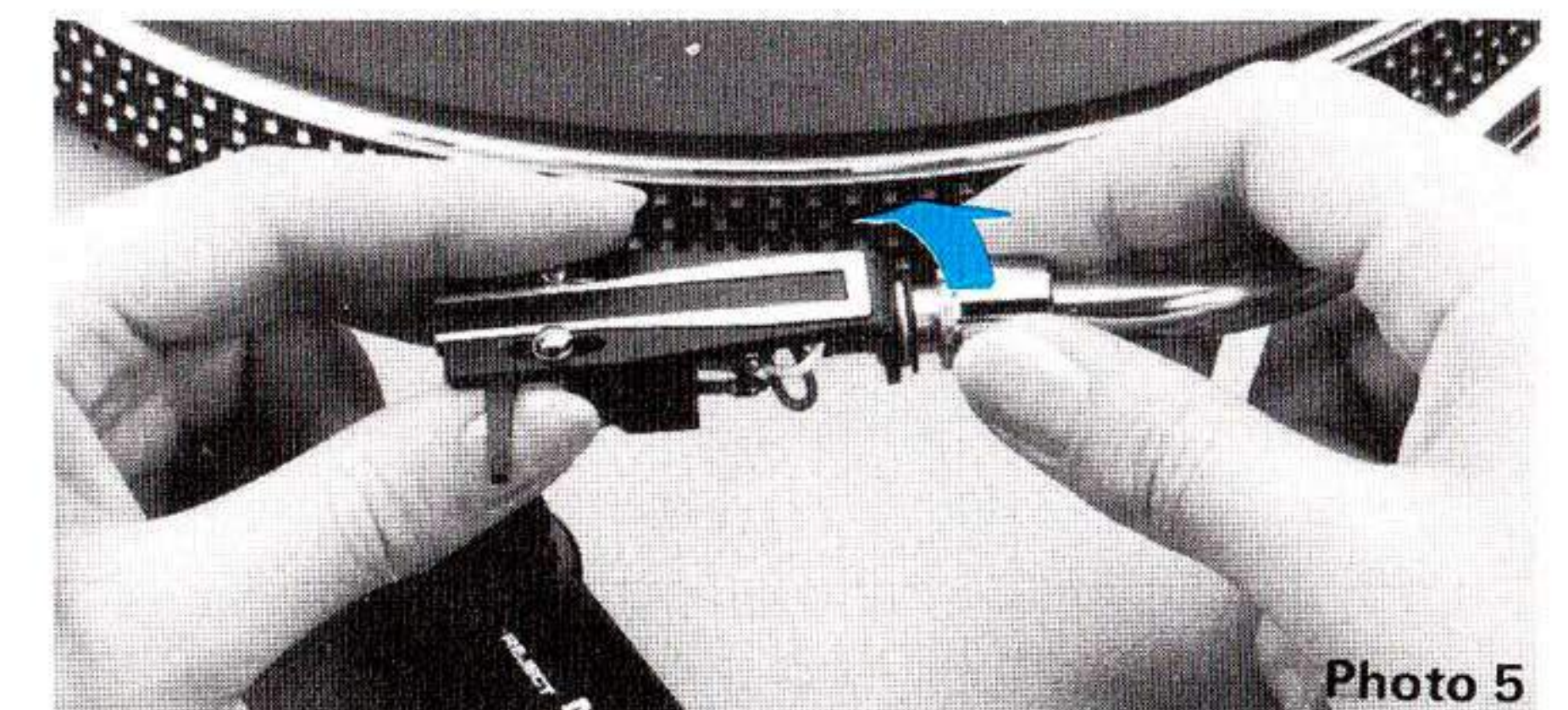


Photo 5

Tonearm Adjustment

● Horizontal balancing

1. Turn the anti-skating adjustment knob in the direction, as shown by the arrow, until it stops. (Photo 6)

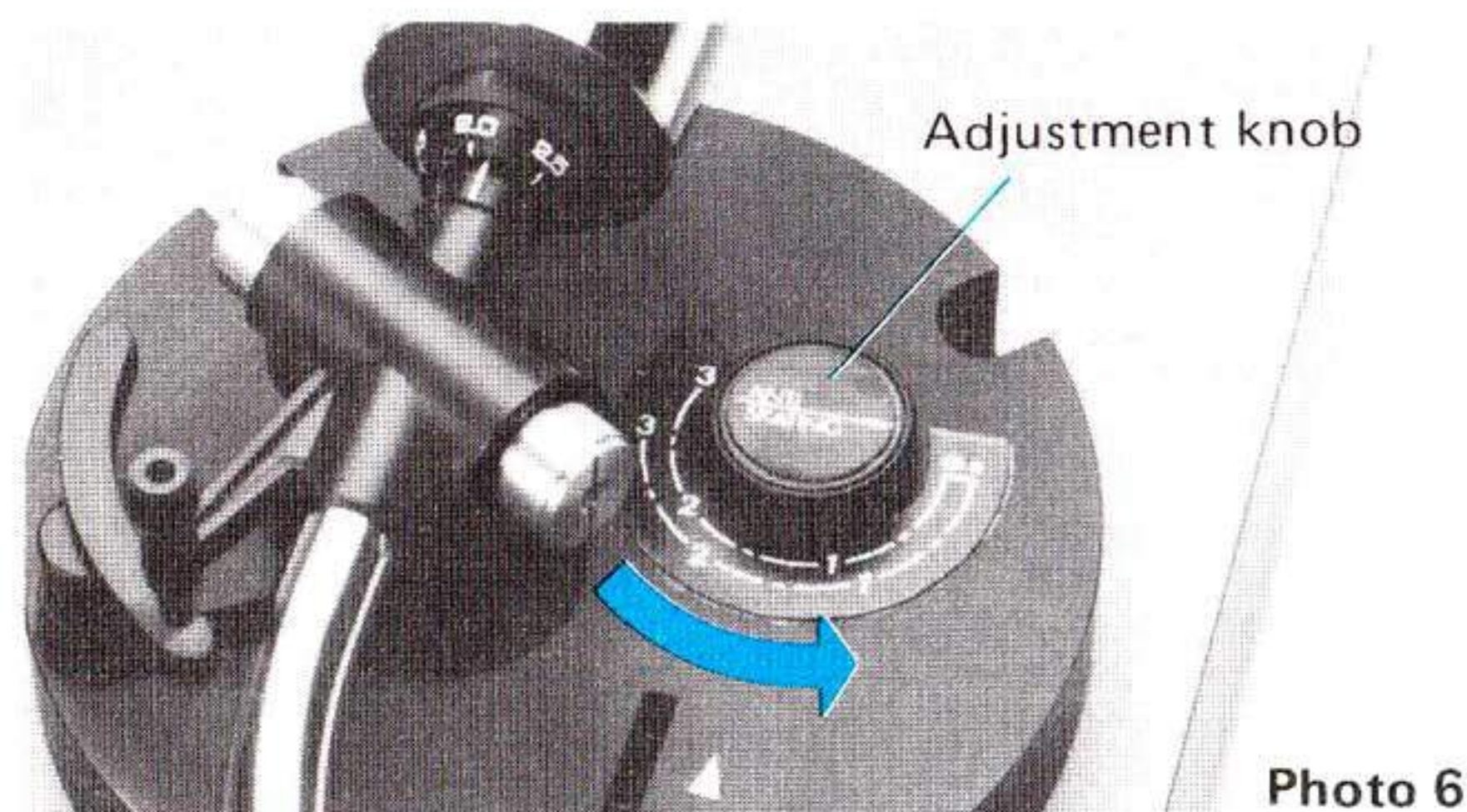


Photo 6

2. Down the arm lift lever. (▼down, ▲up).
3. Supporting the headshell and main weight as illustrated in Photo 7, turn the main weight, moving it backward or forward, until the proper balance is achieved.



Photo 7

4. Tonearm balance is achieved when (1) the main weight and the headshell cancel each other out; and (2) on release, the tonearm adapts the position shown in Fig. 3.

The example in Fig. 4 illustrates too much weight at the main weight end of the tonearm shaft. Turning the main weight in the direction indicated will achieve balancing.

On the other hand, the example in Fig. 5 shows

too little weight at the main weight end of the tonearm shaft. Turning in a clockwise direction as illustrated will rectify this imbalance.



Fig. 3



Fig. 4



Fig. 5

● Tracking force adjustment

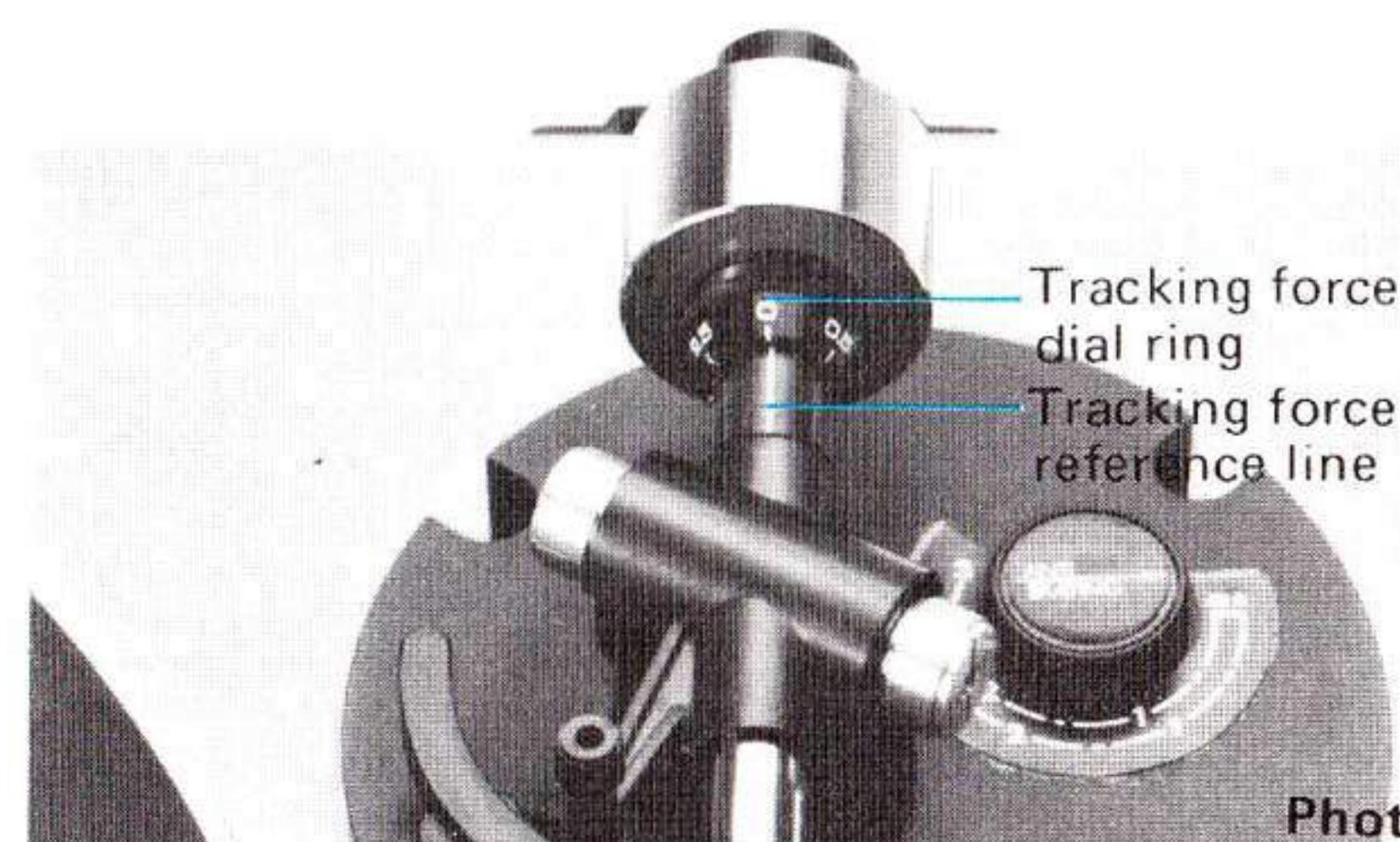


Photo 8

After balancing the tonearm, return it to the arm rest and raise the arm lifter. Turn only the tracking force ring and set the reference line to zero (Photo 9). Next, turn the rear part of the main weight in the arrow indicated direction (Photo 10) so that the tracking force reference line is aligned with the used cartridge stylus pressure, such as 2.0 scale indication for 2.0 gram recommended cartridge. The tracking force ring scale is direct reading in 0.5 gram increments.

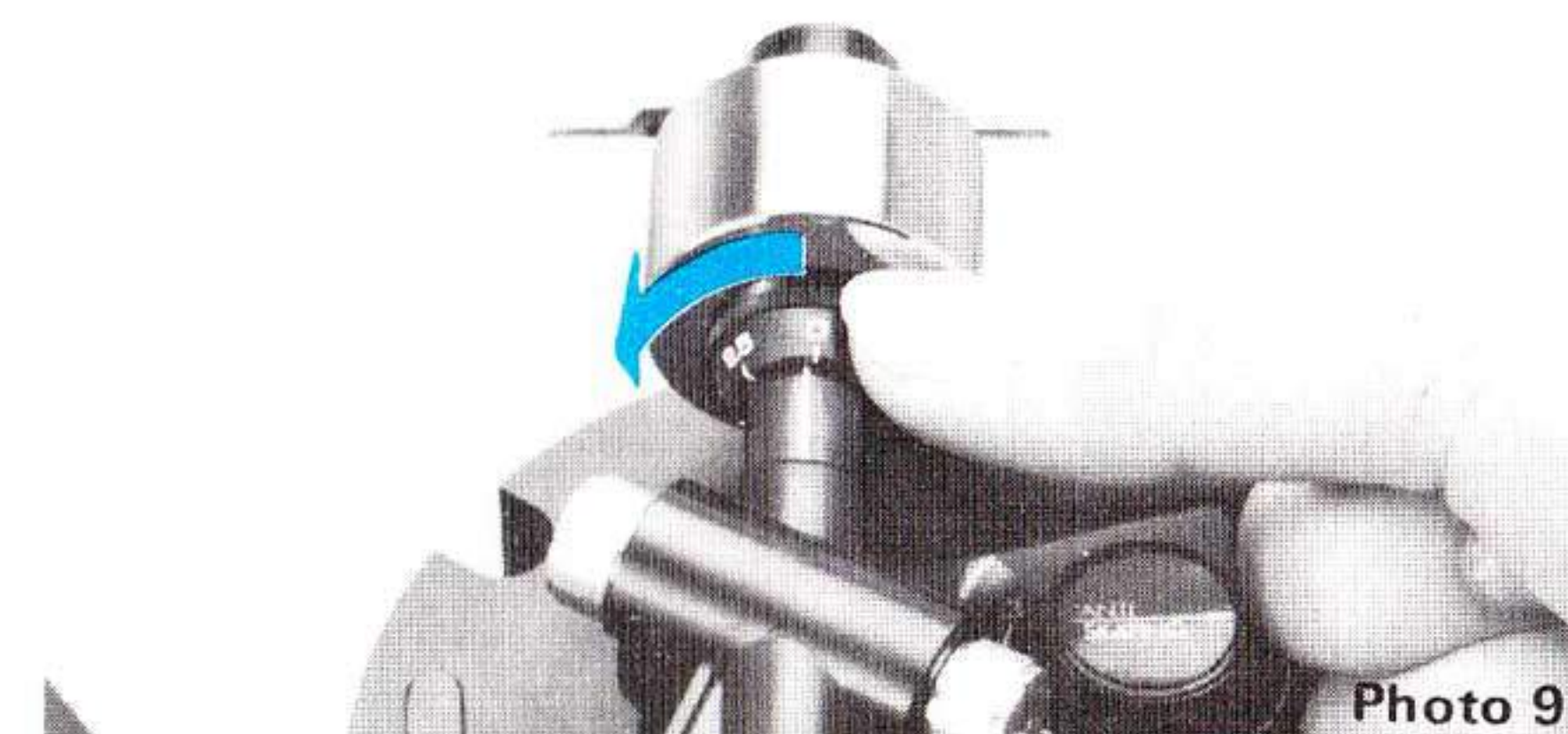


Photo 9

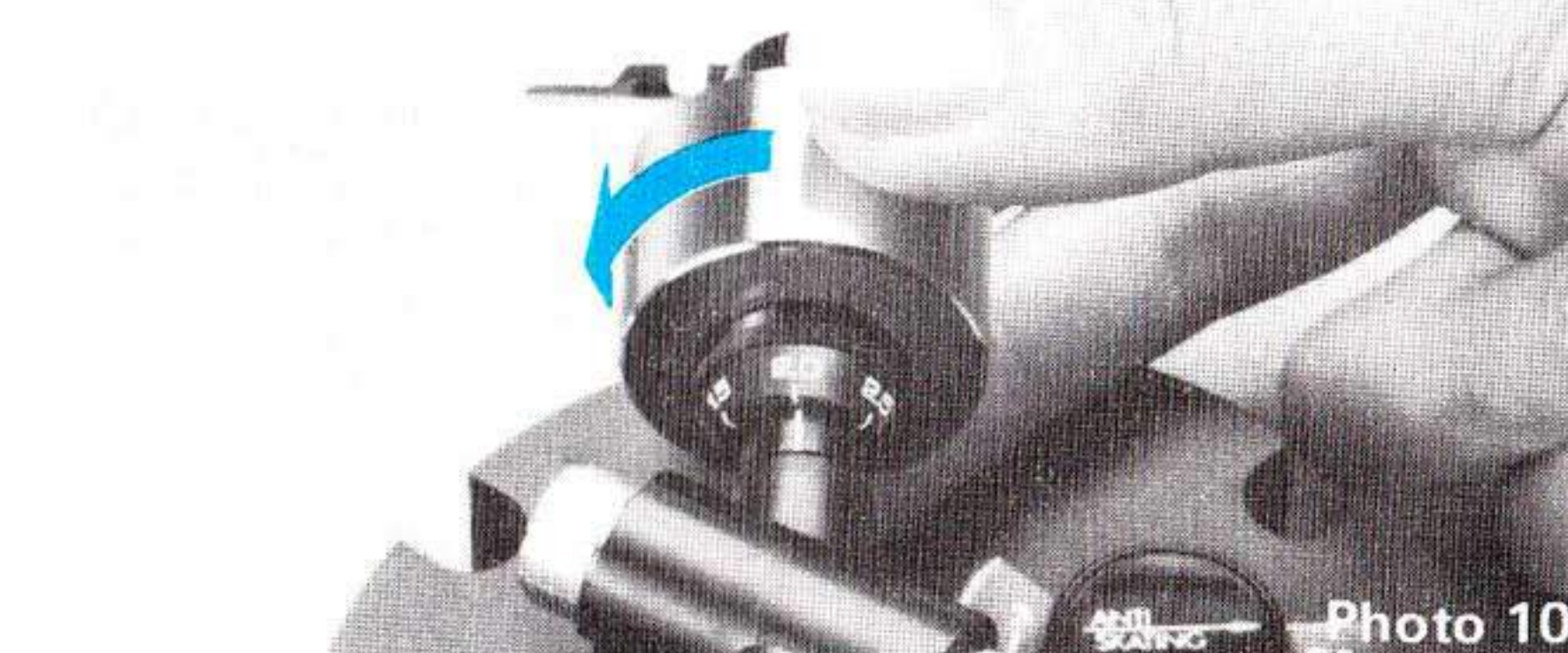


Photo 10

● Anti-skating device adjustment

Anti-skating device is designed to get the correct cancel force where scale indicates the same figure of tracking force and also can be regulated to conform with stylus tip configurations. When the cartridge with elliptical stylus is used, adjust the cancel force according to the elliptical dot line. In case of the cartridge has conical stylus, adjust the cancel force according to the conical dot line. (Photo 11–13)

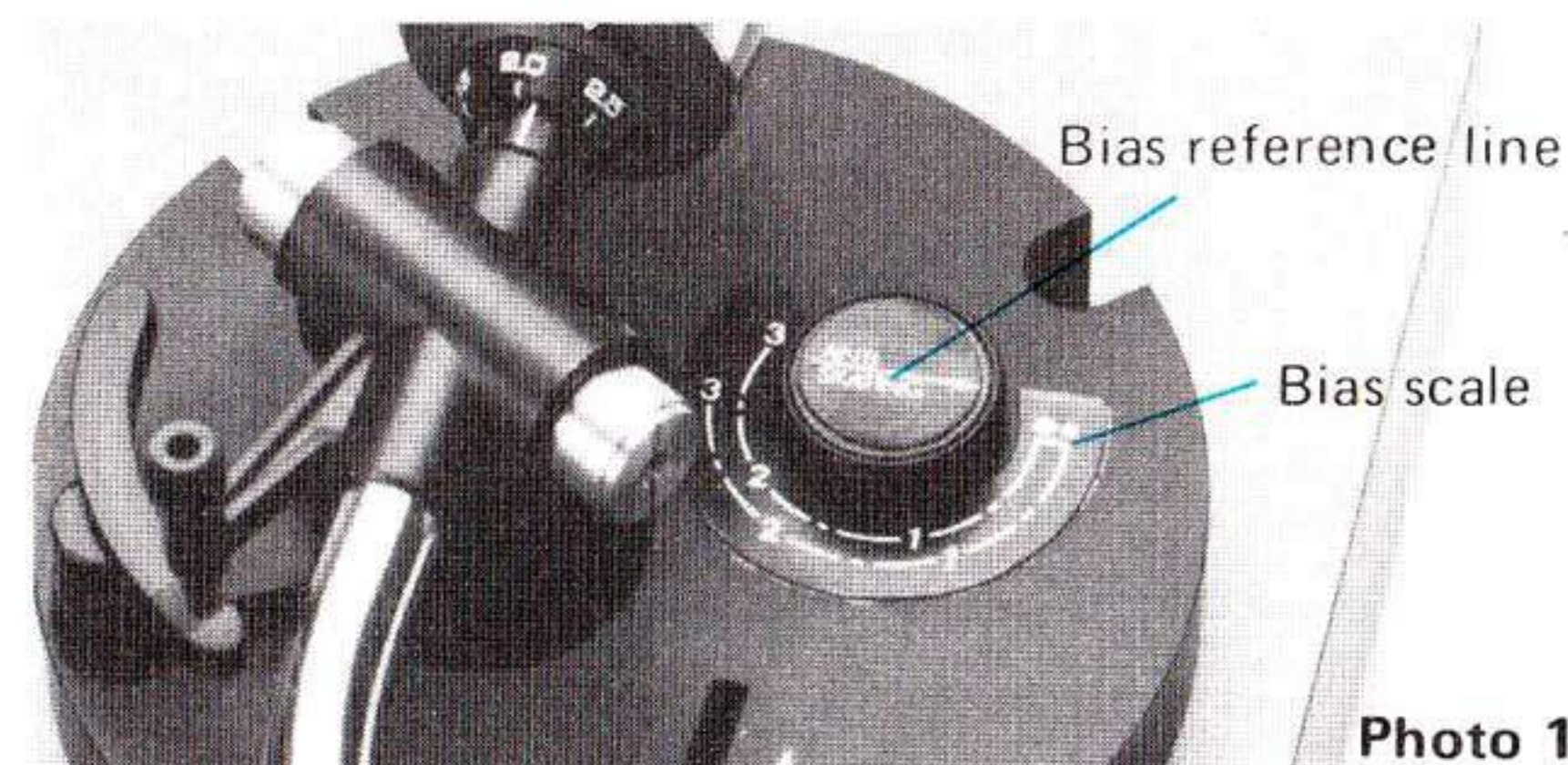


Photo 11

Dust Cover Installation & Connections

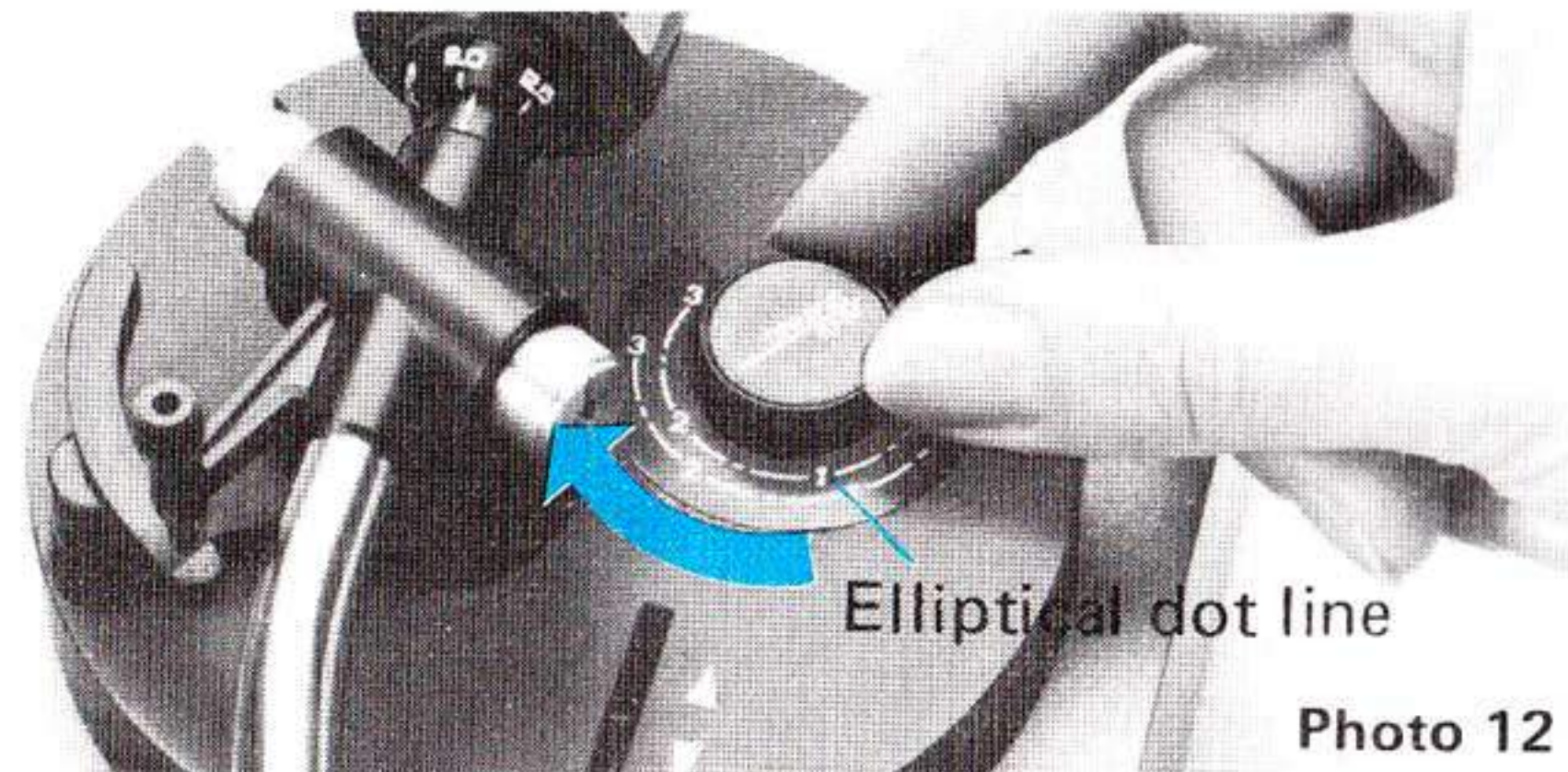


Photo 12

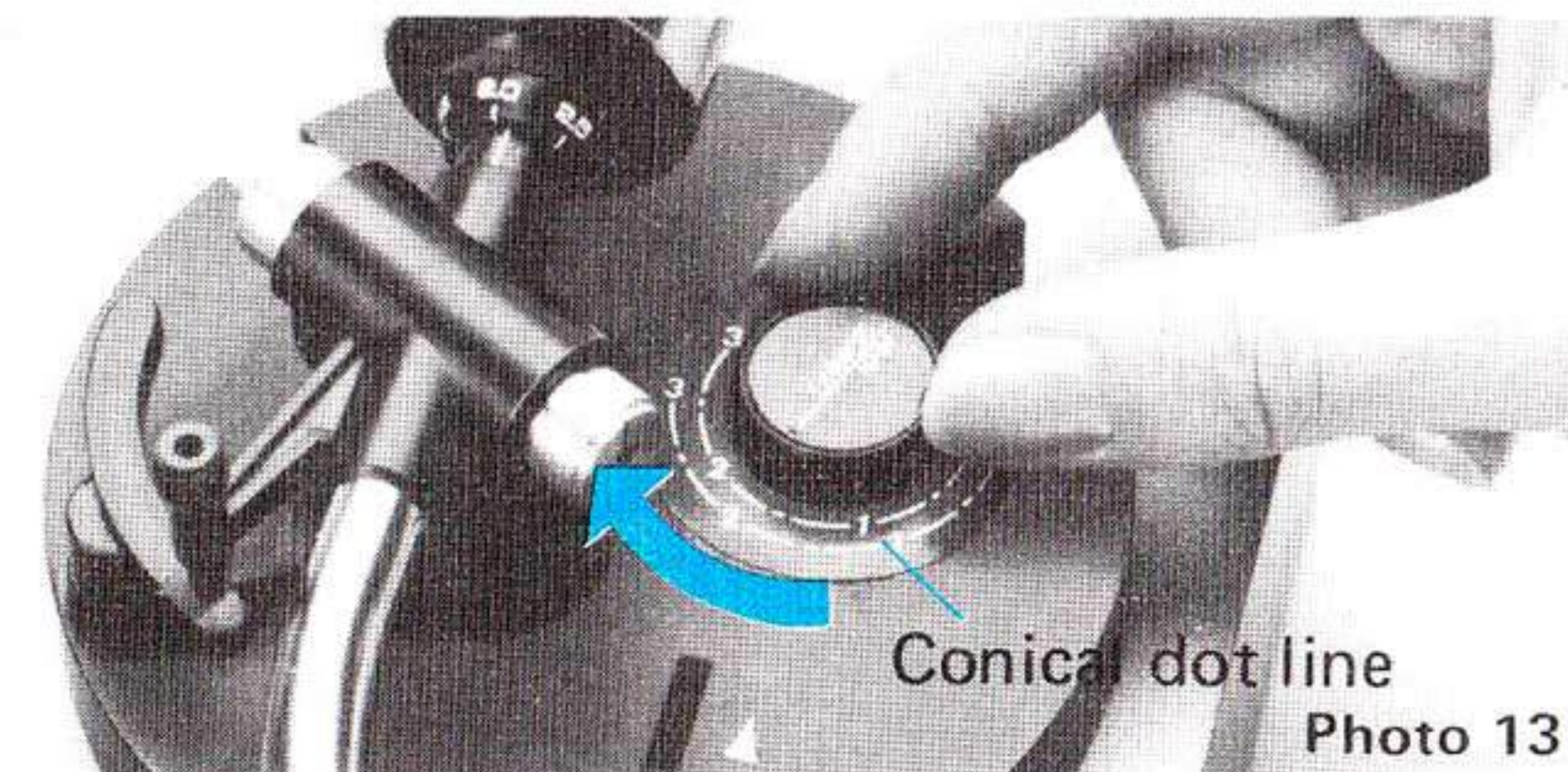


Photo 13

● Adjustment of the arm lifter operation range

The optimum distance between the stylus tip and the record surface is approximately 1 cm. Raise the arm lift lever and move the tonearm to a point above the record surface. Determine whether the distance between the stylus and the record surface is adequate. If necessary, regulate the adjustment knob as illustrated in Photo 14

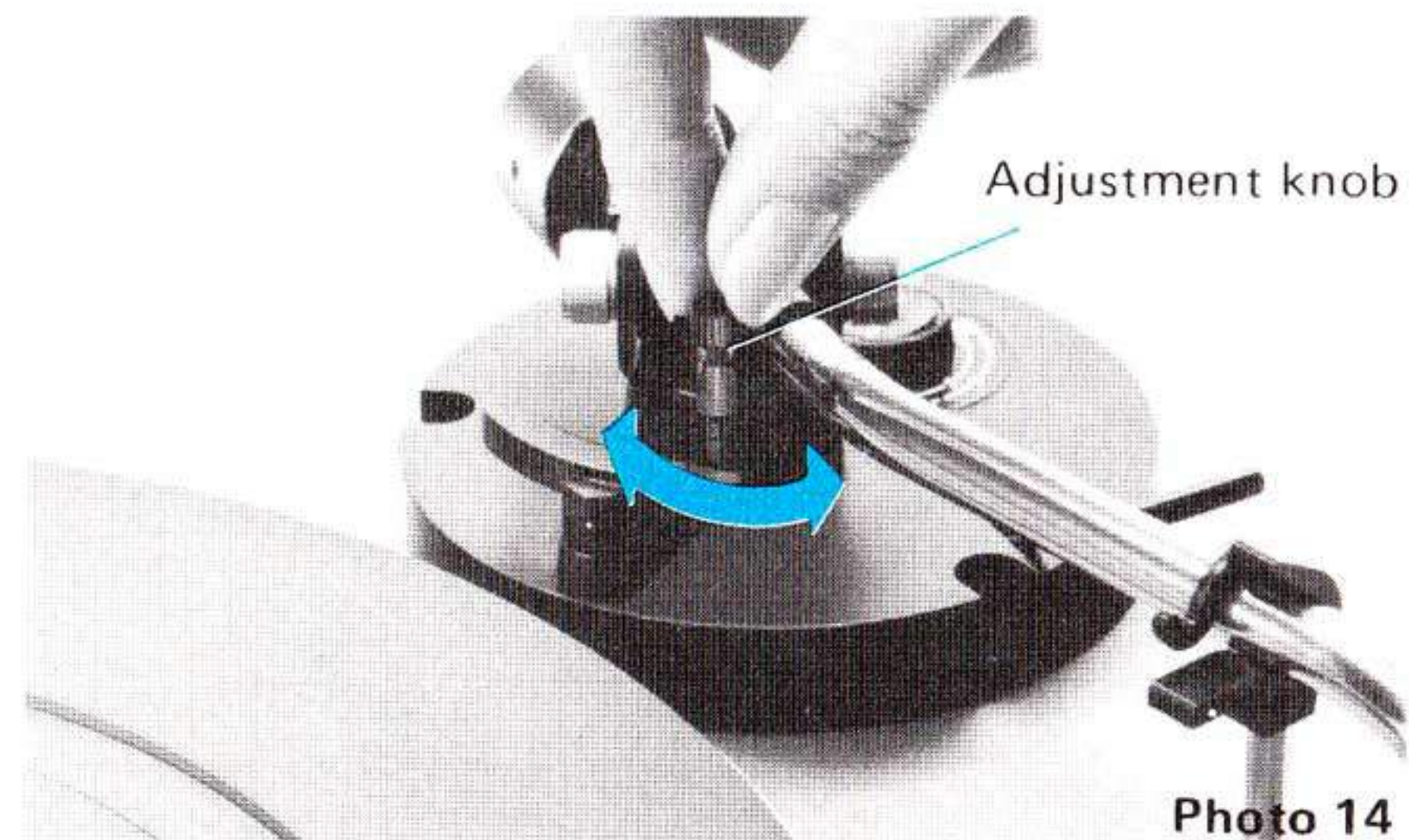


Photo 14

● Installing dust cover

Insert the dust cover hinges into the turntable brackets and push down in the arrow indicated direction (Photo 15)

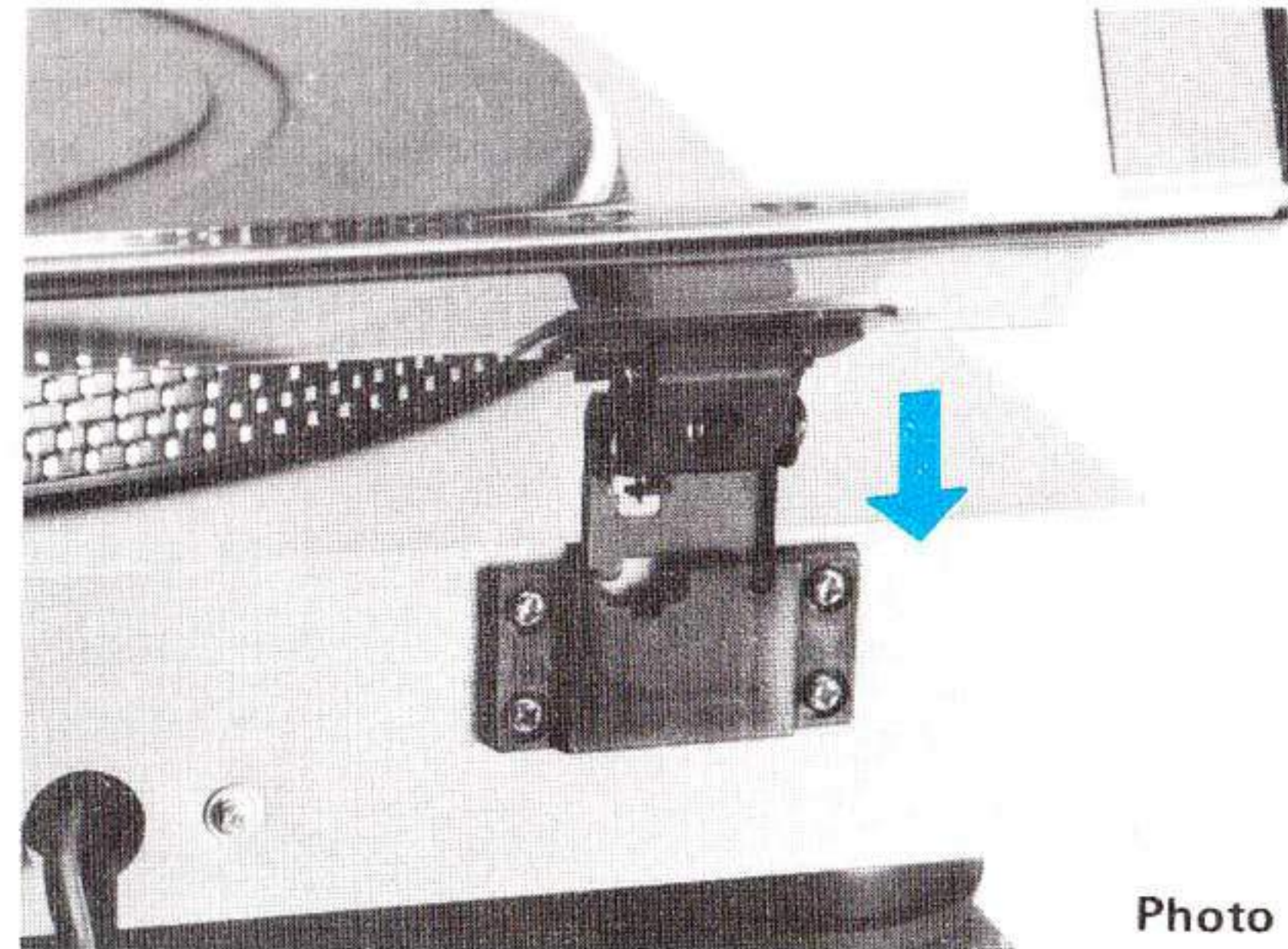


Photo 15

● Connecting to a stereo amplifier or receiver

Connect the output plugs of DD-24 to the input terminals of the amplifier marked PHONO (or MAG).

1. Connect white pin-plug of the output leads to the left jack of the PHONO terminal of the amplifier.
2. Connect red pin-plug of the output leads to the right jack of the PHONO terminal of the amplifier. (Fig. 6)

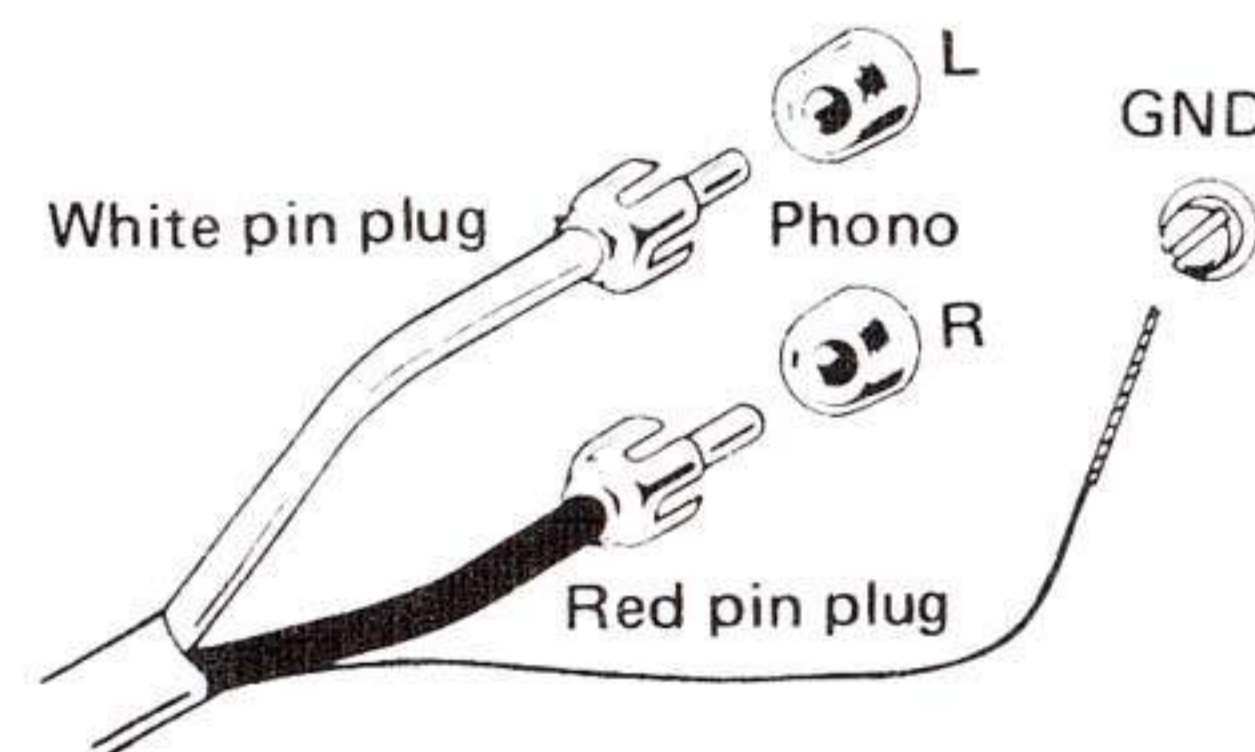


Fig. 6

Operations

1. Press speed selection button to select platter rotating speed according to the record.
2. Raise the arm lift lever and slide the tonearm to the desired point above the record.

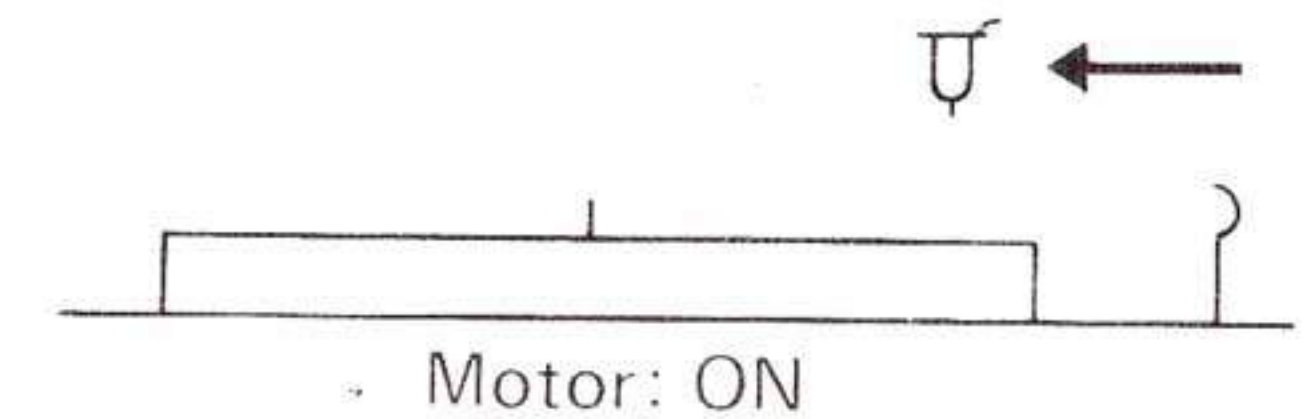


Fig. 7

3. Lower the arm lift lever. The tonearm will gently lower to the record surface and playback will begin.

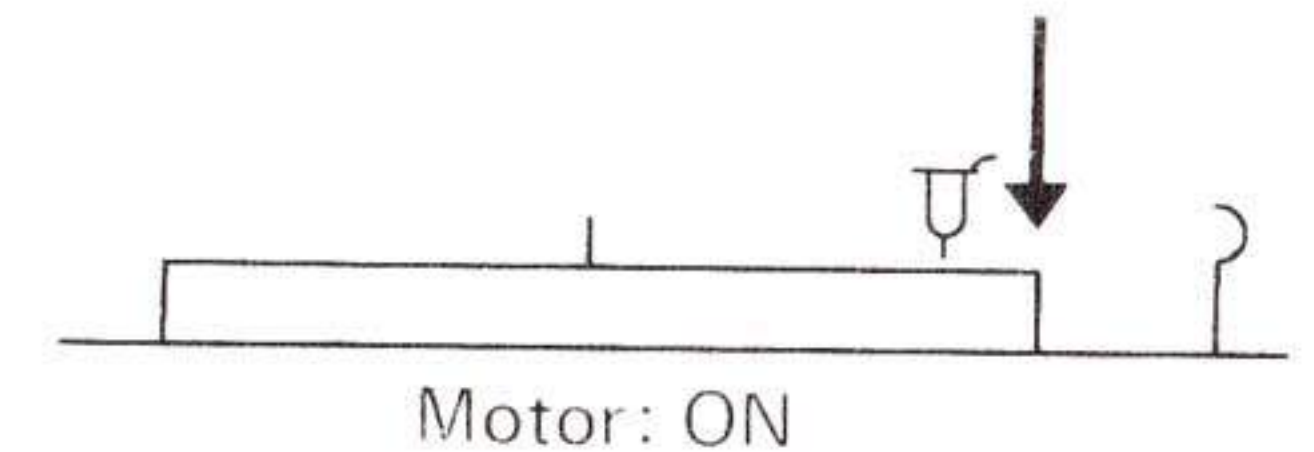


Fig. 8

4. At the end of the record, the tonearm automatically returns and platter rotation stops.



Fig. 9

5. Raising tonearm in midst of record

Raise the arm lift lever. The tonearm will be gently raised while the platter continues to rotate.

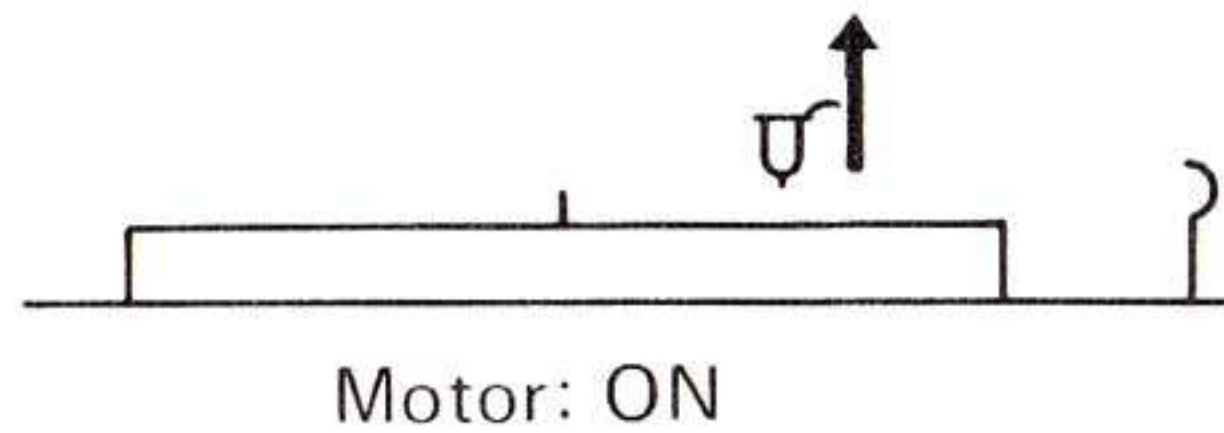


Fig. 10

6. Stopping play in midst of record

Press the REJECT button. The tonearm returns and platter rotation stops.

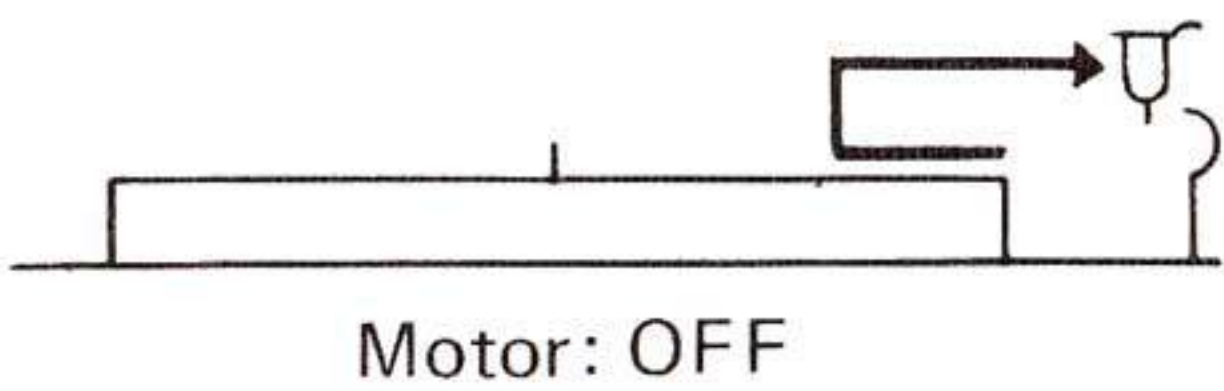


Fig. 11

● Speed adjustment

When the platter is revolving at the correct speed, the stroboscope stripes around the periphery of the turntable platter appear, by means of the neon lamp, to be motionless. If the stripes do not remain still, adjust the speed using the fine adjustment knobs (Photo 16) in accordance with the information given below.

If the stripes run to the right, the platter is revolving slower than the rated speed. Regulate by turning the adjustment knobs in a clockwise direction. When the stripes move toward the left, the platter is rotating faster than the rated speed. Remedy this by turning the adjustment knobs counter-clockwise.

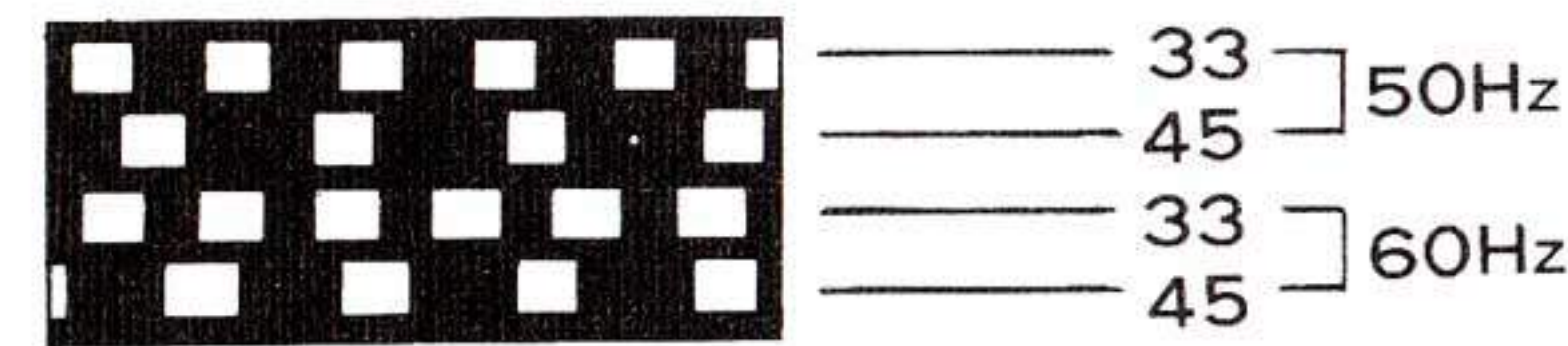
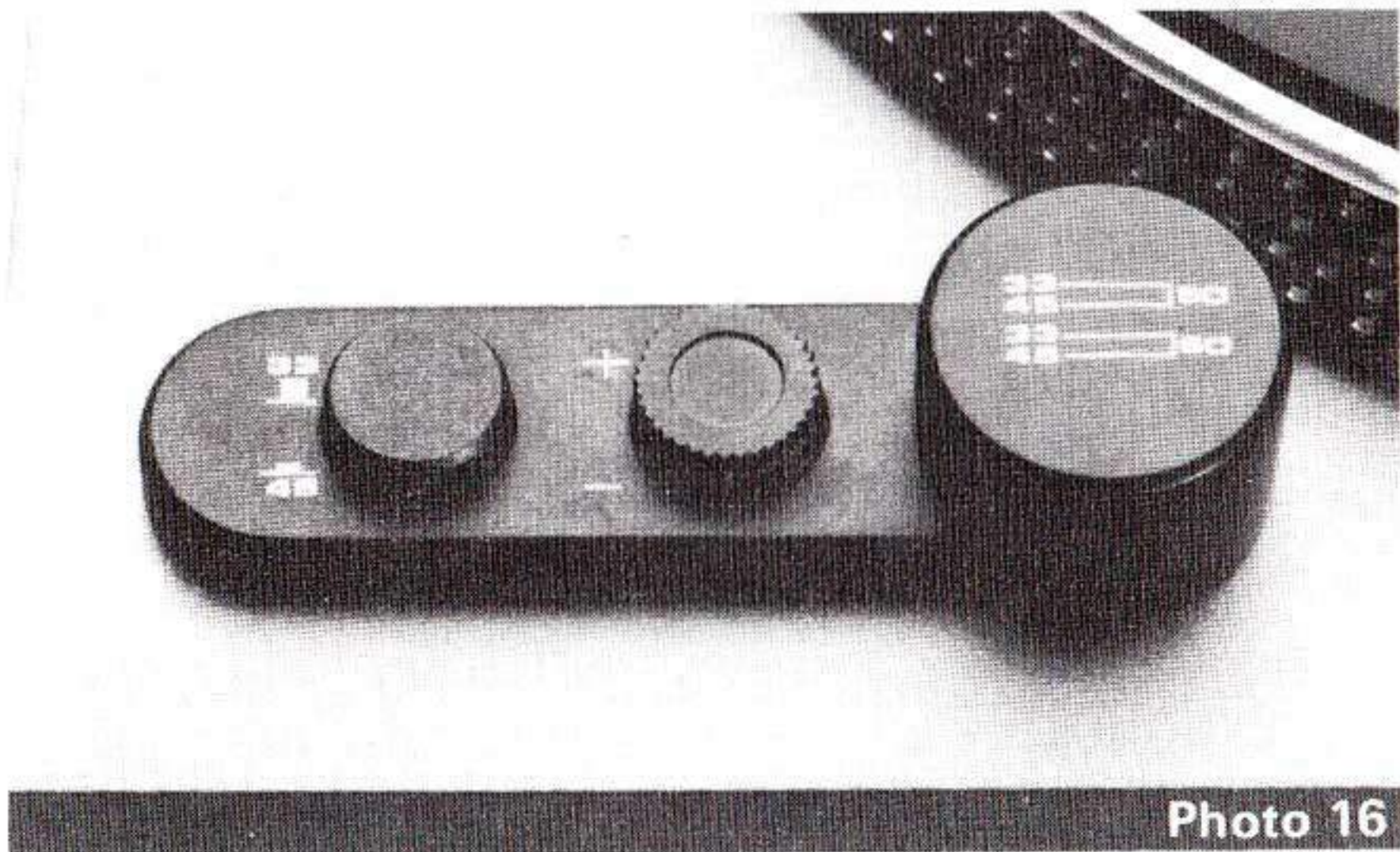


Fig. 12

● Stroboscope and power line fluctuations

Although the platter (driven by a DC servo motor which is unaffected by line frequency changes) continues to rotate at a constant speed, such power fluctuations do affect the neon lamp. Consequently, the stroboscope stripes may occasionally appear a little unsteady. There is no need for concern, as this phenomenon does not indicate any change in platter speed.

(Note: When the player is very new, some current instability in the servo amp transistors may result in very slight speed variation, easily adjusted with the fine speed controls.

Handling and Care

● Player location

- 1. Installing the player near an amplifier, equipment using transformers, or other electromagnetic sources, will most likely cause hum during playback.
- 2. As installation near or on speakers, very close to a wall or other sources of vibration will encourage howling, the player should be located on a surface not subject to excessive vibration.
- 3. The player should be installed in a well ventilated area, out of contact with any prominent heat source which might cause the motor to overheat during periods of extended use.
- 4. This turntable is designed only for indoor use. NO using it outdoors.

As dirt clinging to the stylus will produce distortion and a deterioration of the sound quality, the stylus should be cleaned periodically using the stylus brush.

(Cleaning records with a record cleaner before playing will greatly reduce the amount of dirt and dust on the stylus.)

Avoid location in a dusty place, and when not in use, make certain the dust-cover is closed.

The connections between the tonearm and the headshell and those on the line between the player and the amplifier can sometimes become soiled and consequently less efficient. These points should be wiped occasionally with alcohol or carbon tetrachloride.

As the DD-24 features a special lubricant, oiling is completely unnecessary. Lubrication with a different kind of oil can lead to damage.

Specifications

Turntable

Drive System	Direct drive with DC servo motor
Speeds	33-1/3, 45 rpm
Fine speed adjustment range	±5%
Turntable platter	Die-cast aluminum 31 cm (12- 1/4 inch)
Wow & flutter	Less than 0.03%
S/N ratio	More than 73 dB(DIN B)
Power	U.S.A. & Canada 117 V, 60 Hz, other areas 220 — 240 V, 50 Hz, 5 W

(Be sure the power requirement of this machine corresponds to the outlet of your room.)

Tonearm

Type	Static balance
Effective length	214 (8- 3/8 inch)
Overhang	15 mm (5/8 inch)
Maximum tracking error	Less than 1.5°
Range of tracking force adjustment	0 - 3 g (one turn)

Dimensions	(W) 440 x (D) 350 x (H) 125 mm (17-3/8 x 13- 3/4 x 4-7/8 inch)
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Weight	7 kg (15.4 lbs)
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*Design and specifications are subject to modification without notice.

