

YAMAHA PF-800

*Natural Sound Belt-Drive Turntable
Three-Point Floating Suspension
Two-Section Zinc Plus Aluminum Platter
Dynamic Balance Twin-Pipe Tonearm
Automatic Arm Lifter With Unique Disc Clamp*

Thank you for purchasing the YAMAHA PF-800 belt-drive turntable.

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OWNER'S MANUAL



IMPORTANT!

Please record the serial number of your unit in the space below:

Model: **PF-800**

Serial No.:

The serial number is located on the rear of the chassis.

Retain this Owner's Manual in a safe place for future reference.

WARNING

To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

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CAUTION (PREPARED IN ACCORDANCE WITH UL STANDARD 1270)

1 Read Instructions – All the safety and operating instructions should be read before the appliance is operated.

2 Retain Instructions – The safety and operating instructions should be retained for future reference.

3 Heed Warnings – All warnings on the appliance and in the operating instructions should be adhered to.

4 Follow Instructions – All operating and other instructions should be followed.

5 Water and Moisture – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6 Carts and Stands – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

7 Wall or Ceiling Mounting – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

8 Ventilation – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9 Heat – The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.

10 Power Sources – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11 Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

12 Cleaning – The appliance should be cleaned only as recommended by the manufacturer.

13 Nonuse Periods – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

14 Object and Liquid Entry – Care should be taken so that objects do not fall into and liquids not spilled into the inside of the appliance.

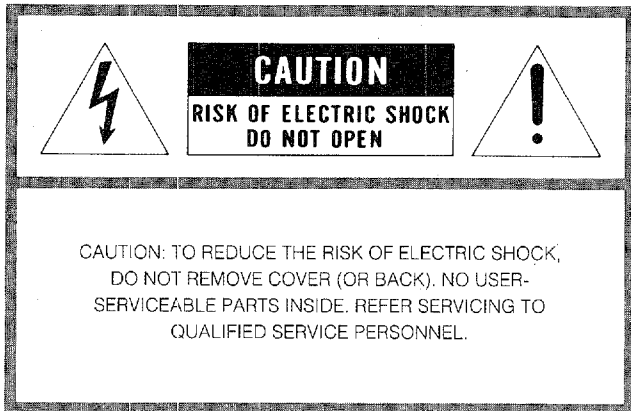
15 Damage Requiring Service – The appliance should be serviced by qualified service personnel when:

- A. The power-supply cord or the plug has been damaged; or
- B. Objects have fallen, or liquid has been spilled, into the appliance; or
- C. The appliance has been exposed to rain; or
- D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
- E. The appliance has been dropped, or the cabinet damaged.

16 Servicing – The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.

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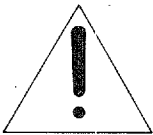
CAUTION: READ THIS BEFORE OPERATING YOUR PF-800



• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1

The PF-800 is a sophisticated semi-automatic belt-drive turntable. To assure proper operation for the best possible sound reproduction, please read this manual carefully.

2

Treat the PF-800 with the utmost of care, as it is extremely easy to jar fine settings such as the tonearm tracking force out of adjustment. If the unit is bumped, it is important that all settings be re-checked.

3

Avoid installing the tonearm side of the PF-800 next to the power transformer of your amplifier.

4

Be sure to locate the PF-800 in a flat and level place, out of the direct rays of the sun. Also avoid locations subject to vibration and excessive dust, heat, cold or moisture, and avoid placing it directly in front of or too close to your speakers.

5

If it becomes necessary to relocate the PF-800, do so with extreme care. If possible, repack the unit in its original packing for transportation.

6

Do not attempt to clean the PF-800 with chemical solvents, because the unit is coated with a mat lacquer. Use a clean, dry cloth.

7

It is extremely important that the stylus tip be kept free of dirt. Regular cleaning ensures the best possible sound reproduction.

8

Keep your records clean. Dirty records reduce the life of the stylus. A stylus with a diamond tip should be replaced after every 200–300 hours of use.

9

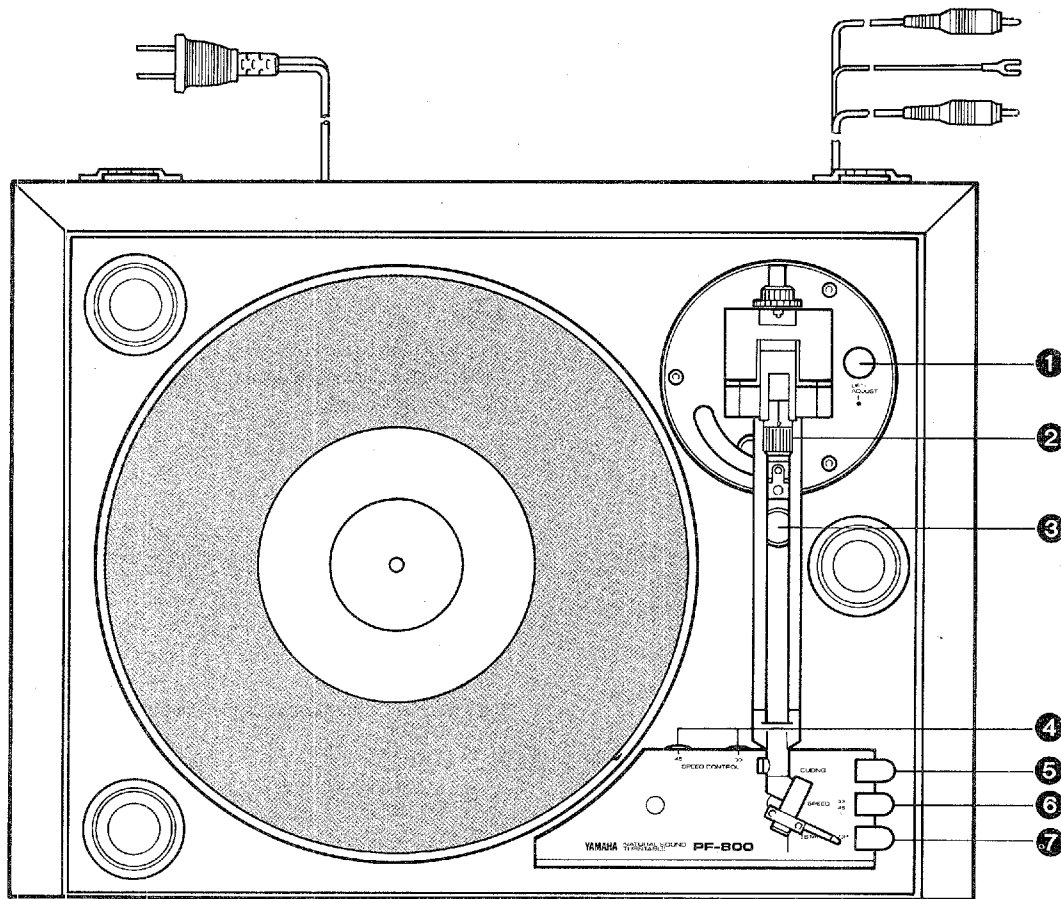
Be sure to read the "troubleshooting" section for advice on common operating errors before concluding that your PF-800 is defective.

10

Keep this manual in a safe place for future reference.

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NAMES OF THE PARTS AND THEIR FUNCTIONS



① LIFTER ADJUSTMENT

The PF-800 tonearm is equipped with an optical non-contact detector and auto-lift function.

Refer to "LIFTER ADJUSTMENT" on page 9.

② TRACKING FORCE KNOB

Refer to "ADJUSTING THE CARTRIDGE STYLUS TRACKING FORCE" on page 6.

③ ANTI-SKATING KNOB

This is a spring-lever type anti-skating control.

Refer to "ADJUSTING THE ANTI-SKATING FORCE" on page 7.

④ SPEED CONTROL KNOB

Used to adjust turntable speed.

Turn to the left to increase the speed and to the right to decrease the speed.

⑤ CUEING SWITCH



In normal operation the tonearm is set in the DOWN position.

However, if you wish to interrupt record play in order to play a different track, the cueing switch can be used to gently raise and lower the stylus.

Lowers the tonearm if pressed with the arm in the UP position; raises the arm if pressed with the arm in the DOWN position.

⑥ SPEED SWITCH

This is used to select the turntable speed.

When playing a 33-1/3 rpm record, set the switch to "33" , and when playing a 45 rpm record, set the switch to "45" .

⑦ START/STOP SWITCH

Starts and stops the turntable motor.

ASSEMBLING THE TURNTABLE AND TONEARM

Do not plug in the power cord until assembly has been completed.

Belt position

1. Mount the belt on the inner platter and the motor drive pulley as shown in Fig. 1.
2. Before installing the outer platter, first manually rotate the inner platter in order to ensure that the belt is attached correctly.
3. Set the outer platter in place.
4. Set the rubber mat on the outer platter.

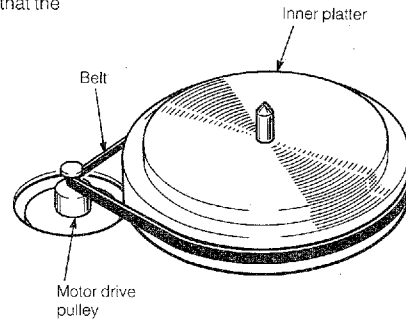
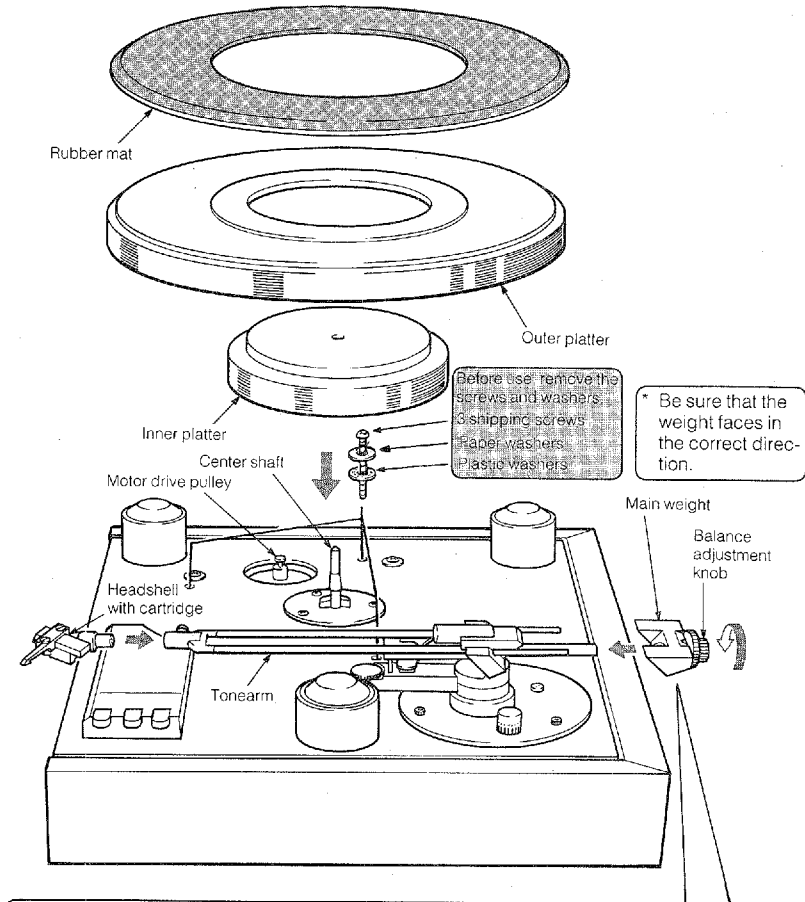
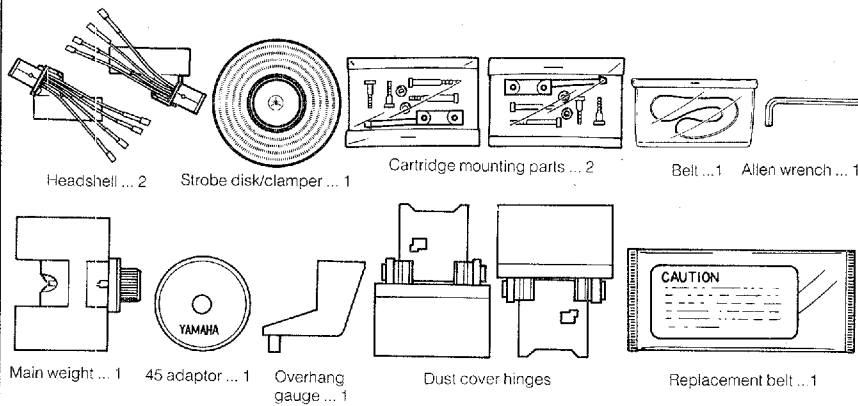


Fig. 1

* When the belt becomes loose, replace it with a replacement belt.

ACCESSORIES



■ MOUNTING THE MAIN WEIGHT

1. To mount the main weight, rotate the balance adjustment knob in the direction indicated by the arrow.
2. The grooves inside the main weight and the click stopper on the end of the tonearm interlock; thus, when the balance adjustment knob is rotated counterclockwise (as seen from the front of the unit), the main weight will move forward smoothly.

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MOUNTING THE CARTRIDGE

Cartridges with weights ranging from 2 to 11 grams may be used with this turntable.

1. Properly connect the headshell leads to the pins on the cartridge.
2. Loosely mount the cartridge to the headshell with the cartridge mounting screws.

Mounting the cartridge

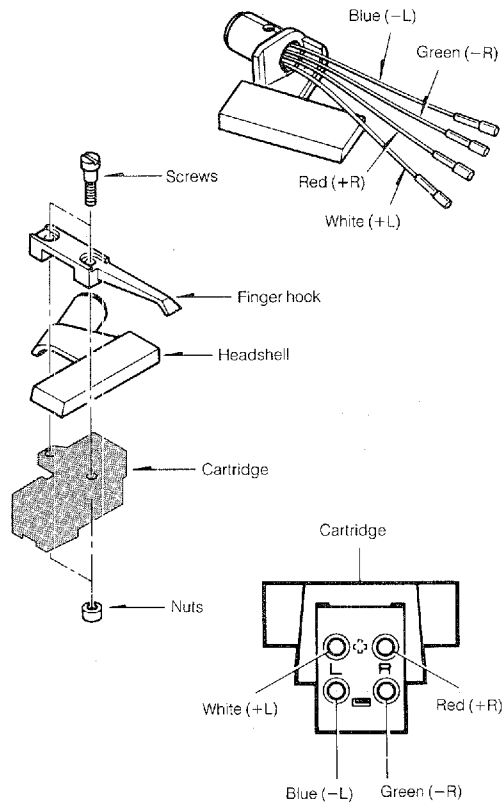


Fig. 2

3. Align the stylus with the accessory overhang gauge and, after adjusting the overhang, secure the cartridge mounting screws. Overhang is correct when the stylus point on the overhang gauge is aligned with the tip of the stylus.

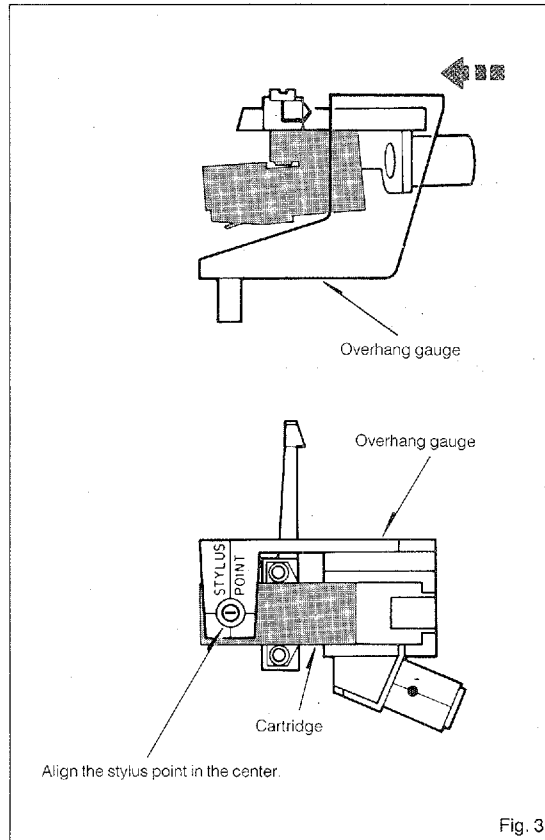


Fig. 3

MOUNTING THE HEADSHELL

To mount the headshell, loosen the headshell locking screw and insert the headshell with the phono cartridge in place. Next securely tighten the locking screw. Be sure to keep the headshell straight when inserting it into the tonearm, because it is very easy to damage the four contact pins inside the headshell.

Mounting the headshell

Push the headshell straight into the tonearm.

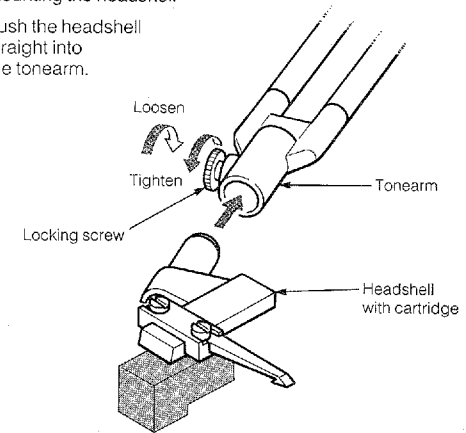


Fig. 4

ADJUSTING THE TONEARM BALANCE

Proceed with the balance adjustment after mounting and installing the tonearm assembly. Also, be sure to set the ANTI-SKATING control and TRACKING FORCE knob to "0".

1. Press the cueing switch and depress the arm lifter.

2. First release the arm lock. Then bring the tonearm away from the arm rest.
3. Carefully release the finger hook and check to see if the tonearm is horizontally balanced.
4. Adjust the main weight until the tonearm is in a perfectly horizontal position.
5. Once the tonearm has been balanced, return it to the arm rest.

Balance adjustment

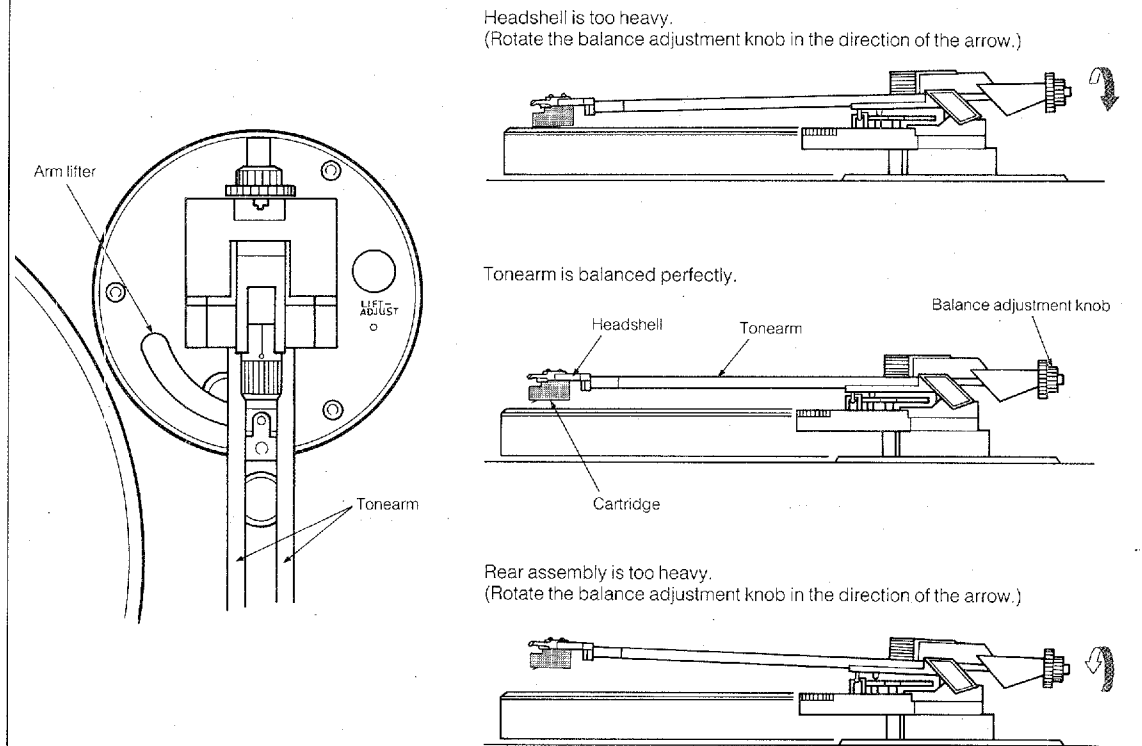


Fig. 5

ADJUSTING THE CARTRIDGE STYLUS TRACKING FORCE

Be careful not to move the main weight after making the balance adjustment. Turn the tracking force knob to align with the specified stylus pressure of the cartridge used.

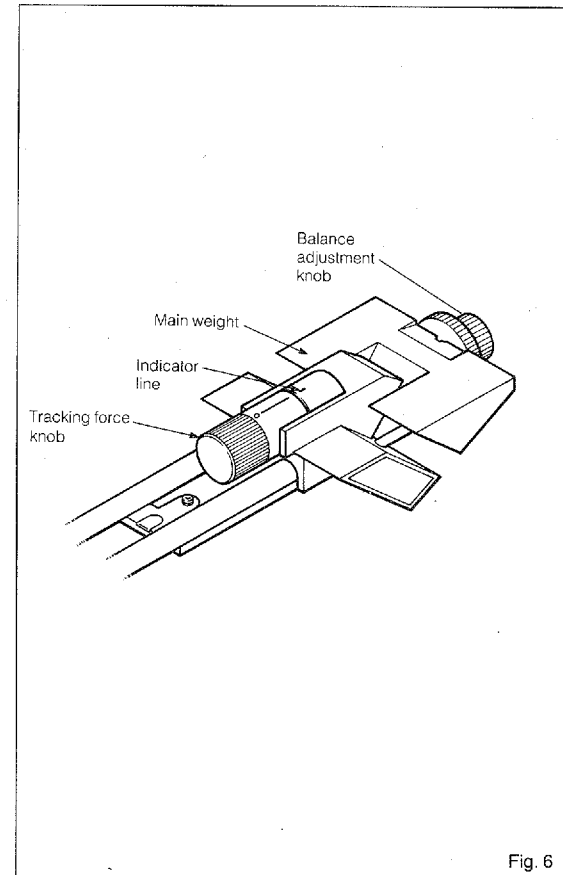


Fig. 6

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ADJUSTING THE ANTI-SKATING FORCE

Align the scale marking on the anti-skating knob which corresponds to the rated tracking force of your cartridge with the index mark.

Adjustment of anti-skating force

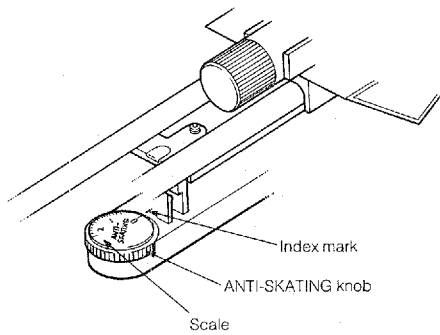


Fig. 7

TONARM HEIGHT ADJUSTMENT

- (1) Set a record on the turntable platter, and press the cueing switch to lower the stylus tip to the record.
- (2) Loosen the tonearm height adjustment screw with an Allen wrench, slowly raise and lower the tonearm, and adjust so the tonearm is parallel to the record as shown in the diagram.
- (3) When the tonearm is level (parallel with the record), tighten the tonearm height adjustment screw to secure it in place.

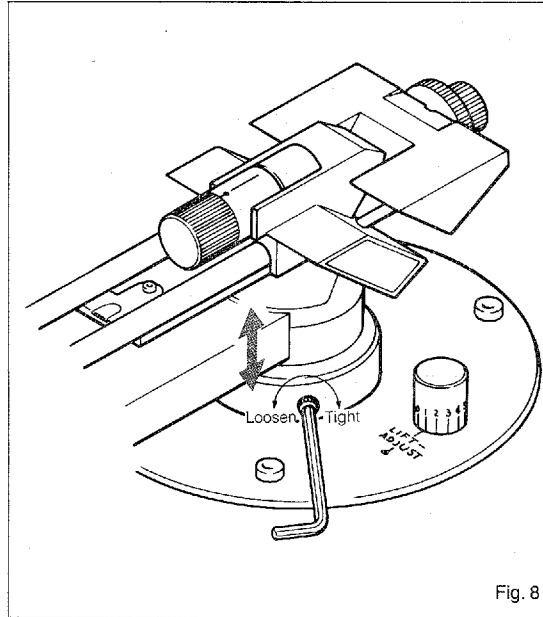


Fig. 8

STYLUS HEIGHT ADJUSTMENT

When the tonearm is in the up position, the height of the stylus above the record should be 6 mm. If it is more or less than this, turn the adjustment screw so the distance from the stylus to the record is 6 mm.

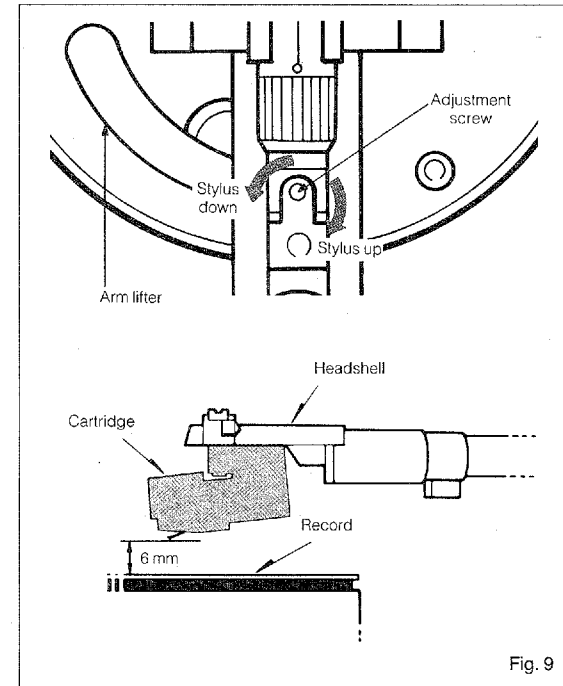
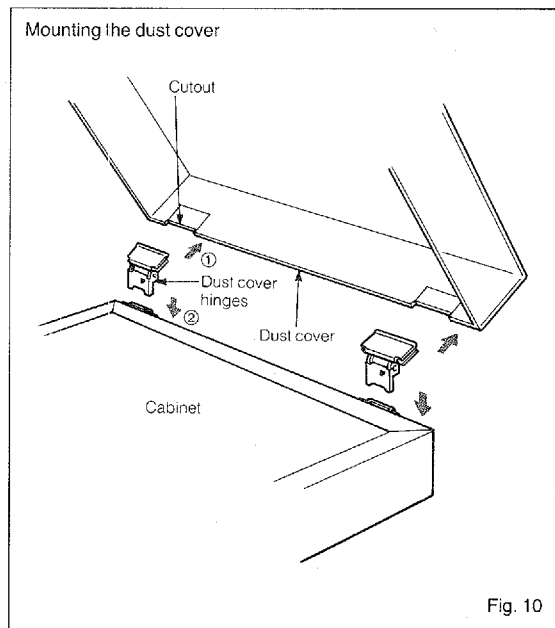


Fig. 9

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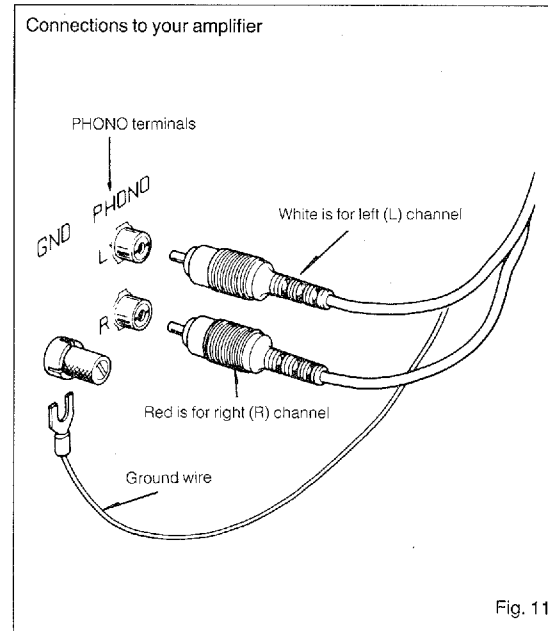
MOUNTING THE DUST COVER

1. Fit the dust cover hinges into the two cutouts at the rear of the dust cover, as shown in fig. 9, and slide them into place. (Arrow ①)
2. Next, simultaneously insert the two hinges into the left and right receptacles on the rear of the cabinet. (Arrow ②)
3. It is possible to remove the dust cover. To remove, follow the above procedure in reverse.



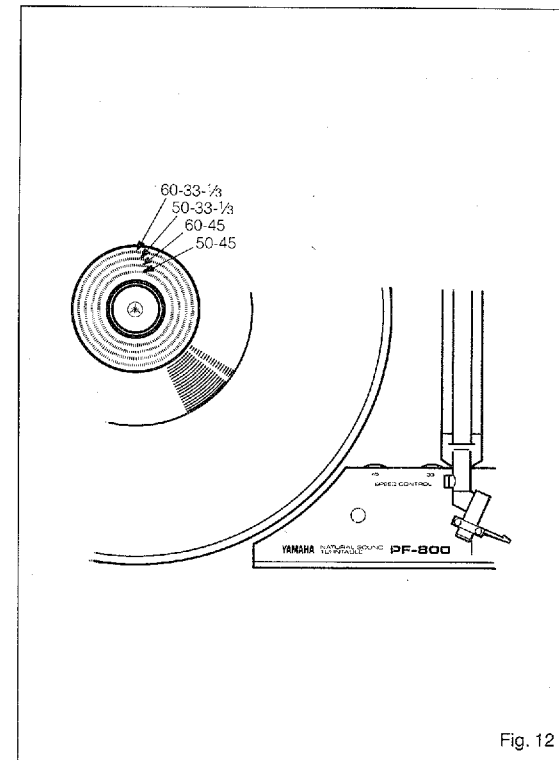
CONNECTIONS TO YOUR AMPLIFIER

1. Connect the output cords from the rear panel of the cabinet to the PHONO terminals on the audio amplifier. Make sure that the left and right channels are properly matched. The white cord is for the left (L) channel and the red is for the right (R) channel.
2. Connect the black ground wire to the GROUND (GND) terminal on the audio amplifier. Depending on the amplifier, better sound is sometimes obtained by not connecting the ground wire.
3. Connect the power plug to the AC wall outlet or to an auxiliary outlet on the audio amplifier.



STROBE DISK

To adjust the turntable speed by using the strobe disk, first set the speed switch to either 33- $\frac{1}{3}$ or 45. Next turn the speed control until the striped band corresponding to the electrical frequency used in your area appears to not move.



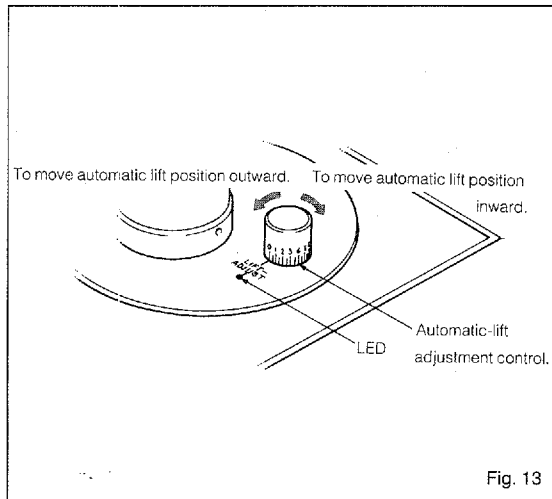
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LIFTER ADJUSTMENT

The PF-800 tonearm is equipped with an optical non-contact detector and auto-lift function. This function also enables adjustment of the auto-up position at the end of a record by simply turning the auto lifter adjustment knob as shown in Fig. 13.

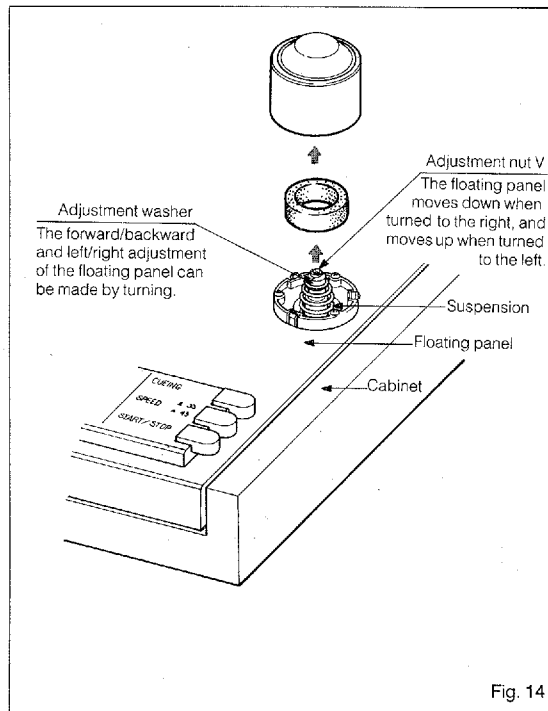
Adjustment

1. Raise the arm lifter, and set the auto lifter adjustment knob to "10."
2. Bring the tonearm to the desired auto-up position on the record.
3. Turn the auto lifter adjustment knob counterclockwise until the LED illuminates.
4. Play the record and confirm the auto-up position.



ADJUSTMENT OF THE FLOATING PANEL

Remove the three suspension covers, and then, as shown in the figure, the forward/backward, left/right and height adjustment of the floating panel can be made by turning the washer and adjustment nut.



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PLAYING RECORDS

After you have assembled the turntable, made the necessary adjustments and connected the turntable to the audio amplifier, you are ready to start playing records. Proceed as follows.

1

Please check the connecting cords for the turntable, amplifier and speakers.

2

Starting the Turntable Operation

- Turn the amplifier's power switch on, and set the input selector to Phono. Set the amplifier's volume level accordingly.

3

Place the record on the turntable platter.

- Use the disk clamp to play 33 1/3 rpm records.

4

Set the **SPEED** switch so that it corresponds to the speed of the record.

5

Press the **START/STOP** switch.

When the turntable begins to rotate, move the tonearm to the beginning of the track to be played. Lower the arm lifter.

6

Record play

- Adjust the amplifier's volume and tone controls to the desired levels.

7

The tonearm will automatically rise when record play has been completed.

- Operate the cueing switch (refer to page 3) to interrupt record play.

SPECIFICATIONS

■ TURNTABLE MOTOR

Drive System	Belt drive
Motor	FG Servo DC motor
Turntable Platters	
Inner	Zinc, 0.86 kg (1.9 lbs.)
Outer	Aluminum, 1.63 kg (3.6 lbs.)
Turntable Moment of Inertia	330 kg-cm ² (including rubber mat 0.25 kg)
Speeds	33-1/3 & 45 rpm
	Pitch control: more than ±6%
Signal-to-Noise Ratio	80 dB (DIN-B)
Wow and Flutter	0.028 % wrms

■ TONEARM

Arm	Twin-pipe straight arm, dynamically balanced
Effective length	222 mm (8-3/4")
Overhang	16 mm (5/8")
Horizontal Tracking Error	-1 to +3°
Anti-Skating	Spring, direct-readout scale
Offset Angle	23°
Permissible Cartridge Weight	2 - 11 g
Initial Shock Sensitivity	Vertical 10 mg, Horizontal 10 mg
Sensitivity	Vertical max. 100 mg, Horizontal max. 100 mg
Headshell	Plug-in type lightweight shell containing 20 % carbon
Automatic Arm Lifter	Sensor infrared light-reflector type position
Cueing	Solenoid, oil damper
Auto Stop	Motor switch-off when arm automatically lifted

■ GENERAL

Power Supply	120 V, AC 60 Hz
Power Consumption	7 W
Cabinet	25 mm particle board, vinyl finish
Dust Cover	Formed acrylic, 1.13 kg (2.5 lbs.)
Hinges	Free-stopping detachable type
Suspension	3-point support; fo = 4 Hz, coil spring plus urethane; with height adjuster
Dimensions (W × H × D)	473 × 154 × 376 mm (18-5/8 × 6 × 14-7/8 inch)
Weight	13 kg (28.6 lbs.)

Specifications subject to change without notice.

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TROUBLESHOOTING

Before assuming that the turntable is defective, check the following troubleshooting list which details the corrective actions you can take yourself without having to call a service engineer. If you have any doubts or queries, please contact your nearest YAMAHA dealer.

Fault	Cause	Cure
Turntable doesn't turn although tonearm is brought over record.	Power cord is not firmly plugged into AC power outlet or into auxiliary power outlet of amplifier.	Connect the power cord securely to the AC power outlet or to the amplifier's auxiliary power outlet.
	Drive belt not installed correctly.	Reinstall.
No sound from turntable, or low sound although the stylus descends to the record surface.	Poor headshell connector pin connections.	Mount the headshell firmly onto the tonearm.
	Amplifier's volume control is at lowest position.	Set the volume control to a suitable position.
	Poor turntable output cord connections.	Check the connection terminals on the rear panel of the amplifier.
The body of the cartridge contacts the record surface.	Tracking force is too high.	Re-adjust to the proper tracking force.
Reproduced sound is distorted and unpleasant, particularly the treble, with a clicking or scraping noise.	Turntable is not placed horizontally.	Install the turntable horizontally.
	Dust on stylus.	Clean the stylus with a stylus cleaning brush.
	Worn stylus.	Replace the stylus.
	Damaged or dirty record.	Replace with a new record, or clean the record.
	Tracking force is either too high or too low.	Readjust the tracking force to the recommended value for the cartridge.
Reproduced sound quavers and a howl (acoustic feedback) is heard.	Amplifier's treble control is too high.	Try returning the treble control to the FLAT position.
	Speaker systems and turntable are too close together, or turntable is unstable and vibrations are being transmitted to cause resonance.	Move the turntable to a stable location, move it farther from the speakers, or change the speaker locations (in particular, avoid placement in corners).
A loud humming sound is heard during record play.	Poor connections of turntable output cord.	Check the connection terminals on the rear panel of the amplifier.
	Poor connections of headshell connector pin.	Mount the headshell properly onto the tonearm.

SINCE 1887



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