

## ATTACHING A PHONO CARTRIDGE

Before attaching a phono cartridge, you should untighten the locking collar, and remove the head shell.

The color-coded pin connectors in the head shell conform to the international EIA standard.

Attach the cartridge according to drawing (Fig. 8). After connection of pin connectors, plug the head shell into the tonearm and tighten firmly locking collar.

### OVERHANG ADJUSTMENT

After mounting cartridge, you must adjust overhang length. At first, plug out AC cord from AC outlet, set the EP record adaptor provided with overhang gauge onto the center shaft.

If it is difficult to lead the tonearm to that place, remove the main counterweight from the rear end of the tonearm.

Bring the head shell to the point of the overhang gauge and regulate stylus tip to 15.5 mm index line explained in Figs. 9 and 10.

When overhang adjustment is over, tighten the cartridge-held screws.

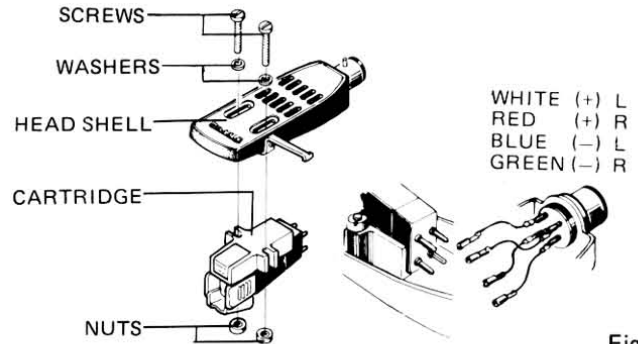


Fig. 8

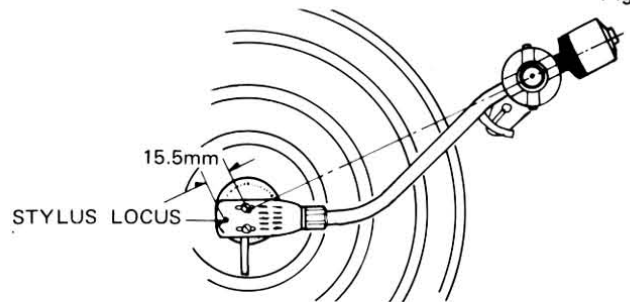


Fig. 9

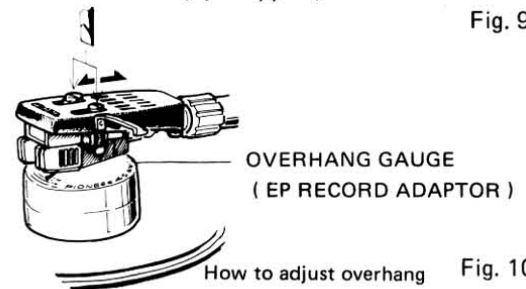


Fig. 10

## TRACKING FORCE ADJUSTMENT

### HORIZONTAL BALANCING

1. Set the anti-skating force control to "0" (Fig. 13).
2. Remove the stylus protection cover from the cartridge.
3. Free the tonearm from the armrest.
4. Set the arm elevation lever to "DOWN."
5. Move the main counterweight slowly back and forth (by turning it) until the tonearm floats in horizontal position.
6. Keeping the weight in this position, turn only the tracking force dial ring so that the zero aligns with the white index line on the tonearm (Fig. 11).

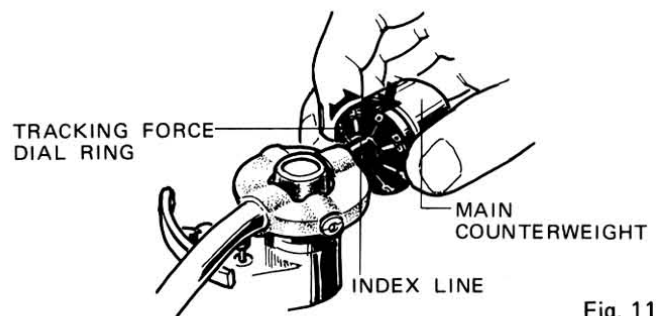


Fig. 11

### TRACKING FORCE ADJUSTMENT

After the horizontal balancing is complete, the tonearm is at "0" tracking force. Turn the whole main counterweight (with which the tracking force dial ring will turn) until the gauge reads the correct force for the cartridge (Fig. 12). The gauge is graduated between 0.5 and 4.0 grams.

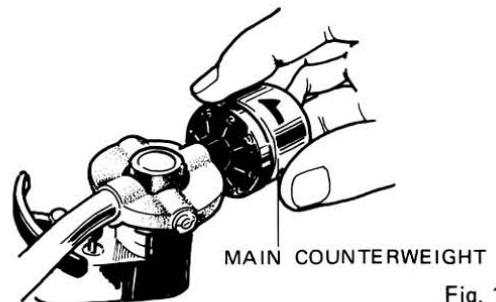


Fig. 12

### ANTI-SKATING ADJUSTMENT

The anti-skating force control knob should be adjusted to the same setting as that required for the tracking force (Fig. 13).

For example, if the tracking force of the cartridge is 2 gram, set the anti-skating knob to 2.

#### What is "Anti-skating"?

As the record groove moves in relation to the stylus it exerts a force on the stylus which pushes it toward the center of the record. This is called "skating force" and will actually cause the stylus to jump out of the groove and "skate" if it is too strong. Even when this does not occur, the force distorts the sound response. The anti-skating device is designed to cancel this force.

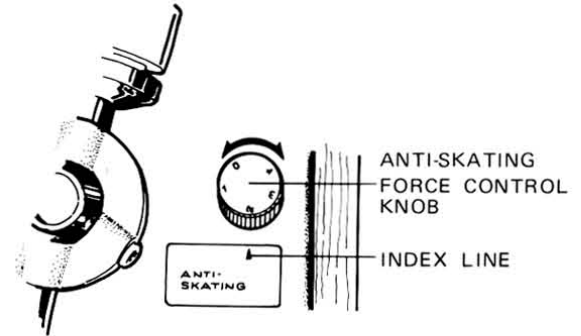


Fig. 13

### ATTACH THE DUST COVER

1. Hold dust cover vertically (Fig. 14-A).
2. Slip cut-outs in cover hinges over pins on base hinges.
3. Push dust cover about 5mm to the left (as seen front to secure hinges (Fig. 14-B).

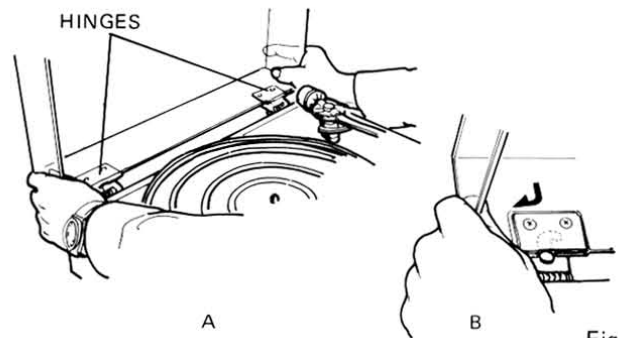


Fig. 14

### STEREO AMPLIFIER CONNECTIONS

The phono inputs on the amplifier to which the turntable should be connected must be chosen in accordance with type of phono cartridge to be used.

- With moving magnet or induced magnet type cartridge:  
Connect to the PHONO MAG inputs on amplifier.
- With low-output moving coil type cartridge:  
Connect to the PHONO MC inputs. If these are not provided on your amplifier, a step-up transformer will be required.

In either case, connect the red output plug from the turntable to the amplifier's right channel input, the white plug to the left channel input. The third black wire (the ground wire) with the split lug on its end can be connected to the GROUND or GND terminal of your amplifier. Do not forget to make this connection, because it is vital for avoiding hum and noise.

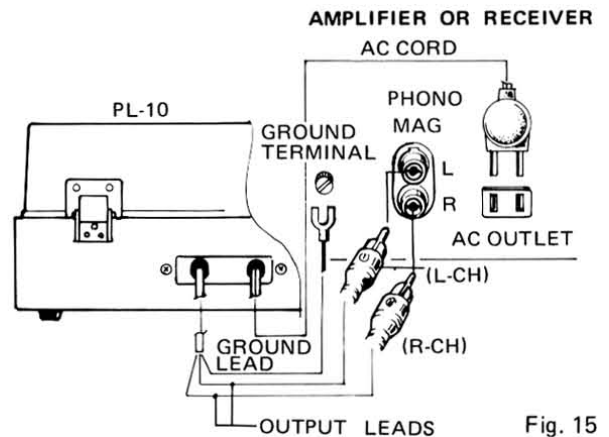


Fig. 15