

**AR**

**TURNTABLE  
EB101**

**Fitting  
Alternative  
Tonearms**

## EB101 turntable Fitting alternative tone arms

If you purchased your EB101 turntable without an AR tone arm, you will need the correct mounting collar. Not all arms are suitable, so consult your dealer on appropriate arms. He can also supply the corresponding arm-mounting collar. If you are in any doubt about the procedures, or find that the parts you have do not fit, contact your dealer immediately, as his experience in handling AR products will be invaluable in solving any problem. He will have, or be able to get, any part you may require for your EB101 turntable and can mount the arm, adjust it and the turntable's suspension for you.

### Arm Fitting

1) Arm fitting should commence without the outer or inner platters in place, so remove these, taking great care not to touch the main bearing spindle. Do not let dust or dirt come in contact with the spindle shaft or get into the main bearing hole.

Unscrew and remove the shipping bolt located on the top of the plinth (see main manual fig 1). Save the shipping bolt for transporting the turntable in the future.

2) Make sure that the mains lead/line cord is **NOT CONNECTED** to the main wall socket and then remove the bottom cover to the base. This is held on by the four rubber feet and can be removed by undoing the four Phillips-head screws in the feet while holding the turntable vertically on one end.

Do not operate the turntable without the base fitted, even for a short time for safety reasons. There are 'live' parts inside which are normally covered but could deliver a fatal electric shock if touched.

3) The arm-mounting collar is made to be held in place by three Allen screws as shown in fig 1. Insert the collar through the hole in the plinth's top surface, then turn the plinth upside down on to some newspaper (in case oil runs out of the bearing). Line up the threaded holes in the arm collar with the holes in the floating 'T-bar' sub chassis.

Use only the correct bolts and washers provided by AR with the collar. Place a spring washer on each bolt. Insert one bolt into

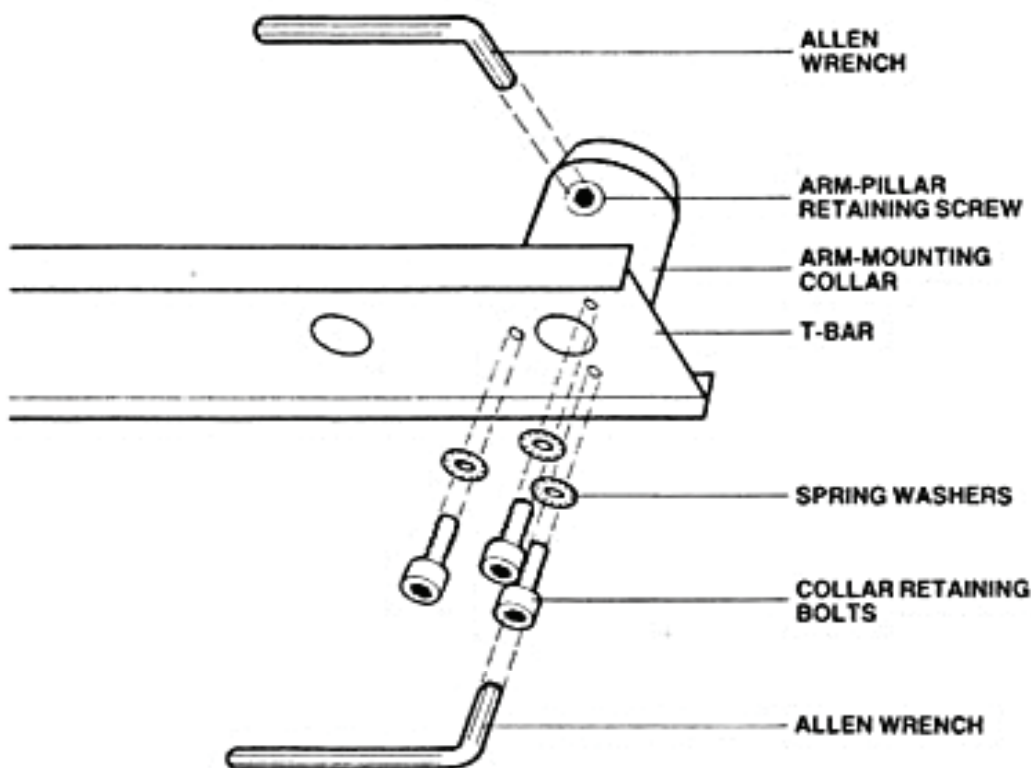
each hole in the sub chassis and screw firmly home in to the collar with the Allen-wrench provided.

4) Turn the plinth right-side-up. Loosen the Allen screw in the side of the arm-mounting collar, then, for arms with fixed leads, pass the 'phono cable down through the hole in the collar. For arms with plug-in leads, the plug and cable should be disconnected until after the arm's support pillar has been located in the collar as described below.

Insert the arm's support pillar into the collar and lightly tighten the Allen screws in the side of the collar as shown in fig 1, with the Allen wrench provided, to grip the pillar and locate the arm for adjustment. (These screws should be tightened more fully when the arm has been correctly set up as explained in the main manual).

FIG 1

### MOUNTING THE ARM-PILLAR RETAINING COLLAR





With arms which have a separate tagged signal earth lead, you should connect this to the floating 'T-bar' subchassis by gripping the tag under the head of the nearby screw provided on the 'T-bar' as shown in fig 2.

5) The tone arm's phono and signal earth cables must now be dressed. The phono cable (comprising two joined phono leads) should be firmly held, along with the signal earth lead, by two 'P' clamps.

These are available as accessories from your AR dealer and should be held in place, so as to tightly grip the cables, by means of 1/4 inch screws driven into the interior vertical wall of the plinth as shown in fig 2. This can be made easier if you first drill small diameter pilot holes for the screws taking care *not* to penetrate the plinth's outer surface.

The tone arm phono and signal earth cables should be adjusted so that there is a loop of free cable approximately six inches long between the arm pillar and the first 'P' clamp to allow unrestricted movement of the suspended 'T-bar' subchassis.

The free loop of cables should not touch any part of the 'T-bar', base, bottom cover or plinth (apart from at the clamping points). Nor should they pull the sub-chassis across, or restrict its horizontal or vertical movement.

One method of positioning the arm lead is shown in fig 2, but different tone arms and cables will need other layouts. Your dealer will be able to assist you here. Otherwise, if you wish to do it yourself a degree of experimentation will be essential.

It may be found that, in some cases, your tone arm has a very deep pillar that would make the cable touch the bottom cover. This can be overcome by cutting a small hole in the cover to allow the cable loop or connector to fall below the cover level, because the feet give an extra 1/2 inch or so of clearance.

6) With the arm and cable installed, you may replace the inner platter by inserting the shaft in the main bearing after first making up for any oil loss which may have occurred during arm installation. Use only the specially-formulated oil as described in section F maintenance, part 5) 'Lubrication' in the main manual.

Replace the drive belt, outer platter and felt mat, fit the counterweight on to the rear of the tone arm and place a record on the mat. Make sure the turntable is level by placing a small spirit level (not provided) on the plinth's top surface.

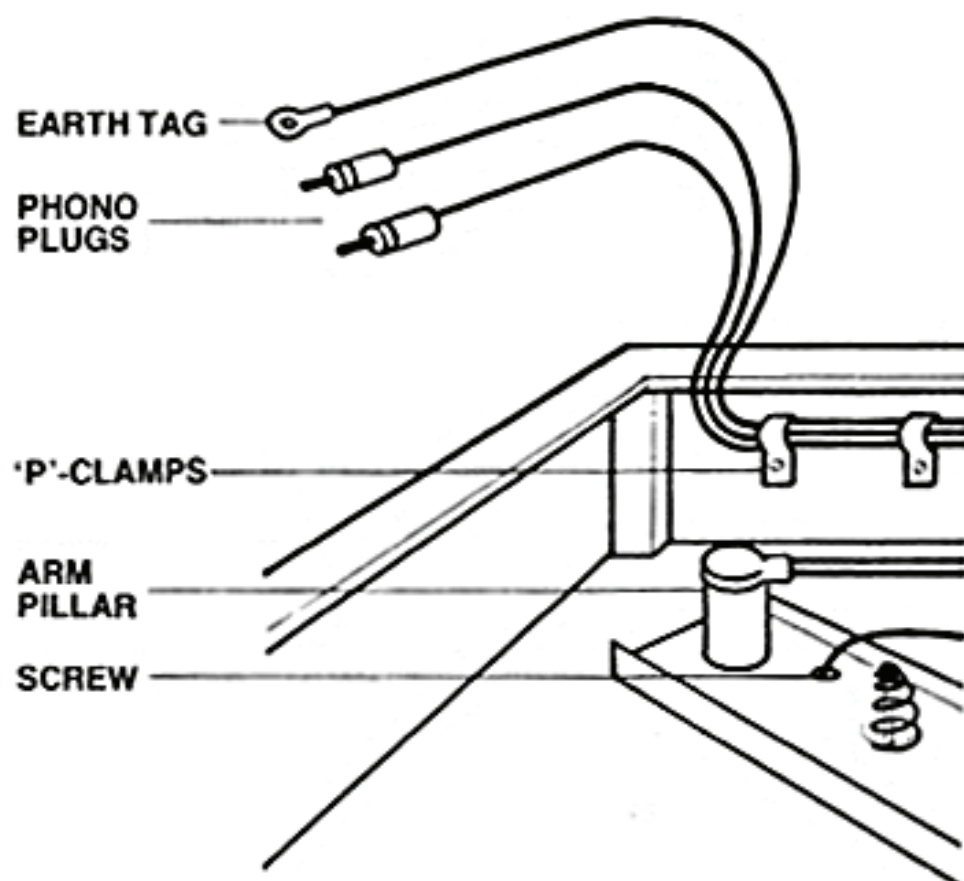
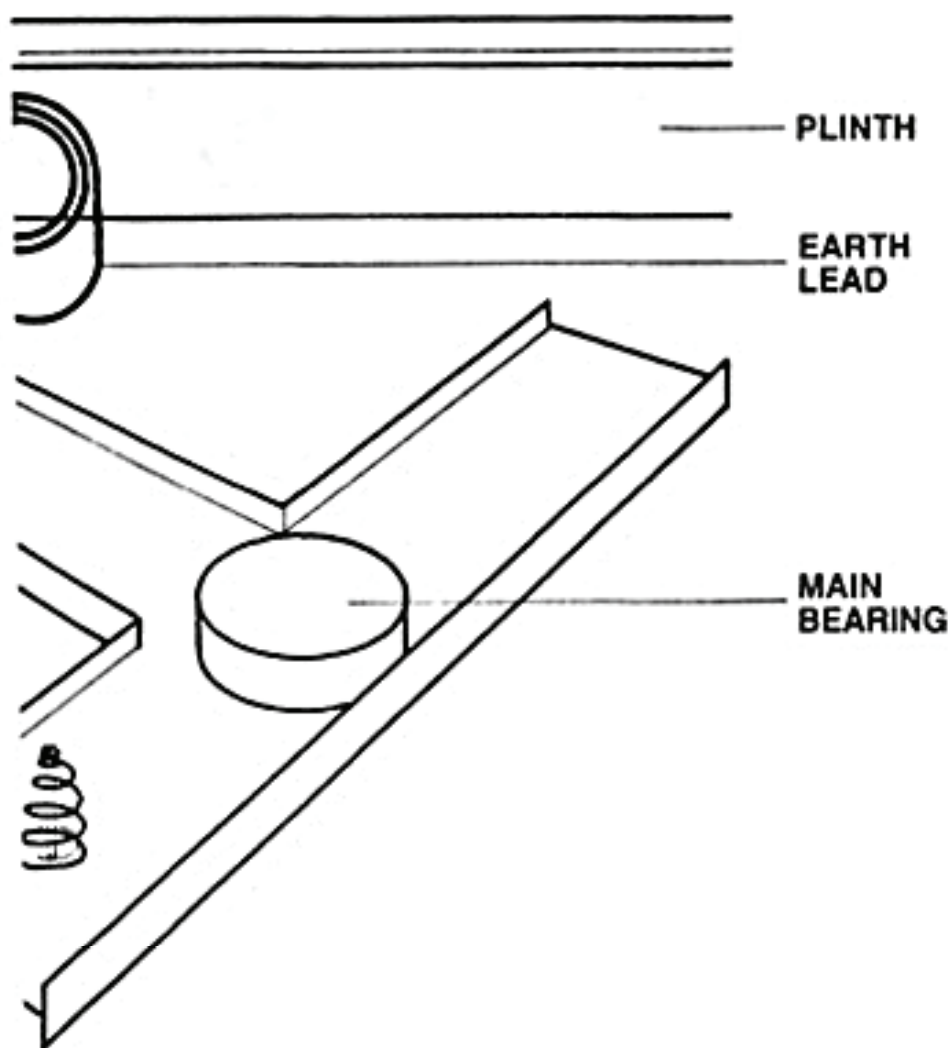


FIG 2

ARM PHONO AND EARTH LEAD DRESSING



When correctly adjusted, the platter and arm should bounce freely when prodded *gently* with a finger in the vertical direction. There should be no knocking sounds — only a faint 'swishing' sound may be audible from the suspension. Also, platter and arm should be free to move laterally by about 1/8 inch in all directions without fouling or pulling when the platter's main spindle is gently moved horizontally by hand from its normal rest position.

**Suspension adjustment**

7) All EB 101 turntables with factory-fitted arms will have pre-adjusted suspensions, but after fitting an alternative arm, the suspension *must* be checked and adjusted as outlined above and in this section.

To adjust the suspension, follow the instructions described below, but because the optimum sonic performance of this turntable requires correct adjustment, refer to your dealer if you are in any doubt about your deck's alignment.

It really isn't difficult to do, but your dealer can fit your tone arm and align the suspension for you if you wish.

**Before starting, YOU MUST DISCONNECT THE MAINS SUPPLY BY UNPLUGGING FROM THE MAINS.**

If you have just fitted the arm and phono leads, you will, of course, have already disconnected the mains supply.

You may then remove the base as explained in Arm Fitting section 1).

Support the plinth about eight to twelve inches above the table or other suitable surface so that you can reach up inside.

This can be done with firm books, loudspeakers or heavy boxes under each end, but make sure the plinth cannot slip off, or the supports fall over, while you are adjusting or tightening.

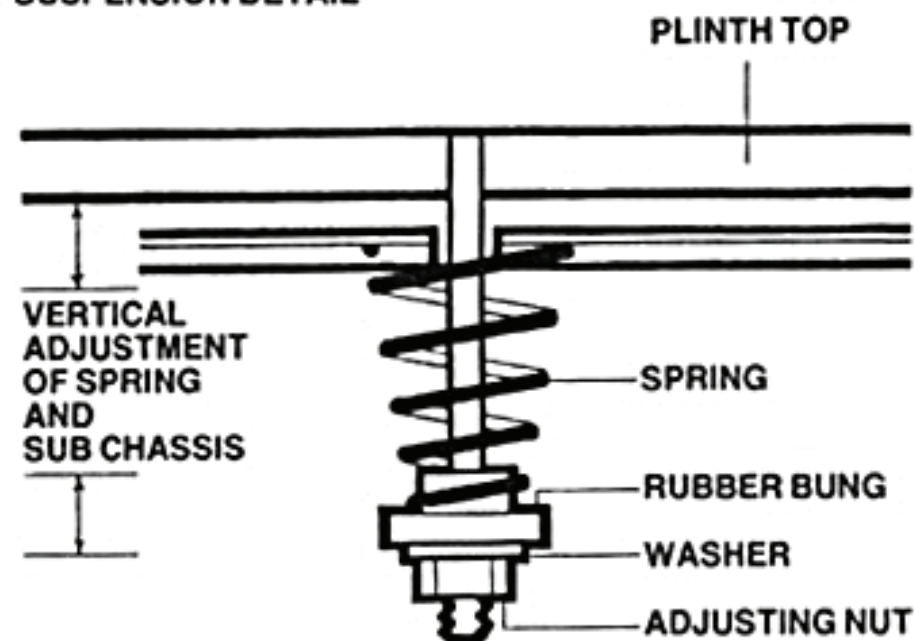
The turntable must also be level before you attempt to adjust the suspension and this should be checked with a small spirit level (not supplied) placed front-to-back and side-to-side on the plinth's top surface.

With the inner and outer platters, drive belt, felt mat, record and arm counterweight in place, check to see if the platter is level. This can be gauged by the gap between the bottom edge of the platter and the plinth top, which should measure four or five millimetres all round.



Use a coin or piece of thick card at a number of positions around the platter and if height correction is needed this is provided by adjusting the nuts holding the suspension springs as shown in fig 3.

**FIG 3**  
**SUSPENSION DETAIL**



You can raise or lower the subchassis, and hence the platter, by turning the retaining nuts (but not the springs) and checking the gap between platter and plinth. Turning the nuts clockwise raises the sub-chassis and vice versa. Adjust the suspension at the three points until the platter is level and the suspension bounces freely. If this proves difficult to achieve, check to make sure the arm lead is not pulling the suspension across. If it is, this means you have installed the phono or earth lead with too small a loop.

If the arm lead is not the culprit, then individually rotate the springs on their seats, keeping the nuts still, until the subchassis bounces well without fouling and is level.

8) When you are satisfied that the suspension is well-aligned as outlined above you must replace the base. First, however, remove the outer platter, inner platter and drive belt. You may then turn the deck on its side and **REPLACE THE BASE BOARD**. Your EB101 may then be re-assembled, connected to the mains supply and tried out.

## Testing

9) Turn on the motor using the on/off switch to the front left-hand side of the plinth top. Check to see that the motor runs without making any rubbing noises and that the platter turns at the correct speed as judged by a stroboscope (not supplied).

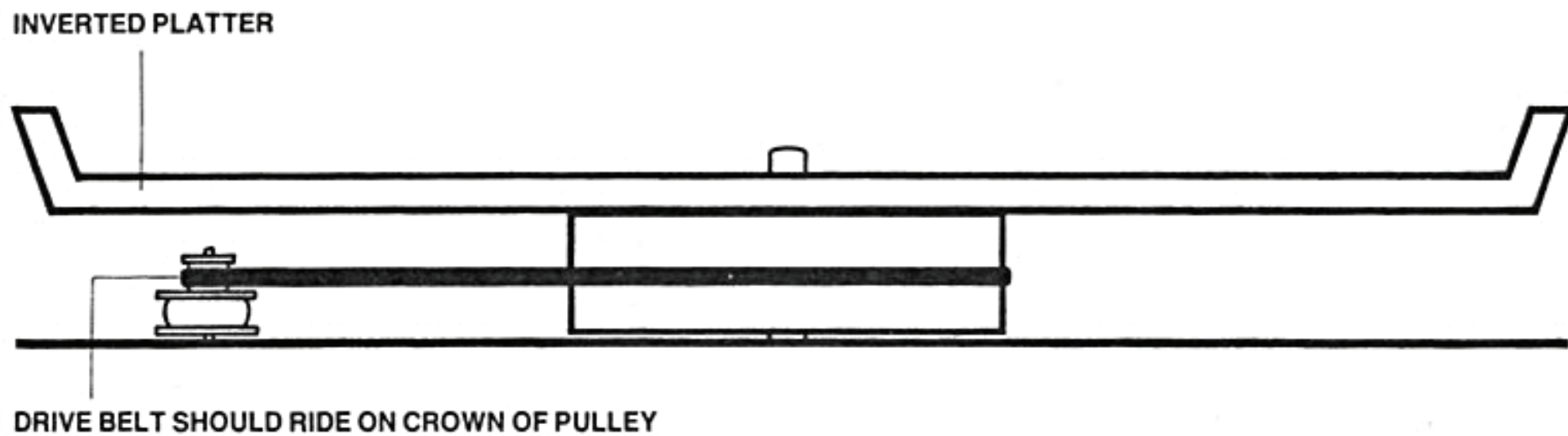
You can turn the platter upside down as shown in fig 4 to watch the belt as it rides on the drive pulley. It should sit centrally on the pulley crown as shown in fig 4. If it does not, the suspension is probably not level and you should repeat the suspension setting and adjust procedures before re-fitting the base and re-checking as outlined above.

If the belt cannot be made to run true, or requires suspension mal-adjustment to make it run true, then you should contact your dealer who will be able to check the unit thoroughly and make any other adjustments that may be necessary.

You must of course fit the base back on and you may then fit your cartridge and adjust the tone arm as instructed by the tone arm and cartridge manufacturers. Though the exact procedures vary, you will find they broadly follow the lines set out in 'Fitting your AR tone arm' and 'Cartridge alignment'.

With the cartridge installed and adjusted in the arm you should proceed with the main manual section E 'Installation and use'. When your EB101 turntable is installed it should give you many years of music, but don't forget to look after it as instructed in the maintenance and cleaning section of the manual.

FIG 4



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