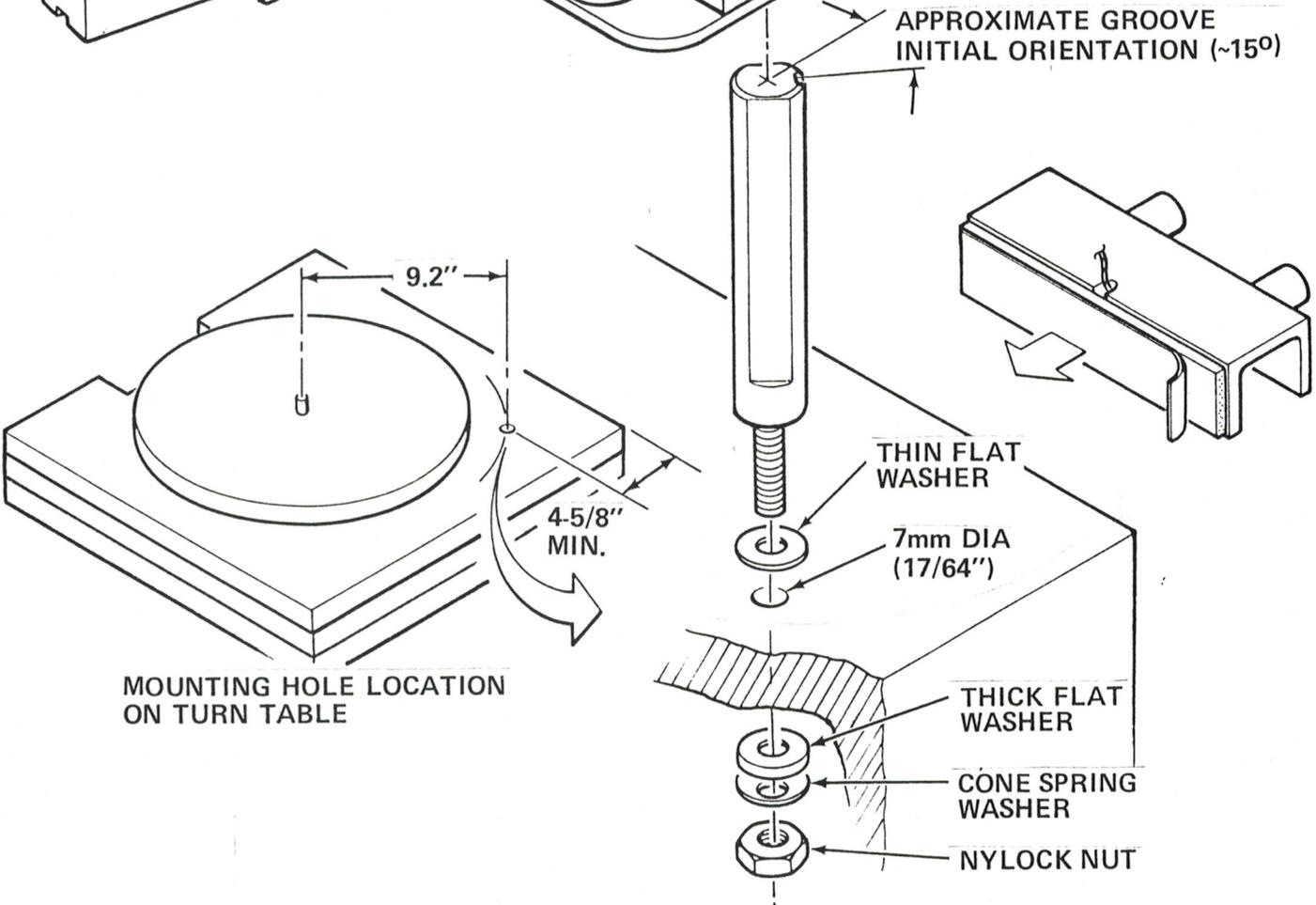
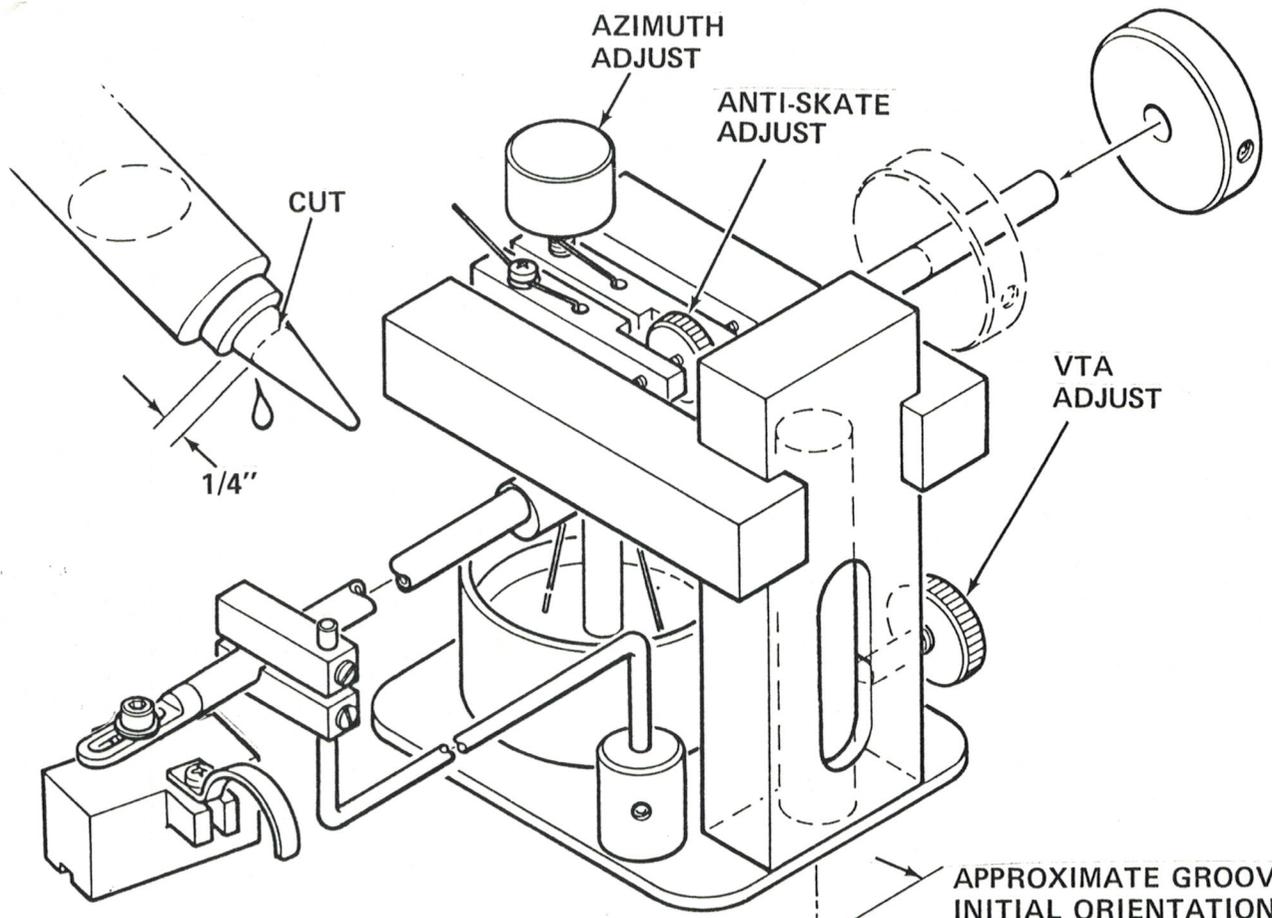
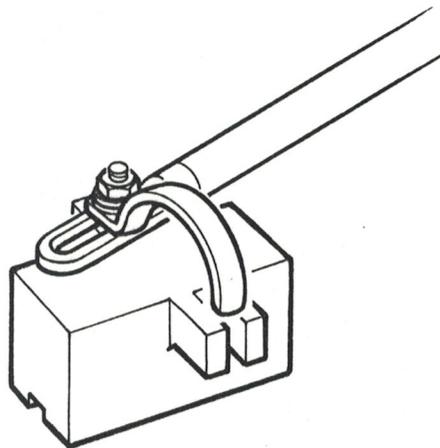
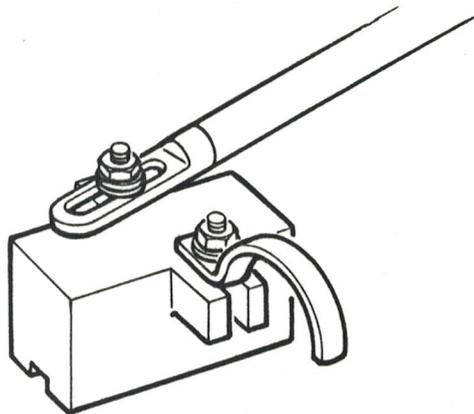
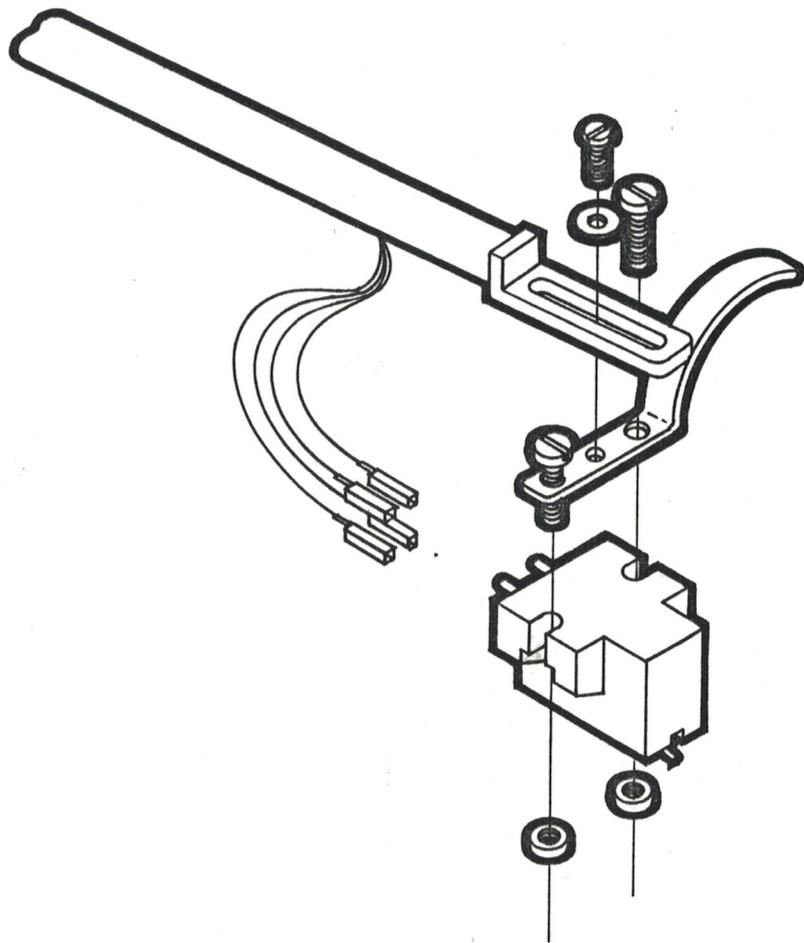


THE WELL TEMPERED LAB
3108 MC KINLEY WAY
COSTA MESA, CA 92626





Installation Instructions For The Well Tempered Arm

Remove the arm from the shipping box being careful of the litz wires connecting the arm to the termination.

I. Assembly of arm rest, counterweight, and adding damping fluid.

a. Put the arm rest assembly into the arm rest holder. Orient the arm rest to about 45 degrees to the base plate and lightly tighten the set screw. Secure the arm in the holder.

b. Put the heavy counterweight on about 1 inch (2.5 cm) from the end. The light counterweight can be used by itself for very low mass cartridges or can be added to the heavy counter weight for heavier cartridges.

c. Remove the tip cover from the syringe of damping fluid and cut the tip off, leaving about 1/2 inch (1.2 cm). Inject all the damping fluid into the damping cup. Rubbing alcohol can be used to clean drips. Don't use too much or the bond of the damping cup may be affected.

II. Mounting the arm on turntable.

a. Drill a 17/64 inch (7mm) hole (to clear a 1/4" bolt) located 9.2 inch (234 mm) from the turntable spindle and at least 4 5/8 inch (117 mm) from the back edge of the turntable. (The 4 5/8" dimension insures that the arm will not protrude past the back edge of the turntable base. Correct mounting geometry can be achieved at any point on a 9.2 inch radius.)

b. Mount the post with the V with the washers and nut as shown.

c. Position the V groove to face the back right corner of the turntable base and tighten the nut securely, then back off a little. (This insures that the post can be rotated for overhang adjustment as will be described later.)

d. Set the arm on the post and tighten the thumb screw into the V groove. It is important not to miss the V groove.

e. Fasten the termination/connectors to the back side of the turntable base with the double tape provided. Notice that the termination can be mounted in several orientations. Dress the litz wires for a neat appearance and so they don't touch anything. (It may be a good idea to clean the mounting area.)

f. Take the arm out of the arm rest holder and hold it over the turntable spindle. Making sure that the thumbscrew is securely tightened, rotate the whole assembly (on the bolt) so that the end of the arm overhangs the turntable spindle by 0.62 inch (15.7 mm) as indicated by the circle on the alignment template. The end of the arm is 9 inches from the pivot. Re-orient the arm rest holder as desired.

III. Installing and adjusting the cartridge.

a. Mount the finger lift on the cartridge using the screws and nuts supplied with the cartridge.

b. Mount the cartridge on the arm with the 2-56 screw and washer as shown in the illustration. Estimate a 20 degree tracking angle and position the cartridge so that the stylus tip lines with the end of the arm. Tighten the screw lightly with the allen wrench. Connect the sockets to the cartridge with tweezers or long nose pliers. Be careful. The sockets can be squeezed together or opened up if necessary to accommodate unusual size pins. The color code is the normal arrangement of (+RIGHT, RED), (-RIGHT, GREEN), (+LEFT, WHITE), (-LEFT, BLUE).

c. Set the tracking force in the usual way by adjusting the counterweight.

d. Set the tracking angle of the cartridge for parallel alignment to the indicated points on the alignment template. Tighten the screw securely.

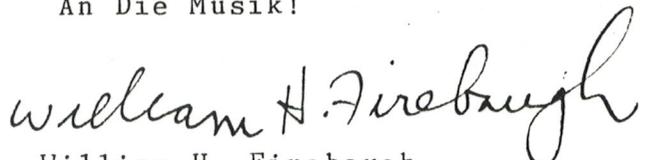
d. Set the Vertical Tracking Angle by loosening the thumbscrew and positioning the suspension assembly on the post for the desired tracking angle. I have found that a negative angle is generally best, where the back edge of the cartridge is lower than the front.

e. With a record playing, set the cartridge azimuth angle by adjusting the knob on the top of the suspension assembly. Because of the viscosity of the damping fluid, there will be some lag in the arm responding to the adjustment. Very little rotation is required therefore adjust in small increments until you get the feel of the action.

f. Set the anti-skate force with the thumbwheel. Place the cartridge stylus on an ungrooved portion of a record and adjust the thumbwheel so that the arm does not skate. Anti skate moment increases as the suspension points are separated.

g. Connect the arm to the preamp in the usual way. The red dot indicates the RIGHT channel. It may be a good idea to have two ground wires, one from the arm and another from the turntable.

An Die Musik!


William H. Firebaugh

Alternate Cartridge Mounting For The Well Tempered Arm

In response to many requests for a different cartridge mounting, I have been experimenting with the single point mounting technique shown on the attached sheet. This method permits any degree of torque to be used for the mounting hardware and this may give some users a comfortable feeling. I am not suggesting that the original mounting method is deficient in any way but I do understand the desire to really torque down on the cartridge mounting hardware.

The cartridge mounting shown on the attached sheet has the following advantages:

1. Permits high torque mounting of cartridge.
2. Single point mounting does not impose a differential stress on the cartridge body which may affect the performance of some cartridges.
3. The cartridge stylus is nearly lined up with the axis of the tone arm and this is a desirable geometry.

Use stainless steel hardware, 2-56 size suggested. Let me know what you think of this different mounting technique.

This technique will require re-adjustment of the azimuth angle but that is easily accomplished with the azimuth adjust knob.