

WALLYZENITH v1.0 INSTRUCTIONS

Use the WallyZenith when you know what your stylus/cantilever zenith error is and wish to make a corrective alignment.¹

SUBJECTIVE ASSESSMENT – BEFORE vs AFTER ZENITH CORRECTION

If you wish to listen to your cartridge with and without zenith correction, the best evaluation conditions are under these guidelines:

- Use only 33rpm records
- Listen to the INNERMOST tracks on evaluation records that are closer to the record label
- Use music that throws a large soundstage with excellent imaging and plenty of high frequency content. Listen for improved dynamics and overall coherence and intelligibility.
- If you do not notice a significant difference, try this experiment again while playing at the middle of the 33rpm record.

PREPARATION FOR ALIGNMENT PROCESS

Ensure your cartridge remains safe by rolling back your sleeves or removing any garments with hanging sleeves. Remove hanging necklaces, lanyards, etc. from around the neck that could get caught on the tonearm or cartridge. Have plenty of lighting on the platter area. Turn off your system to protect the speakers.

Set overhang using the WallyTractor before using the WallyZenith.

Use the WallySkater to measure for any horizontal forces within the tonearm when anti-skating mechanism is set to zero. If the reading is more than 5%, call WallyTools to discuss the situation as such forces will cause misalignment of the cantilever unless certain measures are taken.

INSTRUCTIONS

1. Secure turntable platter with tape or small wedges so platter does not rotate
2. Disengage the anti-skating device on the tonearm (or adjust to zero)
3. Set the Vertical Tracking Force (VTF) to your desired amount. Always make this measurement AT RECORD HEIGHT and stay within the cartridge manufacturer recommended VTF range.
 - a. “At record height” means on most VTF scales (except a WallyScale) that the scale should be placed directly on the platter, not on a record.
4. Choose whether you will use the “Older Record Collection” or “Newer Record Collection” side of the WallyZenith. Which one depends upon how you have set your overhang using the WallyTractor.
 - a. E.g., If you used “Old Record Collection” arc to set your overhang on the WallyTractor you will have to remain consistent and use the same “Old Record Collection” half of the WallyZenith to align your cantilever.

¹ It is possible to use the WallyZenith as a “measurement tool” for determining zenith error. The process involves repeated listening and subjective assessment. WallyZenith is a corrective tool first and foremost. A WallyTools product for zenith measurement is currently under development.

center of the three lines. You now have **PERFECT** horizontal alignment for your stylus/cantilever assembly!

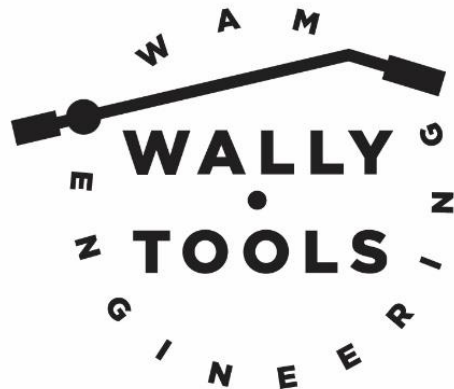
If you have aligned properly you can now see the maximum “Horizontal Tracking Angular Error” (HTAE):

About 1° (clockwise - negative) at position 3 (or C) [Fig. 3]

About 1.8° (counterclockwise - positive) at position 4 (or D) [Fig. 4]

The maximum negative and positive HTAE depends on the effective length of your tonearm and accuracy of cartridge installation. This step is important as it “teaches” you how to identify about 1° of angular error.

12. Re-check Vertical Tracking Force (VTF)
13. Adjust Anti-skating using the WallySkater.
14. If you are not using a WallyTools customized shim for your cartridge, adjust azimuth **ELECTRONICALLY**. Both the visual inspection of cantilever alignment on vertical plane method and the phase cancelling method are **NOT** accurate and cannot confirm maximum stereo separation.
15. Check the horizontal alignment of your cantilever every 3-6 months. The reason for this is the break-in of the stylus/cantilever suspension and aging of the damping polymers. Invariably, such break-in and aging cause some degree of drift in the stylus/cantilever location.



ENJOY ANALOG FOREVER!!! - *Wally Malewicz*
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ILLUSTRATIONS

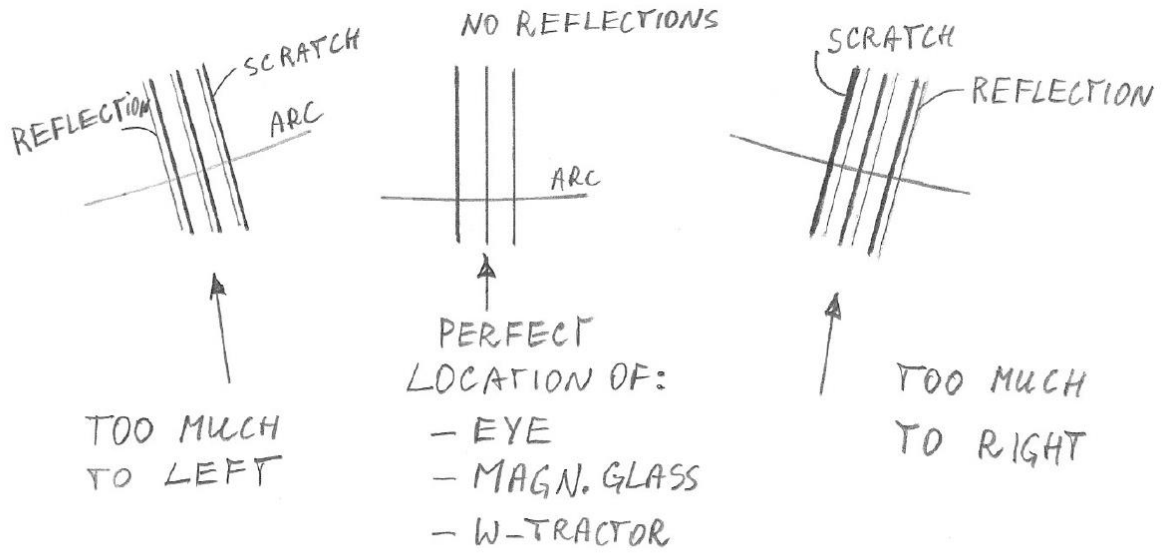


Fig. 1

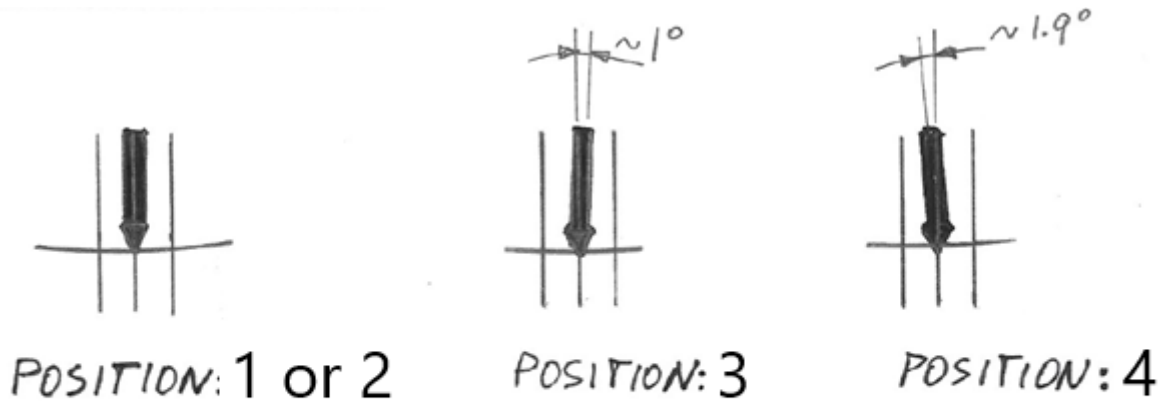


Fig. 2

Fig. 3

Fig. 4