Reed®
For painting on silence

Angling 90° tangential pivot tonearm

Model

5A

User manual

Figure 1

1. Tonearm assembly

a) Unpack box contents (Figure 1).

Please read the User Manual before starting to assemble tonearm. Not following assembly instructions may permanently damage the tonearm.

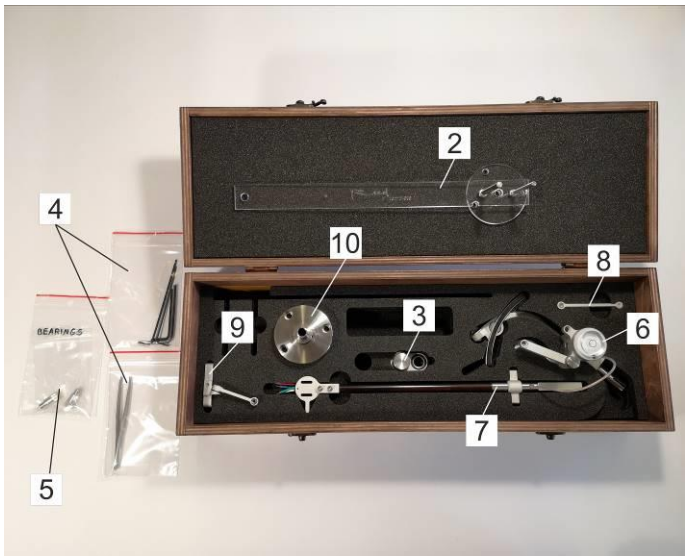

Figure 2

b) Remove the top packaging layer.
c) Take out the template [2], a counterweight [3], all the accessories [4] and the top bearings [5] (*Figure 2*).

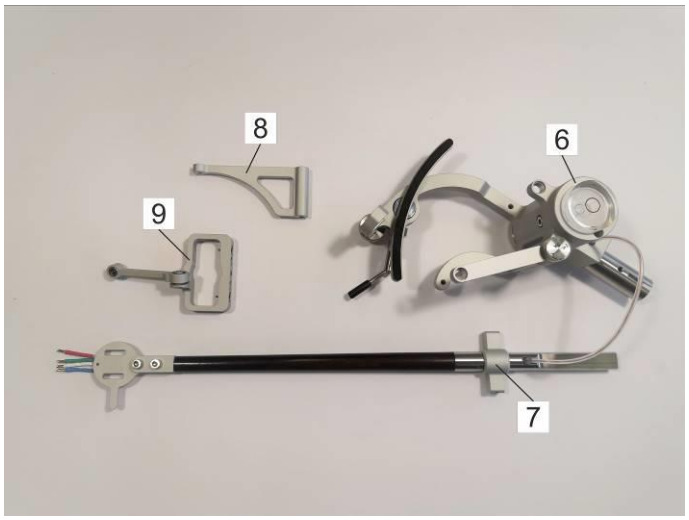

Figure 3

d) Take out the tonearm parts: tonearm body [6], armwand [7], front link [8] and tonearm frame with lever [9] (*Figure 2* and *Figure 3*).

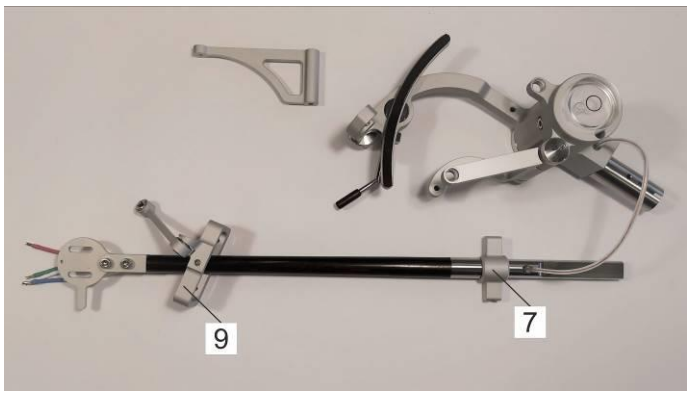

Figure 4

e) Take tonearm frame with lever [9] and put it on armwand [7] so that the armwand [7] passes through the tonearm frame [9] (*Figure 4*).

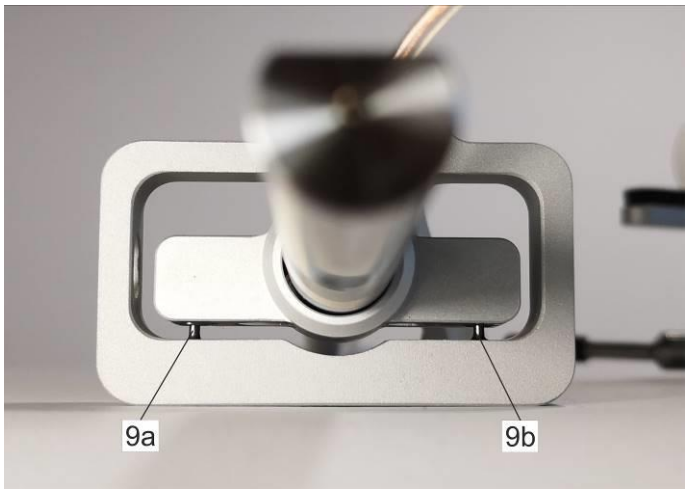

Figure 5

f) Set armwand [7] on tonearm frame pivots [9a] and [9b] and check if they are in correct positions (*Figure 5*). **Needle of the bearing must be embedded in sapphire V cup.**

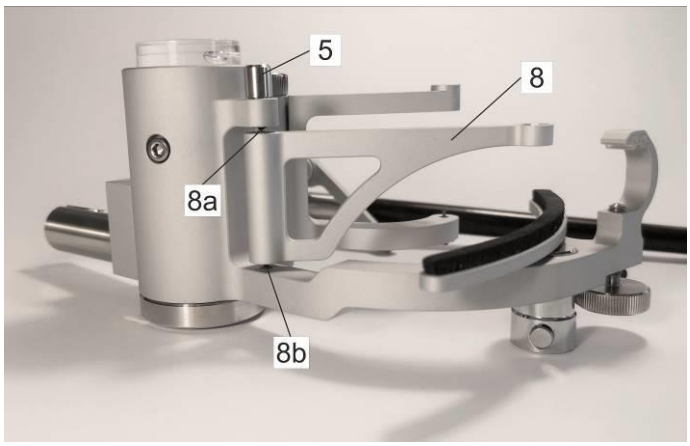

Figure 6

g) Take the hex (allen) key from accessories [4] and top bearing [5] (*Figure 2*). **Top bearing must be screwed out of bearing protection.**

h) Set the front link [8] on a bottom bearing of the front link vertical axis [8b] (*Figure 6*).

i) Screw in the top bearing [5] of the front link [8] vertical axis and tighten it with your fingers without applying excessive force. **Needle of the bearing must be embedded in sapphire V cup.** (*Figure 6*).

j) Check if the front link vertical axis bearings [8a] and [8b] are in correct positions (*Figure 6*).

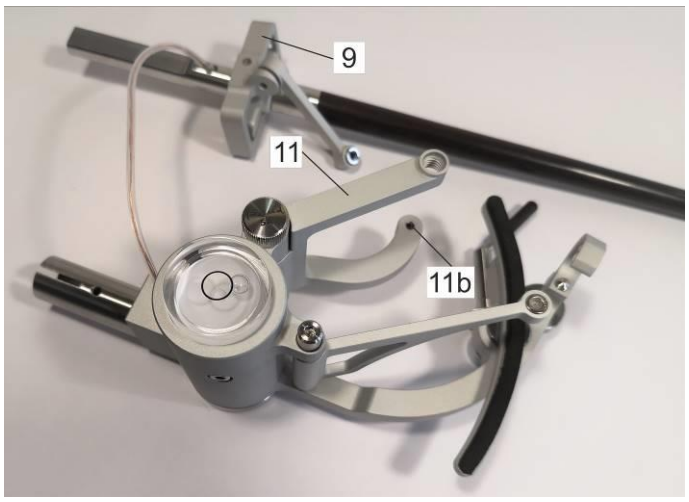

Figure 7

k) Take the hex (allen) key from accessories [4] and top bearing [5] (*Figure 2*). **Top bearing must be screwed out of bearing protection.**

l) Take the tonearm frame with lever and armwand [9] and set it on a bottom bearing [11b] of the back link [11] vertical axis (*Figure 7*). **Needle of the bearing must be embedded in sapphire V cup.**

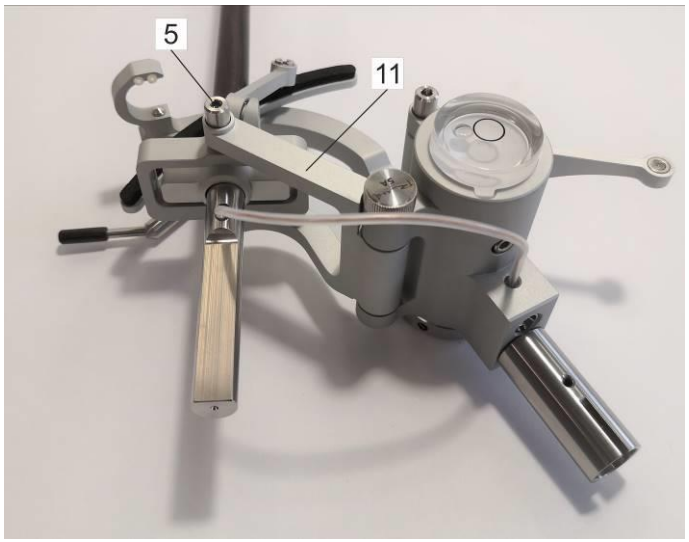

Figure 8

m) Screw in the top bearing [5] of the back link [11] vertical axis and tighten it with your fingers without applying excessive force. **Needle of the bearing must be embedded in sapphire V cup.** (*Figure 8*).

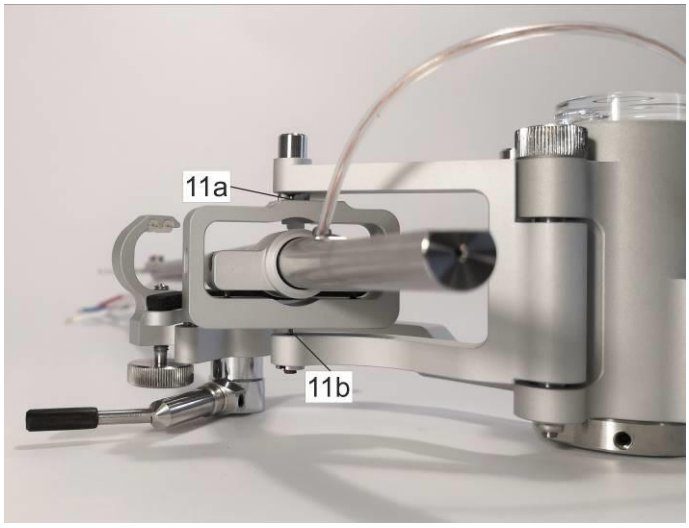

Figure 9

n) Check if the back link vertical axis bearings [11a] and [11b] are in correct positions (*Figure 9*). **Needle of the bearing must be embedded in sapphire V cup.**

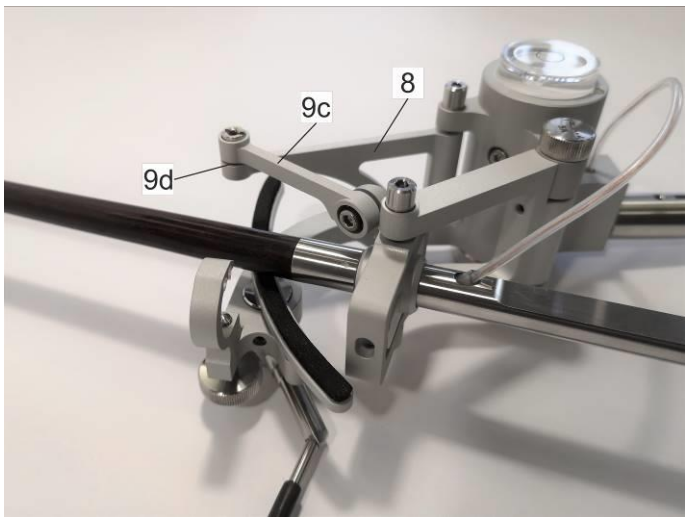

Figure 10

o) Set tonearm lever [9c] on the tonearm front link [8] so that the lever bearing needle [9d] would be embed in sapphire V cup of the tonearm front link [8] (*Figure 10*).

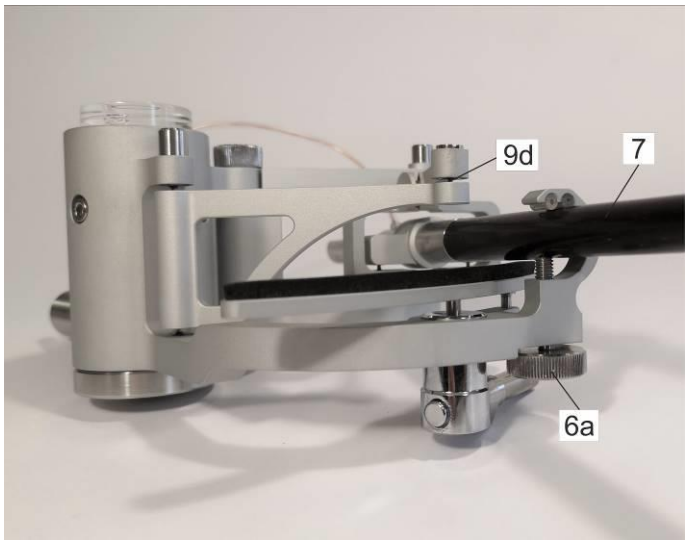

Figure 11

p) Check if the tonearm lever bearing [9d] is in correct position. **Needle of the bearing must be embedded in sapphire V cup.**

Check if the armwand can move freely.

Fasten armwand [7] using fastening screw [6a] (*Figure 11*).

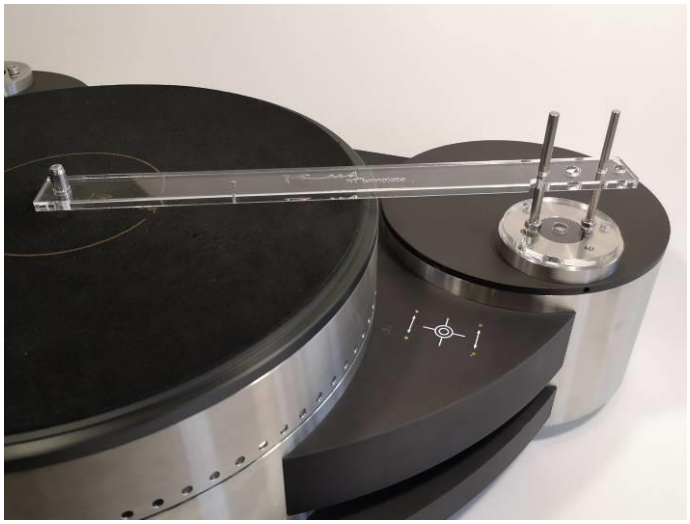

Figure 12

2. Tonearm mounting:
Mount the tonearm onto a turntable using template [2] (*Figure 2*).

a) On the turntable, mark three tonearm base mounting holes (*Figure 12*) using Reed mounting drawing and check the position of holes using a Reed template [2] (*Figure 2*).
b) Drill three 4.2 mm holes and thread them with M5 thread.
c) Fix the armboard in a designated place using a Reed template (*Figure 12*).

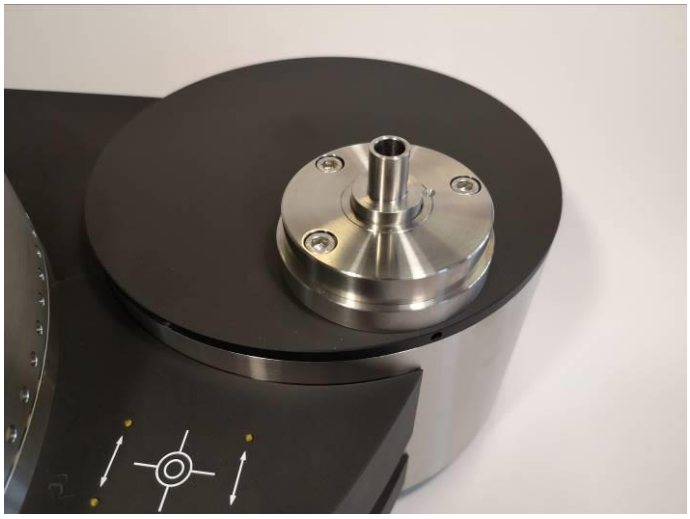

Figure 13

d) Take the tonearm base [10] (Figure 2) and set it on the armboard so that the centers of three holes overlap armboard holes. Fix the tonearm base with three M5 screws (*Figure 13*).

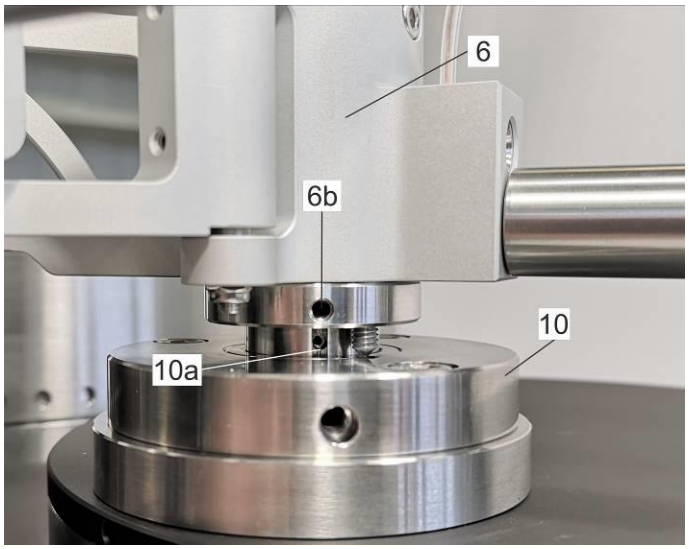

Figure 14

e) Set tonearm body [6] on the base [10]. Fixing screw [6b] must match with the groove [10a] in tonearm base. Fix the screw [6b] with hex (allen) key (*Figure 14*).

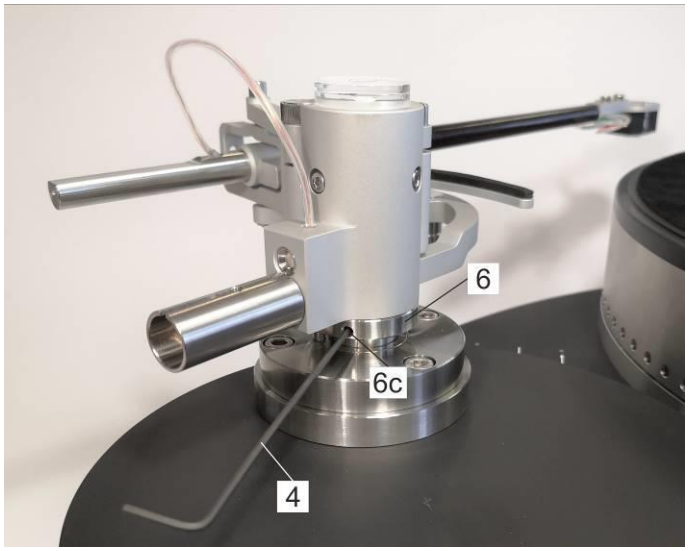

Figure 15

f) Fix the screw [6c] on the other side of tonearm body [6] with hex (allen) key [4] (*Figure 15*).

g) Attach a cartridge of your choice to the headshell. Check cartridge position with Reed protractor [1] (*Figure 1*) after *Step 3*, *Step 4*, *Step 5* and *Step 6*.

Be careful while connecting or disconnecting wire connectors to the cartridge, because tonearm wiring is very fragile. For connecting and disconnecting wires, use tweezers. Always pull the wire by its connector and **never** pull by wire itself.

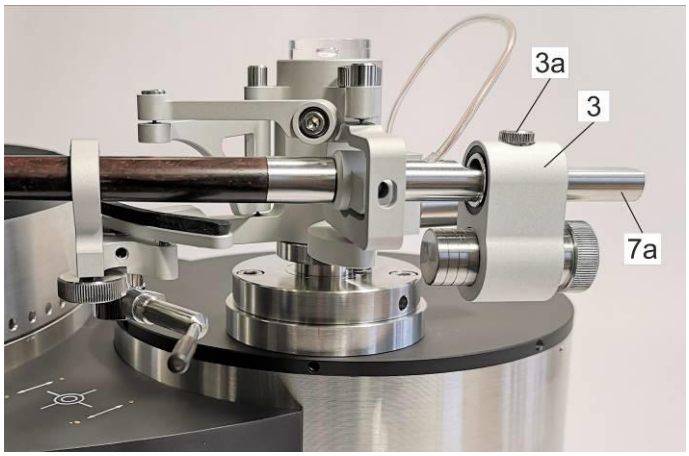

Figure 16

h) Put counterweight frame [3] onto the holder [7a] and fasten it with the fixing screw [3a] (*Figure 16*).

WARNING!

Before using your tonearm (making adjustments or playing LPs) make sure that all bearings of front link and back link vertical and horizontal axis are in correct position (Figure 5, 6, 9, 11).

Failing to set bearings and pivots correctly may permanently damage the cartridge, tonearm and LP.

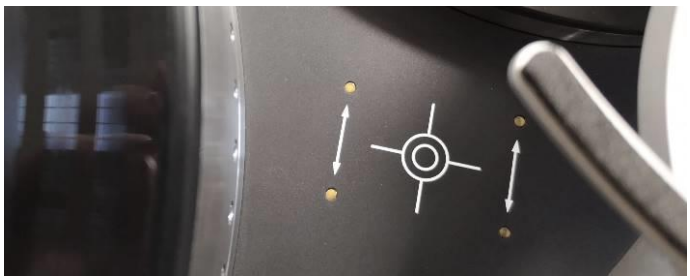

Figure 17

Before setting tonearm adjustments set the turntable to a horizontal position (*Figure 17*).

Figure 18

3. Vertical tracking force (VTF) adjustment (*Figure 18*)

a) Screw counterweight weight [3b] out of the frame [3] until front of a counterweight aligns with frame's surface (i. e. it should not stick from a frame)
b) Set tonearm balance by sliding counterweight frame [3] on the holder [7a].
c) After setting the balance fasten counterweight frame [3] with a fixing screw [3a].
d) Screw in the counterweight weight [3b] forward by two segments. After VTA setup (*Step 4*) finalize VTF using scales.

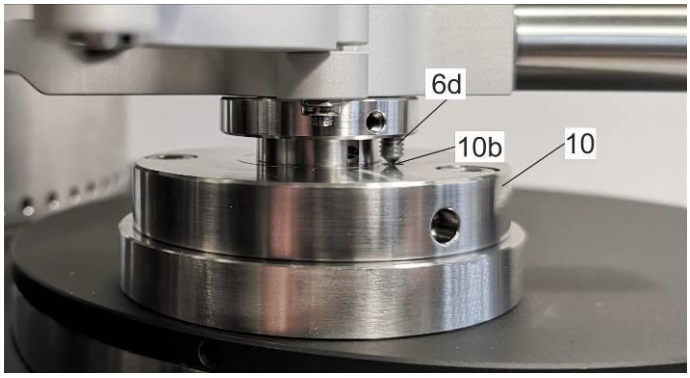

Figure 19

4. VTA (Vertical Tracking Angle) adjustment

a) VTA adjustment screw [6d] must be screwed in and rest in a pit [10b] of the tonearm base [10] (*Figure 19*).

b) Rotate armwand on the record and let down cartridge.

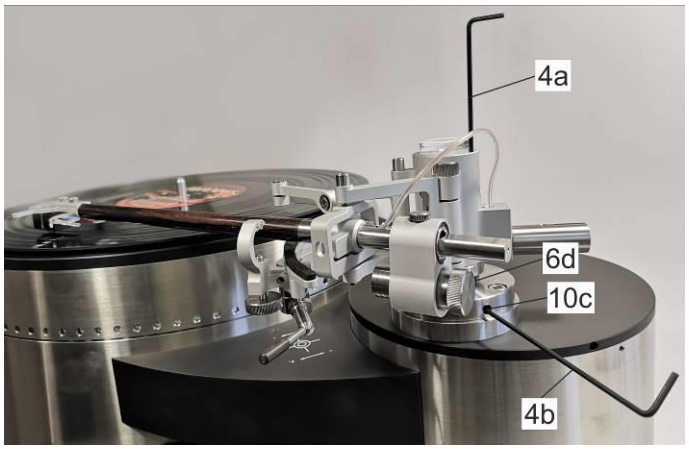

Figure 20

c) Loosen the tonearm base fixing screw [10c] with hex (allen) key [4b] (*Figure 20*).
d) Adjust armwand height by making it parallel to the record. To regulate height, screw in or out VTA adjustment screw [6d] with hex (allen) key [4a] (*Figure 20*).
e) Finalize VTF using scales.

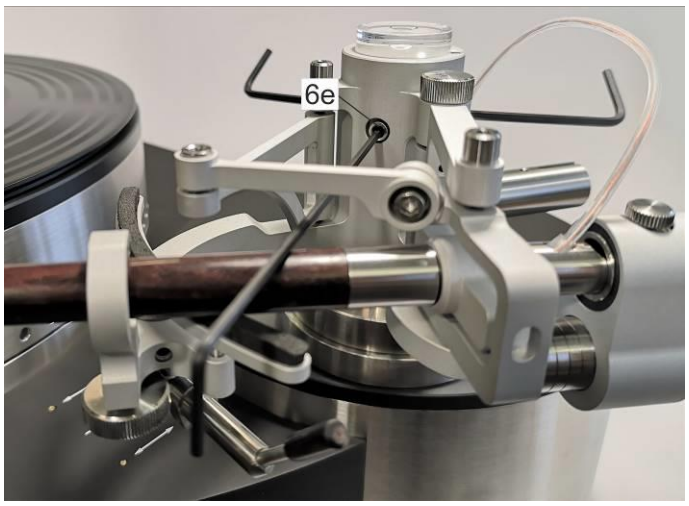

Figure 21

Before setting tonearm horizontality check again if the turntable is set to a horizontal position (*Figure 17*).

5. Tonearm horizontality adjustment

a) To adjust tonearm horizontality you have to screw in or out tonearm horizontality screws [6e], [6f] and [6g] (*Figure 21* and *Figure 22*) with hex (allen) key.

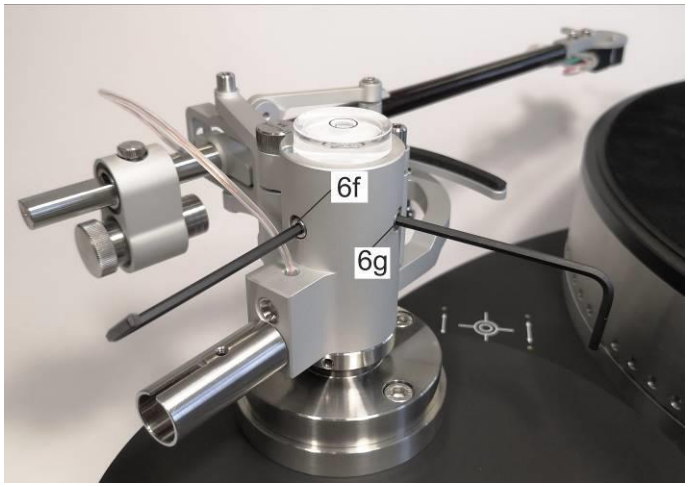

Figure 22

By adjusting three screws – [6e], [6f] and [6g], the anti-skating force adjusted by manufacturer can be adjusted manually.

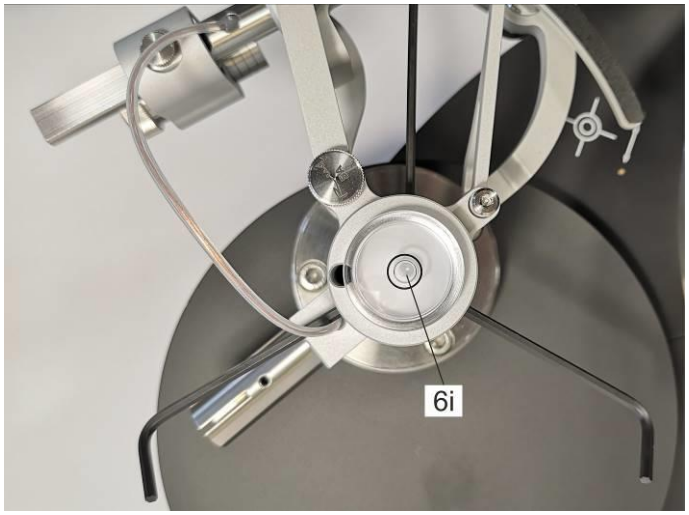

Figure 23

b) Tonearm level bubble [6i] must be in center of level (*Figure 23*).

c) When tonearm horizontality is adjusted all tonearm horizontality screws [6e], [6f] and [6g] must be fixed (*Figure 21* and *Figure 22*).

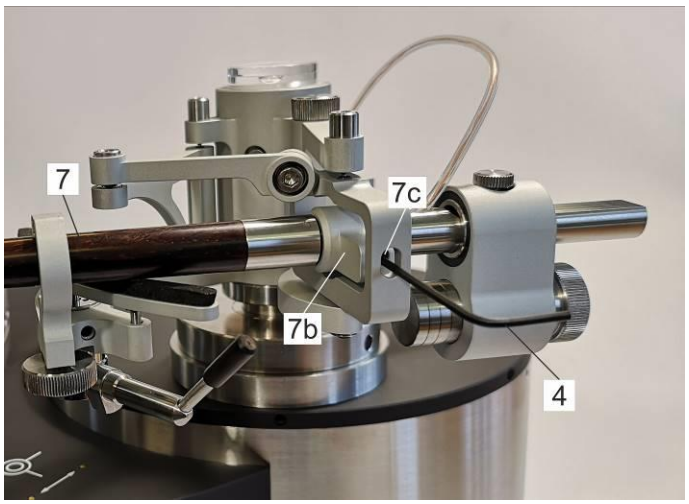

Figure 24

6. Azimuth adjustment (*Figure 24*)

a) If you need to adjust azimuth, hold the armwand cylinder [7b] and loosen azimuth adjustment screw [7c] by using hex (allen) key [4].
b) By carefully turning the armtube [7] clockwise or counterclockwise adjust azimuth and tighten azimuth adjustment screw [7c]. **While adjusting azimuth do not apply excessive force – it can damage tonearm bearings.**

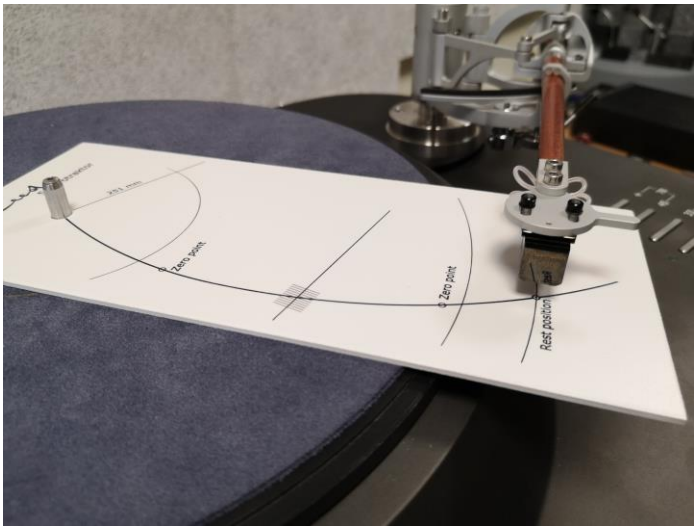

Figure 25

7. Check if the tonearm is mounted correctly with protractor [1] *(Figure 1)* and template [2] (*Figure 2*)

a) Protractor hole should be mounted on the turntable spindle.
b) Needle of the cartridge should follow the line towards the center of the turntable spindle.
c) Needle of the cartridge should match zero points on the protractor. *(Figure 25)*

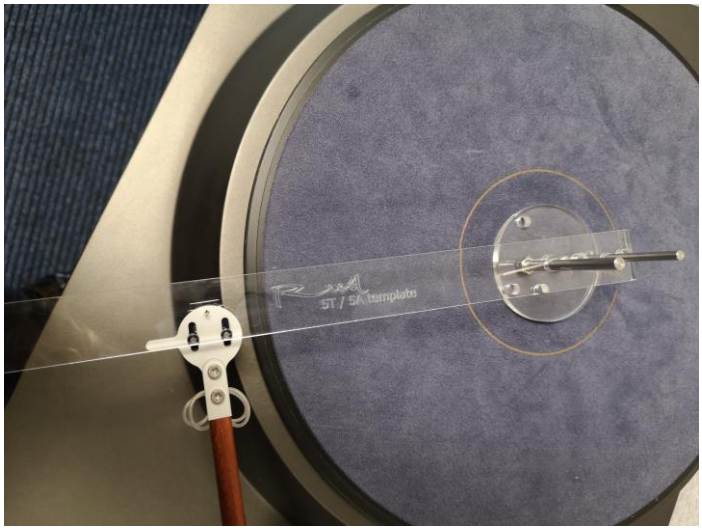

Figure 26

d) Check tonearm setup using Reed 5T-5A template [2] *(Figure 2)*. Template's small hole should be aligned with small hole in the headshell and the needle of the cartridge (Figure 26). Max allowed deviation is +/- 1 mm. If deviation is bigger, please check your tonearm setup according to steps 2-a, 2-b, 2-c, 2-d and 2-e of this manual.