

SERVICE NOTE

JR6: Screen cleaning

These instructions describe how to clean an optical system of JR-6 magnetometer:

1. Switch the device off and unplug the mains cord from the power supply. Unscrew safety screws and remove the white cover:



Figure 1

2. Do not forget to unplug the yellow-green ground cable marked by the red arrow:

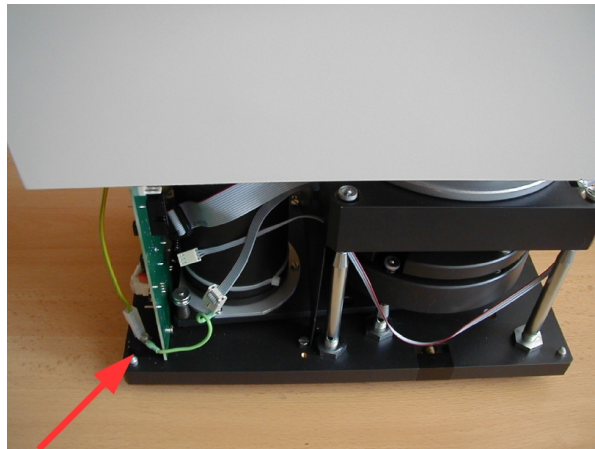


Figure 2

3. Unplug all the cables connected to the electronic board, marked by the arrows:

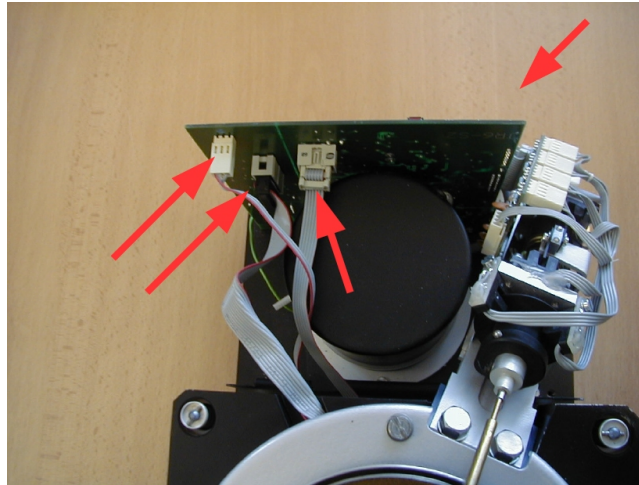


Figure 3

4. Release four springs in the corners of the rectangular plate:

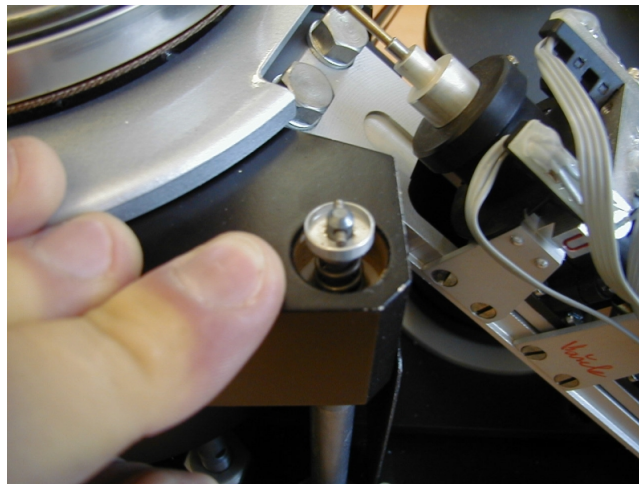


Figure 4

5. Push the upper plate in each particular corner and remove the security pin. Put the spring, small metallic plate and security pin on the desk in square pattern corresponding the position of these parts on the device:

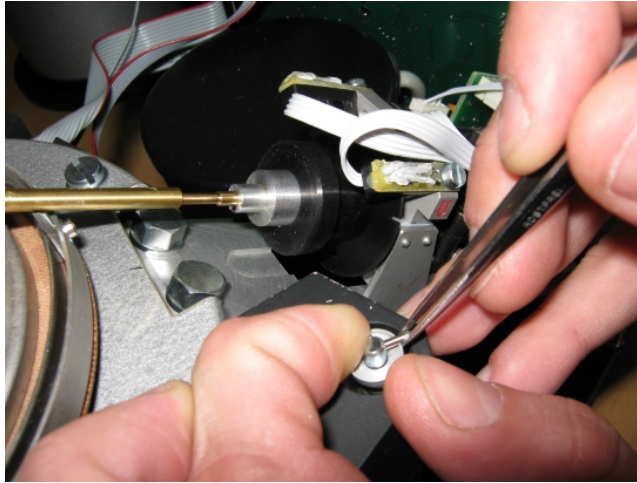


Figure 5

6. Please be careful to **remember position of springs** to be able to place them to the same positions reassembling the device:

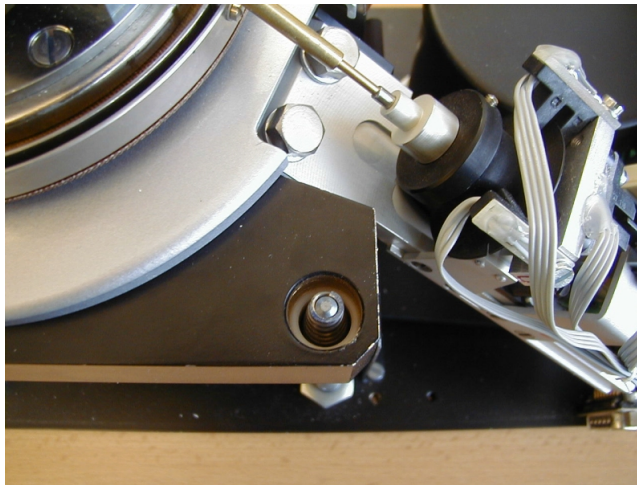


Figure 6

7. Remove the upper rectangular plate with coil and sample manipulator:

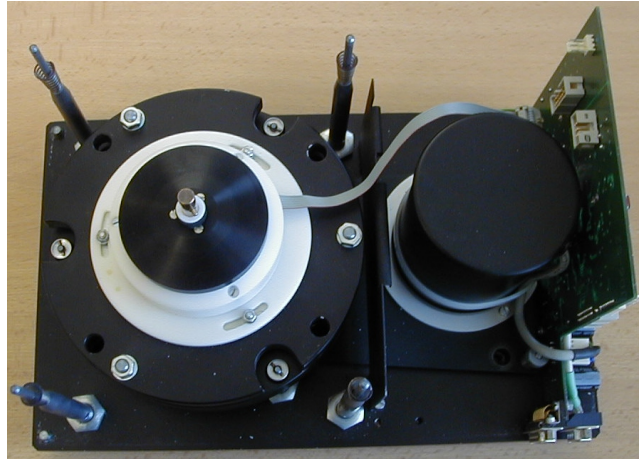


Figure 7

8. Put the rectangular plate with coil and sample manipulator on the corner of the desk to prevent any damage:



Figure 8

9. Remove the screw used for fixing the holder to the shaft of the rotating system (carrier pin), remove also the white teflon and black rubber washers:



Figure 9

10. Now you have the access the three small screws fixing the black rotating screen. Loose the screws and carefully remove the screen pulling it gently up:

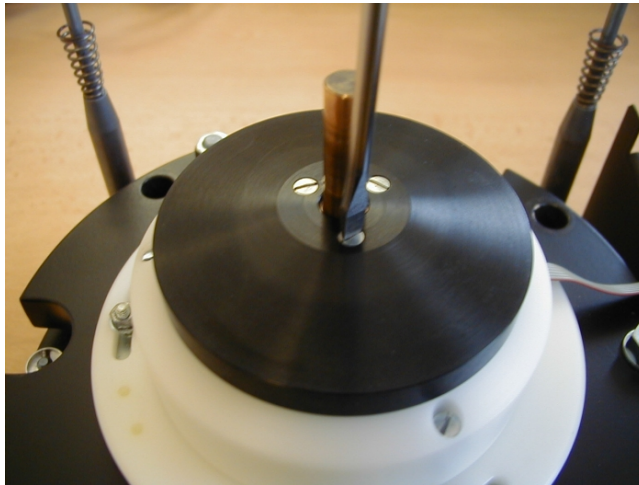


Figure 10

11. Using the magnifying glass observe all the slots in that screen, try to find any one, which is not quite free. Use piece of soft cloth or brush, clean all the slots and entire screen from both sides. Check once more if all the slots are free.



Figure 11

12. You may also remove the white teflon cover to obtain better access to the optocouplers. Unscrew three screws marked by the red circles and arrow, then carefully remove the teflon cover. Clean also the annular area marked by green arrow:

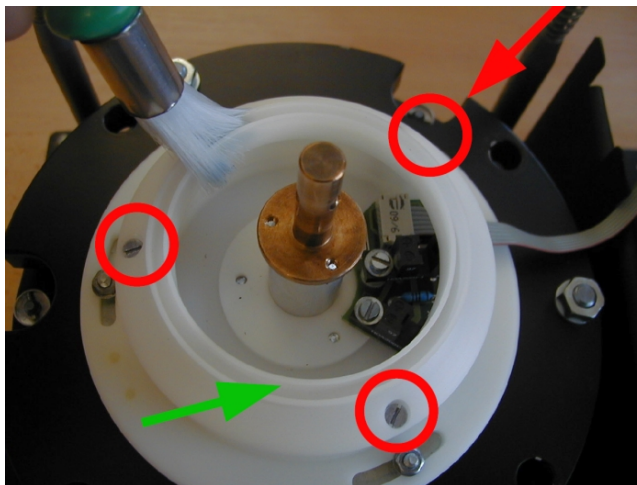


Figure 12

- Using vacuum cleaner clean also the internal space of the optical system, be careful not to damage two optocouplers inside. Clean the optocouplers using thin plastic stick with piece of cotton at the end. Ear cleaning stick works well, very soft brush can be used as well.

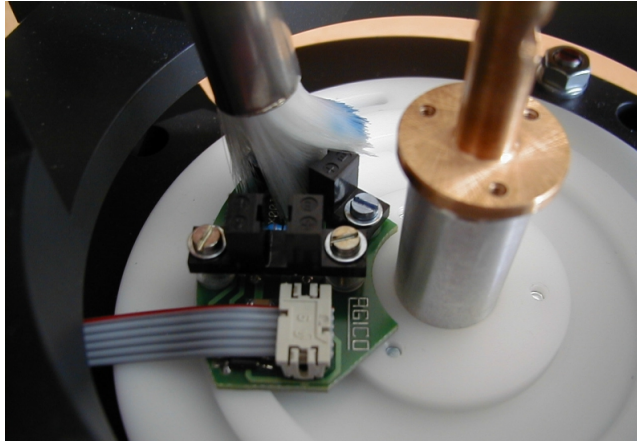


Figure 13

- Now reinstall the screen to the shaft, fix with screws, plug all cables and test the function of the device with JR6TEST program. Use command "**g**" to test a rotation of main shaft.
- If the device works correctly, insert the rubber and teflon washers on the shaft, do not forget to mount the holder fixing screw. Install back the plate with coil. Again be careful to place the **springs** to their **original positions**.
- Plug all cables to the electronic board. Test the function of the device once more.
- Install again the pick-up unit cover when device is switched off. Do not forget to plug the yellow-green grounding cable. Please let me know the results.