How to install a DiaMark-Z™

This is a short tutorial instructing technicians how to assemble a DiaMark-Z machine.

Contents of DiaMark-Z box:
Needed tools:

- 3mm, 2.5mm and 1.5mm Allen wrench
- Large and small Philips screwdriver
Assembly

1. Carefully remove plastic wrapping from laser window.

2. Unscrew 3 Philips screws from optic cable cover and remove the cover.
3. Unscrew 6 Philips screws from Laser assembly top and remove top.
4. Remove back of laser window assembly by pressing lightly on the sides and sliding it upwards.
5. Using a 3mm Allen wrench, unscrew top laser focuser screw and remove focuser very gently by pulling it backwards. Lay it carefully on its’ side.

- **Caution!** The optic cable should not be over-bent. This could cause a tear in the cable and damage the DiaMark assembly.

6. Remove cable tie from assembly.
7. **Unscrew 6 Philips screws from DiaMark top surface.**

8. **Remove DiaMark cover.**
9. Remove 3 Styrofoam cubes from assembly.

10. Tilt machine up and loosen the bottom screw until the ring around it is loose.
11. Put the machine back down and pull on the disk below the motor assembly until you remove the metal bar.

![Image of the machine with the disk pulled out](image1.jpg)

12. Screw on the F axis to the F motor. Close if completely and then loosen it lightly until the 1.5mm screw is visible. Using a 1.5mm Allen wrench, tighten the screw.

![Image of the F axis being adjusted](image2.jpg)
13. Attach and screw the Z axis into Z motor. The screw is found in the top side of the Z axis. Using a 2.5mm Allen wrench, screw the top screw into the Z axis. Using a 1.5mm Allen wrench tighten the connection (as in F axis).
14. Close DiaMark-Z cover, while doing so connect the LED power plug (P2) to the MHC card at the p4 connector. Screw the 6 Philips screw back to the cover.

- Please pay close attention to the optic cable while closing the cover so it may not put pressure on it or break it.
15. Place the expert on the DiaMark-Z surface and attach it with 4 3mm Allen screws.

16. Close the optic cable cover and screw the 3 Philips screws back in.
17. Reattach the focuser to its place and screw it back in using the 3mm screw.

- Again, please pay close attention to the optic cable. Do not bend it too much. Make sure that most of the excess cable is within the DiaMark-Z’s cover and not in the laser window assembly.
Your DiaMark-Z\DiaExpert assembly should look like this:

- notice that the laser window remains uncovered yet. This will give you the access later when calibrating the laser offset.

18. Install the PC power bracket in the computer. Connect it to the PC’s power supplier and attach it to the PC.
The back of your PC should look like this.

19. Connect all the cables according to their numbering.