

WD Alignment jig quick start guide

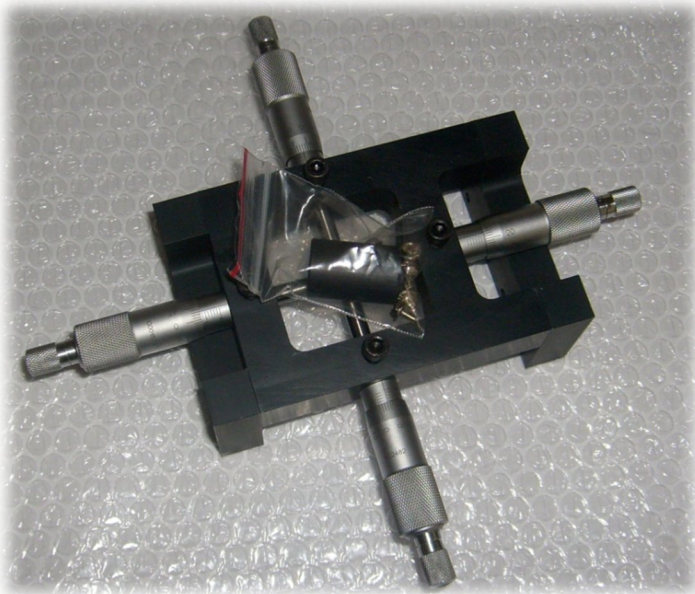
Welcome to WD Alignment jig tool! What is the goal of WD alignment jig tool?

The problems with WD drive heads has been that the head bearing shaft was screwed to the cover. This is bad because once you take the cover off, the bearing is no longer in a fixed position so there is no alignment between the head and data on the plater. WD alignment jig tool is a tool that helps with this issue.

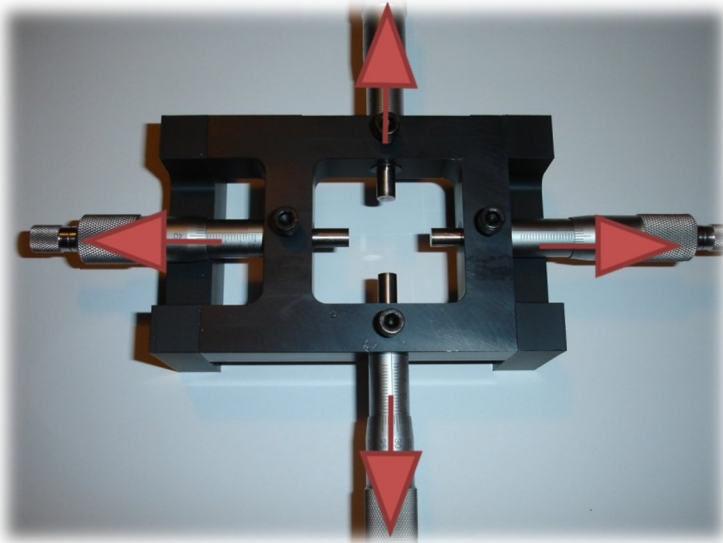
History of WD alignment issue

On lower capacity drives, where the data bits are physically much bigger, people have had success in a clean area running the drive open while copying data to another drive. They did this by doing a head swap (HS), then sticking a skinny screw driver in the bearing shaft screw hole. Now they have a handle, and they slightly moved the head stack around while the drive is booting up until all the sudden, it comes to life. Now the user has to hold the screwdriver very still for as long as it takes to get the data that you need. Clearly this is very tedious, but that is all part of data recovery.

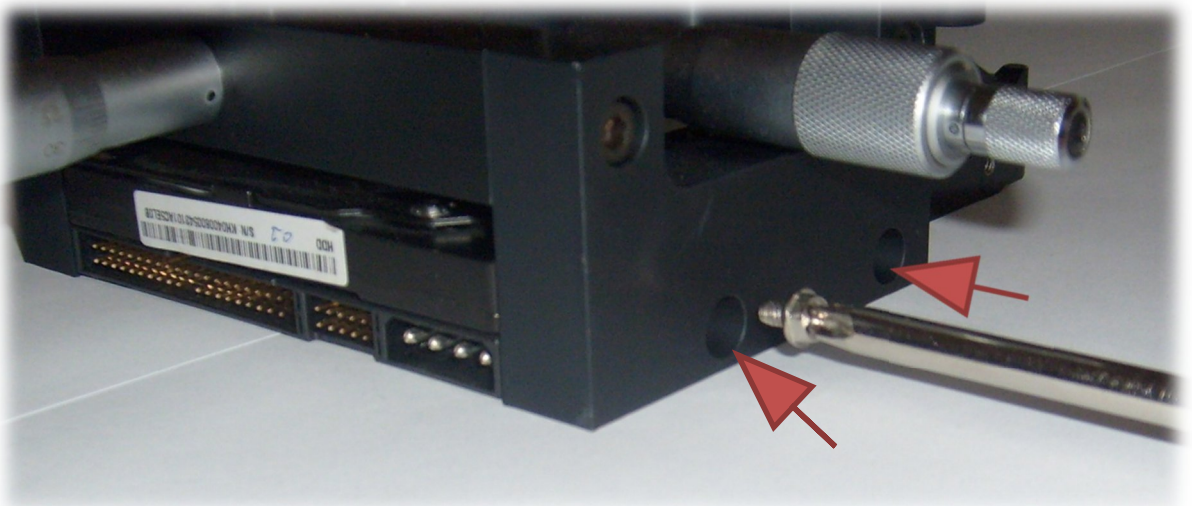
1. Open the package containing WD Alignment jig tool. Package contains: 5x screws for fixing the tool to hard drive, 1x replacement screw, 1x assembled tool with four micrometers and 1x small part for fixing to bearing shaft screw hole



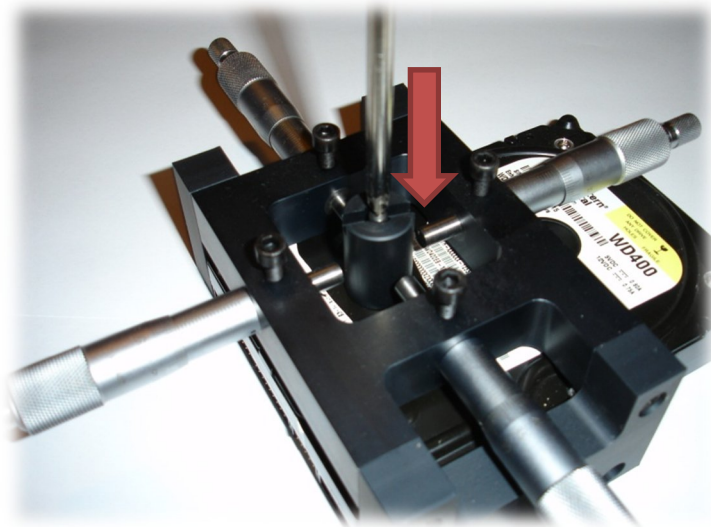
- Put micrometers in position in the picture so there is space between them



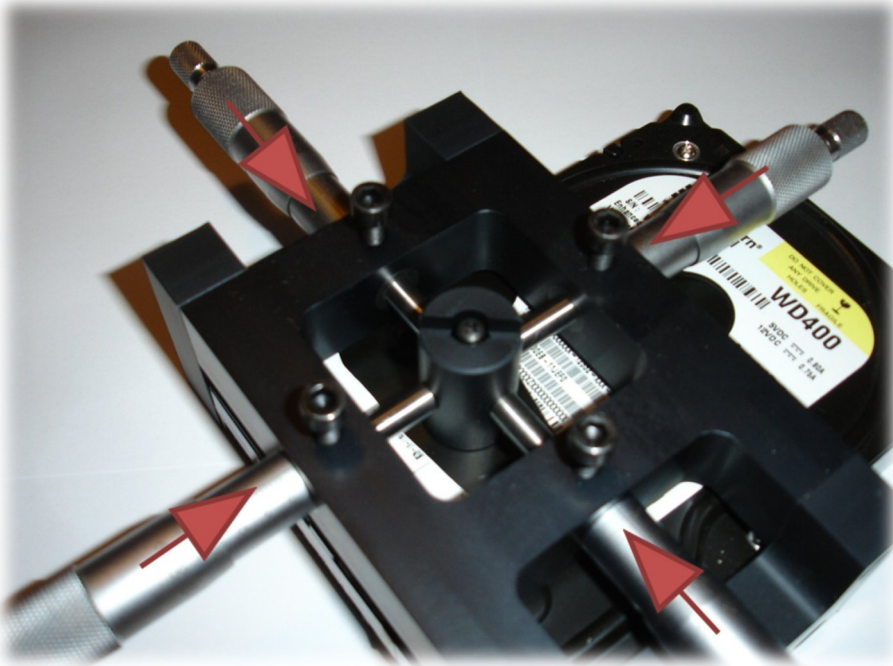
- Fix the tool on the hard drive with all 4 screws!



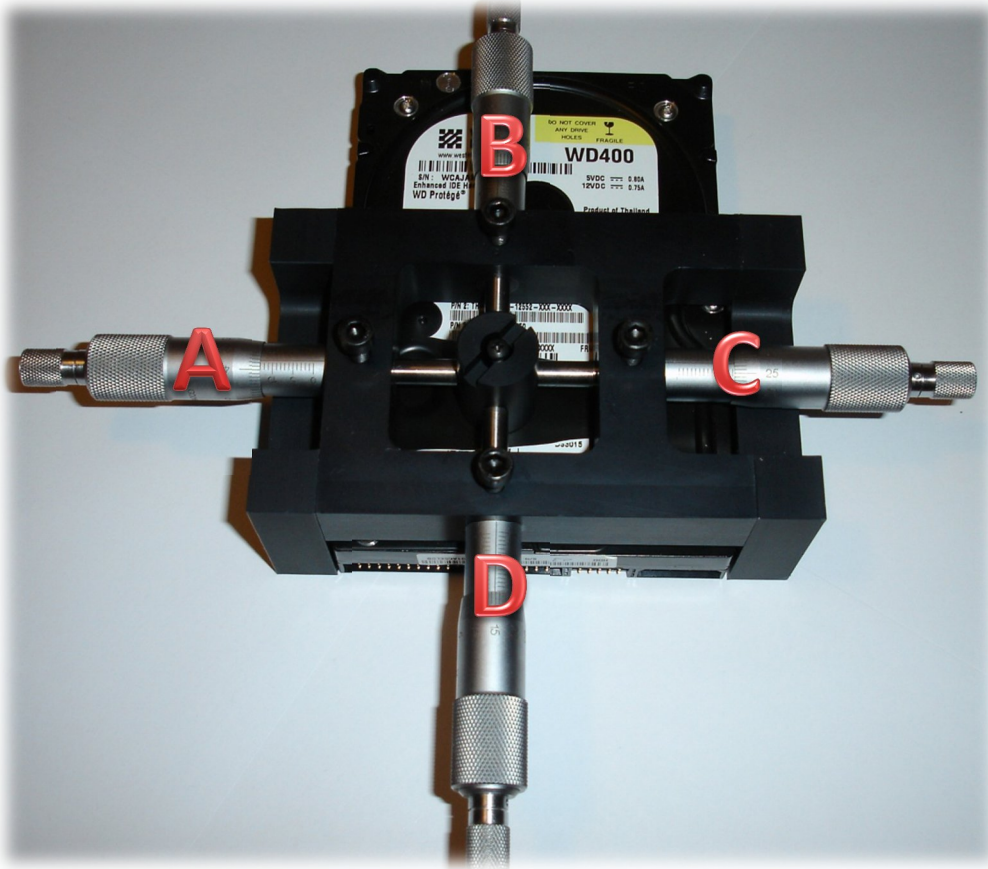
- Screw part of the tool to bearing shaft screw hole
TIP: Don't fix it firmly, somewhere in the middle of grip start and the end.



5. Move all micrometers to the middle so it barely touches the middle part

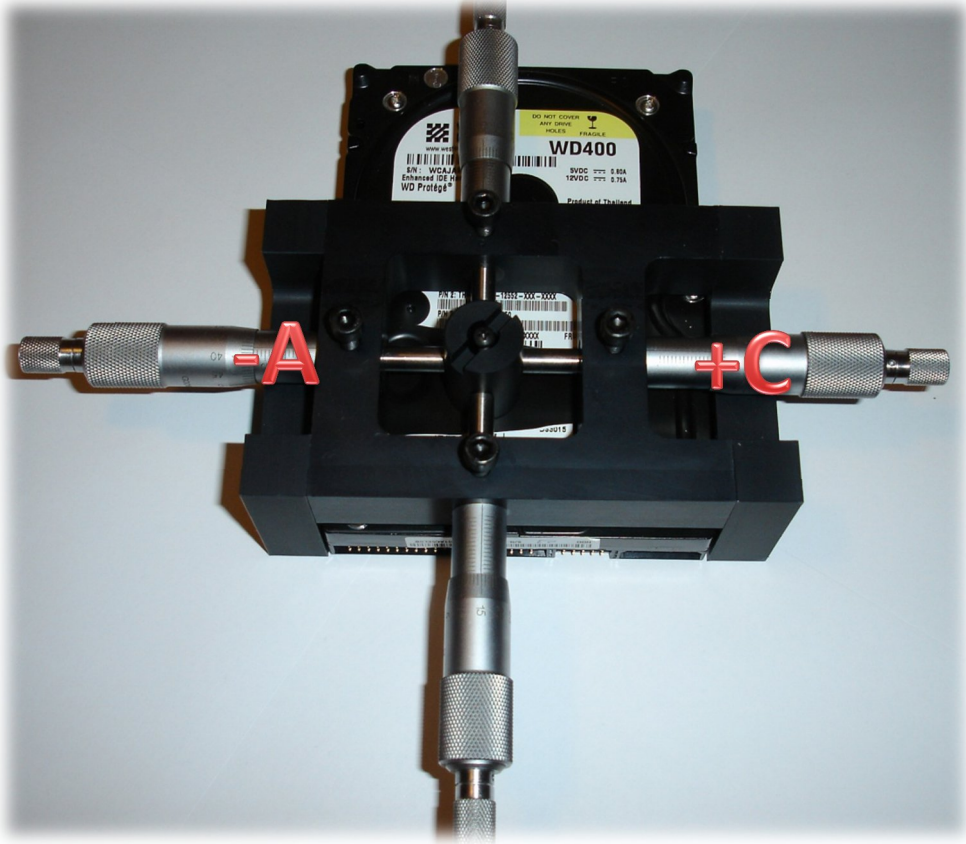


6. You can use the table from the appendix to record the starting position. TIP: You can use the whatever marks you like for documenting the positions.



7. Now turn the hard drive on and wait if the hard drive to become ready and hard drive ID is read. If hard drive ID can be read do your next step in recovery (clone).

8. If hard drive does clicking noises the position is not ok and you need to turn the drive off and try next position. Loosen micrometer A for one line on the scale and tighten micrometer C for one line on the scale, record the position and turn the drive on.



9. Repeat step 8 with your own pattern of moving micrometers until the drive becomes ready, ID is read and data is visible. TIP: If you can't find the position, reasons can vary (for example head change did not go well and there is still a head problem)

OTHER TIPS:

- Don't move 2 micrometers in one try (example $-A+C$ and $-B+D$ this should be 2 tries)
- Try extreme far positions with caution because you can break the screw or bearing post that head stack is on. The alignment is usually not in the far extreme positions!
- Advice: In few cases we had found alignment on second tries of already tried and recorded positions.
- More or less torque on bearing can be applied by turning small part and not the screw inside. Torque is also a factor in finding the alignment.
- Tool can be used without a cover, but then other factors come into play. We use a cover but it is not fixed with side screws.
- Black screws hold micrometers firmly. Please don't unscrew them, there is no need to. They are also a safety if excessive force is used which is not needed!
- PATIENCE IS THE KEY OF WORKING WITH WD Alignment tool!

Appendix

Example table for documenting tried positions

No.	A	B	C	D
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