• Remove the complete fiber Launching Mount from the optical bench



- Remove the output coupler mirror , without disturbing the mount on the optical bench (just by unscrewing mirror fixing shaft)
- He Ne Beam has to be aligned with respect to the Tm:YAG rod, with mirror 1 of the He Ne mount (as in above picture) beam has to be aligned to the center of the ROD, and with He Ne Mirror 2 the reflection from rod has to be aligned back into the pin hole.

This procedure has to be repeated until the He:Ne beam is at center of the Rod , and reflection is in center of pin hole



• Mark the Pumping chamber on the optical bench, and remove the flash lamp cables, unscrew and remove the pumping chamber.



• Adjust the Cavity HR Mirror, to put back the HeNe reflection into pin hole, make sure the beam is approx.. center of the mirror



- Place back the pumping chamber with reference lines you have made, connect the flash lamp, make sure the He:Ne is still in the center of the rod, and its reflection back in pin hole
- Put back the OC mirror , put the reflection back into pin hole (you can put a business card between rod and OC mirror , just to remove the reflection from rod , please note that the brighter reflection from OC is coming from the other side of the OC mirror , the reflection from the side facing the rod is faint and this reflection has to be put in pin hole)
- Start the laser with energy adjust OFF at very low power 10 Hz, 0.5J, you can also try to reduce the pulse duration further, you just need some lasing.

- With the thermal paper check the shape of the beam , and optimize the cavity HR mirror for good beam profile and better energy.
- Step by step , increase the energy and finally check the beam at max energy 10 Hz, 3J
- After cavity is completely aligned the fiber launching alignment has to be performed.