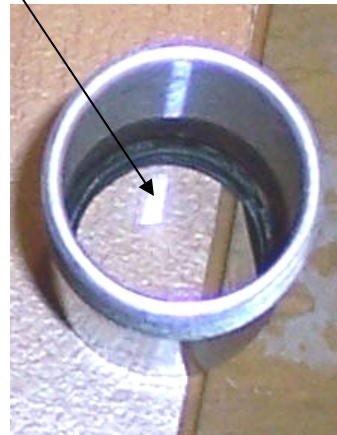
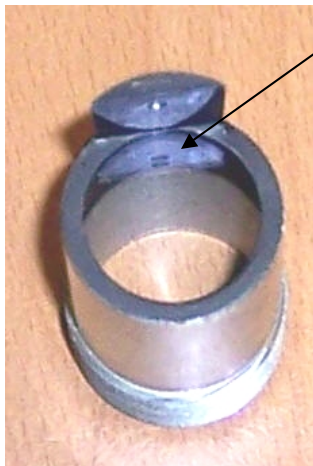
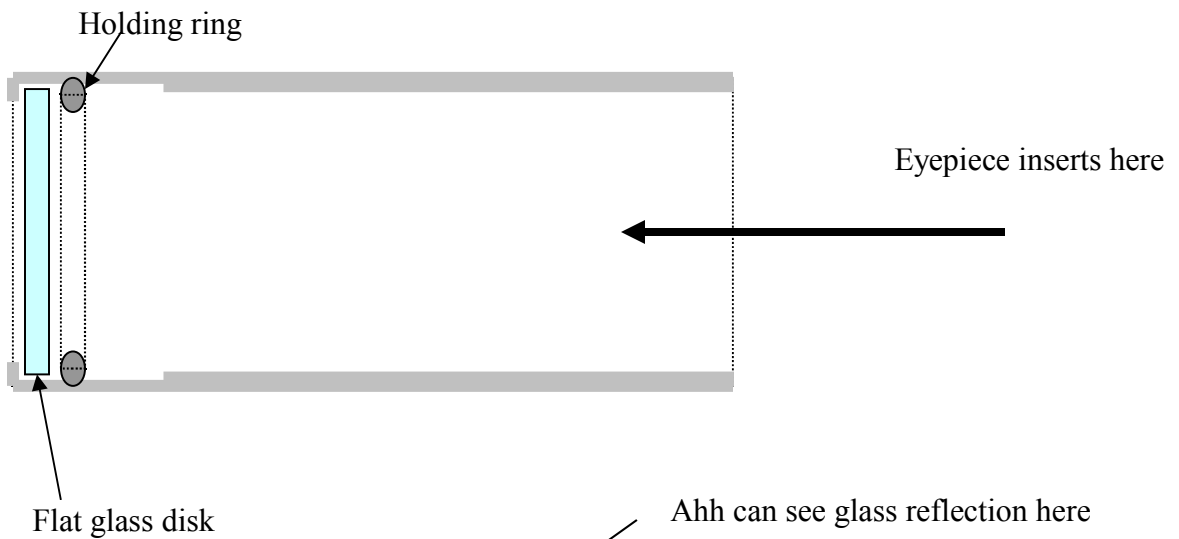


I have some after thoughts & questions regarding the binocular head / the flat glass seated in the eyepiece holder

The Problem:

I am very fussy about optical glare , scattering ; scattered light ocuring even in optical stop areas; I can't stand it; I try to hold back , exercise patience , do Web search ; not to do anything stupid that ruins the optics; anyways I wish to describe what I did to solve my problem (but generally with great difficulty) that seems to exist for any BL DynaXXX binocular head that I purchase from eBay; specifically addressing the flat optics window in the eyepiece holder It probably describes how to do it the hard way that is CLEAN it; if there is a much easier way I certainly would appreciate feedback.

First I wish to clarify the specific component that I am talking about before proceeding; pictures are better than words:



My Speculation/ Purpose of Glass Window

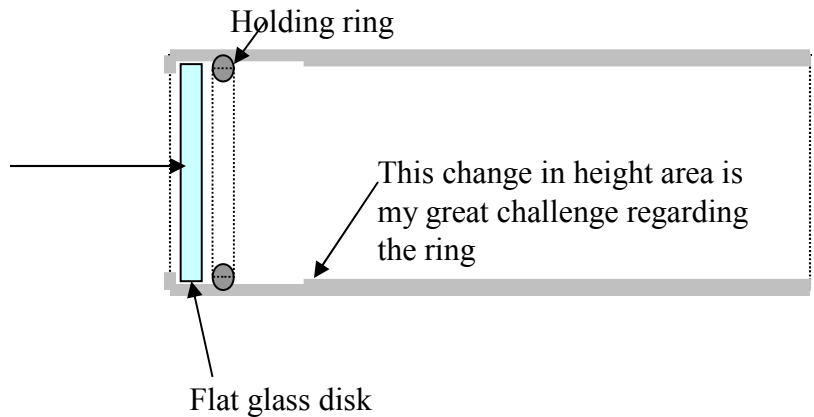
I tried to find some reference for my Google search; as usual I probably didn't have the proper keywords; my best guess is that considering that the binocular head has sensitive prism etc optics; the purpose of the flat glass seated in the eyepiece is to seal the head from condensation (at least from the eyepiece end); laboratory contaminants that can condense on and degrade the sensitive optics.

I believe that when microscopes are retired in storage; they can be exposed to extreme temperature condition inviting out gassing, chemical breakdown etc. Creating contamination condensing vapors. As a result (as I have seen in many of optical heads) residue on optical surfaces: prisms, glass windows; lens .

Initial Window Cleaning Attempts)

1st I desire that all glass surface within the eyepiece FOV is sparkling clear; otherwise I eventually notice these imperfection. I tried cleaning the glass window intact; even with my best efforts I may get the center area clean but not so close to or near the edge. It is difficult not to touch the edge area while cleaning . The edge would contaminate what it is that I am cleaning with; as a result I decided to remove the glass window from the eyepiece holder.

If I push here carefully the window pops out into the inside of the holder; the holding ring also.



After extracting the window; it can be be cleaned ==>> squeaky clean

But putting the window back in is another thing; I can use gravity with great alignment care get the it in its proper place. My real great problem is inserting the holding ring back in place. Specifically the area indicated above. I usually have to makes several attempts; in this several attempts smuggling the window; clean the window again; followed by trying again. Sometimes chipping the glass edge. Certainly the BL factory had to do this; they must have had a special tool to do this!!! I would certainly like to know how they did it.

My question is:: IS THERE AN EASIER WAY TO DO THIS (making the entire window surface squeaky clean) ????