

Re: AO Spencer binocular head repair

Source: <http://sci.tech--archive.net/Archive/sci.techniques.microscopy/2005-08/msg00022.html>

- *From:* "Kevin Cunningham" <smskjd@xxxxxxxxxxxxxxxx>
 - *Date:* Sat, 06 Aug 2005 14:02:56 GMT
-

"Dave Myers" <dave.myers@xxxxxxxxxxxx> wrote in message
news:Xns96A9D211E1B58davemyerscharternet@xxxxxxxxxxxxxxxx

> Hello,
>
> I recently purchased a used AO Spencer binocular compound microscope
> (model #
> unknown). The interpupillary distance adjustment works smoothly, but the
> left slide
> that the eyepiece attaches to is loose. The result is double vision if it
> isn't held
> up manually. Does anyone know of an adjustment, or some way of shiming
> this
> mechanism to tighten it up? Or maybe a web page that could give me a clue
> for
> repairing. For now duct tape will have to do.
>
> Thanks,
> Dave

My guess is that this is an AO 10 head, right? If it is you need to remove the 4 screws that hold a plate where your nose goes. These are Bristol Splines, not all that common and after 40 years or so they are usually bonded to the head. Usually I have to cut a slot in the top of the screw and sometimes this doesn't work so I file the head until it's gone. Later replace the Bristol Splines with conventional screws.

Remove the screws holding the optics to the head assembly. On the back side of this assembly you will see some screws. Remove all the screws, you might want to take some digital shots of this so you can remember where things were.

Clean all the parts with heptane in a clean, ventilated area or use acetone and alcohol. Relubricate with Dow-Corning 44 or similar, a light bodied synthetic. Now put it back together. When you put the screws in adjust the tension so it will slide back and forth but stop the eyepiece rocking you described.

With all the tools and lubricants this is an at least two hour job. There

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is a 40% chance this is to worn so there is a chance that nothing will work.

Give it a try or better yet contact a well trained microscope tech.

Thanks,

Kevin Cunningham
SMS

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◆ *Re: AO Spencer binocular head repair*

◇ *From:* Dave Myers

• *References:*

◆ *AO Spencer binocular head repair*

◇ *From:* Dave Myers

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