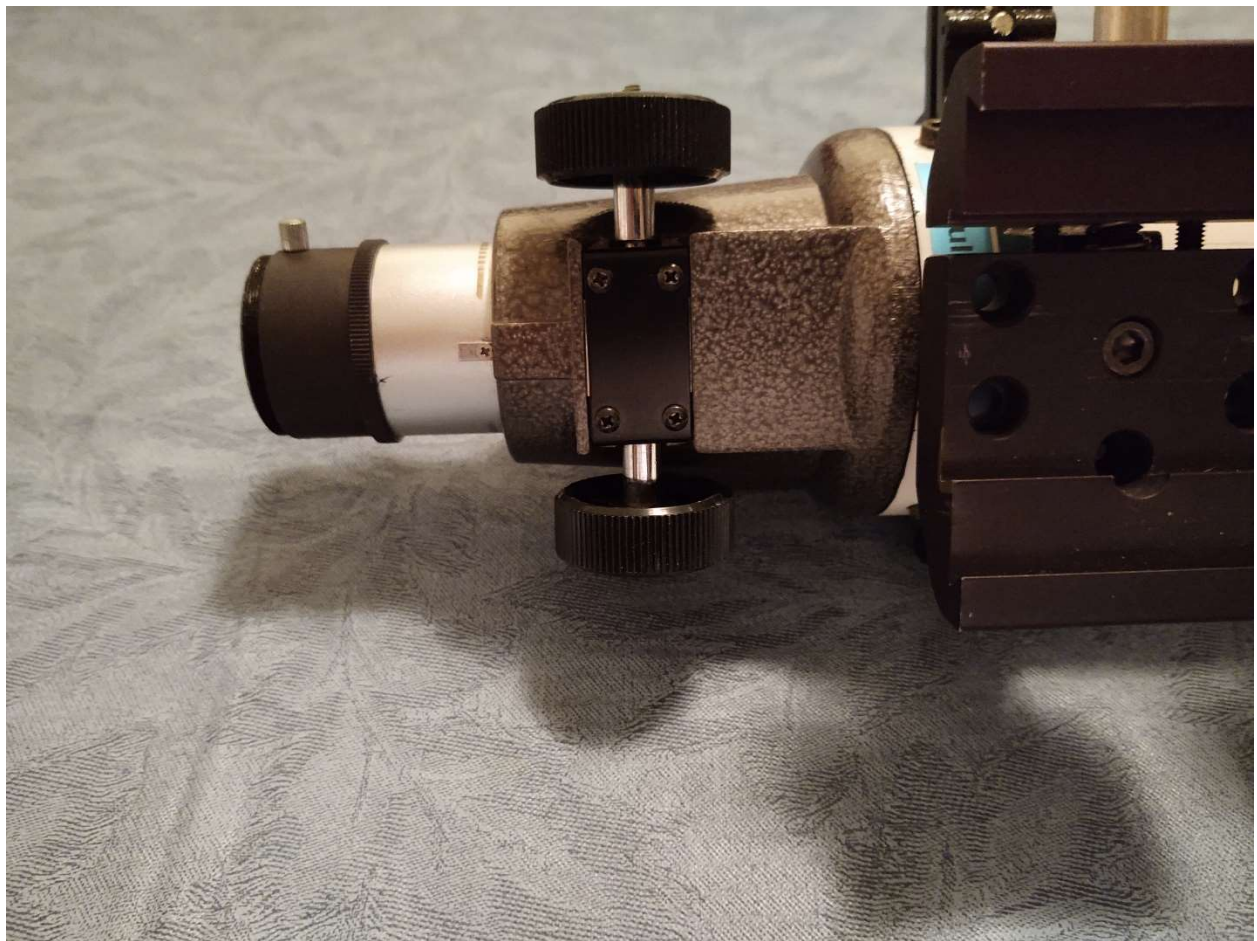


Install a ZWO EAF on an Orion ST80



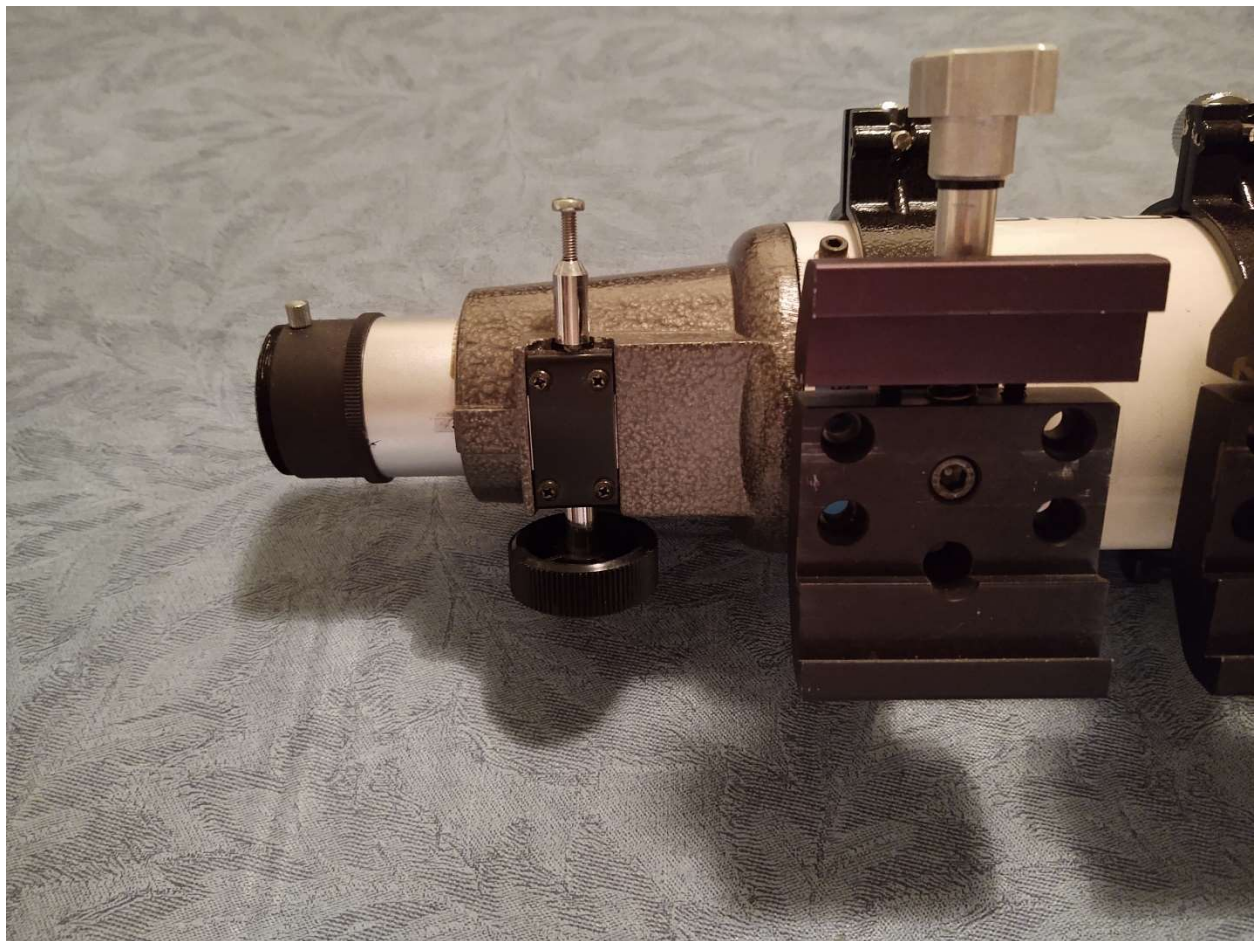
Out of the box, I could see this would not fit together. So this is what I did to make it work.

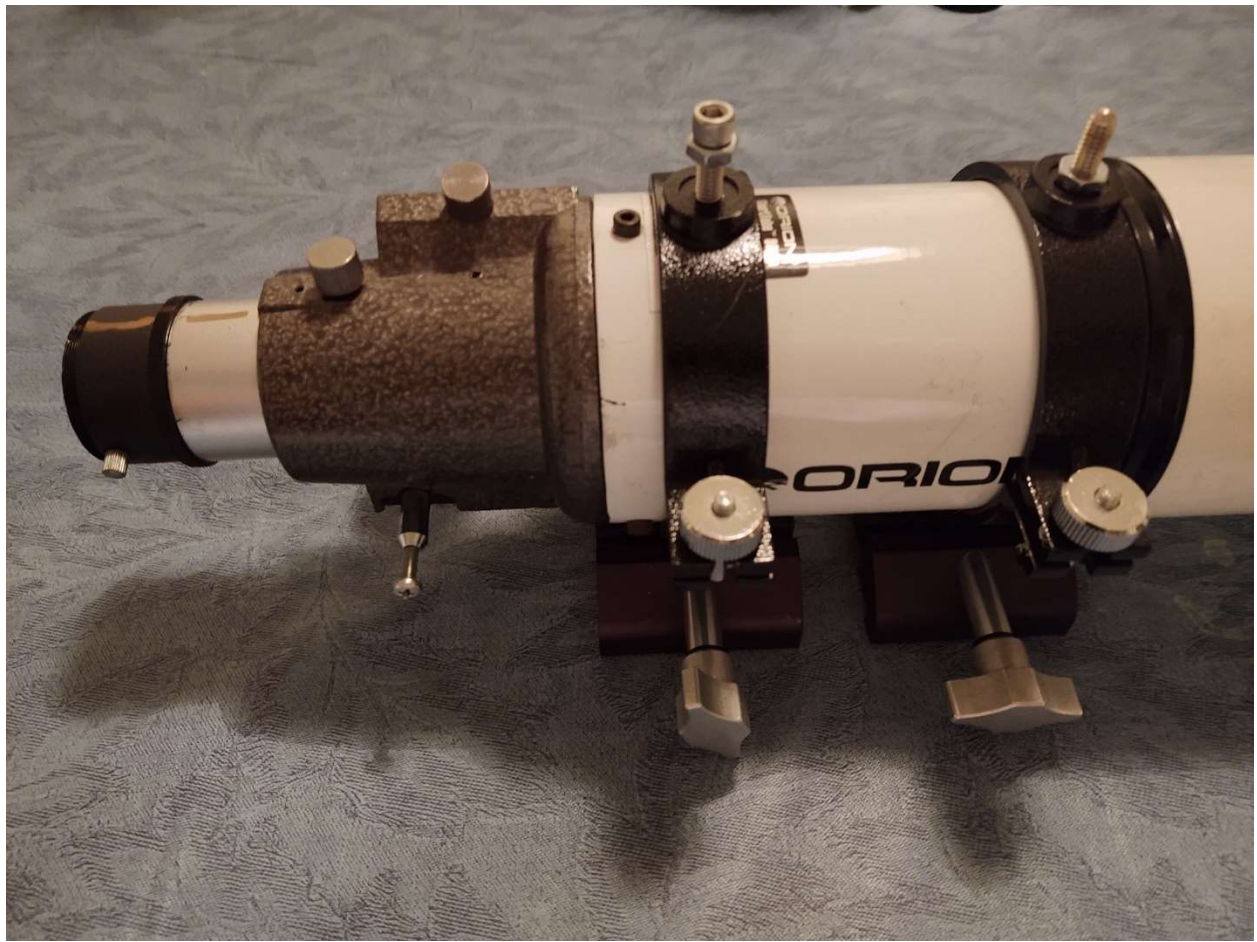
Remove the phillips screw and then the Knob.

None of the four couplings that come with the EAF will fit on the ST80 focuser shaft.

There are multiple ways you can approach this:

- 1) Drill out one of the couplers.
- 2) Grind down the focuser shaft.
- 3) Insert a screw and cut the head off.

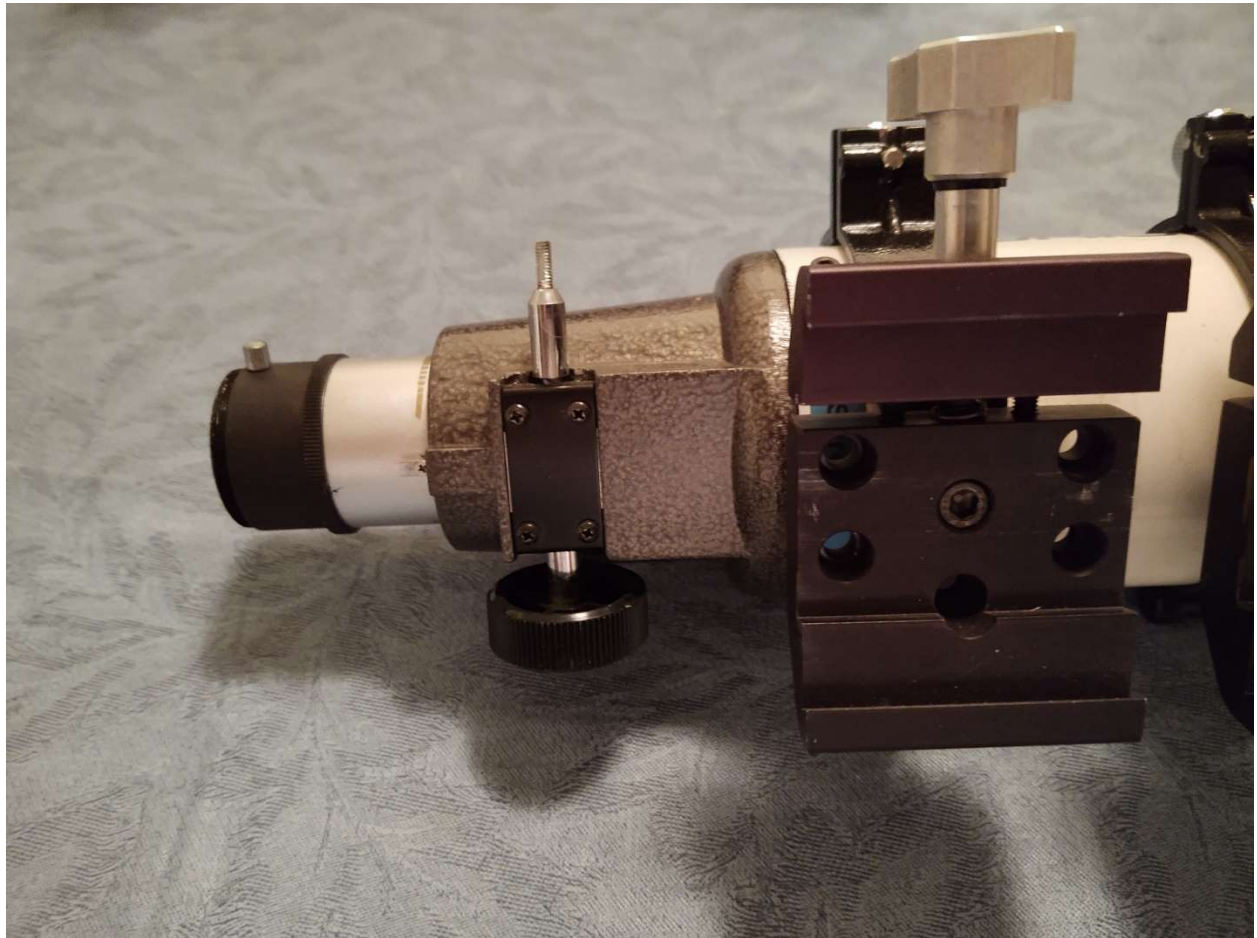






I chose option number three.

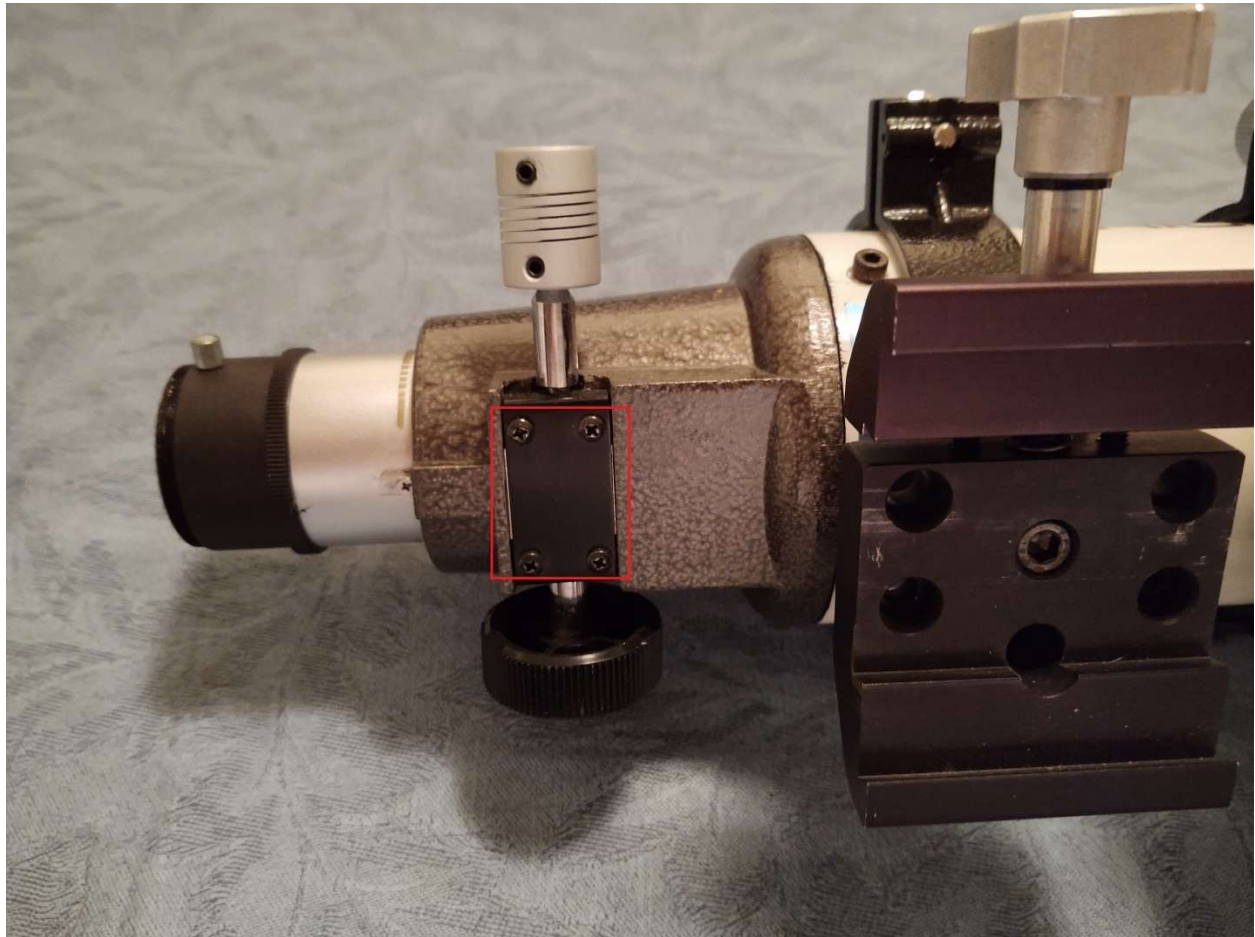
I put in a longer screw with a drop of Loctite to secure it. I then cut off the screw head. Then I ground a flat on the shaft for one of the set screws to sit on.



The smallest EAF included coupler now fits nicely.



There are 4 screws of the focuser that hold it together. These seem like the ideal mounting place for the EAF bracket.





However none of the slots match up with the focuser screws.

So I marked the location of the screws on the bracket.

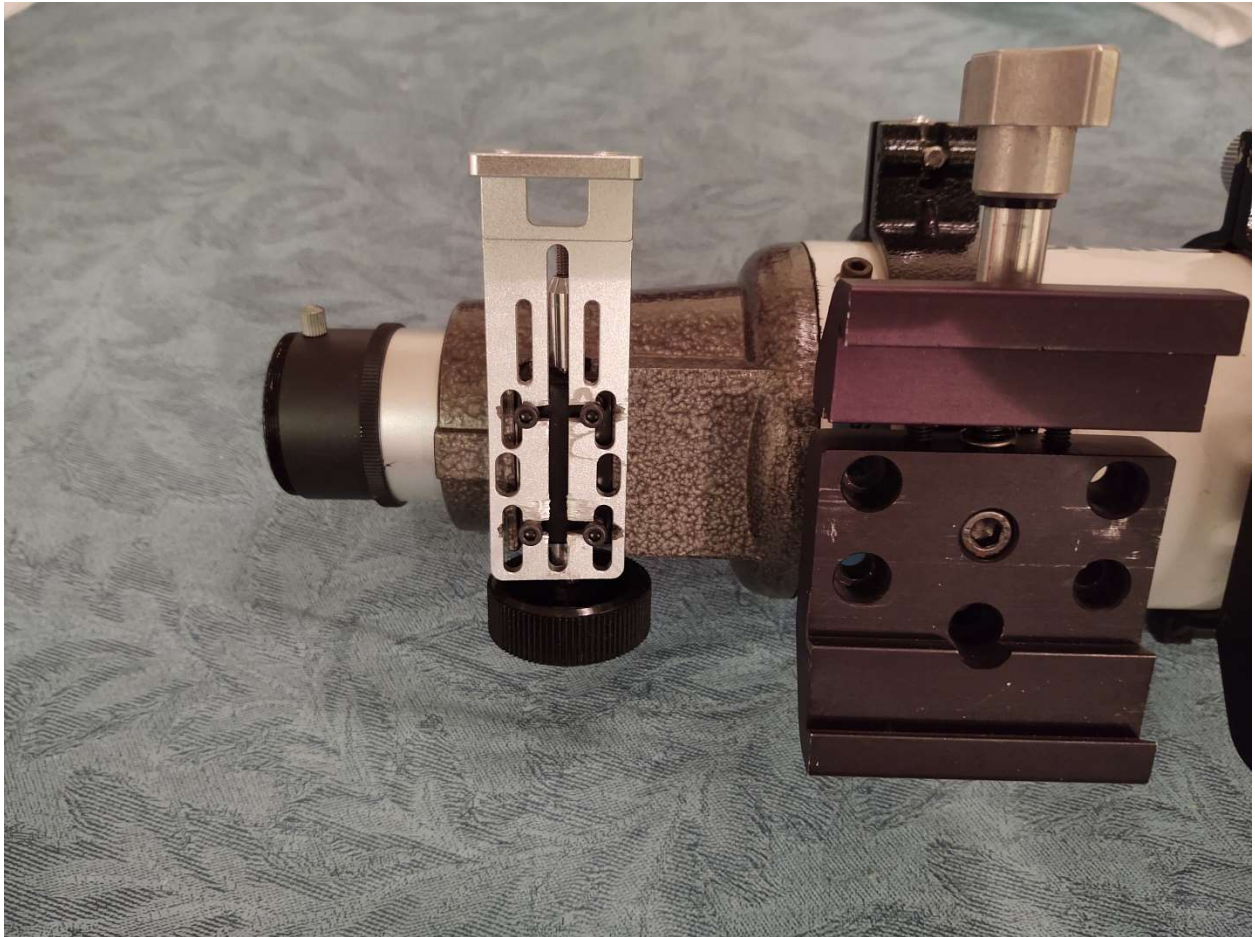


Using the cutting disk on my Dremel Tool, I cut four slots for the screws.





The longer screws with some flat washers would work just fine to secure the bracket.



Next problem, there wasn't enough space between the bracket and focuser shaft for the EAF coupler to fit.



So I placed five M4 flat washers between the bracket and focuser.

The also mandated I get longer screws for the focuser.

Note: To hold the washers in place while assembling, I used a dab of hot glue on each pile.





So everything is now connected and aligned. The EAF drives the focuser very smoothly.

I suspect you could do the same thing on an Orion ST120 and other similar scopes.



