

These instructions apply to FS70 models that are similar in appearance to this model, which uses the Mitutoyo "FOCUSINGUNIT A" model focus block.



Tools Required:

- 1.5mm hex Allen wrench
- 2mm hex Allen wrench



Fixed Collar. (One side has set screws, you will work on the side that does not.)

Coarse Focus Knob.

Fine Focus Knob.

Mitutoyo FOCUSINGUNIT A

1. Pull off the fine focus knob. It is only held in place by friction.



NOTE: With fine focus knob removed, if the inside shaft looks as shown, with two small hex nuts at the end of the shaft, stop and push the fine focus knob back into place. You must install the motor onto the other side of the focus block.



2. There is a thin sheet metal spring sleeve that holds the fine focus knob in place. It may stay with the knob when removed or still be on the aluminum bushing. Remove it from the bushing.



3. Loosen the set screw (not visible in photo) that holds the bushing to the fine focus shaft and slide the bushing off the shaft. It will not be reused.



4. With the aluminum bushing removed there will be 3 or 4 spacers/washers that will come loose. Remove them, they will not be used.



5. On the Prior focus motor, loosen the thumb screw and slide the bell housing off the motor can. Locate the set screw(s) that hold the friction disc & adapter on the motor shaft. Loosen the screw(s) and remove so that only the motor shaft is showing. These parts will not be used.

Bell Housing
Thumb-screw



Adapter
Friction Disc

7. Remove 3-piece coupler from bag and remove one of the silver parts from the black plastic part. Both the motor shaft and the fine focus shaft of the microscope should be 5mm in diameter, and this coupler will connect the two together.



8. Place the silver coupler on the motor shaft and tighten the set screw(s). There is a hole in the motor housing to access the screw.



9. Place the other half of silver coupler & black plastic part (not pictured) onto the microscope fine focus shaft and tighten set screw to hold in place.



10. Slide the motor bell housing onto the focus block. It should slide all the way onto the fixed collar and rest against the focus block housing.



(The Bell housing should slide all the way over this collar)



11. Tighten the three set screws in the bell housing to secure the housing to the fixed collar.

12. Slide the motor into the bell housing until the coupler parts contact each other. Rotate the fine focus knob on other side until the coupler slots line up and you feel the motor slide in a little further. Coupler should now be engaged.



13. Tighten the thumbscrew of the bell housing to hold the motor securely in place. Installation should now be complete.



Connect motor to controller and verify smooth operation of the fine focus.

Be aware that there are no limit switches, and this is a high torque motor, so care must be taken when near the end of travel for the focus block or damage to the focus block may result.