

Feathertouch SCT MicroFocuser

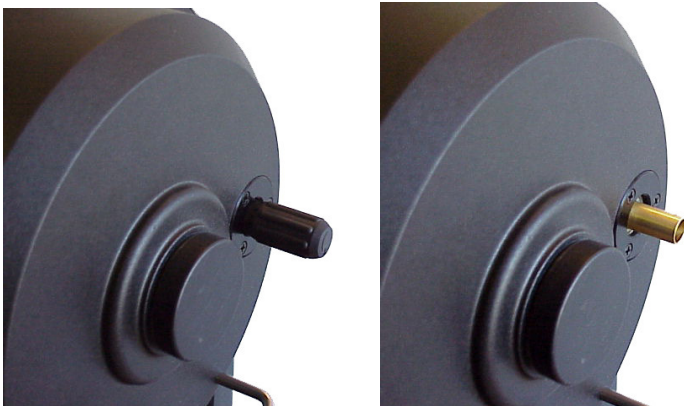
Installation Instructions – Celestron 8” Telescopes

Note: The SCT MicroFocuser is designed to work on most Celestron Schmidt-Cassegrain telescopes (SCTs). Newer model SCTs use a stop on the baffle tube to prevent the mirror from sliding off the baffle tube. Older scopes use a C-clip on the focus shaft to hold the mirror in place. Removing this clip is necessary for the installation of the MicroFocuser, so some older scopes will not be able to use the MicroFocuser. During the assembly instruction you will be shown how to test an older telescope to see whether it will work with the SCT MicroFocuser.

Important: The telescope optical tube must be positioned horizontally before removing the original focus assembly. If the telescope is not horizontal the primary mirror could move during the installation.

Required Tools: Phillips Screwdriver (some models)
1/16” Hex-Head Wrench (some models)
7/64” Hex-Head Wrench (included)

Step 1 Remove Focus Knob



The newest Celestron telescopes have a rubber knob which can be pulled off. Older 8" telescopes will have a metal focus knob which must be removed using a 1/16" hex-head wrench to loosen a small set screw. Once the knob is removed you will see the brass focus shaft as shown in the second picture above.

Step 2 Remove Focus Assembly Cover



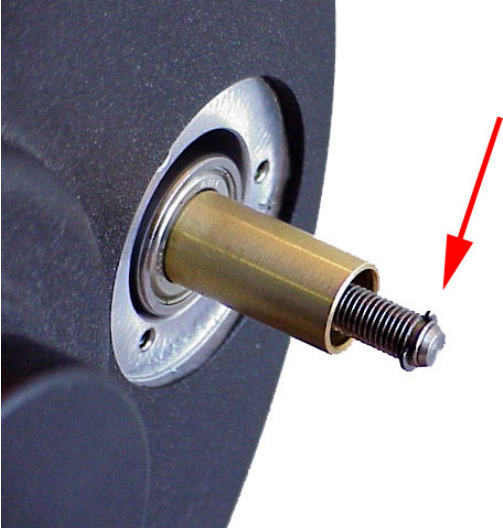
There are 3 small screws which hold the focus assembly cover in place. These will be Phillips-head screws on newer scopes, but some models will have hex-head screws. Remove these screws and take off the flat cover plate, exposing the inside of the focus assembly.

Step 3 Move Mirror Back to Expose C-Clip or Screw



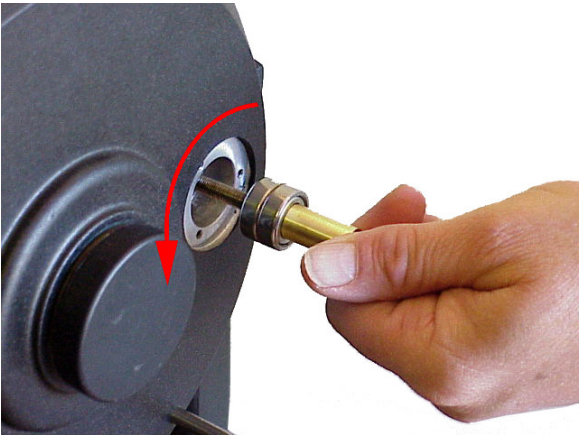
Rotate the brass portion of the focus assembly *clockwise*. This will bring the mirror back and expose the threaded portion of the focus shaft. At the tip of this threaded bolt will be either a small C-clip or a screw which will be removed in the next step.

Step 4 Remove C-Clip or Screw



The C-clip at the end of the focus shaft must be removed to install the SCT Micro-Focuser. The clip should be removable by hand, but you may use needle-nose pliers or a similar tool if necessary. Be careful not to scar the threads of the focus shaft as the SCT MicroFocuser must be threaded on in a later step. If your telescope has a screw, simply remove this with a screwdriver.

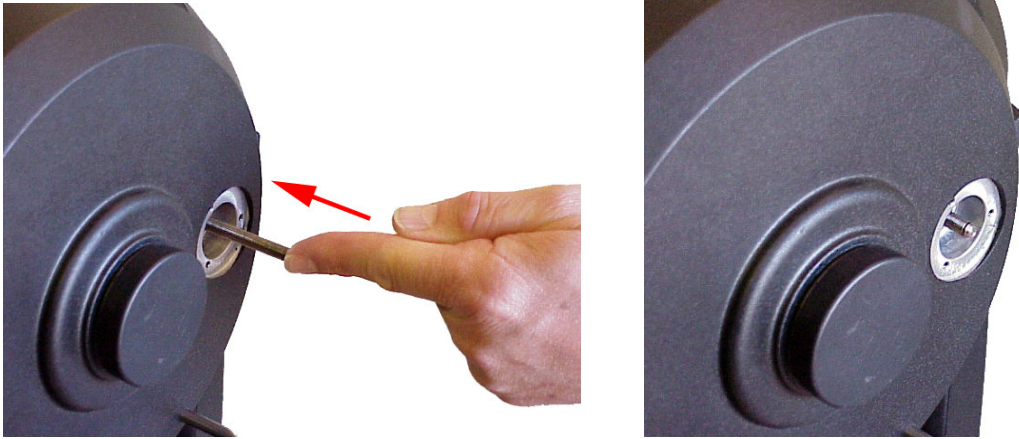
Step 5 Remove Focus Bearing Assembly



Rotate the brass portion of the focus shaft *counterclockwise*. This will unthread the brass shaft and bearing assembly from the threaded rod. Remove these parts entirely (you will turn the brass shaft quite a few times to remove it).

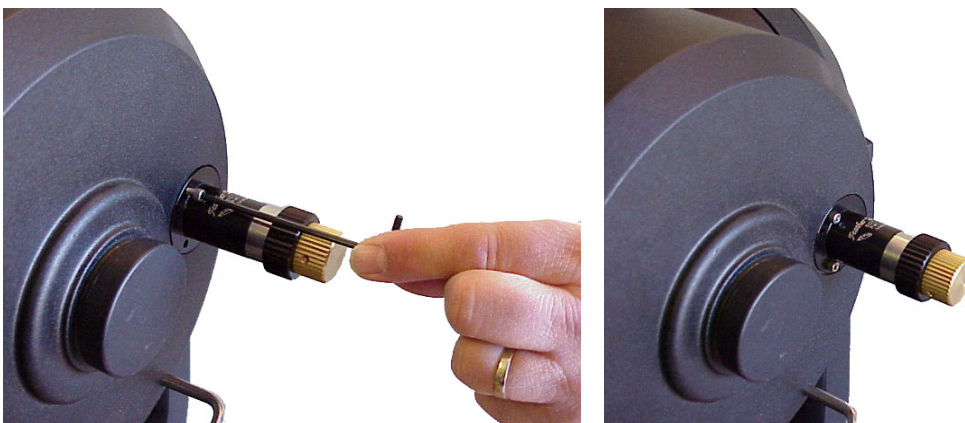
Note: *If you have an older scope, please test it at this point to see if there is a stop on the baffle tube. If not, you will not be able to use the SCT MicroFocuser on your telescope. If you have a new telescope (year 2000 or later), please skip ahead to Step 7.*

Step 6 Test for Baffle Tube Stop



Carefully push the threaded focus shaft forward (moving the entire mirror assembly). Do not push the shaft all the way into the telescope. If there is a baffle stop on your telescope you will only be able to push the mirror forward until the threaded shaft is just flush with the back of the telescope (see picture on right). If you can push the mirror beyond this, you do not have a baffle stop and it is possible that the mirror could fall off the baffle tube. Normally the C-clip or screw prevents this, but the SCT MicroFocuser will not work with the clip in place.

Step 7 Attach the SCT MicroFocuser



Use the three provided hex-head screws and wrench to attach the SCT MicroFocuser to the telescope. You are now ready to head out under the stars! Use the black knob for coarse focus and the brass knob for fine focus (10:1 ratio).