

# Feathertouch SCT MicroFocuser

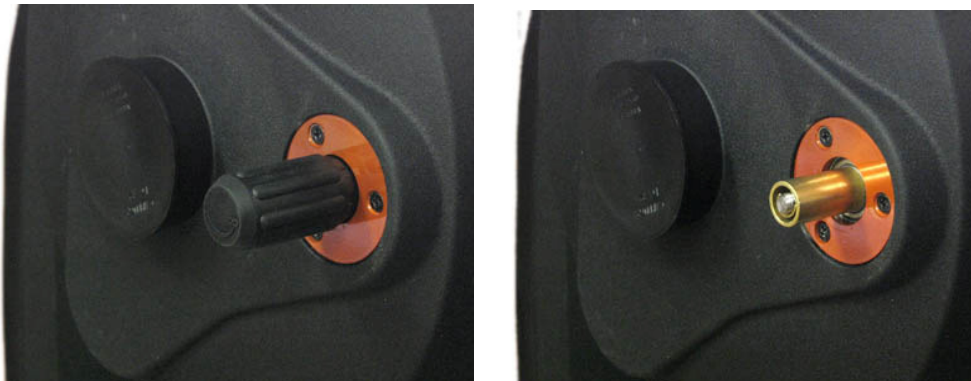
## Installation Instructions – Celestron CPC-800 Telescopes

**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.

**Parts List:** Feathertouch SCT MicroFocuser  
(3) M3-0.5x10 Hex-Head Screws  
2.5mm Hex-Head Wrench

**Additional Required Tools:** Phillips Screwdriver  
Wrench: ½” or adjustable

### Step 1 Remove Focus Knob



Begin by removing the black rubber focus knob from the scope. This knob simply pulls off the brass focus cylinder.

## Step 2 Remove Focus Assembly Cover



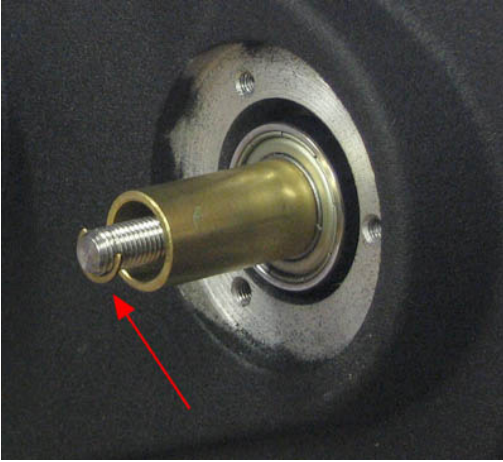
There are 3 small Phillips-head screws which hold the orange focus assembly cover in place. Remove these screws and take off the flat cover plate, exposing the inside of the focus assembly.

## 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 Philips-head screw and washer 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 and washer, simply remove these with a screwdriver. Keep these parts handy; they will be reinstalled later.

## Step 5 Remove Focus Bearing Assembly



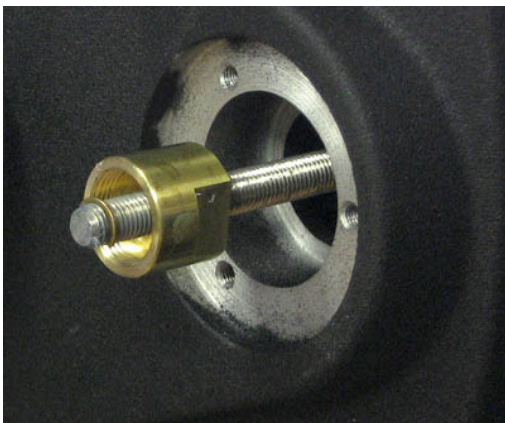
Rotate the brass portion of the focus shaft *counterclockwise*. This will unthread the brass cylinder and bearing assembly from the threaded rod. Remove these parts entirely (you will have to turn the brass shaft quite a few times to remove it).

## Step 6 Remove Brass Stop from MicroFocuser



Unthread the brass stop from the end of the MicroFocuser. This stop prevents the telescope mirror from falling off the baffle tube inside the telescope. Thread the stop onto the focus shaft of the telescope. Be sure to thread the stop on far enough that the end of the threaded rod is exposed.

## Step 7 Reattach C-Clip or Screw



Snap the C-clip back onto the end of the threaded rod or thread the screw back in. Note that the C-clip fits into a small groove about 3 threads in from the very tip of the threaded rod. If your scope has a washer and screw, put these back in place on the focus shaft.

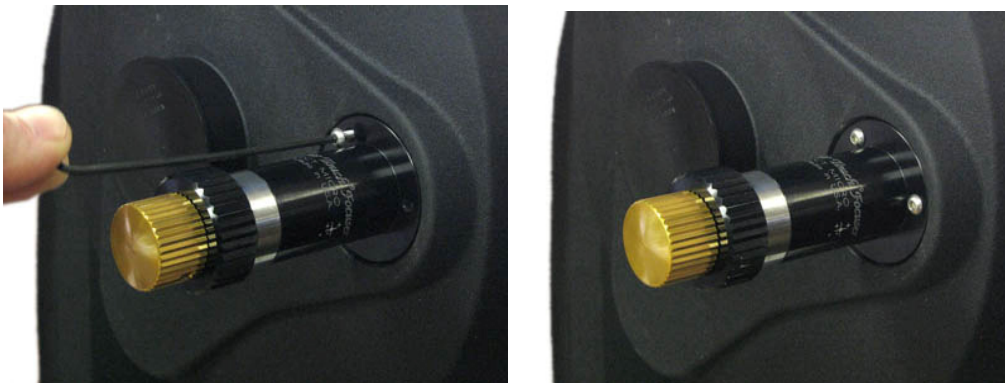
## Step 8 Attach MicroFocuser to Stop



Thread the MicroFocuser into the brass stop. Hold the stop with a wrench and the black focus knob with the other hand to tighten the stop. *This stop MUST be tight to secure the MicroFocuser to the focus shaft.*

Thread the focuser down the threaded rod until the base sits flush with the back of the telescope. If it does not thread all the way down, push it forward to move the position of the primary mirror, allowing the focuser to fit against the back of the scope.

## Step 9 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). Note that the telescope will likely be pretty far out of focus, so you may need to turn the focus knob quite a few times to reach focus.