

## Q-FOCUSER-FTF20-CRAYFORD INSTALLATION INSTRUCTIONS

Installation of the Q-Focuser-FTF20-Crayford bracket is straightforward and requires only a few simple steps.

Tools needed: small diameter Philips head screwdriver, 2.0mm hex key, 1.5mm hex key (not provided).

1. Remove the fine and coarse focus knobs from the Feathertouch focuser.
- 2a. **Standard Version** - Slide the provided 3D printed coupler (with larger opening) onto the brass coarse focuser pinion shaft. Match the flat on the coupler with the flat on the pinion shaft and secure with two set screws, using the 1.5mm hex key. Do not over tighten the screws.
- 2b. **High Precision Version** – Using the appropriate coupler provided with the Q-Focuser, slide the coupler onto the focuser fine focus pinion shaft as far as it will go. Clamp the coupler onto the focuser fine focus pinion shaft using the 2.0mm hex key.
3. Slide the bracket onto the silver body of the focuser. Try to align the bracket laterally so the outermost coupler set screw aligns with the outermost side access hole in the bracket. Rotate the bracket to the desired position and tighten the two Philips head screws to clamp the bracket onto the focuser.
- 4a. **Standard Version** - Slide the Q-Focuser pinion into the coupler. Note that there is a flat on the coupler hole that matches the flat on the Q-Focuser pinion. Once the Q-Focuser pinion is inside the coupler, rotate the Q-Focuser until the set screws in the coupler are visible through the side access holes in the bracket. Secure the coupler to the Q-Focuser pinion with set screws. Do not over tighten the screws. Attach the Q-Focuser to the bracket using the supplied M3x20mm socket head screws.
- 4b. **High Precision Version** – Slide the Q-Focuser pinion into the coupler. Note that there is a flat on the coupler hole that matches the flat on the Q-Focuser pinion. Once the Q-Focuser pinion is inside the coupler, rotate the Q-Focuser until the set screws in the coupler are visible through the side access holes in the bracket. Secure the coupler to the Q-Focuser pinion with set screws. Do not over tighten the screws. Attach the Q-Focuser to the bracket using the supplied M3x20mm socket head screws.

Please inform of any additions or corrections to these directions by sending an email to [buckeyestargazer@gmail.com](mailto:buckeyestargazer@gmail.com)