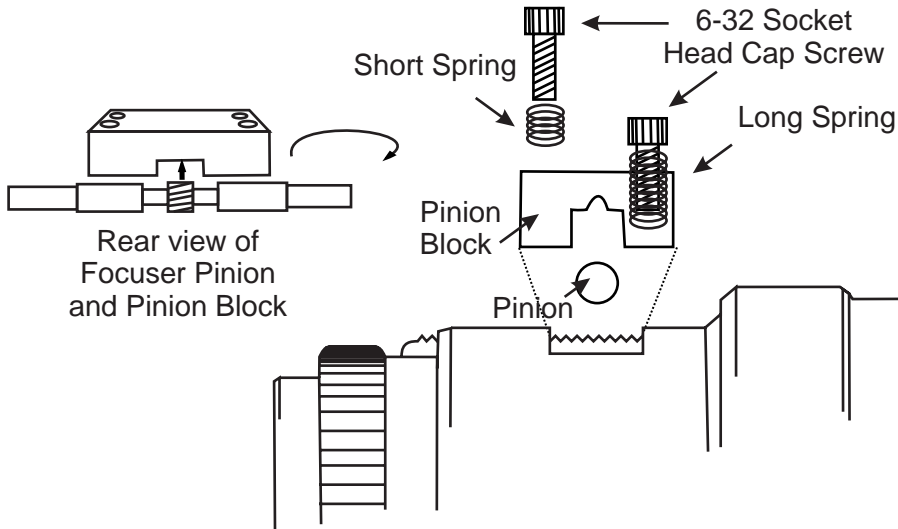
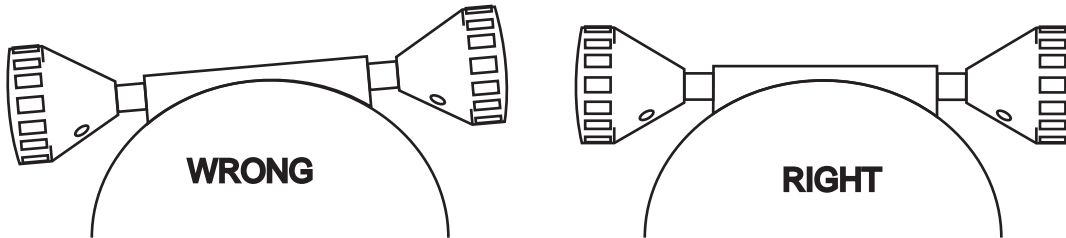


# Focuser Pinion Adjustment

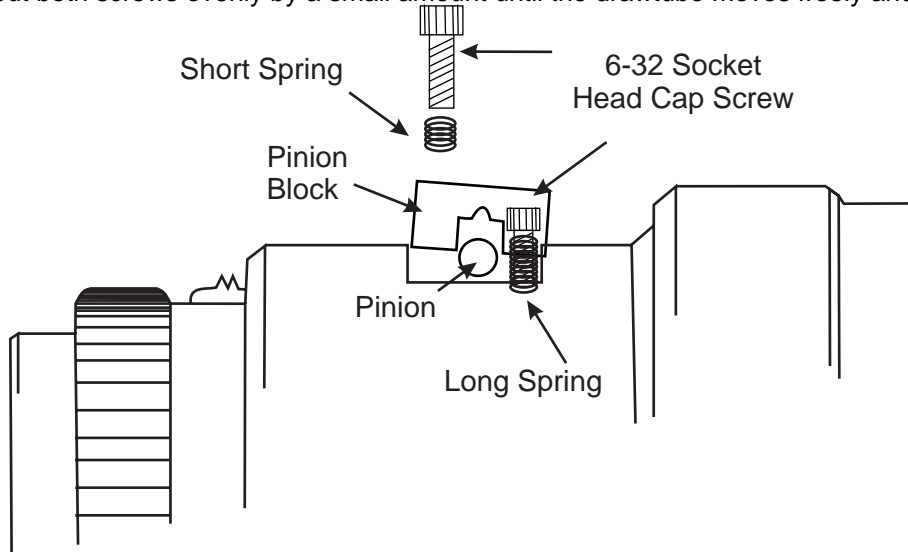
These procedures apply to most Astro-Physics Traveler, 2.7" and 4" focusers shipped prior to July 2001.



Install the two 6-32 screws with long springs into the pinion block, using the two holes toward the lens end of the telescope. Leave the other two screws out until later. Snug both screws down until the pinion gear is tight and hard to move with the knobs. Be sure that the pinion block and gear assembly is evenly spaced on either side of the focuser housing.



Now, slowly back out both screws evenly by a small amount until the drawtube moves freely and smoothly when the knobs are turned



At this point, you will notice that the pinion block is tilted forward slightly (the illustration is exaggerated). This will allow the block to lock into the housing, thus eliminating all backlash in the system.

The two screws with the short springs can now be installed. Do not tighten them down because that will eliminate the tilt. These screws should be installed with only 2.5 to 3.5 turns. They will add a bit of stiffness, which is desirable to prevent the focuser tube from slowly uncracking when a heavy eyepiece or accessory is used.