



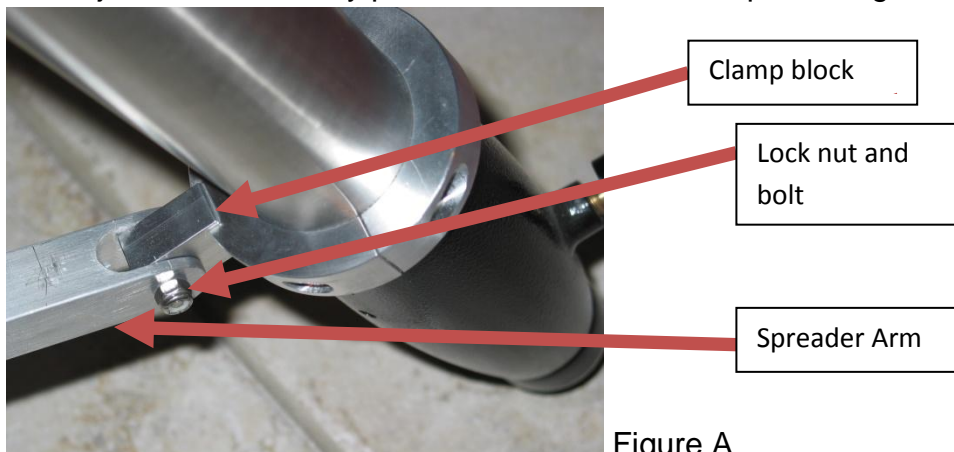
Telescope Performance Improvements

CGEM/EQ6/CG5/Atlas/Sirius/HEQ5 Spreader and Heavy Duty Battery Tray Installation

Thank you for your purchase- Your spreader and tray have been carefully designed specifically to improve the stiffness and stability of the tripod. The spreader exerts pressure on the top portion of the tripod and physically locks such that motion and play is removed. The spreader also provides much needed control and support for the tripod legs while folded.

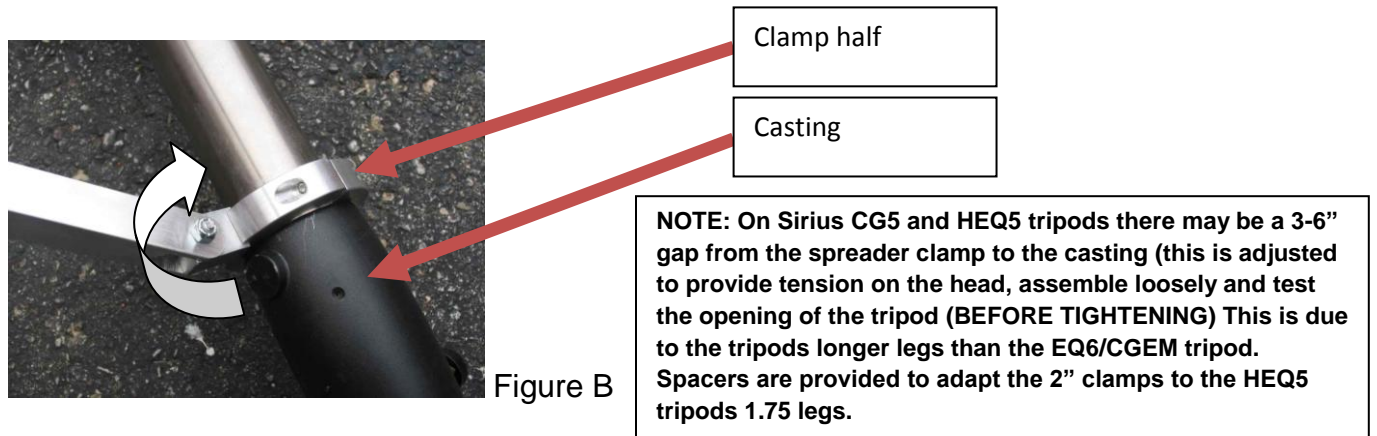
ASSEMBLY and ADJUSTMENT

- 1- Slide the small blocks attached to the clamp rings into the slotted end of the spreader arms.
- 2- Slide one of the provided #8 stainless steel screws through the slotted end holes and through the clamp block.
- 3- Spin on one of the provided nylock stainless lock nuts onto the screw and tighten **JUST** snug so the joint can still easily pivot. Do this for all 3 clamps See figure A



4-Remove the socket head #10 screws from each clamp half and separate the clamps. Place one clamp around your tripod leg near the bottom of the tube right above the casting as seen in figure B below (for EQ6 and CGEM Tripods). **NOTE: On Sirius, CG5 and HEQ5 tripods there will MAY a 3-6" gap from the spreader clamp to the casting (this is adjusted to provide tension on the head), assemble loosely and test the opening of the tripod (BEFORE TIGHTENING) This is due to the tripods longer legs than the EQ6/CGEM tripod. Adapter bushings (supplied) are required to adapt the smaller Sirius/HEQ5 legs to the 2" clamps.**

5-Reassemble the clamp halves to each clamp but keep the screws loose at this time (just snug) so as to allow rotational adjustment. See figure B below



6-Open the spreader as shown in figure C below and carefully rotate the clamps so the legs are evenly spaced then ***SNUG UP THE CLAMP SCREWS*** (there will be a small gap between the 2 pieces- make the gap equal on each side)

Press down on the center of the spreader- **YOU WILL FEEL TENSION**, this is normal. Excessive tension means there is something wrong!! The push should happen with about 3" of down travel left before the spreader flattens out.

7- The spreader will tension the top of the tripod. If the tension is not sufficient (there should be a good snap action when the center is pushed down), release the tension and move the clamps up slightly (1/4" to start) and secure the socket head screws in the clamp halves. (they can be moved slightly more or less as required, every tripod is slightly different) do **NOT** use your foot to push down the spreader- that is **TOO MUCH** tension

Once the tension is to your liking (you should have to push down with your hand and feel a moderate amount of tension) Tighten the clamp halves fully- do not over torque the screws. See figure C (extended) and figure D (folded)



Figure C



Figure D

8-If you purchased the Optional Heavy duty battery tray- assemble the tray onto the spreader as shown in (Figure E)- and hold the block against the side of the spreader arm (**the large countersink on the square block faces the screw head to provide clearance for the countersunk head**) then tighten the supplied flat head screw tightly (if desired- apply a small amount of lock tite about 1" from the countersunk head then screw on the block). Use the supplied knob to secure with the supplied clamp (on bottom of tray) as shown- Finger tighten the hand clamp knob only (**You're clamp may be pre-assembled to the tray**)

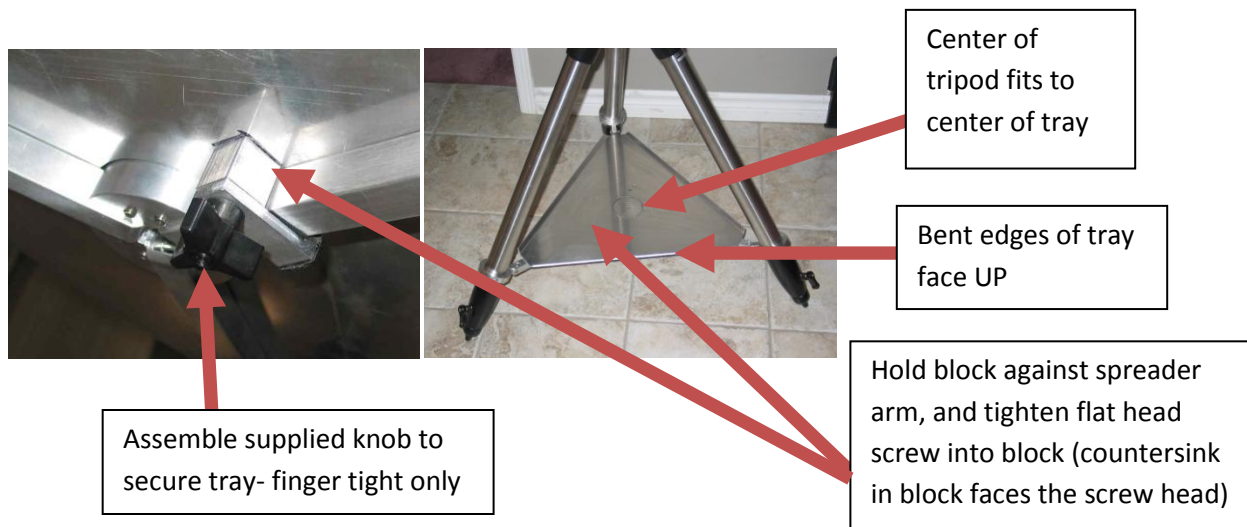


Figure E

9- The Battery tray and spreader will easily support large auto size and style deep cycle batteries to 50lbs+. Pads are already applied to protect the spreader arm finish.

6- The center set screws of the tripod are lock-tited in place and adjusted to provide motion over center- Do not adjust these set screws. See figure F

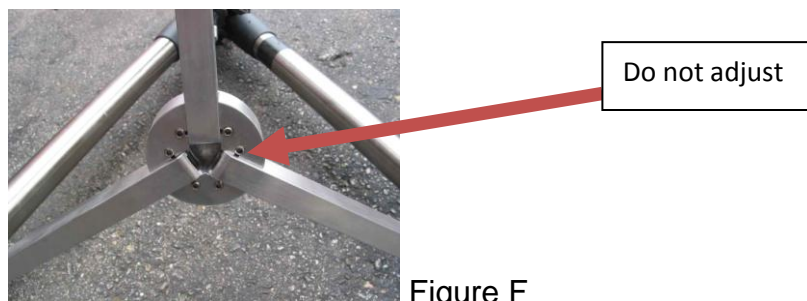


Figure F

7-It is recommended that once your TPI spreader is tensioned, that the original Eyepiece holder/tray be also installed and the center knob tightened.

****** make sure to loosen the stock eyepiece tray bolt BEFORE releasing tension from the TPI spreader****** or the eyepiece tray will be very difficult to loosen and remove and possibly MAY bend the stainless tubing or break!.

CARE and CLEANING

Your spreader and tray are made from 6061-T6 aircraft aluminum with superior corrosion resistance and strong mechanical properties. The parts are clear anodized and will provide many years of trouble free service.

Clean the parts with a damp cloth and a mild cleaning solution like Windex or equivalent as required. The fasteners on your TPI products are all stainless steel. A VERY light lubrication with a thin oil may be applied to the pivot points if required or desired depending on your location and frequency of use.

Comments or questions please contact Dave Yates at dave@tpiastro.com