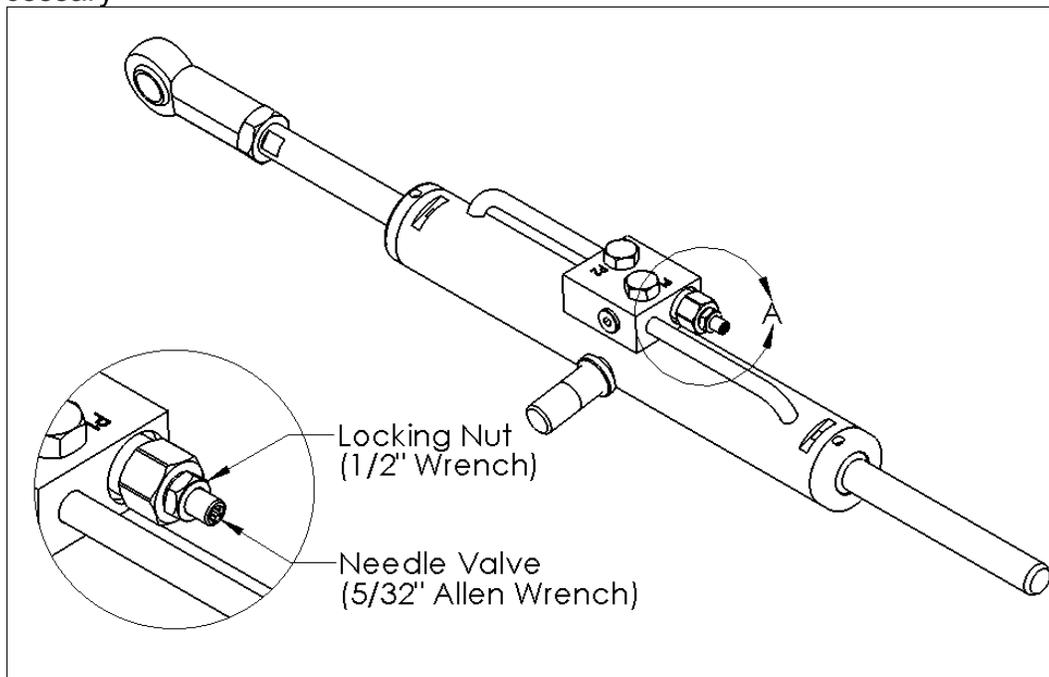


## Cylinder Adjustment Instructions

- Cylinder ships as shown: filled with oil, bled (air removed) and with rod end / jam nut installed
- The needle valve has been opened to allow for easier adjustments
- Install the Cylinder on the rack as shown in the instructions (provided with the rack, found in the Gimbal box)
- Be sure to use the Loctite #242 provided on both the hex nut and the 3/4" bolt when installing the Cylinder
- Torque both fasteners to 125 ft-lbs
- After the initial installation, both fasteners should be checked periodically and tightened if necessary



- The needle valve can be adjusted for more or less resistance. A good starting place is to open the valve 1-1/2 turns from fully closed (do not tighten valve excessively – hand tight is enough).
- Less resistance (more open) will result in quicker wake-up times and less protection from wind gusts. More resistance (more closed) will delay wake-up times but will provide more resistance to wind gusts.
- Wake-up times (measured from when the rack starts to flip to the east to when it is fully turned) should be anywhere from 40-60 minutes.
- Fine adjustments of the needle valve will be on the order of 30°- 60° (1/12<sup>th</sup> – 1/6<sup>th</sup> turn)
- Adjustments can be made to compensate for extreme temperatures: for example, opening the valve during extremely cold weather.
- When the proper setting has been found, while preventing the needle valve from turning, tighten the 1/2" hex nut to lock setting in place.