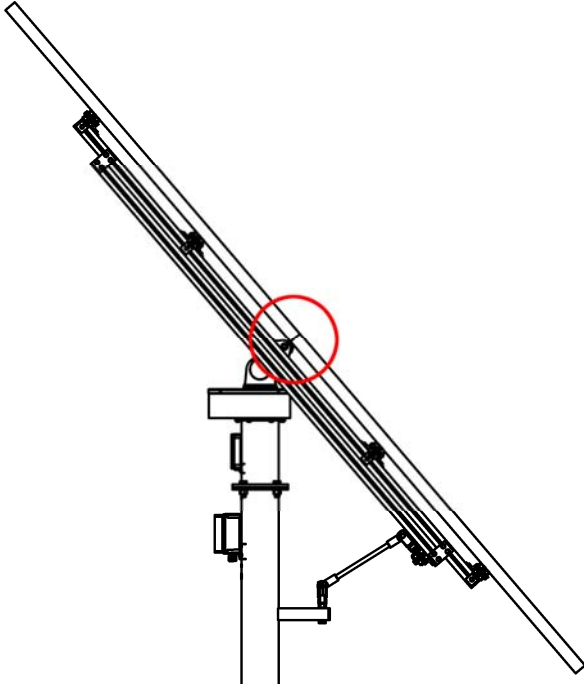


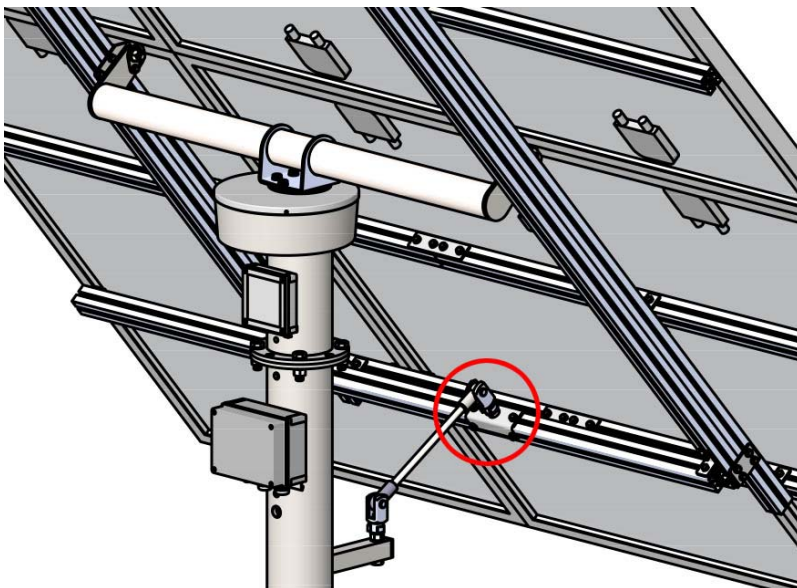
## Panel balance

Make sure the panels are balanced in the middle of the angle brackets as shown in the picture below. Microinverters mounted on the lower half of the framework do not cause an imbalance issue, but if the panels are significantly off center the motor will have difficulty rotating the framework.



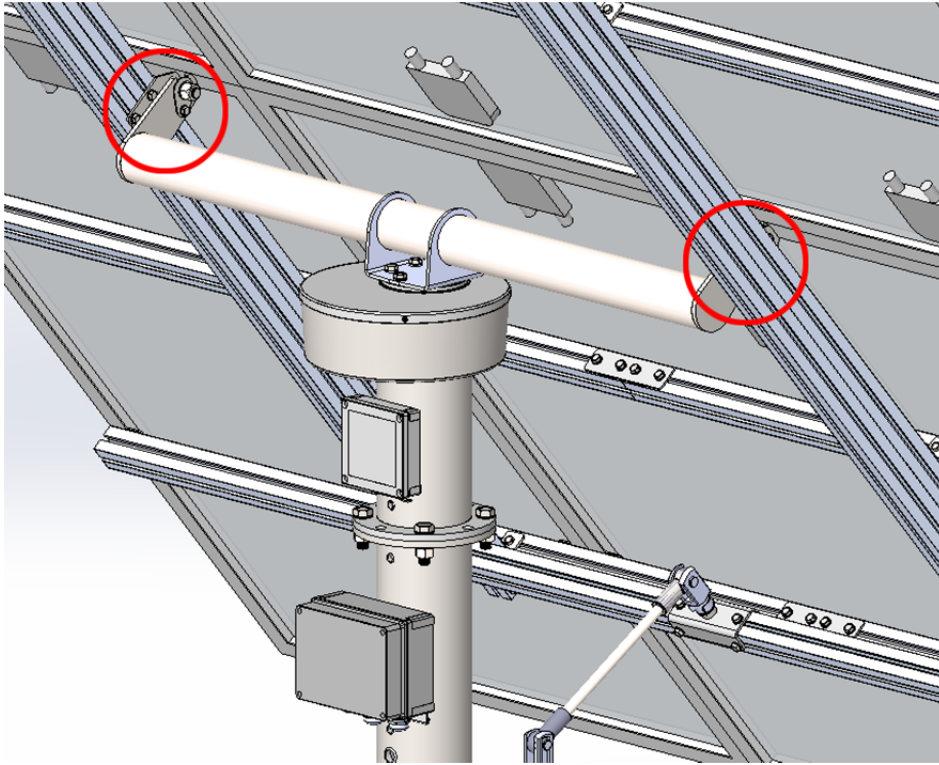
## Rod support plate

Make sure the rod support plate (circled in red) is oriented as shown in the picture below. If it is oriented towards the balk the fork joint cannot rotate properly and it will be difficult for the tracker to rotate.



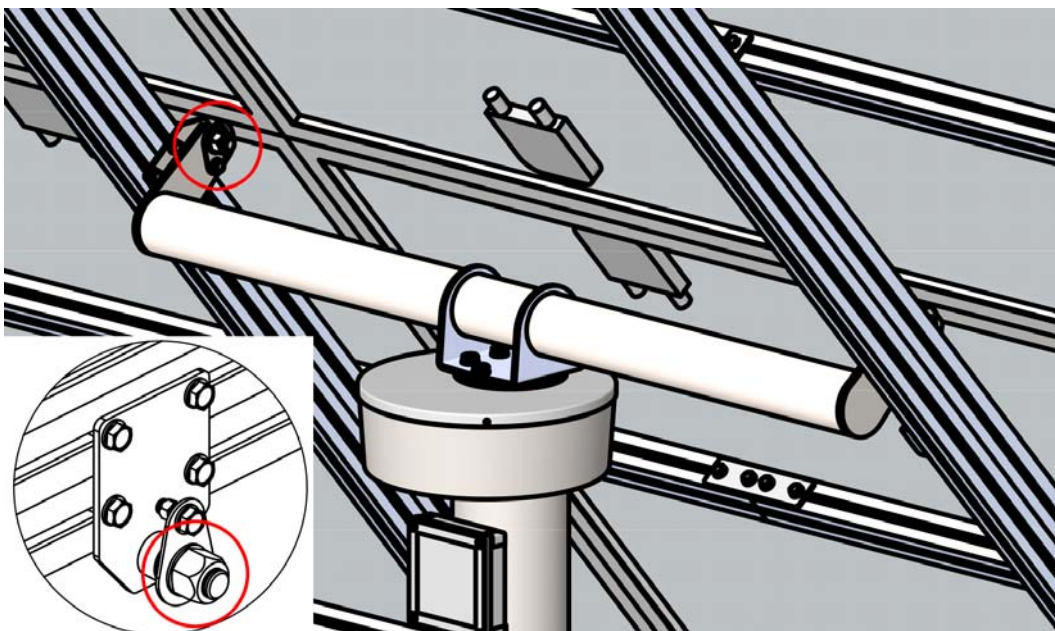
## Angle bracket orientation

The angle brackets (marked in red) need to be oriented as shown in the picture below. If they are rotated the other way around the balance point will be way off and it will be 5 times more difficult for the tracker to rotate.



## M16 bolts

The two M16 bolts (circled in red) should not be tightened so much as to cause friction. They should only barely touch the M16 nylon washer. Loosen the fork joint and tilt the framework up and down to make sure there is no resistance from the M16 bolt being screwed on too tightly.



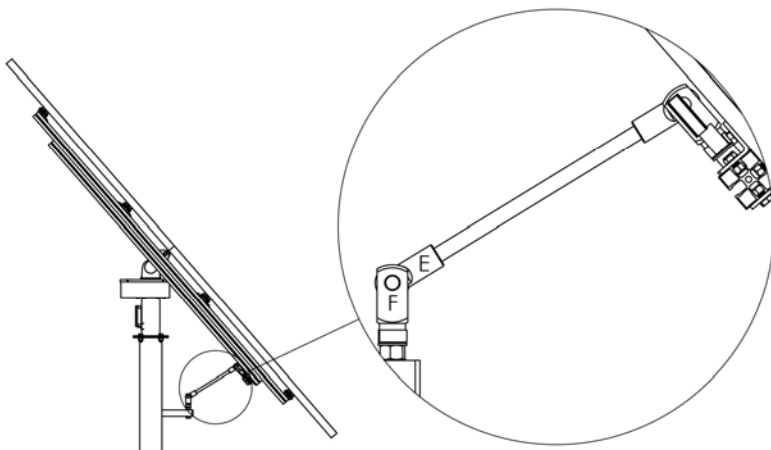
## 24V transformer

Use a voltage meter to confirm that the 24V transformer delivers close to 24VDC, even while the motor is running. The 24V voltage can be measured on the screw terminal circled in red below. If the voltage falls significantly during motor rotation the transformer needs to be replaced. If the voltage falls to for instance 12V the motor torque will be halved.



## Fork joints

Make sure the two fork joints (F) are unscrewed at least half a turn to allow for full 180 degree range of motion. The clevis eye (E) also rotates slightly, so it too needs to be unscrewed half a turn so as to not interfere with the rotation.



## **Gear rotation**

The gear can be rotated by hand to make sure the slew drive can be rotated properly and hasn't been jammed. A significant imbalance over a number of weeks may potentially cause the slew drive gears to become jammed, in which case a wrench can be applied to the slew drive shaft to unjam the gears, after the imbalance has been removed.

The motor should be removed when rotating the external gear by hand to get a better grip around the gear. Rotating the gear by hand towards morning/evening position should be easy. Rotating the gear with towards midday position should be harder, but still doable with one hand. During factory test the slew drive is rotated with 2 watt (motor setting 40) to make sure there are no needless friction in the gears. An assembled PV-6 requires at least 8 watt (motor setting 80) to rotate reliably. The default setting is 20 watt (motor setting 110).

