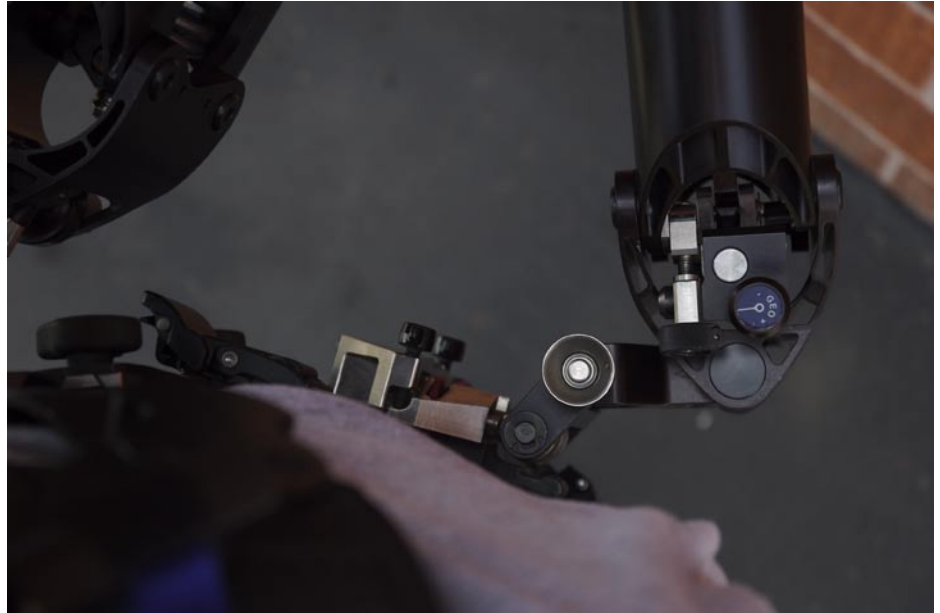


G-70 Kick Back

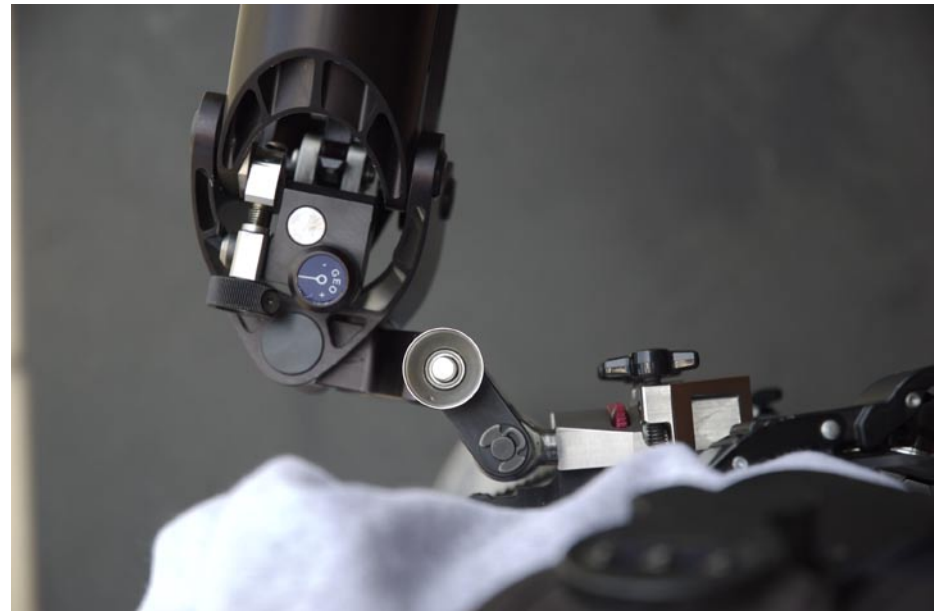
The G-70 “kick back” element

To accommodate both regular and goofy-foot operators, the two mating parts held by the “parachute” pin can fit together in two ways. The design intent is to “kick back” the upper arm segment as shown in the photos. The parts need to be set one way for regular operating, and the opposite way for goofy foot operating.



Regular

Goofy-foot



With a back mounted vest



Operators with “back mounted” vests should also orient the connection to send the arm to the inside.

When using a back mounted vest, set the kickback link inwards as shown in the photo. This is the opposite direction from the kickback link’s use in a front mounted vest. The idea is to get the socket block both closer to the body and to the Steadicam. Why? See the next tip.

When using any back mounted vest, all arms are more extended from the load (the sled) to the attachment point (the socket block). Additionally, the “end block” nearest the body is pointing fore and aft. With a normal, front-mounted vest, the arm extension is less and the end block is oriented sideways to the load.

Extending any arm makes it more likely to go over centers and lock up.

When you lean back with a back mounted vest, the upper arm section’s end block leans back in line with the upper arm section. (With a front mount vest, the end block rotates perpendicular to the upper arm section as you lean back). With a back mounted vest, this leaning back puts the end block in a more iso-elastic

position, making the upper arm section more likely to go over centers and lock up.

All arms behave this way, but the consequences become evident with an extended range (± 70 degree) and very iso-elastic arm like the G-70 or G-50. The travel in most other arms is restricted to ± 50 degrees, and this effect occurs above that angle.

The solution is to have about one-half the “iso” help ($1/2$ the threads) in the upper arm section that one has in the forearm section. You fine tune the adjustment the same way as described on page 61, increasing the iso-elastic response until the arm starts to lock up, then dialing it back in a few turns.

Walking with a back mounted vest also “activates” the socket block more than with a front mounted vest; it rocks back and forth in line with the upper arm section, again with consequences for the arm’s response. It may require an even smaller “less iso” link.

If you leave the forearm fully iso, it has the “helper torque” throughout its range, low to high, and when the arm is extended, it tends to force the upper arm over centers. Consequently, you should not only reduce the iso for the upper arm link with a back mounted vest, but also reduce the iso for the forearm. That way when raised, the operator is lifting a little, the torque is reduced correspondingly and the transferred torque is likewise reduced – hence a smaller tendency for the upper arm section to go over centers. Even with the iso dialed down, the G-70’s response in the ± 50 degree range is more iso-elastic than other arms.