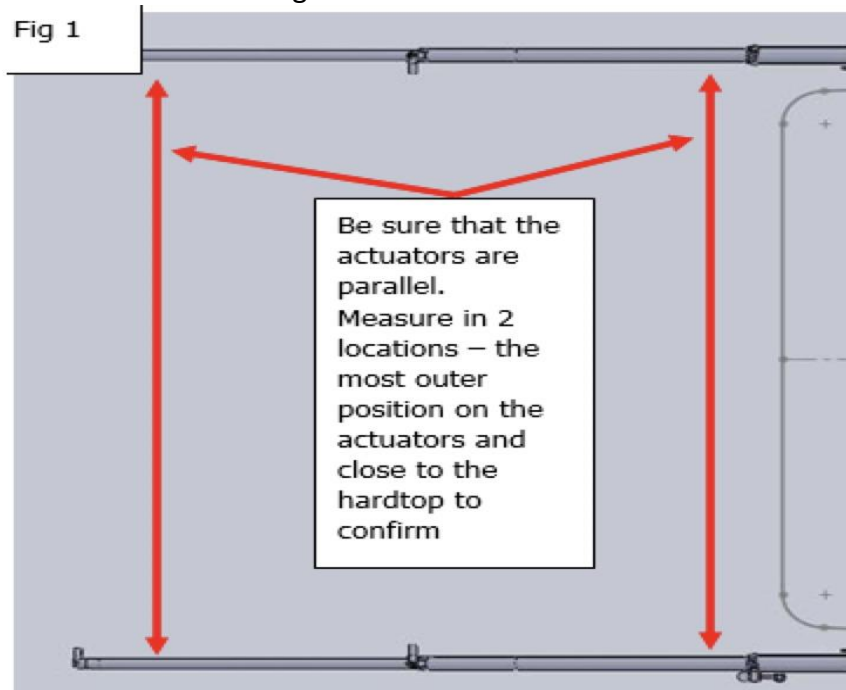


MTF Manual Shade

Steps to Determine if Unit is Square

The following are the steps to take to determine if your MTF shade is squarely mounted on the top. Do this if the system seems to rack when operating or excessively difficult to retract. (It is normal for the last 18-24" of retraction to be somewhat stiff as you are compressing the springs).

- 1) Extend the shade completely allowing the billow loops to pass the tabs without engaging them. (You want the canvas to not catch the mid bar tabs)
- 2) Remove the outer cross bar and lay it on the deck.
- 3) Remove the mid cross bar and lay it on the deck.
- 4) You will now have the two actuators 100% extended with no load(s) port or STB.
- 5) Please measure the actuators per the attached picture. Do your best to not add pressure moving the actuators when doing so.



- 6) You can have up to 1/4"-1/2" out of square, at the most. If your measurements are greater than this, the actuators will need to be brought into tolerance. The greater the number, the more the shade will bind while functioning.

- 7) Now using a rag, place that over the end of the smallest extending tube and using great care, push that tube all the way in. Then VERY carefully walk that tube back to its resting fully extended position.
- 8) Did the actuator seem to function smoothly in both directions?
- 9) If the answer to #8 is yes, then reinstall the mid cross bar. Please pay special attention to the tab it attaches to. Make sure that when the tab is engaged, and the screw is inserted, it is not dragging the secondary tube. This will gouge the tube and cause a functioning issue.

See the attached set of pictures. Figure 1 shows correct spacing. If needed bend the tab and bar end upwards to achieve the correct spacing. Figure 2 and Figure 3 show the tab and screw dragging the tube. Figure 4 shows the mid bar not lining requiring you to pull the actuator in to engage. This will cause binding.



Figure 1



Figure 2



Figure 2



Figure 4

- 10) Reinstall the outer cross bar with canvas attached.
- 11) Now start to crank the canvas in taking special care that the edges roll on top of each other and not allowed to roll left to right or vice versa. Use your hands to guide the canvas back onto the roller.
- 12) Retract the shade until it is fully retracted. Please understand that does not mean until the tube ends are touching. You should stop when there is still about 6" of outer tube still extended. See pictures below. If you continue past this point you only stress the canvas and it will tear.



Some noteworthy things to mention on the MTF:

If your Gear box is splitting at the top or bottom and it has the updated bolt through the bottom case, it is being mistakenly used as a boarding handle. That places a tremendous amount of side load on the box causing the case to split. This is not warranty.

If your port side mount shows the axle not resting firmly on the mount (see pic below) but has a space and the bushing is pushed out, this is generally caused by the unit not being squarely mounted. This can also be caused by the axle not being installed correctly. Make sure the bolts go through the axle threads and is tight.

