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## Spacer Shims for #8954 Orion SkyQuest™ XX14g GoTo Truss Tube Dobsonian Base

Some units of the #8954 SkyQuest™ XX14g GoTo Truss Dob may exhibit a very slight amount of contact between the right altitude side bearing on the optical tube assembly and the inside surface of the right side panel of the base. Such contact could cause a slight “jitter” in the altitude motion, which is observable during electronic tracking and slewing. Ideally, there should be a small gap of at least 1 or 2 millimeters between the right side bearing and the side panel to allow for smooth motion throughout the 90-degree range of the tube’s vertical motion.

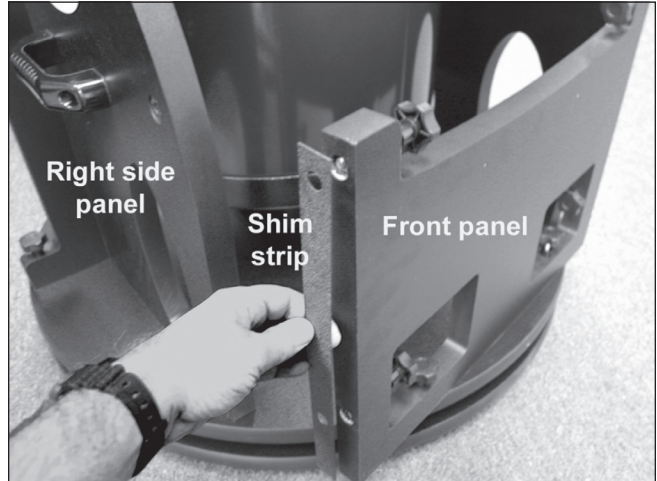
If on your telescope you can not see a small gap between the right altitude bearing and the right side panel, or you detect a jitter or jumpiness in the image you’re viewing when the telescope is tracking electronically, then we recommend you install the enclosed 1/16”-thick spacer shims onto your base, following the directions below. The addition of two (or four) shims should correct the problem, creating a gap between the right altitude bearing and the right side panel while still maintaining a solid structural connection between the base’s front panel and adjoining side panels. The gap will allow unobstructed up-and-down rotation of the tube and, thus, smooth tracking.

To install the shims:

1. Place one shim on each of the two lateral edges of the front panel as shown in the picture, lining up the holes in the shim with the connecting bolts in the front panel.
2. Then tighten each side panel to the front panel – with a shim inserted between the two adjoining surfaces – using the connecting bolts.

If your base is already assembled:

3. Loosen the four connecting bolts that attach the front panel to the two side panels.
4. Slightly loosen – by just one turn or so -- the six connecting bolts (three on each panel) that attach the side panels and side braces to the top ground plate.
5. Slide a shim between the edge of the front panel and the side panel, lining up the holes in the shim with the bolts in the front panel. Now thread the connecting bolts through the holes in the shim and back into the threaded inserts in the side panel. Tighten.



6. Repeat step 5 on the other side of the front panel.
7. Now re-tighten the connecting bolts that attach the side panels to the top ground plate.

Check to insure that there is now a discernable gap of at least a millimeter or two between the right side bearing on the optical tube and the right side panel of the base. (You should be able to freely slip a piece of paper between the side bearing and the side panel without it getting pinched between them.) If there is not, add a second shim to each edge of the front panel, laying the second shim right beside the first one. This will double the amount of spacing.

If there is still contact between the right side bearing and right side panel after four shims are installed, please call Orion Customer Support at 800-676-1343.

If you will be disassembling your base for transport or storage, be sure to collect the shims and keep them in a safe place so you’ll have them next time you reassemble the base! You may want to glue the shims permanently to the lateral edges of the front panel to prevent losing them. To do so, use an epoxy glue and adhere the textured surface of the shims to the front panel edge surfaces.

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