

Re: Subassembly Kinematic mounting

Source: <http://sci.tech-archive.net/Archive/sci.optics/2007-06/msg00127.html>

- *From:* danek <danek@xxxxxxxxxxxxx>
 - *Date:* Tue, 19 Jun 2007 13:56:33 -0400
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Tom Hubin wrote:

Hello,

I need to have a removable subassembly with good repeatability when reinserted. Actual position is not an issue since optics are adjusted with the subassembly in place.

I can use Thorlabs six piece set if necessary but I prefer something that is more predictable.

Machining what I need is an option but I would prefer to work with common breadboard with 1/4-20 holes on one inch centers.

So, I am looking for

- 1) magnets that screw into 1/4-20 holes,
- 2) ball-end screws that screw into 1/4-20 holes,
- 3) and mating slots or parallel rods that can be attached with 1/4-20 screws.

Second choice would be these same items but press fit or a different thread.

Last choice is machining more and buying less. Not a happy choice for a one-of-a-kind.

Tom Hubin
thubin@xxxxxxxxxxxxx

A simple machining procedure can be done to help this problem. Once you get everything fixed where you want it to go, drill through the mount and into the breadboard in two places. Then you insert roll pins and lift off the top part. You now have positioning pins to relocate the mating piece in exactly the same spot. You must use two pins per piece or the object can rotate around the pin.

P. Danek

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