Making BOLT for attaching the Bracket to the Scope

I needed a 1 / 4 inch bolt, similar to a camera mount bracket bolt, to mount the aluminum bracket to the spotting scope. They make these commercially, but those bolts have wings on them, and I needed something with a slim profile in it. So, I took 1 / 2 inch PVC water pipe, and the head of the 1 / 4 inch bolt will get pushed into there, and then the pvc cut to a short length. I screwed this in lightly to the bracket and scope, to size it, then removed it again. Silicone was placed in the BOTTOM of the PVC, (to keep epoxy from coming out), and then epoxy was placed in the UPPER part of the bolt, to glue in the hex head, and then a washer placed on top of the PVC.

After 24 hours, the bolt was ready, and it easily attached the bracket to the scope. NOTE – when finished, if the bolt needed cut down, light grinding to the top threads did not damage the epoxy bond.