## **Service Bulletin 56**

**Subject:** Sportsman Wing Strut Drilling Tolerances

**Applicability:** Sportsman Aircraft with 201-04004-03/04 Strut Attach Arms Installed.

Sportsman CAC customers are not affected by this service bulletin, since the wing struts were drilled using the new drill jig, assuring adequate

concentricity.

**Compliance Time:** Next Annual Inspection or First Flight (if yet unfinished).

## **Discussion and Background Information:**

GlaStar part number 201-04004-01/02 Strut Attach Arms were reinforced for the increased wing loads on the Sportsman line of aircraft. This part number was rolled to a –03/04 variant and used in the Sportsman kits. As part of a process improvement for drilling the Sportsman wing struts at the Strut Attach Arm location, the two holes common to the wing strut in the 201-04004-03/04 fitting are now provided to the customer full size (.375"). Additionally, a new strut drill jig part #981-03050-01 was designed at the Glasair Aviation Customer Assembly Center, which allowed for much faster and more accurate positioning of the wing dihedral and subsequent drilling of the wing struts to match these fittings.

Because both of these subject holes in the fitting are full size, if you have used the older GlaStar wing strut drill jigs as shown in Step 32 of Section IX, Systems Installation in the Sportsman Assembly Manual, an unforeseen problem could occur while drilling the strut and the fitting. The older GlaStar Wing Strut Drill Jigs are identified as part number 201-25000-DJ and come with instructions for the drilling the 201-04004-01/02 fittings and wing struts. Because these older drill jigs have 11/32" bushings permanently installed in the jig, the first step was to drill the inboard strut hole using an 11/32 drill bit, and then drill the outboard strut hole using an 11/32 drill bit, and then finish ream the hole to 3/8" diameter. The possibility for misalignment can occur since the -03/-04 strut arm fittings already have a full size 3/8" hole, and the 11/32" pin may not be concentric with the larger hole in the fitting.

Because there is a potential for misalignment between the wing strut and the strut arm fitting and the resulting egg shaped hole (which may not adequately transfer loads between the wing strut and the fitting), a maximum hole tolerance has been established. The maximum measured hole diameter, either in the wing strut or the fitting, is .385".

## **Required Action:**

If you used the older GlaStar Wing Strut Drill Jigs (identified as part number 201-25000-DJ) and have holes that do not meet the minimum hole diameter listed above, notify the Technical Support department at 360-435-8536 or <a href="technicalsupport@glasairaviation.com">technicalsupport@glasairaviation.com</a> for further instructions.

