

SUBJECT: REVISED GROSS WEIGHT AND MAIN LANDING GEAR STRUT REPLACEMENT

APPLICATION: All Glasair II TD and II-S TD aircraft

DESCRIPTION: Many of the improved features of the Glasair III were incorporated into the Glasair II and II-S designs. Important benefits such as pre-molded canopy frames, thicker windshields and canopies, stainless steel canopy latches, unidirectional roll cage protection, longitudinal fuselage stiffening members, stronger wing attach fittings, premolded elevator spars and ribs with centerline hinges and many other improvements have raised the empty weight of these improved models.

Now that several Glasair II models are complete and we recently constructed a II-S model, we have a better understanding of where the empty weight range is.

In order to maintain the same useful load as earlier models, a study was recently made to evaluate raising the gross weight. For TD models, the empty weight range should be from 1100 to 1200 lbs. with factors such as builder technique, VFR vs. IFR instrumentation, engine options, etc. affecting the outcome.

To maintain similar useful loads as earlier Glasair models, a structural evaluation was undertaken. As a result, the gross weights have been increased to the following figures:

- Aerobatic Gross Weight (+6/-4 g's) 1800 lbs.
- Utility Gross Weight, Short Wing 1900 lbs.
- Utility Gross Weight (with tip extensions) 2000 lbs.

To accommodate the higher weights, a modification to increase the strength of the main landing gear legs is necessary. We regret the time it took to evaluate the gross weight of the Glasair IIs but it was impossible to determine how large a gross weight increase was necessary until an accurate idea of the typical empty weights was available. Unfortunately, a couple of years elapsed before completed II models were available to provide the empty weight information. We apologize for any inconvenience this has caused you in reinstalling the landing gear if you have already done so.

We will be providing you with new main landing gear struts, attach brackets, and necessary mounting hardware. The new struts are approximately 3/8" thicker in section in the center, tapering to the original dimensions at the upper and lower ends.

If you have already installed your main gear struts, the new attach brackets designed for the thicker landing gear struts will mount to your existing rib attach plates. We checked with a local Glasair II TD builder, and he had plenty of room to accommodate the larger brackets. A minimum 3/16" space is required outboard of the attach brackets, as shown in FIGURE (1). The bidirectional torsional reinforcements added to the lower ends of the struts and all other installation details will remain the same.



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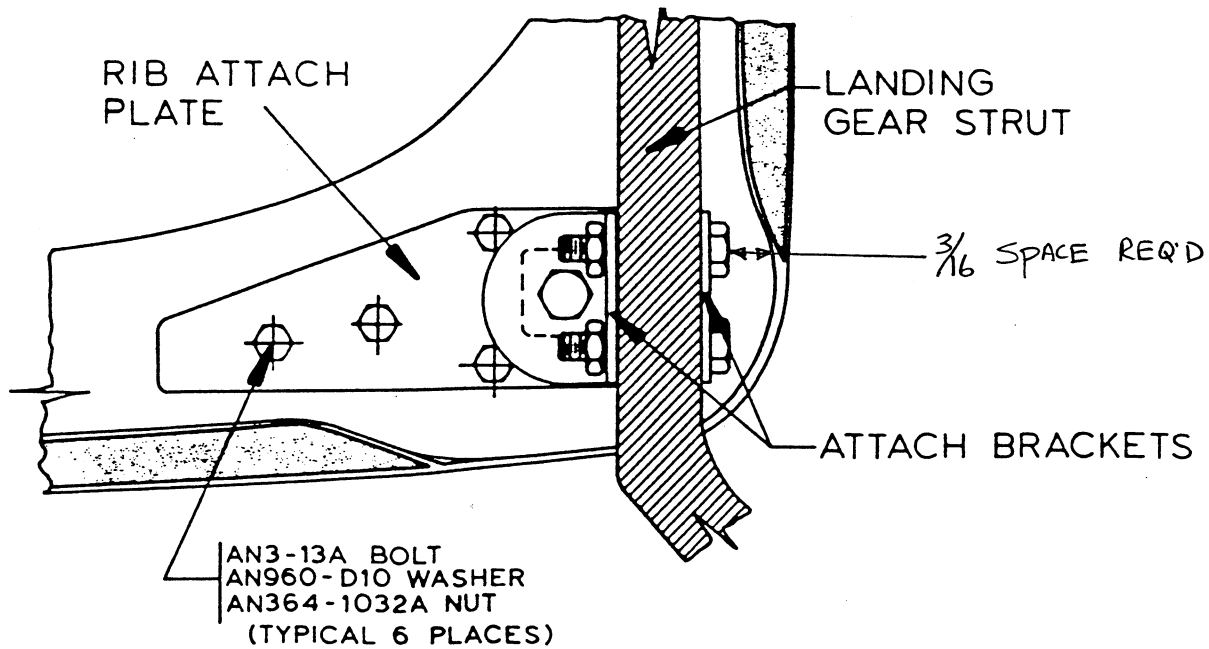


FIGURE (1)

We will also supply an adjustable tubular compression strut to fit between the upper gear leg attach bolts, as shown in FIGURE (2). Be sure to reserve space for the compression strut when installing the header tank fuel lines, the engine controls, wiring, etc.

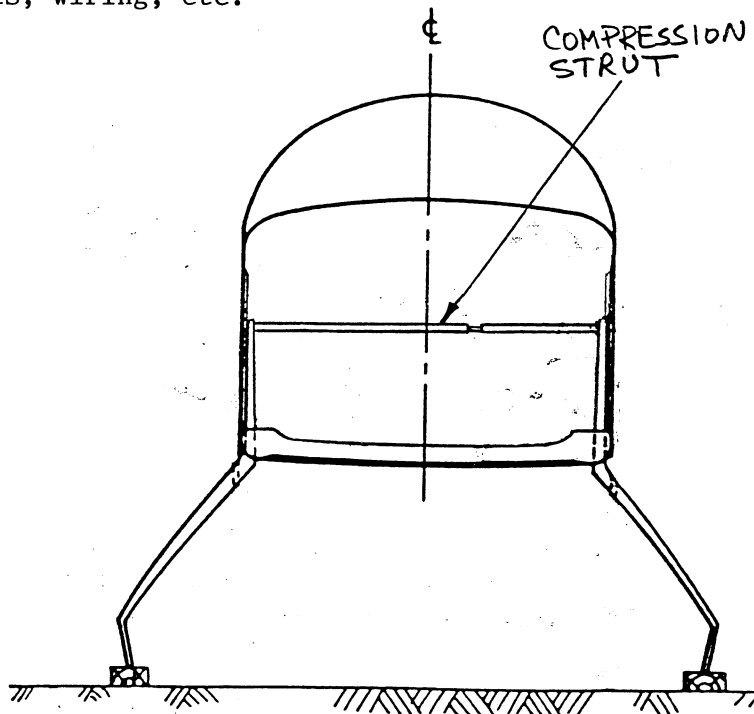


FIGURE (2)

STODDARD-HAMILTON
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We expect to have our gear leg tooling complete by mid December and be able to begin shipment by the first of 1991. Please note that, once production starts, we will be able to produce only one or two ship sets per week. Notify us if you need these quickly so we can prioritize our shipments.

If the main landing gear struts and mounting brackets shipped with your kit have not been trimmed or drilled, please return them to Stoddard-Hamilton as they are still usable as replacement parts for Glasair I kits.

This Service Bulletin is meant to advise you of the mandatory main landing gear strut replacement. Installation details and hardware will accompany the thicker replacement struts.

System 4 kit purchasers who have not yet ordered kit #3, which includes the landing gear, will receive the larger struts and corresponding hardware in those future deliveries.



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