

GLASTAR SERVICE BULLETIN 20

MANDATORY



Note This is Revision A. It supersedes the initial release of this service bulletin.

Subject: Flap handle weldment [P/N 602-02010-01 (bare) or 602-02010P01 (powder coated)]

Applicability: All GlaStar fuselage kits shipped prior to 1/29/97

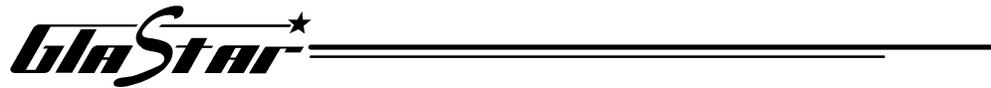
Discussion: During a recent demonstration flight in Stoddard-Hamilton's GlaStar prototype, N824G, the pilots experienced increasing difficulty setting the flaps in their detent positions and getting them to stay there. The flaps would retract suddenly and without warning, and ultimately, the pilots decided to land the aircraft without flaps.

Inspection revealed that the flap handle was bent upward, having buckled around the aft end of the ratchet plate slot. Although the bend was slight, it had been sufficient to impede the operation of the spring-loaded plunger mechanism that holds the flap handle in the detents. The aircraft had approximately 500 hours at the time of the failure.

The flap handle weldment was designed with adequate strength for the loads imposed in normal operation at or below the established flap-extension speed (V_{fe}) of 75 knots (86 m.p.h.), but this incident demonstrated that these loads could be exceeded without the pilot even being aware that he/she was overloading the handle. For this reason, we have redesigned the flap handle to include a welded sleeve reinforcement over the area of the ratchet plate slot. This redesigned weldment will be designated with P/N 602-02010-**03** or P/N 602-02010P**03** for the bare steel and powder-coated variants, respectively.

Based on our experience, a flight-critical failure of the flap handle is extremely difficult to imagine. The failure was progressive rather than instantaneous, and the aircraft can be operated safely in virtually all situations without flaps. However, sudden and uncommanded flap retraction has the potential to distract or startle the pilot and passenger significantly, and if it occurred under pre-existing conditions of high pilot workload or stress, it could certainly be a contributor to potentially serious accidents.

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We therefore have decided it would be prudent to recall all -01 and P01 flap handles; we will provide -03 or P03 replacement handles to all builders free of charge.

Required Action: The -01 or P01 flap handle weldment must be replaced with a -03 or P03 variant **within the next 50 hours in service**. Because the -01/P01 weldment can be reworked to -03/P03 standards, we require that it be returned to Stoddard-Hamilton before the new part can be shipped out. On receipt of your return, we will ship you a newly manufactured -03 or P03 weldment as quickly as our production schedule permits.



Note Given our purchasing and production schedules, it is not practical to return to each builder the very same weldment that he/she returns to us. Regrettably, this means that if you have customized your flap handle weldment in any way, you will have to re-customize the new weldment. We apologize for any inconvenience this may impose.

Please observe the following procedures in returning your -01 or P01 weldment:

1. Return **only** the flap handle weldment itself (P/N 602-02010-01 or 602-02010P01). Do **not** return the flap handle plunger, extension, spring, button or ratchet plate.
2. Affix securely to the weldment a tag or card with the following information:
 - Your name
 - Your shipping address
 - Your kit number
 - The notation "GSSB 20"

This information will be logged by our Receiving Department to insure that you are credited with the return of the part. Receiving will also record whether your returned part was bare or powder coated to insure that the new part you receive will be in the same condition. It is absolutely essential that the required information be attached to the part, not loose in the packaging. We recommend using safety wire through the holes in the part to attach a metal or sturdy cardboard tag.

3. Ship the weldment **to arrive at Stoddard-Hamilton no later than March 31, 1997**. The new part will be shipped to you no later than April 30, 1997.

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Note If your obsolete flap handle weldment is received by Stoddard-Hamilton **after** March 31, 1997, you will be liable for the cost of rework or the cost of a new part, at our discretion, as well as return shipping costs. Compliance with this bulletin remains mandatory in any case.

4. If you have **realistic** plans to have your GlaStar flying **before** April 30, 1997, please make an additional notation on the card or tag giving your anticipated first-flight date (e.g., "Plan to fly by March 15"). We will make every effort to give priority in shipping the upgraded weldments to builders whose first flights would otherwise be delayed.



Note Some builders have reported part marking errors wherein powder-coated weldments have been marked with the -01 part number rather than the P01 number. Such weldments are still subject to recall as outlined in this service bulletin.



Note If the flap handle weldment was backordered when you received your fuselage kit, the backorder will automatically be filled with a -03 or P03 weldment, regardless of which variant was backordered. No action on your part is required.