

SERVICE BULLETIN 141

SUBJECT: RG Landing Gear Scissor Bolt Bushing Installation

APPLICABILITY: All Glasairs with retractable landing gear delivered between April 1992 and December 1995 with Landing gear strut serial numbers 232 thru 299 for G-III's and 500 thru 566 for G-II RG's, that have NAS bolts used in place of stainless steel pins to secure the scissors to the gear.

DESCRIPTION: Builders have pointed out an area on the newer Glasair RG landing gear that is particularly vulnerable to wear. This is where bolts are installed, in place of earlier scissor pins, to form the pivot point between the landing gear scissors and an aluminum component, such as the forward shimmy damper clamp half or the Glasair Super II RG aluminum half-forks. The Glasair III is only affected by the forward shimmy damper clamp half location. Each of these locations would have used a stainless steel scissor pin with a closer tolerance fit and been secured with a clevis pin in the original design. They were replaced with the NAS1105-32D bolts, which retain the scissor bushings to prevent them from falling out, should they become loose. The problem is that the center aluminum boss holding the scissors to the gear does not have a bushing in it and can wear excessively from the rotational movement of the scissor bolt that is assembled through it. This would result as play in the nose gear scissors which if allowed to become excessive and not caught during a preflight, could lead to serious damage to the aircraft.

New landing gear currently produced has bushings pressed in, eliminating this problem.

RECOMMENDED ACTION: Remove the affected scissor attach bolt. For the nose gear remove the shimmy damper clamp half and ream out the scissor attach boss in preparation for a press in bushing. The Glasair Super II RG main gear half forks can be reamed in place and will not require removal.

**Nose Gear Shimmy Damper Clamp Half:**

Secure the forward clamp half in a vise and ream out the clamp half boss with a .4375" (7/16") reamer. Apply a small amount of Loctite or equivalent to help seal the mating surfaces from corrosion. Use a small press or bench vise to press in the 363-5317-001 bushing into the shimmy damper clamp half. Reassemble the parts. Adjust the shimmy damper friction per the specification given in the pilots operating handbook for the aircraft.

**Super II main gear half forks:**

Ream out the half fork boss with a .4375" (7/16") reamer. Apply a small amount of Loctite or equivalent to help seal the mating surfaces form corrosion. Using one of the NAS bolts through the 363-5317-001 bushing hammer the bushing into the boss hole with a soft hammer. Then reassemble the parts.

**CAUTION:** Use care while starting to ream the hole and press in the bushings to make sure that you are square to the hole.

Please contact our order desk to purchase the 363-5317-001 bushings.



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