

SERVICE BULLETIN 72

SUBJECT: GLASAIR III HYDRAULIC SNUBBER

APPLICATION: All Glasair III aircraft

DESCRIPTION: During operation of our Glasair III prototype, we have experienced higher than normal loads on the hydraulic actuator rod ends caused by too rapid gear extension at or above 140 mph. When the hydraulic system moves the actuators to release the mechanical uplock hooks, there is relatively low pressure on the opposite sides of the actuator pistons and very little restriction in the hydraulic fluid's flow back to the pump. This situation, along with aerodynamic forces and the force of gravity, causes the gear to fall abruptly out of the wing.

SOLUTION: Achieving smoother gear operation and, thereby, reducing peak loads on the hydraulic system can easily be accomplished by installing the hydraulic snubber (stock # 341-5663-001) between the "B" cross and the hydraulic pump. The snubber is an AN816-4D nipple that has been modified by welding it closed and then drilling a #60 hole through the weld. The tiny hole restricts the flow of fluid back to the electric hydraulic pump, preventing the gear from slamming down.

To install the snubber, disconnect the hydraulic line from the AN823-4D elbow in the aft end of the "B" cross (shown on page G-258 in Volume II of the Instruction Manuals). This is the line between the "B" cross and the high pressure port in the electric hydraulic pump. Remove the AN823-4D elbow and install the hydraulic snubber (modified AN816-4D nipple) in its place. Bend the hydraulic line as necessary to mate to the snubber and reconnect the line. When the hydraulic snubber is installed at this point in the hydraulic system, the emergency hand pump bypasses the snubber in the event that the snubber's hole becomes plugged.

Please contact Stoddard-Hamilton Aircraft's Shipping Department to order the hydraulic snubber (stock number: 341-5663-001; price: \$7.50).


STODDARD-HAMILTON
AIRCRAFT, INCORPORATED

MODEL GLASAIR III	ASSEMBLY NAME SERVICE BULLETIN 72	REVISION	DATE 9/11/89	VOLUME	PAGE 1 of 1
----------------------	--------------------------------------	----------	-----------------	--------	----------------