

LazairTM

Castering Tailwheel Kit

Installation Manual

1.0 INTRODUCTION

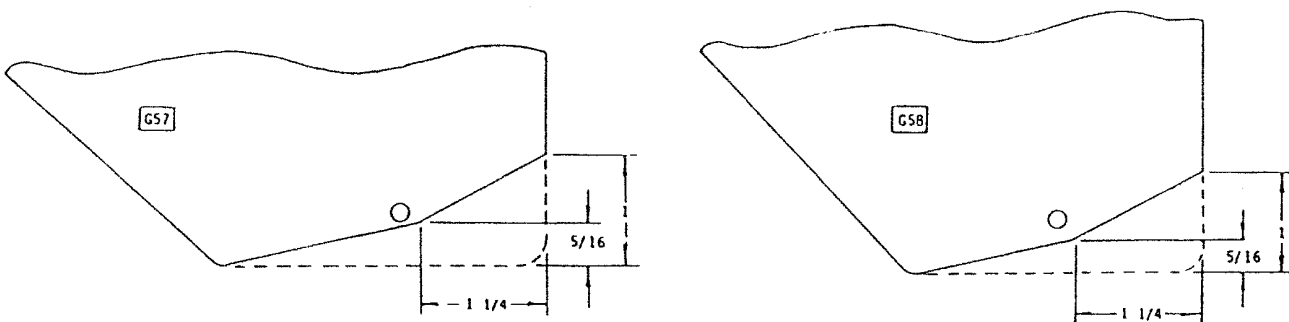
This castering tailwheel kit is recommended for installation on the Lazair™ Series II aircraft. It will facilitate short radius ground maneuvers, and provide increased clearance between the ruddervators and the ground, thereby reducing any possibility of damage due to obstructions on the ground.

As the castering tailwheels greatly reduce the force required to move the tail of the aircraft sideways (on the ground) there is an increase in the tendency to weathercock in a crosswind. Therefore the castering tailwheels are not recommended for installation on an aircraft without brakes and rudder pedals.

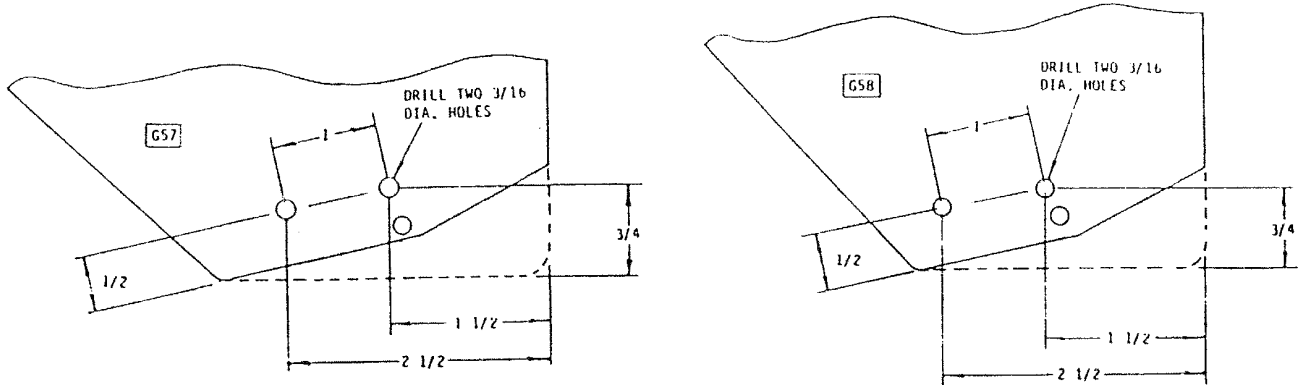
The additional weight of these tailwheel assemblies may have a slight effect on the aircraft trim. If necessary, refer to Technical Update No. 9, Item 9.11.

2.0 INSTALLATION

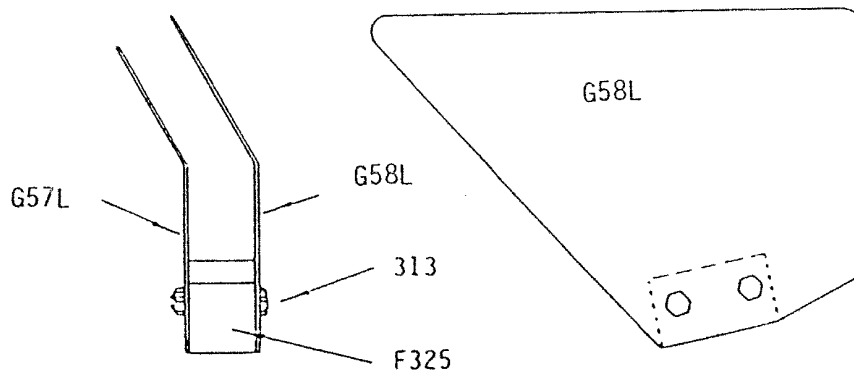
- 2.1 Remove the tailwheels from the aircraft. Mark the tailwheel gussets G57 and G58 and trim the bottom corner (with tin snips or a hacksaw) as shown.



2.2 Drill the 3/16 inch mounting holes in G57 and G58 as shown.

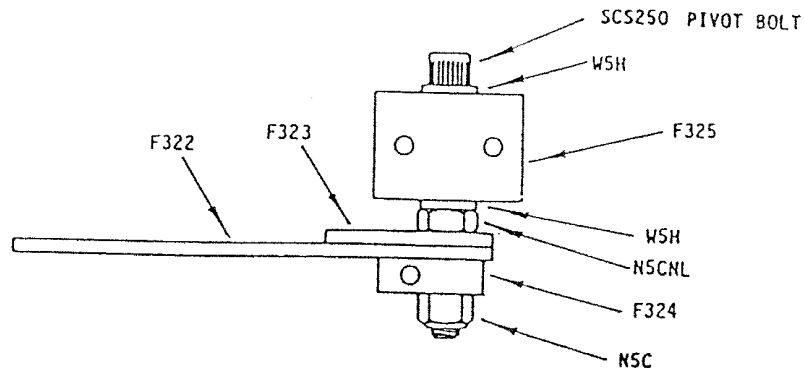


2.3 Temporarily install the two F325 mounting blocks between F57 and F58. Install one bolt first, then ream the second hole if necessary (with a 3/16 drill) so the second bolt may be inserted.

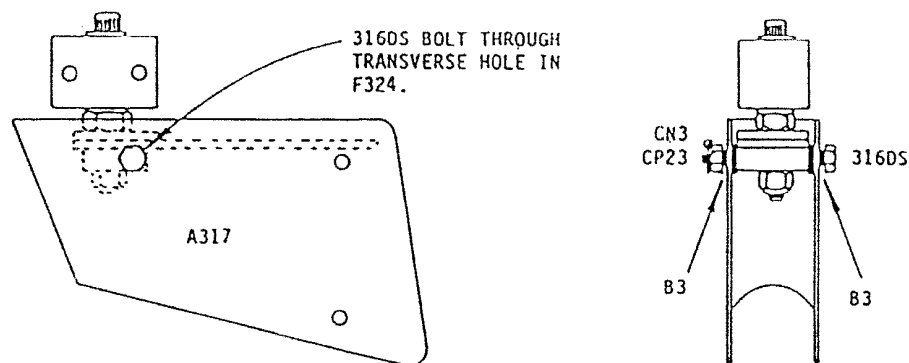


2.4 Remove the F325 tailwheel mount blocks from the aircraft. Grease the SCS250 pivot bolt and assemble the two tailwheel spring and pivot assemblies as shown. The nut between F325 and F323 should be adjusted so that F325 will rotate freely on the bolt but there is little or no

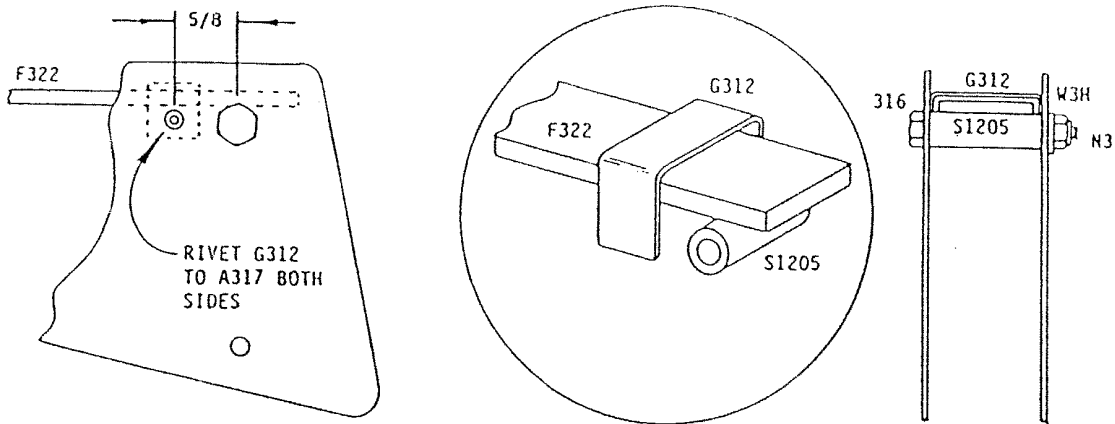
end play. Then, while holding this nut with an open end wrench, the other nut (on the end of the bolt) should be tightened to clamp F322, F323 and F324 securely. It may require several attempts to adjust both of these nuts to achieve the required freedom of rotation for F325.



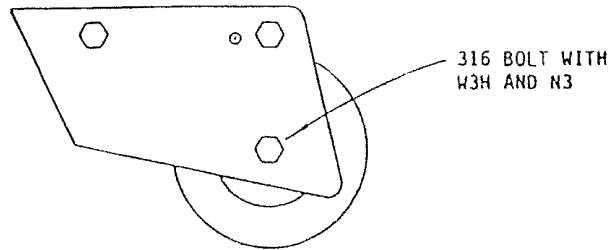
- 2.5 Fit each spring and pivot assembly into a tailwheel pant (A317) as shown. Adjust the CN3 so that A317 will move freely, and pin the nut with a CP23 cotter pin. Make a left and right assembly by inserting the two 316DS bolts in opposite directions. (The left assembly is shown in the figure).



- 2.6 Install the S1205 spacer with a 316 bolt (below the F322 leaf spring). Install the G312 stop and rivet in place as shown to retain the spring. Note that the spring should not be clamped by G312 (about 1/16 of an inch play is acceptable).



2.7 Install the tailwheel and axle assembly with a 316 bolt as shown.



2.8 Reinstall the F325 mount blocks on the aircraft. Check that the tailwheel assembly rotates freely on its pivot bolt. Press down on the top of the tail and check that the tailwheel springs deflect.

PARTS LIST, CASTERING TAILWHEEL KIT

<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	A311	Assembly, Tailwheel
2	A317	Assembly, Tailwheel Pant
4	B3	Bushing
2	CN3	Castle nut (3/16)
2	CP23	Cotter Pin (3/4)
2	F322	Spring, Long Tailwheel
2	F323	Spring, Short Tailwheel
2	F324	Mount, Tailwheel Pant
2	F325	Mount, Tailwheel
2	G312	Stop, Tailwheel Pant
8	N3	Nut
2	N5C	Nut
2	N5CNL	Nut
2	SCS250	Cap Screw
2	S1205	Spacer
4	W3H	Washer
4	W3T	Washer
4	W5H	Washer
4	313	Bolt
4	316	Bolt
2	316DS	Bolt