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SERVICE BULLETIN

SB052-1299

Subject: Lancair Flap Track Travel (Lancair IV, IV-P)

Date: 10 Dec., 99

Ref: Construction Manual Chapter 7 and 21

Pages: 3

Status: Mandatory

Background:

On some installations the flap cylinder stroke may exceed the travel available in the flap tracks causing unnecessary loads on the flap system components. This condition could cause component failure.

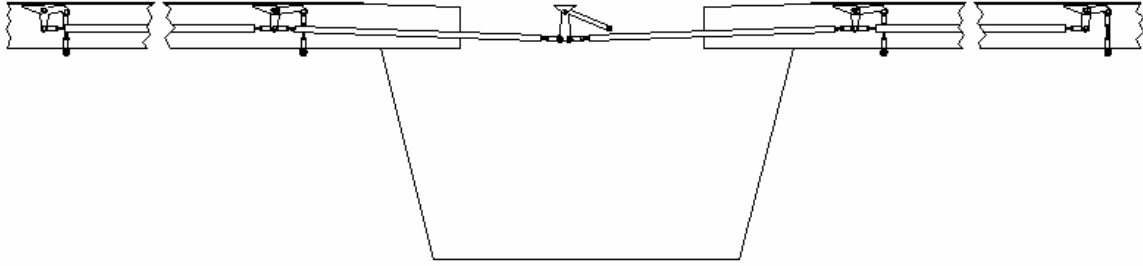
Action:

Before next flight, check the flap travel in the flap tracks. The flap rollers should not bottom out hard against the ends of the flap track slots. If travel is incorrect use the stop P/N FL171, washer #WS-6 and nut AN316-5. Contact Kit Components Inc. for parts.

Procedure:

1. Remove necessary panels to access the flap control system.
2. See fig.1, which follows. Recheck the alignment of the wing mounted bellcranks (P.7-87 in IV manual and P.7-13 in IV FB manual) and alignment of the wing mounted bellcranks with the center bellcrank (P.21-9 thru P.21-12).
3. Remove the F45-19 rod end bearing from the bellcrank and cylinder shaft. Remove the check nut.
4. See fig. 2, which follows. Slide the stop sleeve onto the shaft followed by the WS-6 washer. The rounded edge side of the washer should face the cylinder. Secure the washer with an AN316-5 check nut. Thread the original 316-5 check nut onto the shaft followed by the F45-19 rod end bearing. If this is a new installation leave 4 threads visible between the check nuts for best adjustment range and follow the manual for flap cylinder installation instructions. For an existing installation check that the flaps are in the full up position and the cylinder rod fully extended. Then adjust the rod end bearing and reattach it to the bellcrank and the cylinder shaft.
5. Again check the flap travel in the flap tracks. Fine-tune the up stop by readjusting the rod end bearing on the cylinder shaft. Set the down stop by machining the stop sleeve to the proper length, make sure that the cut is straight.
6. Secure all fasteners and replace access panels. Use Loctite on the check nut, securing the #WS-6 washer in place.

Fig. 1



Note:

See manual Pg. 21-10 B2. Align the bellcranks as accurately as possible.

Fig. 2

