

CESSNA SERVICE LETTER SLN-27

DATE: 01-08-47

SUBJECT: Wing Drag Wires

We have had an occasional question or request for information on wing drag wires and rigging of them on Cessna Model 120 and 140 airplanes.

These drag wires have been properly set at the factory and normally should require no tightening or inspection. The wire is tight enough for structural purposes if there is no end play in the wire, that is, if there is no clearance between the nut and the drag wire fitting. There is only one way to determine looseness in a drag wire. No personal opinion is to be used to decide that that particular wire "feels" loose. End play in the wire itself is the only criterion.

In the event that a drag wire does have end play it will rattle in the fitting and thereby make itself known. There is no inspection necessary to look for loose drag wires. When a wire does have end play and rattles in the fitting it should be re-rigged. In that event the following procedure should be followed:

- 1 If the wing is covered, cut an inspection opening through the fabric aft of the rear spar at the drag wire station
- 2 Remove the hexagonal jamb nut on the end of the wire and loosen the drag wire nut.
- 3 Tighten the drag wire nut finger tight then tighten not more than two additional full turns. (The drag wires should not be over tightened).
- 4 Replace the jamb nut running it snug against the drag nut with the fingers

CAUTION:

Over tightening this jamb nut will break the drag wire. Extreme care should be used to avoid over tightening the jamb nut against the drag nut.

In isolated instances a broken drag wire has evidenced itself by rattling. There is no inspection necessary to hunt for such broken drag wires. The break occurs in the threads at a point approximately between the drag nut and the jamb nut and is the result of over tightening of the jamb nut. The installation of anew drag wire will necessitate cutting an opening in the fabric forward of the front spar. Tightening procedure for the new drag wire is the same as outlined above with one important

exception. Shut the drag nut on both ends fingertight and then tightened the drag nut only on one end, the two turns as outlined above. The jamb nut should be tightened 1/12th of a turn on both ends.