

The following a description of the device I designed to safely pull the landing gear pivot (gear leg to fuse mounts) pin.

Please excuse the detail but I have found thru time that if you explain something as though you were talking to a young child, most adults will be able to do the task as per instructions with ease.

The pulling device I devised for the pins will not damage the fuse mounts.

The materials should be available at any neighborhood hardware store.

It is really very simple requiring a length of threaded rod (ready-bolt) that will fit thru the pivot pin. I used 7/16. The 7/16 ready bolt will fit snugly inside the pin which will reduce the chance of puller end misalignment as it travels thru the fuse and gear leg members.

This threaded rod could be cut to about 24 inches in length.

(For a more powerful pulling rod, the standard coarse threaded rod could be substituted with a fine thread but fine threaded rod would probably have to be obtained thru an industrial source.)

Next: turn (cut) a couple of nuts (that fit the ready-bolt) down to the Dia. of the OD of the pin (slightly smaller (-.005 to-.010) for clearance)

Then make a tube, slightly longer than the length of the pivot pin (11.75 should work), with an ID that will easily fit over the OD of the fuse mount tubes. On one end of that tube, weld a heavy washer that the threaded rod will go thru. On the other end, weld a heavy washer that has been bored to .630 dia. to fit over the sliding pivot pin. (Both washers could be bored after welded to the tube if a lathe is available.)

Other items needed will be three nuts to fit the puller rod. Two of regular dims and the third, preferably, a ready bolt connector nut (Long nut for joining ready-bolts). The long nut will be used as the "pulling nut" and will distribute the stress of the pull over a greater number of threads.

Now the pulling assembly:

After removing the pivot pin retaining pin, push the threaded rod thru the pivot pin and put the turned nuts on the rear end of the rod.

(I'm thinking the rear end is too close to the fuse longeron to pull the pin front to rear).

That being the case, the nuts have to be added after the rod is inserted from the front. (I use the double nuts to lock them to the pulling rod so they are not accidently turned off during the pull).

Lock the two nuts together by threading them to the rod and rotating them both in opposite directions to tighten then against each other.

Now slide the puller tube over the rod with the larger hole at the gear leg fuse mount .

Next: Add the pulling nut, either the long nut if used or a hardened nut, to the forward end of the assembly and snug the tube up against the fuse mount pivot tube.

To prevent the pulling rod from rotating while pulling the pin, add the final two nuts to the forward end of the rod and lock them together by tightening them together using counter rotating motion.

You can now start the pull. Put a wrench on the forward most nuts to hold the rod from turning and use a second wrench to rotate the pulling nut.

If the first few turns seem to have major resistance, make sure that the turned nuts are not fowling the aft fuse mount hole and the fuse mount end of the puller tube is not fowling the end of the pivot pin.

If both are aligned, you may have to use penetrating oil like Aero Kroil to release the aged joint.

Once the pin has moved a half inch or so, the alignment will be assured and the long process of the pull can continue until the pin is free from the gear leg tube.

Adding more Kroil from time to time should make the pull easier.

Reassembly should be easier as all will be cleaned, sized, aligned, and lubricated.

DO NOT FORGET TO INSTALL THE SECURITY PIN to retain the pivot pinto the front Fuselage mount.

I used a roll pin for strength and then added a safety wire thru the pin to secure it from working out over time.

Good Luck.

If you have any questions, feel free to contact me directly at: bcairport@dishmail.net

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