

ComancheZOOM for Thursday, October 10, 2024

**Topic: Comanche Nose Gear springs and Replacement**

With Eivind Egenberg and Rosemarie Williams (among others)

Fuel mismanagement and starvation, and flying with instructors inexperienced in type, are the biggest killer of Comanche pilots, but the biggest killer of Comanche aircraft is Landing Gear collapse. Keeping the flight numbers and the community organized is the way to keep values up and provide our support system an incentive to invest in our future! . This ComancheZOOM discusses Nose Gear springs: what they do, why are there two, how do they work, what causes nose gear collapse, and what procedures and tests did Piper put in place to prevent collapse related to worn out or broken springs.

We will discuss the role of nose gear springs in the Comanche landing gear system, how they are interconnected with the rest of the gear through the gearbox in the floor between the front seats, discuss the Piper procedure provided to test the springs if you are brave enough to remove and reinstall (or replace) them! We will discuss two procedures to make removing and replacing them relatively easy: that of Matt Kurke, and that of A&P/IA and long time (currently lapsed) CFII Eivind Egenberg.

We will show Matt Kurke's video of the nose gear coming down, then an additional video (as Matt's video is relatively low resolution and dark) will be played that shows fresh nose gear springs in action. In this second video it is particularly evident how the fresh springs expand and then contract again during the extension and retraction cycle, and the audible click as the knuckle comes over center.

Functional nose Gear Springs support the landing gear transmission, and extend the life and stability of your gear system.

We will mention that the early Comanches came from the factory with just one nose gear spring, and Piper furnished a free kit to convert them all to two nose gear springs. Why should every owner and pilot should check your Comanche nose gear and ensure that there are two springs, NOT one, and why you should check your logbook and make sure your springs are not original Equipment!

The procedure Matt Kurke dictated to CJ AFTER the change of the nose gear springs in the 180 (with much sweat and many 4 letter words) will be discussed, using photos taken by Rosemarie Williams and Ivan Egenberg to illustrate Matt Kurke's instructions, and then a different quick and easy (relatively) method just developed by Eivind Egenberg during the replacement of their 260 C nose springs at their recent annual.

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To see/hear the recordings click on a link below:

- <http://meetings.northeastcomanche.org/zoom/2024-10-10/video.mp4>
- <http://meetings.northeastcomanche.org/zoom/2024-10-10/audio.m4a>

To read the Chat text click on this link:

- <http://meetings.northeastcomanche.org/zoom/2024-10-10/chat.txt>

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