



Performance PARTS for IV, IV-P, Mako



Nose Landing Gear Replacement Oleo Strut

- **Extended life**
- **Enhanced control and stability**
- **Smoother operation**
- **Available Q1-2020**

The new Lancair Oleo Strut has been re-engineered from top to bottom for extended operational life. The new Lancair unit incorporates everything we have learned from decades of PMA-approved precision aviation manufacturing experience.

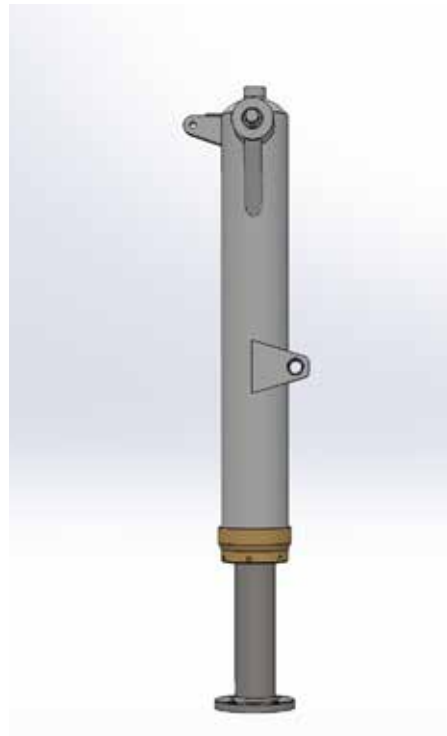
Our refined production process incorporates a new piston, precision machined to very fine tolerances and chrome plated to reduce friction and maximize longevity. This new piston is utilized in the nose gear strut for both fixed and retractable gear Lancair models. With different housings and piston travel, it will also be available for recent 2-seat (Legacy, Barracuda) and 4-seat (Mako/IV/IV-P) aircraft models with retractable nose gear.

LANCAIR OLEO HISTORY

The original nose gear strut for Lancair 320/360, IV/IV-P, ES, and Legacy models was the ESCO GM014 series. ESCO struts require a rebuild about every 5-6 years to reduce the chance of shimmy-induced collapse of the nose gear. The ESCO strut employs a shimmy dampener pin that can be broken if turned excessively while towing. If this pin is broken, the shimmy dampener is inoperative, and collapse could occur on landing. Newer updates to the ESCO style strut include an internal self-centering cam, flange clamp at yoke attachment, and higher deflection turn pivot stops.

In 2007 the manufacturer changed and subsequent struts were built by Wolstenholm Machine Inc. and known as the "WMI" strut. Now, under new ownership, Lancair International has improved the strut in many areas to increase the service life and further reduce the tendency to shimmy when not properly serviced.





OLEO STRUT BACKGROUND

An oleo strut is a pneumatic-hydraulic air-oil shock absorber. The primary purpose of the oleo strut is to absorb the substantial landing gear loads on an aircraft. Inside the strut are two chambers containing (1) hydraulic fluid and (2) dry air or nitrogen. The upper chamber (air/nitrogen) acts as an "air spring", absorbing the aircraft's landing loads. The hydraulic fluid in the lower chamber of the strut regulates and transfers the loads from the lower part of the strut to the upper portion and subsequently to the airframe. By regulating the flow of hydraulic fluid, the internal metering of the strut allows a progressive transfer of the load, minimizing the impact of the landing gear's contact with the runway.

Lancair Oleo Nosegear Strut - SPECIFICATIONS

Part Number:	432-0000
Applications:	IV / IV-P / Mako
Weight:	13.37 lb
Dimensions:	overall: 24¼" x 5" x 8¾"
	upper cylinder diameter: 2½"
	lower cylinder diameter: 1½"
	lower flange diameter: 3"
Pricing:	Please call 1-830-900-7032 for current pricing.

Effective: 01-01-2021

