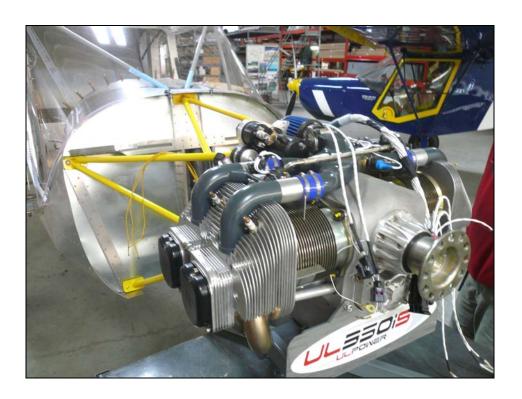
## **UL Power UL350 Series Engine Installation**

## Section 1 Engine Mount Installation



UL Power aircraft engines are manufactured and supported by UL Power Aero Engines of Belgium. Read and understand the <u>UL Power manuals</u> completely before starting with the engine installation, as they contain important engine installation, operation and maintenance information. Follow all of the <u>important safety information</u> provided in the UL Power manuals regarding the installation, operation and maintenance of the UL Power engine. <u>Read and understand the UL Power Operating Manual before starting the engine</u>.

Make sure that your engine is registered with UL Power or an authorized distributor so that the factory warranty is in effect. In North America, UL Power engines are distributed by UL Power North America LLC: http://www.ulpower.net. Contact a UL Power distribution or service partner if you do not understand the instructions or if you have any additional questions. Maintain copies of the manuals with the aircraft in case of sale. Obtain current versions of the manuals from the official UL Power website, as well as current service and maintenance information: www.ulpower.com

If a discrepancy arises between the information provided by UL Power and the following pages, the UL Power manuals and/or service information and instructions take precedence. Zenith Aircraft Company does not manufacture or directly support engines.

**Note:** <u>Different engines</u> will affect performance, specifications, and flight characteristics of the aircraft. Also, the weight and balance of the aircraft will be affected by different engines and the fuel system per the drawings may not be adequate or suitable for some engines



**P/N:** 650-UL-350 Engine Mount (top left photo)

**P/N:** 750-UL-350 Engine Mount (left)

Position the Engine Mount on the Firewall (650 engine mount shown inset in top left corner).



Mark the areas on the Engine Mount plates that need to be trimmed to clear the supports on the Firewall.



Use a grinder with a cutoff wheel or a hacksaw to trim the plates on the Engine Mount. Use a file to remove any burr and to clean up the edge.



Expand the holes in the Firewall and Engine Mount Fittings to 3/8".



Bolt the Engine Mount to the Firewall (650 engine mount shown inset in top left corner).



Mark the hole locations for the AN4 bolts attaching the top of the Engine Mount to the Cabin Frame. Mark a line 15mm from the left and right edge. Mark the hole location centered vertically on the plate (skip this step for the 650 installation).



Check that the holes will have sufficient edge distance on the Cabin Frame. Clamp the top Engine Mount plate to the Firewall and Cabin Frame. Use a #40 drill bit to drill the two bolt locations and cleco. Expand the holes in steps to 1/4" (skip this step for the 650 installation). Remove the Engine Mount from the Firewall and deburr the holes. To prevent rust, clean and paint or powder coat the Engine Mount.



P/N: 91290A460 M8x1.25 Metric Socket Head Cap Bolt

**P/N:** E014002A Rubber Engine Mount

**P/N:** E013505 Engine Mount Washer

**P/N:** AN916-516 Washer

**P/N:** 94235A090 M8x1.25 Hex Lock Nut

P/N: E093002A Exhaust Bracket UL350 series



Install the Rubber Engine Mounts on the Engine Mount. **Note:** The 650 Engine Mount does not have the two top tubes and plate.



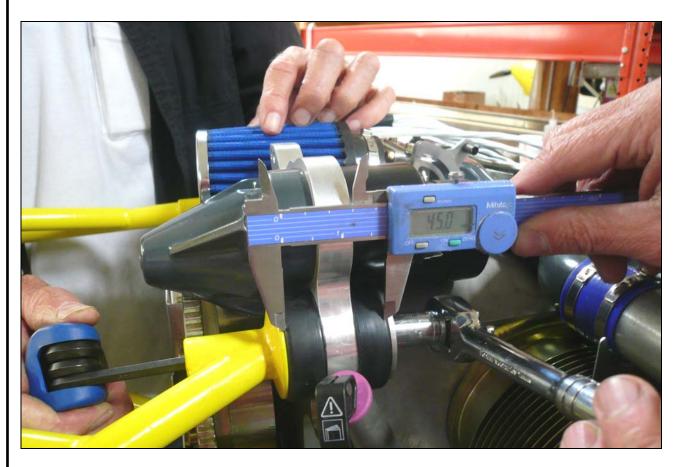
Insert the M8 Bolt in the Engine Mount. Install the Engine Mount on the Engine. The Rubber Engine Mounts have a shoulder, be certain the smaller diameter of the Rubber Engine Mount slides inside the aluminum mounting plate on the Engine.



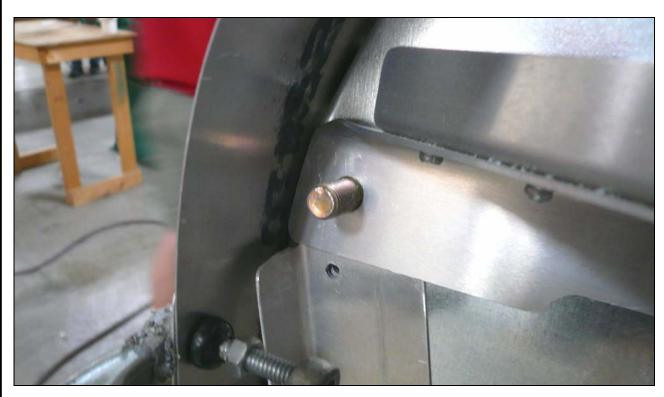
Install the second Rubber Engine Mount and Engine Mount Washer. If the Rubber Engine Mount doesn't want to go into place, spray a little soapy water on the Rubber Mount.



Install the Exhaust Bracket and M8 Lock Nut on the bottom mount points. The Exhaust Bracket may need to be bent to align with the Exhaust properly. On the top mounting points, use a Washer and Lock Nut.



Tighten the Lock Nuts on the Bolts until the Rubber Engine Mounts are compressed to 45mm thickness. See the UL Power UL350 series Installation Manual for more specific information.



Insert the AN6 bolts into the Engine Mount Fittings on the Fuselage.



Install the Engine Mount and Engine on the Fuselage and Torque the mounting Nuts. See the Construction Standards for proper Torque specifications.



Engine mounted to Fuselage. Note: The 650 Engine Mount does not have the two top tubes and plate.