

UL Power UL350 Series Engine Installation

Section # 5 ECU, EGT, OIL Pressure, OIL TEMPERATURE

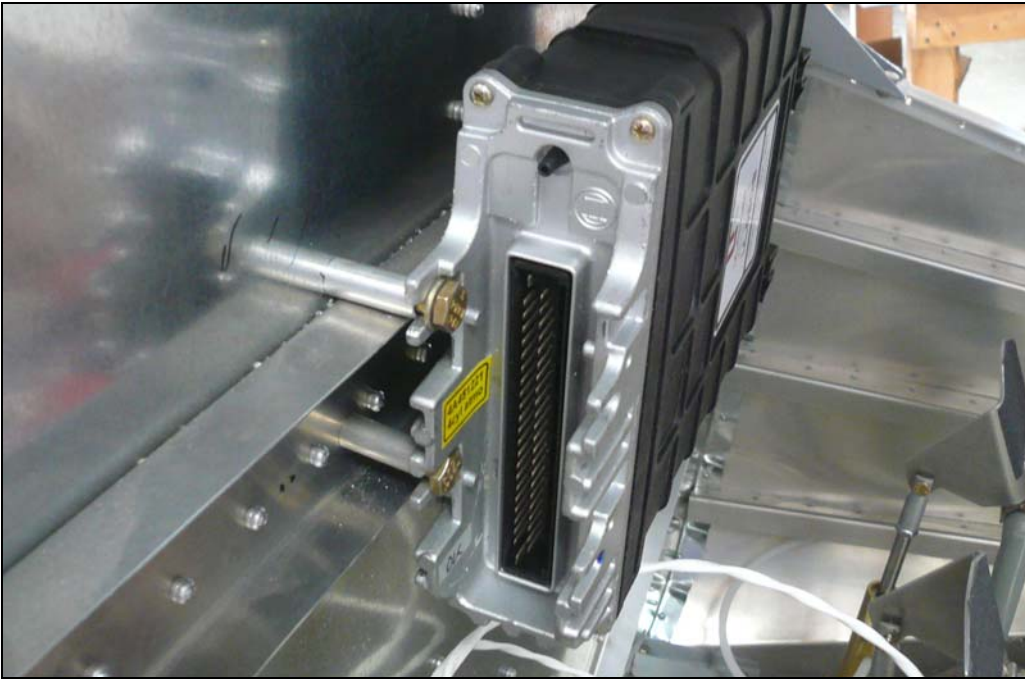


UL Power aircraft engines are manufactured and supported by UL Power Aero Engines of Belgium. Read and understand the UL Power manuals completely before starting with the engine installation, as they contain important engine installation, operation and maintenance information. Follow all of the important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

Make sure that your engine is registered with UL Power or an authorized distributor so that the factory warranty is in effect. In the United States, the UL Power distributor is UL Power North America: <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.

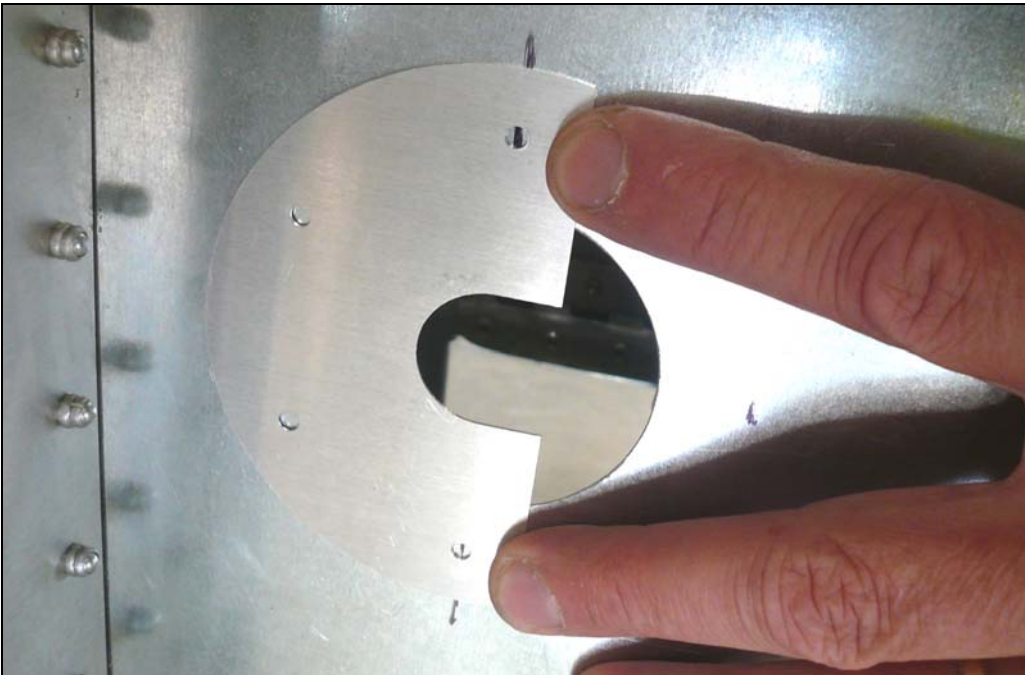
Note: Different engines will affect performance, specifications, and flight characteristics of the aircraft. Also, the weight and balance of the aircraft will be affected by different engines and the fuel system per the drawings may not be adequate or suitable for some engines.



P/N: ECU
Engine Control Unit

P/N: ECU Spacers
AN4-14A

Mount the ECU (Engine Control Unit) on the inside of the firewall using the ECU spacers with AN4-14A bolts. For ECU Positioning and wiring see ULPOWER Installation Manual.



P/N: FG Firewall
ECU Grommet

P/N: AN931-10-14
Grommet

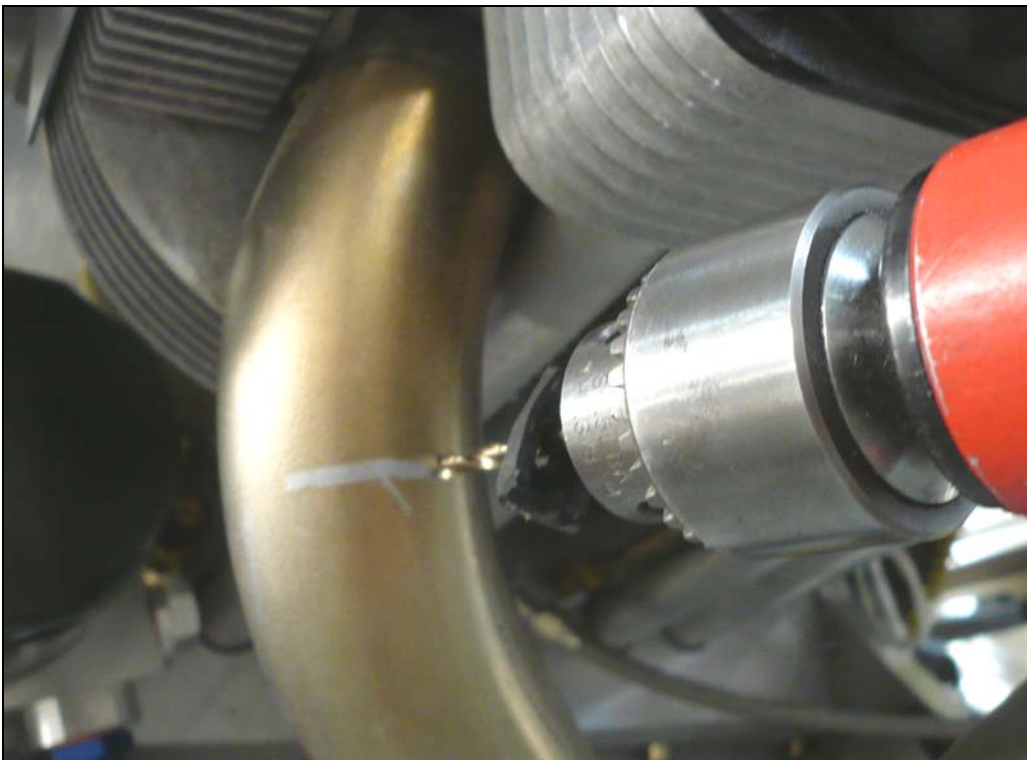
Measure up 320mm from the bottom of the firewall and 120mm from the center to locate firewall grommet. Drill a 2" hole with a hole saw so the ECU plug can go thru the firewall.



P/N: FG

P/N: AN931-10-14

Run the ECU plug thru the firewall and cleco the FG Grommet with the Rubber Grommet. Rivet the grommet with A4 rivets.



P/N: Stainless Steel
Exhaust Tubes

Installation of the EGT Probes: Measure down 3 inch from the beginning of the exhaust piping. Drill with a number 20 drill bit.



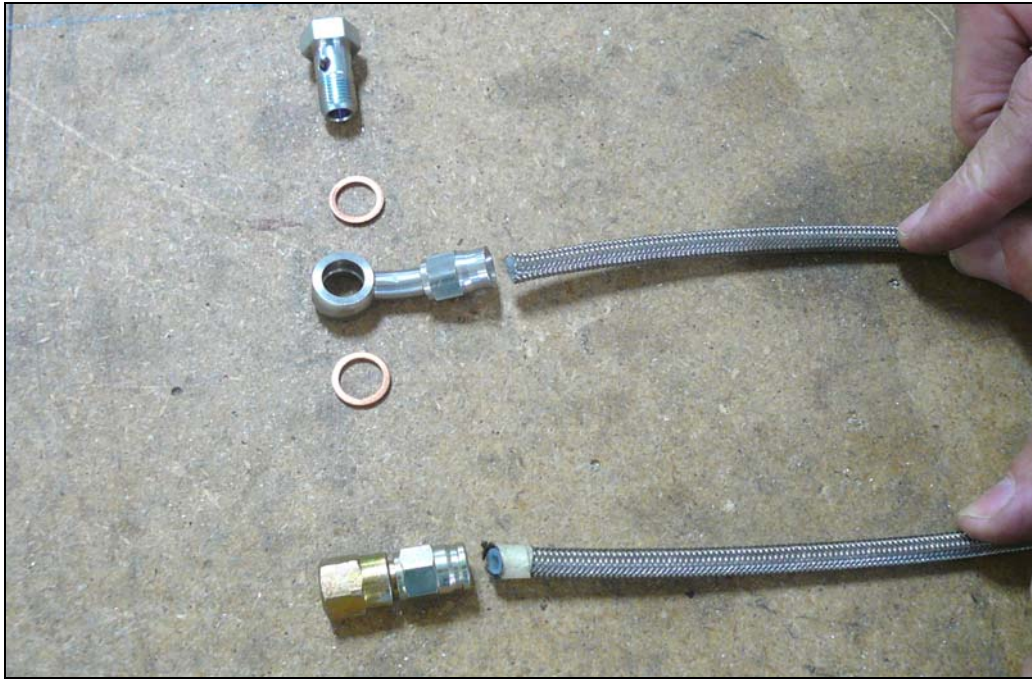
P/N: EGT Sensors,
100405-000

Position the EGT Sensors on to the Exhaust pipe and tighten. You may need to bend the sensors to allow room for the cowling. Refer to Avionics installation for correct sensors (Dynom EGT Sensors).



P/N: 100404-000
CHT Bayonet

All four cylinders should have a CHT probe. Each cylinder head has a pre-drilled hole close to the exhaust port to monitor CHT (see avionics installation manual).



- P/N:** Banjo Bolt
- Copper Sealing Ring
- Banjo
- Sensor Fitting

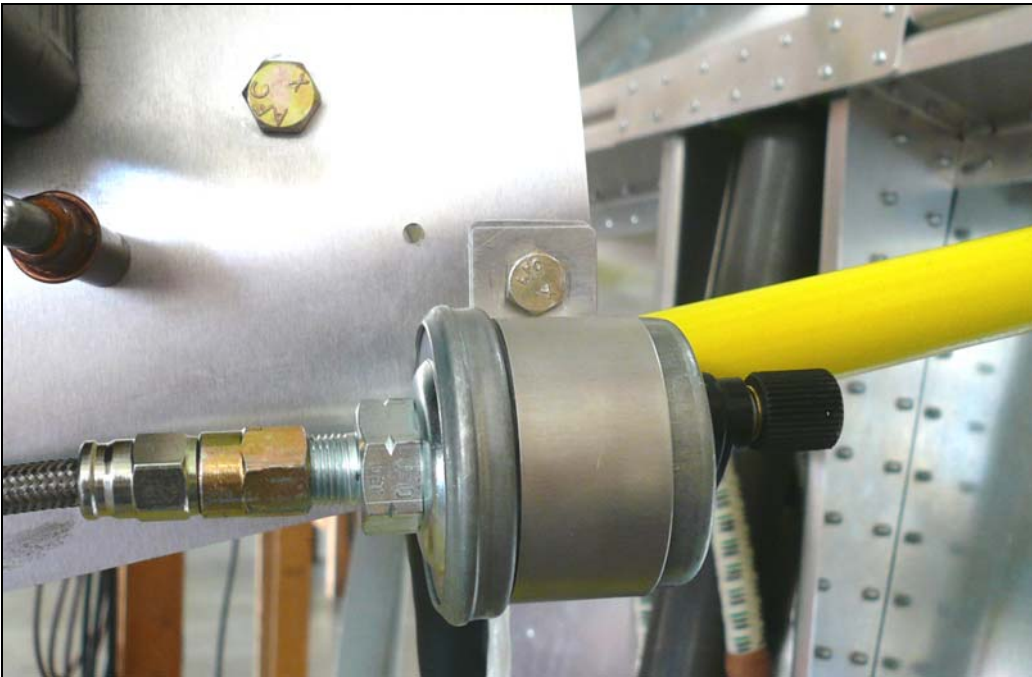
Attach the oil pressure line to the each fitting. Review the UL Power installation Manual on the oil pressure to attach the fitting to the line.



Oil pressure is measured in the main oil gallery on the left side of the engine casing. Do not over tighten the banjo bolt in to the engine case. Torque to 25Nm.



Use a piece of extra material to make a strap to hold the oil pressure sending unit to the ULICP ignition coil mounting plate (see below). Oil pressure sending unit may vary in size. Oil Pressure unit needs to be compatible to your instruments.



Mount the oil pressure unit on the Coil Mounting Plate with the bolt to the adel clamp. This unit the case is the ground and the post goes to the instrument panel.



P/N: Mitchell
 300F Temp
 5/8 18 UNF

Wick Aircraft 323-061

The oil temperature is measured behind the oil filter with a 5/8"-18 UNF thread with the copper sealing ring.
 Recommend using Loctite Aviation Gasket on the threads.



This picture shows the installed Oil Temp Sensor and Oil Filter Sandwich Plate with Thermostat.