



EXHAUST INSTALLATION INSTRUCTIONS FOR LYCOMING AIRCRAFT ENGINES

1. On engines in service, it is necessary to remove existing exhaust system and associated bracketry. Clean and inspect all gasket surfaces. Clean and inspect exhaust port studs. Install new exhaust gaskets on each cylinder port (make sure that exhaust gasket ID matches cylinder port ID). Lubricate all slip joints with high-temperature anti-seize lubricant.
2. Each primary tube has the cylinder number stamped on the underside of the flange.
3. If two people are performing installation, loosely assemble exhaust system in the approximate orientation that it will be installed. Then with someone on either side of the engine, bring the entire loosely assembled system up onto the appropriate ports. Loosely thread a nut onto each exhaust stud to hold exhaust system in place.
4. With all joints / flanges still loose, align exhaust system to eliminate any binding that occurred during initial install.
5. If only one person is performing install, it is easiest to install each exhaust primary tube individually. Orient each to approximate correct location and loosely thread nut onto stud to hold tube in place. With each individual tube installed, slide collector onto the tube ends. It should not take extreme force to slide collector onto the tubes, if it does then the tubes need to be re-aligned.
6. With the entire system aligned to proper fit and zero binding, tighten exhaust nuts to 150 in-lbs.
7. Tighten slip joint hardware. Do not bottom out lock nuts as that will eliminate the necessary freedom of movement that occurs during normal exhaust expansion/contraction.
8. As each installation varies a bit, you will need to make a simple exhaust mounting strap to hold the collector in place. We provide mounting tabs on the top of our collector to facilitate this. This mount can be as elaborate as a dual heim joint assembly attached to the rear engine case or as simple as a piece of high temperature hose / strap that is attached to a mount tube. The key is to hold the collector slightly up and forward. Please keep in mind that if you prefer to attach the collector mount to an engine mount tube, it can not be rigid. A rigid mount may be attached directly to the engine.
9. Crankcase breather line (from center of collector) connects to side port of the inverted oil canister (aerobatic installations) or to rear case breather fitting (non-aerobatic). Standard stainless braided AN10 line to be used.
10. After 2 hours of running time, re-check all fasteners for proper torque. Inspect exhaust system for leaks and abnormal binding.

Please feel free to contact us if you have any installation or operation questions:

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