



SKY DYNAMICS CORPORATION

AEROSPACE DESIGN AND FABRICATION

1900 Skyway Drive
Moneta, Virginia 24121
540-297-6754
FAX: 540-297-2240
www.skydynamics.com

MAXI - SUMP INSTALLATION INSTRUCTIONS FOR SIX-CYLINDER LYCOMING AIRCRAFT ENGINES

1/ On engines in service, it is necessary to remove existing oil sump assembly along with intake tubes and exhaust system.

2/ Clean and inspect all gasket surfaces. On engines so equipped, remove intake studs. New 1/4" X 1" capscrews are supplied for Maxi-Sump intake tubes.

3/ Mount new Maxi-Sump on engine using new gasket, taking care to align all holes. Leave bolts loose to facilitate installing intake tubes on cylinder port. The tubes are number stamped on their flanges to identify them. Lubricate O-rings in intake tubes before mounting on plenum outlet port tube.

4/ Primary tubes of the exhaust system are stamped on the flanges for their respective cylinders. The collector is mounted on the tubes with support tabs on top. Individual applications require a support from these tabs to a sufficient junction on the engine or mount. A strut pulling forward and up will maintain proper location of the collector.

5/ When used as an aerobatic sump with an inverted oil system, the bottom fitting on the sump is plumbed to the bottom port of the changeover valve.

Important note for sumps with swinging oil pickup tube:

When attaching a line to the bottom fitting, hold the fitting from turning with a wrench as you tighten the line fitting onto it. If you allow the fitting in the sump to spin, the swinging oil pickup will be damaged.

The rearmost fitting is plumbed to the center of the changeover valve. The front corner port is for the return from the air/oil separator tank. The small #8 cap and fitting is for an oil drain.

6/ For applications that do not use an inverted oil system, it is necessary to connect a line between the bottom port and the rear port of the sump.

7/ Due to the differences in the contour of our sump floor, it is important to recalibrate the oil dipstick during initial filling.

8/ After 5 hours of running time, re-check all fasteners for proper torque. Inspect oil hoses for possible chafing and exhaust system for abnormal binding.

Please contact us if you have any installation questions:

Phone: 1(540)297-6754

Email: sales@skydynamics.com