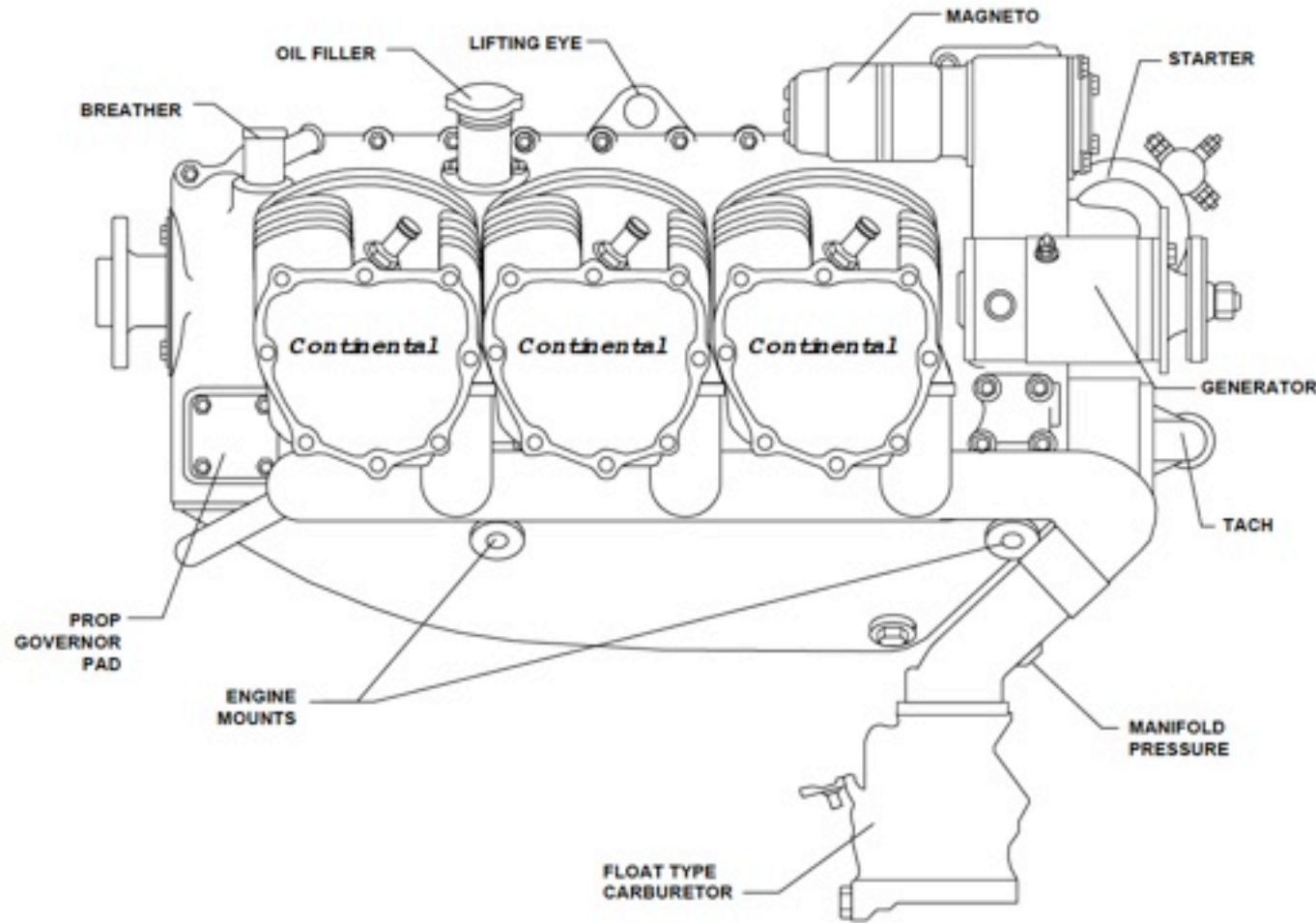


O-470-U

Type Certificate E-273

ENGINE SPECIFICATIONS O-470-U



The O-470-U model is a six cylinder carbureted engine producing 230 brake horsepower and has a crankshaft speed of 2400 RPM. The engine has horizontally opposed air cooled cylinders. The engine cylinders have an overhead inclined valve design. The cylinders have updraft intake inlets and downdraft exhaust outlets mounted on the bottom of the cylinder head.

The O-470-U model has a 471 cubic inch displacement achieved by using a cylinder design with a 5.00 inch diameter bore and a 4.00 inch stroke. The O-470-U weighs in at a dry weight of 388.93 lbs. without accessories. The weight of the engine with installed accessories is approximately 425 lbs.

OVERALL ENGINE DIMENSIONS INCHES	
HEIGHT	28.42
WIDTH	33.56
LENGTH	36.03

Cylinders
 Arrangement..... Horizontally Opposed
 Number of Cylinders 6
 Compression Ratio..... 8.6:1
 Firing Order 1-6-3-2-5-4
 Bore (Inches)..... 5.00
 Stroke (Inches)..... 4.00
 Piston Displacement (cu. in.) 471

Brake Horsepower
 Rated Maximum Continuous Operation 230 BHP @ 2400 RPM
 Recommend Maximum Cruise 172 BHP @ 2400 RPM

OPERATING LIMITS

Crankshaft Speed - RPM
 Rated Maximum Continuous Operation 2400
 Manifold Pressure Limit (In. Hg.) Absolute Full Throttle
 Fuel Control System Carburetor MA-4-5
 Fuel 100 or 100LL
 Oil

TEMPERATURE	AVIATION GRADE	SAE GRADE	MULTI-VISCOSITY
BELOW 40	65	30	10W-30 / 15W-50 / 20W-50
ABOVE 40	100	50	15W-50 / 20W-50 / 20W-60

Oil Pressure
 Idle, Minimum, psi 10
 Normal Operation, psi 30-60
 Oil Sump Capacity (U.S. Quarts)..... 12
 Max. Oil Consumption (Lb./BHP/Hr. Max.) $.006 \times \% \text{ Power}$
 100

Oil Temperature Limits
 Minimum for Take-Off..... 75° F
 Maximum Allowable 240° F

Cylinder Head Temperature
 Recommended Max. at Cruise 400° F
 Limit..... 460° F

Ignition Timing (Compression Stroke, Breaker Opens)
 Right Magneto, Degrees BTC 24°
 Left Magneto, Degrees BTC 24°

Spark Plug
 TCM..... 634675
 Champion RHB32E

