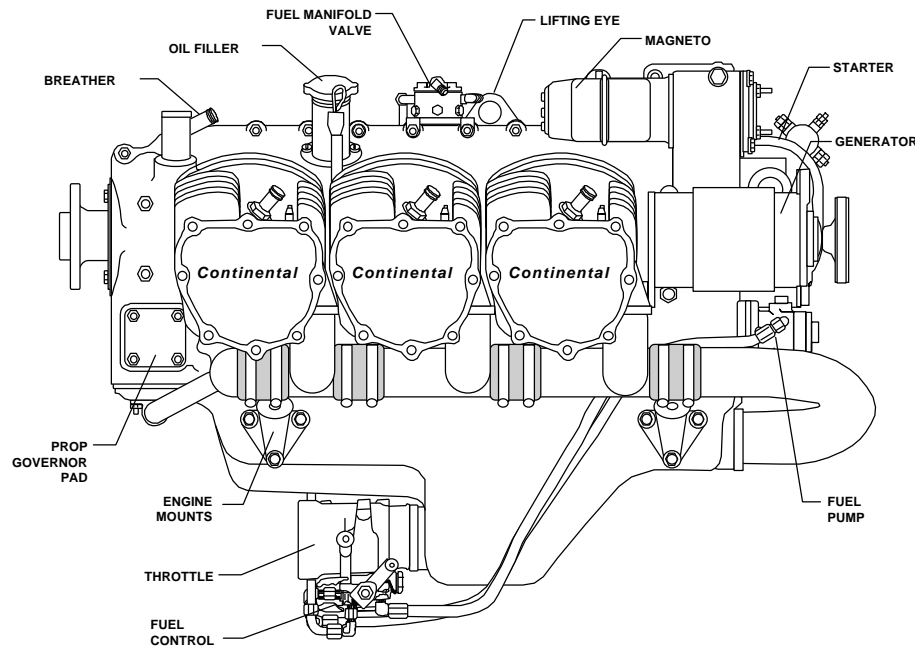


# IO-470-N

# Type Certificate 3E1



The IO-470-N model is a six cylinder fuel injected engine that produces 260 brake horsepower and has a crankshaft speed of 2625 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 IO-470-N engine 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 dry weight of the engine is 414.44 lbs. without accessories. The average weight of the engine with installed accessories is approximately 465 lbs.

OVERALL ENGINE DIMENSIONS INCHES	
HEIGHT	26.81
WIDTH	33.58
LENGTH	38.14

# ENGINE SPECIFICATIONS .....IO-470-N

## 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 ..... 260 BHP @ 2625 RPM  
 Recommended Cruise ..... 195 BHP @ 2450 RPM

## OPERATING LIMITS

### Crankshaft Speed - RPM

Rated Maximum Continuous Operation ..... 2625  
 Recommended Idle ..... 600

Manifold Pressure Limit (In. Hg.) Absolute ..... Full Throttle

Fuel Control System ..... TCM Fuel Injection

Fuel ..... 100/130

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.) ..... .012 lbs/bhp/hr

## Oil Temperature Limits

Minimum for Take-Off ..... 75° F  
 Maximum Allowable ..... 225° F

## Cylinder Head Temperature

Recommended Max. at Cruise ..... 380° F  
 Limit ..... 460° F

## Ignition Timing (Compression Stroke, Breaker Opens)

Right Magneto, Degrees BTC ..... 20°  
 Left Magneto, Degrees BTC ..... 20°

## Spark Plug

TCM ..... 634675  
 Champion ..... RHB32E



**CONTINENTAL MOTORS**