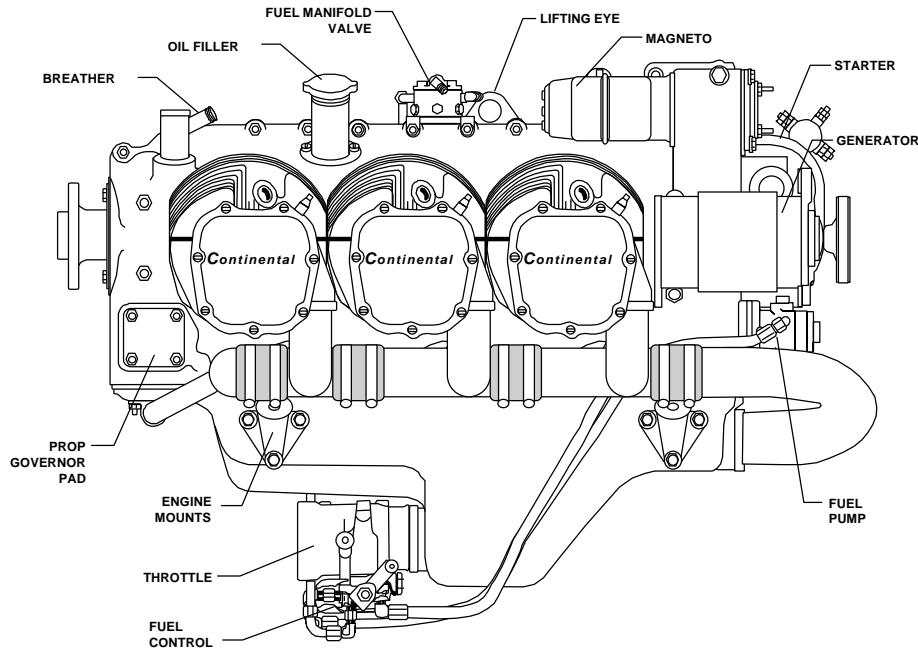


**IO-470-J**

**Type Certificate 3E1**



The IO-470-J model is a six cylinder fuel injected engine that produces 225 brake horsepower and has a crankshaft speed of 2600 RPM. The engine has horizontally opposed air cooled cylinders. The engine cylinders have an overhead straight valve design. The cylinders have updraft intake inlets and downdraft exhaust outlets mounted on the bottom of the cylinder head.

The IO-470-J 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 401.90 lbs. without accessories. The average weight of the engine with installed accessories is approximately 445 lbs.

<b>OVERALL ENGINE DIMENSIONS INCHES</b>	
<b>HEIGHT</b>	<b>26.81</b>
<b>WIDTH</b>	<b>33.39</b>
<b>LENGTH</b>	<b>38.14</b>

**ENGINE SPECIFICATIONS ..... IO-470-J**

**Cylinders**

Arrangement ..... Horizontally Opposed  
 Number of Cylinders ..... 6  
 Compression Ratio ..... 7.0:1  
 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 ..... 225 BHP @ 2600 RPM  
 Recommended Cruise ..... 169 BHP @ 2450 RPM

**OPERATING LIMITS**

**Crankshaft Speed - RPM**

Rated Maximum Continuous Operation ..... 2600  
 Recommended Idle ..... 600

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

Fuel Control System ..... TCM Fuel Injection

Fuel ..... 80/87 Min.

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.) ..... .015 lbs/bhp/hr

**Oil Temperature Limits**

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

**Cylinder Head Temperature**

Recommended Max. at Cruise ..... 375° F  
 Limit ..... 450° F

**Ignition Timing (Compression Stroke, Breaker Opens)**

Right Magneto, Degrees BTC ..... 22°  
 Left Magneto, Degrees BTC ..... 22°

**Spark Plug**

TCM ..... 627643  
 Champion ..... REM40E



**CONTINENTAL MOTORS**