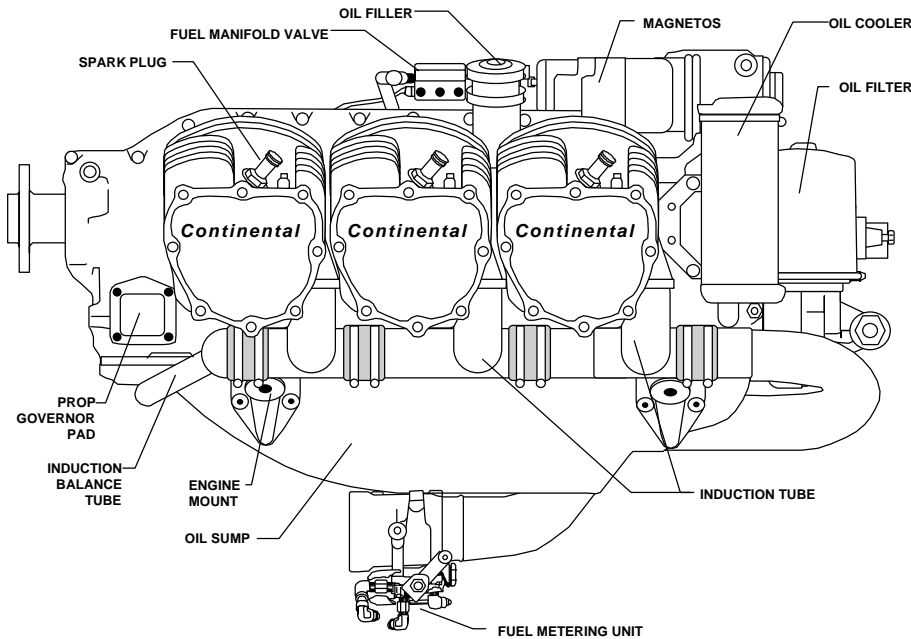


**IO-550-B**

**Type Certificate E3SO**



The IO-550-B is a six cylinder fuel injected air cooled engine producing 300 brake horsepower and has a crankshaft speed of 2700 RPM. The engine has horizontally opposed air cooled cylinders. The engine cylinders incorporate an overhead inclined valve design. The cylinders have updraft intake inlets and downdraft exhaust outlets mounted on the underside of the cylinder head.

The IO-550-B engines have a 550 cubic inch displacement achieved by using a cylinder design with a 5.25 inch diameter bore and a 4.25 inch stroke. The engine enclosure is of the Permold series crankcase design. The dry weight of the engine is 406.65 lbs. without accessories. The average weight of the engine with installed accessories is approximately 460 lbs.

<b>OVERALL ENGINE DIMENSIONS INCHES</b>	
<b>HEIGHT</b>	<b>27.32</b>
<b>WIDTH</b>	<b>33.56</b>
<b>LENGTH</b>	<b>37.97</b>

**ENGINE SPECIFICATIONS .....IO-550-B**

**Cylinders**

Arrangement ..... Horizontally Opposed  
 Number of Cylinders ..... 6  
 Compression Ratio ..... 8.5:1  
 Firing Order ..... 1-6-3-2-5-4  
 Bore (Inches) ..... 5.25  
 Stroke (Inches) ..... 4.25  
 Piston Displacement (cu. in.) ..... 550

**Brake Horsepower**

Rated Maximum Continuous Operation ..... 300 BHP @ 2700 RPM  
 Recommended Cruise ..... 235 BHP @ 2500 RPM

**OPERATING LIMITS**

**Crankshaft Speed - RPM**

Rated Maximum Continuous Operation ..... 2700  
 Recommended Idle ..... 600

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

Fuel Control System ..... TCM Fuel Injection

Fuel ..... 100/100LL

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 X % Power  
 ..... 100

**Oil Temperature Limits**

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

**Cylinder Head Temperature**

Recommended Max. at Cruise ..... 420° F  
 Limit ..... 460° F

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

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

**Spark Plug**

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



**CONTINENTAL MOTORS**