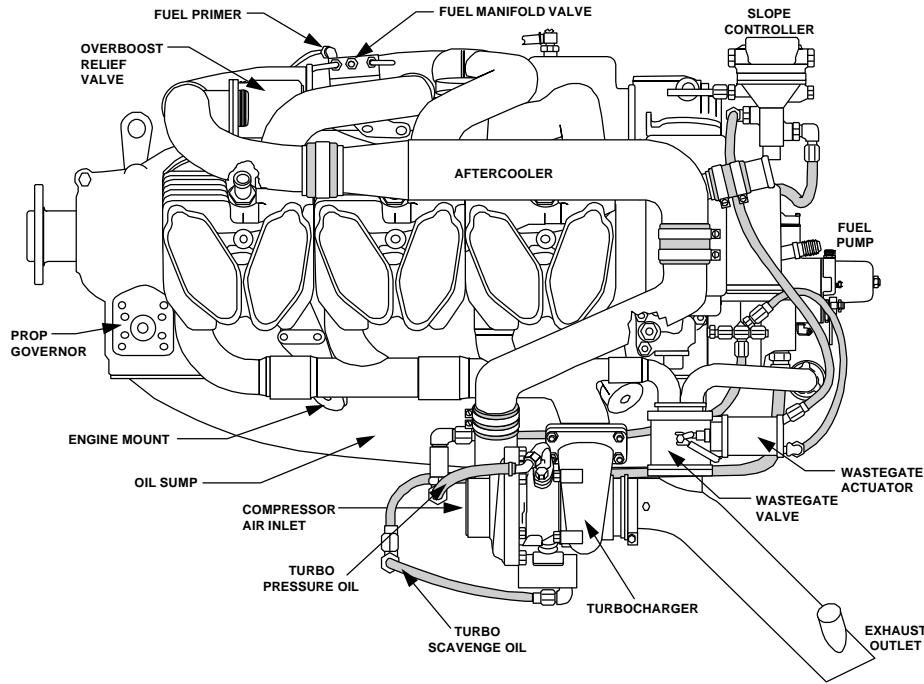


TSIO-550-C

Type Certificate E5SO



The TSIO-550-C is a six cylinder fuel injected, turbocharged engine producing 310 brake horsepower and has a crankshaft speed of 2600 RPM. The engine has horizontally opposed air cooled cylinders. The engine cylinders are cross flow design having overhead inclined valves. The cylinders have downdraft intake inlets mounted on the top of the cylinder head and downdraft exhaust outlets located on the bottom of the cylinder.

The TSIO-550-C 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 442.10 lbs. without accessories. The average weight of the engine with installed accessories is approximately 565 lbs.

OVERALL ENGINE DIMENSIONS INCHES	
HEIGHT	33.50
WIDTH	42.50
LENGTH	42.64

ENGINE SPECIFICATIONS TSIO-550-C

Cylinders

Arrangement Horizontally Opposed
 Number of Cylinders 6
 Compression Ratio 7.5:1
 Firing Order 1-6-3-2-5-4
 Bore (Inches) 5.25
 Stroke (Inches) 4.25
 Piston Displacement (cu. in.) 550

Brake Horsepower at Rated Speed

Rated Maximum Continuous Operation 310 BHP @ 2600 RPM
 Recommended Cruise 262 BHP @ 2500 RPM

OPERATING LIMITS

Manifold Pressure Limit (In. Hg.) Absolute 35.5"
 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) 8
 Max. Oil Consumption (Lb./BHP/Hr. Max.)006 X % Power
 100

Oil Temperature Limits

Minimum for Take-Off 100° F
 Maximum Allowable 240° F

Cylinder Head Temperature

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

Turbine Inlet Temperature

Maximum Continuous 1750° F
 Maximum, 60 Seconds 1850° F

Ignition Timing (Compression Stroke, Breaker Opens)

Right Magneto, Degrees BTC 24°
 Left Magneto, Degrees BTC 24°

Spark Plug

TCM 634675
 Champion RHB32E



CONTINENTAL MOTORS