

550

AVGAS ENGINE SERIES

The 550 series includes 550 in³ models in either naturally aspirated or turbocharged configurations with FADEC model capabilities. With the right combination of thrust and efficiency, our 550-series engines are powering some of the most successful and high performing aircraft in general aviation history like the Cirrus[®] SR22T and Beechcraft[®] Baron/Bonanza, and Mooney[®]. With a powerful range of 280 to 350 HP at 2500 to 2700 RPM, you'll be glad you fly a 550.



THE 550 SERIES IS A FAMILY OF 6-CYLINDER, AIR-COOLED, HORIZONTALLY OPPOSED, DIRECT-DRIVE AIRCRAFT ENGINES WITH HYDRAULIC LIFTERS, TWO PUSHROD-ACTUATED VALVES PER CYLINDER, WET OIL SUMP, AND FUEL INJECTION WITH MANUAL MIXTURE/FADEC CONTROL.

CERTIFIED FUELS:
100/100LL & 94UL
AvGas (TSIO-550-K only)

DISPLACEMENT:
9046 cm³
552 in³

POWER:
209 to 261 kW
280 to 350 HP

MAXIMUM RATED RPM:
2500 to 2700 r/min
2500 to 2700 rpm

BORE:
133.4 mm
5.25 in

STROKE:
107.95 mm
4.25 in

COMPRESSION RATIO:
7.5:1 (turbocharged)
8.5:1 (naturally aspirated)

HEIGHT:
501.7 to 933.2 mm
19.75 to 36.74 in

WIDTH:
852.4 to 1076.7 mm
33.56 to 42.39 in

LENGTH:
933.2 to 1215.6 mm
36.74 to 47.86 in

TYPICAL WEIGHT:
207 to 320 kg
456 to 706 lbs

TIME BETWEEN OVERHAUL (TBO):
Currently
2000–2400 hours

TURBO AND FADEC MODEL AVAILABILITY:
Yes

550 AVGAS SERIES DETAILS



MODEL	# CYL	RATED POWER ¹	BORE × STROKE	DISPLACEMENT	TYPICAL WEIGHT ²	CERTIFIED FUEL GRADE	COMPRESSION RATIO	TIME BETWEEN OVERHAUL (TBO) ³	FAA TCDS
O-550-A	6	224 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	207 kg	100LL, 100,B95/130 CIS, RH95/130	8.5:1	Up to 2100 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in ³	456 lbs				
IO-550-B	6	224 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	216 kg	100/100LL	8.5:1	Up to 2100 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in ³	476 lbs				
IO-550-C	6	224 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	218 kg	100/100LL	8.5:1	Up to 2100 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in ³	481 lbs				
IO-550-D, E, F, L	6	224 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	211 kg	100/100LL	8.5:1	Up to 2100 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in ³	466 lbs				
IO-550-G	6	209 kW @ 2500	133.4 x 108.0 mm	9046 cm ³	231 kg	100/100LL	8.5:1	Up to 2400 hours or 12 years	E3SO
		280 HP @ 2500	5.25 x 4.25 in	552 in ³	509 lbs				
IO-550-N, P, R	6	231 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	225 kg	100/100LL	8.5:1	Up to 2400 hours or 12 years	E3SO
		310 HP @ 2700	5.25 x 4.25 in	552 in ³	496 lbs				

TURBO 550 AVGAS SERIES DETAILS

MODEL	# CYL	RATED POWER ¹	BORE × STROKE	DISPLACEMENT	TYPICAL WEIGHT ²	CERTIFIED FUEL GRADE	COMPRESSION RATIO	TIME BETWEEN OVERHAUL (TBO) ³	FAA TCDS
TSIO-550-C	6	231 kW @ 2600	133.4 x 108.0 mm	9046 cm ³	302 kg	100/100LL	7.5:1	Up to 2400 hours or 12 years	E5SO
		310 HP @ 2600	5.25 x 4.25 in	552 in ³	665 lbs				
TSIO-550-E	6	261 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	307 kg	100/100LL	7.5:1	Up to 2000 hours or 12 years	E5SO
		350 HP @ 2700	5.25 x 4.25 in	552 in ³	677 lbs				
TSIO-550-G	6	231 kW @ 2700	133.4 x 108.0 mm	9046 cm ³	251 kg	100/100LL	7.5:1	Up to 2400 hours or 12 years	E5SO
		310 HP @ 2700	5.25 x 4.25 in	552 in ³	554 lbs				
TSIO-550-K, N	6	235 kW @ 2500	133.4 x 108.0 mm	9046 cm ³	285 kg	100/100LL, UL94 (K Only)	7.5:1	Up to 2400 hours or 12 years	E5SO
		315 HP @ 2500	5.25 x 4.25 in	552 in ³	628 lbs				
TSIOF-550-D, J (FADEC)	6	261 kW @ 2600	133.4 x 108.0 mm	9046 cm ³	320 kg	100/100LL	7.5:1	Up to 2400 hours or 12 years	E5SO
		350 HP @ 2600	5.25 x 4.25 in	552 in ³	706 lbs				
TSIOF-550-K (FADEC)	6	235 kW @ 2500	133.4 x 108.0 mm	9046 cm ³	277 kg	100/100LL	7.5:1	Up to 2400 hours or 12 years	E5SO
		315 HP @ 2500	5.25 x 4.25 in	552 in ³	610 lbs				
TSIOF-550-P (FADEC)	6	235 kW @ 2500	133.4 x 108.0 mm	9046 cm ³	265 kg	100/100LL	7.5:1	Up to 2400 hours or 12 years	E5SO
		315 HP @ 2500	5.25 x 4.25 in	552 in ³	585 lbs				

1. Engine rated power at sea level standard day inlet conditions (29.92 in Hg, 59°F, 0 water vapor) with maximum allowable cylinder head and oil temperatures with full rich (maximum) fuel flow.

2. Typical engine weight including all accessories.

3. See Maintenance Manual M-O for details and applicability.