

# 520

## AVGAS ENGINE SERIES



Continental® introduced the first 520 series engine to the world in the Beechcraft® Bonanza and the Cessna® Centurion in 1964. The 520 series includes 520 in<sup>3</sup> models in either naturally aspirated or turbocharged configurations. With the right combination of thrust and efficiency, our 520-series engines have powered some of the most successful aircraft in general aviation history and continues to deliver reliability and value to its owners.

**THE 520 SERIES IS A FAMILY OF AIR COOLED, NATURALLY ASPIRATED, HORIZONTALLY OPPOSED, 6-CYLINDER, GASOLINE, FUEL INJECTED, SPARK IGNITION, FOUR-STROKE, DIRECT DRIVE, RIGHT (CW) ROTATING, AIRCRAFT ENGINE WITH MANUAL ENGINE CONTROLS FOR FIXED WING AIRCRAFT.**

**CERTIFIED FUELS:**  
100/100LL AvGas

**DISPLACEMENT:**  
8514 cm<sup>3</sup>  
520 in<sup>3</sup>

**POWER:**  
186 to 280 kW  
250 to 375 HP

**MAXIMUM RATED RPM:**  
2600 to 3400 r/min  
2600 to 3400 rpm

**BORE:**  
133.35 mm  
5.25 in

**STROKE:**  
101.6 mm  
4.00 in

**COMPRESSION (COMP.) RATIO:**  
7.5:1  
8.5:1

**HEIGHT:**  
477 to 1030.22 mm  
18.78 to 40.56 in

**WIDTH:**  
845.57 to 1079.5 mm  
33.29 to 42.5 in

**LENGTH:**  
933.2 to 1616.2 mm  
36.74 to 63.63 in

**DRY WEIGHT:**  
184.2 to 259.4 kg  
406.1 to 571.9 lbs

**TIME BETWEEN OVERHAUL (TBO):**  
1400 to 2200 hours

# 520 AVGAS SERIES DETAILS



MODEL	# CYL	RATED POWER <sup>1</sup>	BORE × STROKE	DISPLACEMENT	DRY WEIGHT <sup>2</sup>	CERTIFIED FUEL GRADE	COMP. RATIO	TIME BETWEEN OVERHAUL (TBO)	FAA TCDS
IO-520-A	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	208.9 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	460.5 lbs				
IO-520-BB	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	209.9 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	462.7 lbs				
IO-520-CB, F	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	206 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	454 lbs				
IO-520-D	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	207.5 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	457.4 lbs				
IO-520-E	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	212 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	467.3 lbs				
IO-520-J, L	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	207 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	457 lbs				
IO-520-MB	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	205.4 kg	100/100LL	8.5:1	1900 hours or 12 years	E5CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	452.8 lbs				
L/TSIO-520-AE	6	186 kW @ 2400	133.35 × 101.6 mm	8514 cm <sup>3</sup>	184 kg	100/100LL	8.5:1	2200 hours or 12 years	E8CE
		250 HP @ 2400	5.25 × 4.00 in	520 in <sup>3</sup>	406 lbs				
TSIO-520-AF	6	213 kW @ 2600	133.35 × 101.6 mm	8514 cm <sup>3</sup>	243.8 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		285 HP @ 2600	5.25 × 4.00 in	520 in <sup>3</sup>	537.6 lbs				
TSIO-520-BB	6	213 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	213.8 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		285 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	471.3 lbs				
TSIO-520-BE	6	231 kW @ 2600	133.35 × 101.6 mm	8514 cm <sup>3</sup>	251.8 kg	100/100LL	7.5:1	2200 hours or 12 years	E8CE
		310 HP @ 2600	5.25 × 4.00 in	520 in <sup>3</sup>	555.1 lbs				
TSIO-520-C	6	198 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	217.3 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		265 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	479 lbs				
TSIO-520-CE	6	242 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	238 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		325 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	524.8 lbs				
TSIO-520-E	6	224 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	215.6 kg	100/100LL	7.5:1	1400 hours or 12 years	E8CE
		300 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	475.4 lbs				
TSIO-520-EB	6	224 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	214.9 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		300 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	473.9 lbs				
TSIO-520-G	6	213 kW @ 2600	133.35 × 101.6 mm	8514 cm <sup>3</sup>	204.9 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		285 HP @ 2600	5.25 × 4.00 in	520 in <sup>3</sup>	451.7 lbs				
TSIO-520-H	6	198 kW @ 2700	133.4 × 101.6 mm	8514 cm <sup>3</sup>	207.5 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		265 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	457.6 lbs				
TSIO-520-M, P, R	6	213 kW @ 2600	133.35 × 101.6 mm	8514 cm <sup>3</sup>	209.2 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		285 HP @ 2600	5.25 × 4.00 in	520 in <sup>3</sup>	461.1 lbs				
TSIO-520-NB	6	231 kW @ 2700	133.4 × 101.6 mm	8514 cm <sup>3</sup>	223 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		310 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	491.6 lbs				
TSIO-520-T	6	231 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	226 kg	100/100LL	7.5:1	1600 hours or 12 years	E8CE
		310 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	498.2 lbs				
TSIO-520-UB	6	224 kW @ 2700	133.4 × 101.6 mm	8514 cm <sup>3</sup>	236.3 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		300 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	521.6 lbs				
TSIO-520-VB	6	242 kW @ 2700	133.35 × 101.6 mm	8514 cm <sup>3</sup>	220.7 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		325 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	486.6 lbs				
TSIO-520-WB	6	242 kW @ 2700	133.4 × 101.6 mm	8514 cm <sup>3</sup>	253.7 kg	100/100LL	7.5:1	1800 hours or 12 years	E8CE
		325 HP @ 2700	5.25 × 4.00 in	520 in <sup>3</sup>	559.2 lbs				
GTSIO-520-H	6	280 kW @ 3400	133.35 × 101.6 mm	8514 cm <sup>3</sup>	247.5 kg	100/100LL	7.5:1	1600 hours or 12 years	E7CE
		375 HP @ 3400	5.25 × 4.00 in	520 in <sup>3</sup>	545.7 lbs				
GTSIO-520-L	6	280 kW @ 3350	133.35 × 101.6 mm	8514 cm <sup>3</sup>	259.4 kg	100/100LL	7.5:1	1600 hours or 12 years	E7CE
		375 HP @ 3350	5.25 × 4.00 in	520 in <sup>3</sup>	571.9 lbs				
GTSIO-520-M	6	280 kW @ 3350	133.35 × 101.6 mm	8514 cm <sup>3</sup>	255.3 kg	100/100LL	7.5:1	1600 hours or 12 years	E7CE
		375 HP @ 3350	5.25 × 4.00 in	520 in <sup>3</sup>	562.9 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.

# 550

## AVGAS ENGINE SERIES

The 550 series includes 550 in<sup>3</sup> models in either naturally aspirated or turbocharged configurations. 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 AIR COOLED, NATURALLY ASPIRATED, HORIZONTALLY OPPOSED, 6-CYLINDER, GASOLINE, FUEL INJECTED, SPARK IGNITION, FOUR-STROKE, DIRECT DRIVE, RIGHT (CW) ROTATING, AIRCRAFT ENGINE WITH MANUAL ENGINE CONTROLS FOR FIXED WING AIRCRAFT. THE TURBO SERIES IS TURBOCHARGED FOR FIXED WING AIRCRAFT.**

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

**DISPLACEMENT:**  
9046 cm<sup>3</sup>  
552 in<sup>3</sup>

**POWER:**  
209 to 261 kW  
280 to 350 HP

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

**BORE:**  
133.35 mm  
5.25 in

**STROKE:**  
107.95 mm  
4.25 in

**COMPRESSION (COMP.) RATIO:**  
7.5:1  
8.5:1

**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 317 kg  
456 to 699 lbs

**TIME BETWEEN OVERHAUL (TBO):**  
1800 - 2200 hours

**TURBO MODEL AVAILABILITY:**  
Yes

# 550 AVGAS SERIES DETAILS



MODEL	# CYL	RATED POWER <sup>1</sup>	BORE × STROKE	DISPLACEMENT	DRY WEIGHT <sup>2</sup>	CERTIFIED FUEL GRADE	COMP. RATIO	TIME BETWEEN OVERHAUL (TBO)	FAA TCDS
IO-550-A	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	206.8 kg	100/ 100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	455.9 lbs				
IO-550-B	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	219.8 kg	100/100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	484.5 lbs				
IO-550-C	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	224 kg	100/100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	493.9 lbs				
IO-550-D	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	209.4 kg	100/100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	461.7 lbs				
IO-550-E	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	213.6 kg	100/100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	470.9 lbs				
IO-550-G	6	209 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	231 kg	100/100LL	8.5:1	2200 hours or 12 years	E3SO
		280 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	509.2 lbs				
IO-550-F, L	6	224 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	211.8 kg	100/100LL	8.5:1	1900 hours or 12 years	E3SO
		300 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	466.9 lbs				
IO-550-N, P, R	6	231 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	222.7 kg	100/100LL	8.5:1	2200 hours or 12 years	E3SO
		310 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	490.9 lbs				

# TURBO 550 AVGAS SERIES DETAILS

MODEL	# CYL	RATED POWER <sup>1</sup>	BORE × STROKE	DISPLACEMENT	DRY WEIGHT <sup>2</sup>	CERTIFIED FUEL GRADE	COMP. RATIO	TIME BETWEEN OVERHAUL (TBO)	FAA TCDS
TSIO-550-B	6	261 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	317 kg	100/ 100LL	7.5:1	1800 hours or 12 years	E5SO
		350 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	669 lbs				
TSIO-550-C	6	231 kW @ 2600	133.35 x 107.95 mm	9046 cm <sup>3</sup>	301.8 kg	100/100LL	7.5:1	2200 hours or 12 years	E5SO
		310 HP @ 2600	5.25 x 4.25 in	552 in <sup>3</sup>	665.4 lbs				
TSIO-550-E	6	261 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	307 kg	100/100LL	7.5:1	1800 hours or 12 years	E5SO
		350 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	676.9 lbs				
TSIO-550-G	6	231 kW @ 2700	133.35 x 107.95 mm	9046 cm <sup>3</sup>	251.3 kg	100/100LL	7.5:1	2200 hours or 12 years	E5SO
		310 HP @ 2700	5.25 x 4.25 in	552 in <sup>3</sup>	554 lbs				
TSIO-550-K	6	235 kW @ 2500	133.35 x 107.95 mm	9046 cm <sup>3</sup>	285 kg	100/100LL UL94	7.5:1	2200 hours or 12 years	E5SO
		315 HP @ 2500	5.25 x 4.25 in	552 in <sup>3</sup>	628.4 lbs				
TSIO-550-N	6	235 kW @ 2500	133.35 x 107.95 mm	9046 cm <sup>3</sup>	278.3 kg	100/100LL	7.5:1	2200 hours or 12 years	E5SO
		315 HP @ 2500	5.25 x 4.25 in	552 in <sup>3</sup>	613.7 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.