

## 540 Series

# LYCOMING

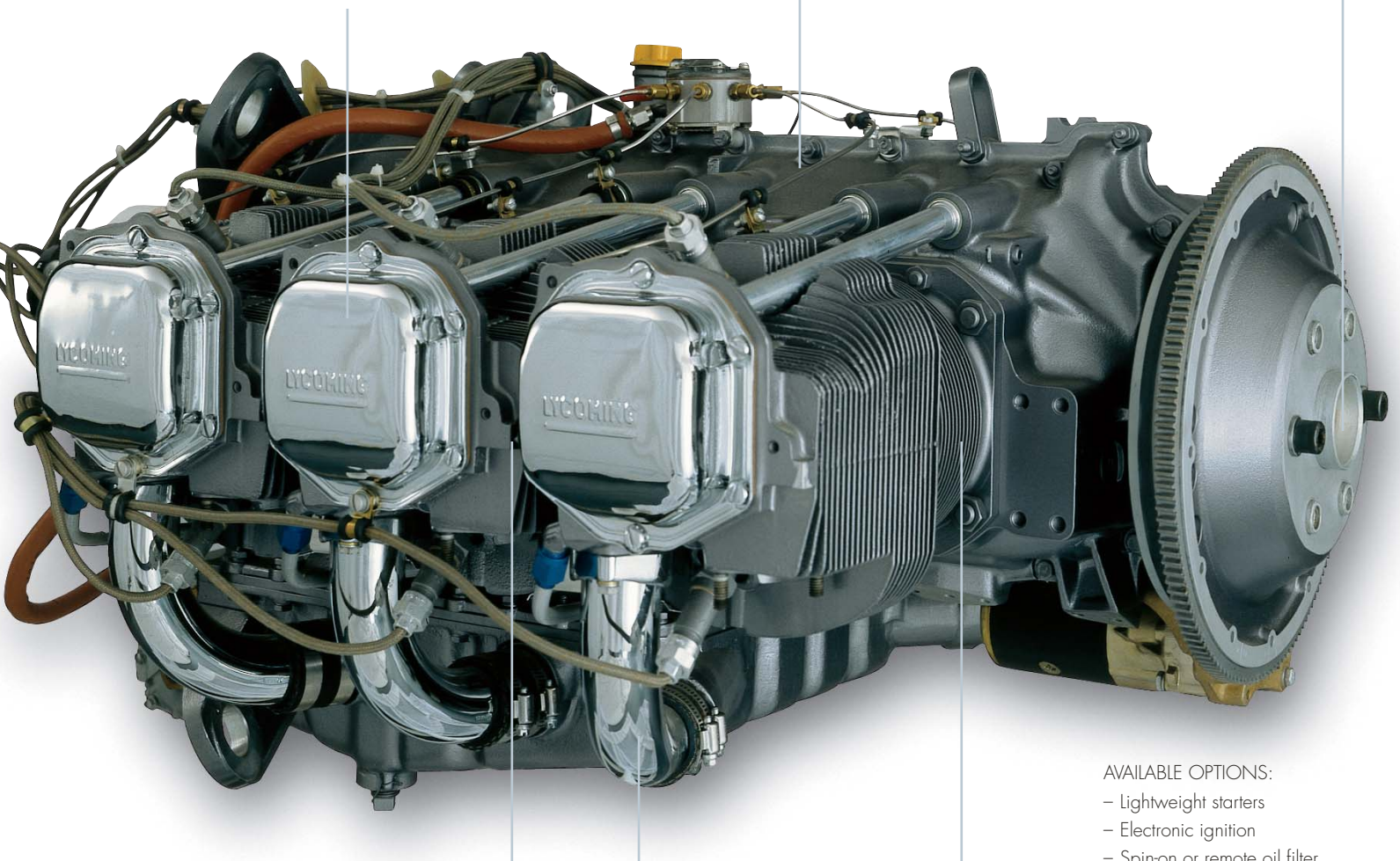
*This beast handles any burden.*

The Lycoming O-540 series engines are six-cylinder, direct-drive, horizontally opposed, air-cooled models. The cylinders are of conventional air-cooled construction with heads made from an aluminum-alloy casting and a fully machined combustion chamber. Rocker-shaft bearing supports are cast integral with the head, along with housings to form the rocker boxes. The cylinder barrels have deep integral cooling fins, and the inside of the barrels are ground and honed to a specified finish. The IO-540 and TIO-540 (turbocharged) series engines are equipped with a fuel-injection system, which schedules fuel flow in proportion to airflow. Fuel vaporization takes place at the intake ports. A turbocharger(s) is mounted as an integral part of the TIO-540 series. Automatic waste-gate control of the turbocharger provides constant air density to the fuel-injector inlet from sea level to critical altitude.

CHROMIUM-MODIFIED  
NIRESIST IRON EXHAUSTVALVE GUIDES,  
RESULTING IN BETTER WEAR  
CHARACTERISTICS

FORGED-STEEL CAMSHAFTS

FORGED-STEEL CRANKSHAFTS



FORGED-STEEL  
CONNECTING RODS

OPTIONAL CHROME KIT

NITRIDE-HARDENED STEEL  
ALLOY CYLINDER BARRELS

#### AVAILABLE OPTIONS:

- Lightweight starters
- Electronic ignition
- Spin-on or remote oil filter
- Air conditioning provisions
- Factory chrome kits:
  - Triple-plated rocker-box covers, intake pipes and shroud tubes
- Optional magnetos
- Fixed-pitch or constant-speed propeller applications



**540 CUBIC INCH ENGINE SERIES**

This current production model data is provided for engine selection, and is subject to change without notice. The Lycoming Sales Department should be contacted prior to starting detailed installation layouts. Engine weights may vary according to specific engine model configuration.

MODEL	COMPRESSION RATIO	HP	RPM	TBO	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	DRY WT (LBS)	REMARKS
O-540-A	8.50:1	250	2,575	2,000	24.56	33.37	37.22-38.42	405-406	Dynafoal Mounts
O-540-B	7.20:1	235	2,575	2,000	24.56	33.37	37.22-39.34	395-397	Dynafoal Mounts
O-540-E	8.50:1	260	2,700	2,000	24.56	33.37	37.22-39.34	397-399	Dynafoal Mounts
O-540-G	8.50:1	260	2,700	2,000	24.56	33.37	39.34	415	Dynafoal Mounts
O-540-J	8.50:1	235	2,400	2,000	20.43-24.56	33.37	38.93	387-388	Dynafoal Mounts
O-540-L	8.50:1	235	2,400	2,000	20.43	33.37	38.93	387	Dynafoal Mounts
IO-540-A	8.70:1	290	2,575	1,400	19.60	34.25	38.62	443	Dynafoal Mounts
IO-540-C	8.50:1	250	2,575	2,000	24.46	33.37	37.22-38.42	402-404	Dynafoal Mounts
IO-540-D	8.50:1	260	2,700	2,000	24.46	33.37	38.42-39.34	410-412	Dynafoal Mounts
IO-540-K	8.70:1	300	2,700	2,000	19.60-20.86	34.25	38.62-39.34	466-474	Dynafoal Mounts
IO-540-S	8.70:1	300	2,700	1,800	19.60	34.25	39.34	475	Dynafoal Mounts
IO-540-V	8.50:1	260	2,700	2,000	19.35	33.37	38.93	414-420	Dynafoal Mounts
IO-540-AA	7.30:1	270	2,700	1,800	19.60	34.25	39.24	479	Dynafoal Mounts
IO-540-T4B5	8.50:1	260	2,700	2,000	21.50	33.37	38.93	418	Dynafoal Mounts
IO-540-W1A5	8.50:1	235	2,400	2,000	19.35	33.37	38.93	400	Dynafoal Mounts
TIO-540-A	7.30:1	310	2,575	1,800	22.71	34.25	51.34	540	Dynafoal Mounts
TIO-540-C	7.20:1	250	2,575	2,000	30.33	33.37	40.38	483	Dynafoal Mounts
L/TIO-540-F	7.30:1	325	2,575	1,800	22.42	34.25	51.34	542	Dynafoal Mounts
L/TIO-540-J	7.30:1	350	2,575	1,800	22.56	34.25	51.50	548	Dynafoal Mounts
TIO-540-S	7.30:1	300	2,700	1,800	26.28	36.02	39.56	533	Dynafoal Mounts
L/TIO-540-U	7.30:1	350	2,500	1,800	22.62	34.25	51.93	580	Dynafoal Mounts
L/TIO-540-WV	7.30:1	350	2,600	2,000	23.33	34.80	54.19	567	Dynafoal Mounts
TIO-540-ABIAD	8.00:1	250	2,575	2,000	30.06	33.37	39.36	474	Dynafoal Mounts
TIO-540-AFIB	8.00:1	270	2,575	2,000	28.62	33.38	40.24	493	Dynafoal Mounts
TIO-540-AAIAD	8.00:1	270	2,575	2,000	21.48	33.37	48.57	466	Dynafoal Mounts
TIO-540-AE2A	7.30:1	350	2,500	2,000	27.75	46.52	42.02	595	Dynafoal Mounts

**TIO-540**

**ENGINE LABELING LEGEND:** 1 2



**1 PREFIXES:**

- AE - Aerobatic (wet sump)
- H - Horizontal Helicopter
- I - Fuel Injected
- L - Left Hand Rotation Crankshaft
- O - Opposed Cylinders
- T - Turbocharged

**2 CYLINDER CUBIC INCH DISPLACEMENT:**

Number of Cylinders	Cubic Inch Displacement
4	235, 320, 360
6	540, 580
8	720

**ENGINE MOUNT CONFIGURATIONS:**

- Conical -**  
Straight mounts parallel to crankshaft.
- Dynafoal -**  
Mounts set at a specified angle to the crankshaft with Type 1 (30°) and Type 2 (18°).
- Bed -**  
Bed mounting available on select engine models.