

ENSTROM 280 Shark Model Guide

The ENSTROM 280 Shark is a piston-powered, skid-gear helicopter family (variants 280, 280C, 280F, 280FX). The detailed limits here come from the 280FX Operator's Manual, which lists a turbocharged Lycoming HIO-360-F1AD rated 225 hp continuous. Family registry data shows up to 3 passengers, 900 kg maximum takeoff weight, 260 nm range and a 12,000 ft ceiling.

KEY TAKEAWAYS

- Turbocharged Lycoming HIO-360-F1AD: 225 hp, 3050 RPM and 39.0 in MP maximum continuous, sea level to 12,000 ft (280FX manual).
- Restrictions: no instrument flight and no aerobatics. Solo flight is from the left seat only.
- Registry figures are family maxima across the 280, 280C, 280F and 280FX: 260 nm range, 900 kg MTOW, 3 passengers.
- Confirm the exact variant and serial number: door weights and switch layouts differ before and after S/N 2167.

LIMITS TO KNOW

Engine runs 2900-3050 RPM. Cylinder head limit is 500°F, TIT 1650°F, oil 245°F, and normal oil pressure is 60-90 psi. Transmission oil limit is 225°F. Airspeed limit is 117 MPH power on and 85 MPH power off. Rotor green arc is 334-385 RPM. Fuel is 100/130 or 100LL.

PRE-BUY INSPECTION POINTS

The manual's preflight covers the belt drive and idler pulley, tail rotor drive shaft flex couplings, main rotor dampers and pitch links, oleo struts, and the turbocharger tailpipe, wastegate and heat damage. Engine oil is 10 quarts full, 8 minimum for flight. Inspect blade leading-edge tape if fitted.

CONFIGURATION AND PARTS

The Illustrated Parts Catalog, Revision 12 (Aug 29, 2024), covers the 280, 280C, 280F and 280FX. Electrical systems are 12 or 28 volt with a 70-amp alternator. Both doors weigh 20.4 lb on S/N 2166 and prior, and 18.1 lb on S/N 2167 and later. Removing them changes weight and balance.

SPECIFICATIONS

Max Continuous Power Hp	225
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PERFORMANCE

Family Max Service Ceiling Ft	12000
Family Max Range Nm	260

WEIGHT & BALANCE

Both Doors Weight Sn 2166 And Prior Lbs	20.4
Both Doors Weight Sn 2167 And Later Lbs	18.1

SAFETY NOTES

- Instrument flight and aerobatic maneuvers are prohibited. Solo flight is from the left seat only.
- Hovering in ground effect above 10,000 ft density altitude is limited to five minutes.
- If the dipstick fuel level reads below 1/4, takeoff is not recommended. Start with the collective down and locked.