

Diamond DA40 NG Model Guide

The Diamond DA40 NG is a four-seat, single-engine piston aircraft, built since 2008. It has an Austro E4 diesel engine rated 123.5 kW (165.6 HP) at 2300 RPM. It burns Jet-A rather than avgas and has a Garmin G1000 flight deck. No registry range, speed or weight data was available for this guide.

KEY TAKEAWAYS

- Diesel on Jet-A: approved fuels are Jet-A, Jet-A+ (with PRIST premix) and Jet-A1. Supervise fueling and keep the fuel caps locked.
- Check two oil levels: engine oil at the cap gauge and gearbox oil at the sight gauge. Both are reached through the pilot-side access port.
- Keep power under 40% until the oil, gearbox and coolant temperatures are green. Cool the turbocharger at low power before shutdown.
- Rear door: a 2023 UK accident saw the door detach in flight. Inspect the door, latches and warning system closely.

ENGINE AND HANDLING

The Austro E4 diesel uses a single power lever, and the engine start waits on a GLOW annunciator. Idle propeller RPM is 710-730. Run-up is automated: you hold the ECU TEST button through the whole test. Before shutdown, run at less than 10% power for at least one minute.

FUEL AND OIL CHECKS

Sump the wing tanks and gascolator when contamination is a concern, for example after rain or with doubtful fuel storage. Jet-A smell lingers in the cabin, so use the sump kit as designed. The briefing says the Austro engine burns relatively little oil. Ask for oil and gearbox oil service history.

PROPELLER AND RECORDS

A Hartzell 3A1-QP460A1/75A01-2 composite propeller is an STC replacement option for the DA40 NG, with no extra airworthiness limitations. Confirm which propeller is fitted and its overhaul status. After any lightning strike, composite blades need special inspection.

SPECIFICATIONS

Takeoff Power Hp	165.6
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SAFETY NOTES

- A 2023 AAIB report: the rear door detached in flight after the door handle was pushed and the primary lock disengaged. Landing was safe.
- Fuel contamination: sump on condition, especially after outdoor parking in rain or when Jet-A storage or delivery quality is doubtful.
- Do not use the OAT sensor on the co-pilot side or the engine exhaust as a step or handhold during fueling.