

Diamond DA20-A1 Katana Model Guide

The Diamond DA20-A1 Katana is a two-seat, single-engine piston trainer built from 1994 to 2004. Per the New Zealand type acceptance report, it is a low-wing, T-tail, all-composite aircraft with fixed gear. It was sold with 80 hp and 100 hp engine manuals.

KEY TAKEAWAYS

- Two seats, fixed gear, composite structure. VLA-certified for day and night VFR.
- Check which engine is fitted: the 80 hp and 100 hp versions have separate flight manuals.
- The type acceptance report lists maximum takeoff weight of 1609 lb, or 1653 lb with the 912 S3 engine.
- Some aircraft have an optional Rotax 912iSc3 and MT-Propeller STC conversion. Ask for the paperwork.

TYPE AND CERTIFICATION

The DA20 series is certified under Transport Canada type certificate A-191. For the DA20-A1, the type acceptance report lists the Rotax 912 A3, 912 F3 and 912 S3 engines and a Hoffman propeller. The 1994 manual was issued under Transport Canada approval to VLA requirements.

SPEEDS AND LIMITS (100 HP CHECKLIST)

The DA20-A1 100 hp normal checklist gives these speeds: Vy 65 KIAS, Vx 57 KIAS, approach 60 KIAS, VNO 118 KIAS and VA 104 KIAS. Maximum flaps-extended speed is 81 KIAS. Demonstrated crosswind is 15 kt. Oil is 3.0 to 3.4 qt. Confirm all figures against the manual for the specific aircraft.

ENGINE CONVERSION AND MANUAL REVISIONS

The Rotax 912iSc3 STC (EASA) adds an MT constant-speed propeller and an engine monitoring unit. The vendor claims about 3.5 L/h less fuel burn, no carburetor icing and a 55 m shorter ground roll. The January 2012 manual revisions added a 50/50 glycol coolant option (SB DA20-72-03L Rev 2) and a ground de-icing section.

PERFORMANCE

Max Demonstrated Crosswind Kts	15
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V-SPEEDS

Best Rate Climb Vy Kts	65
Best Angle Climb Vx Kts	57
Max Rough Air Vno Kts	118
Max Maneuvering Va Kts	104
Max Flaps Extended Vfe Kts	81
Recommended Approach Kts	60
Minimum Approach Kts	57
Best Glide 1653 Lbs Kts	73

WEIGHT & BALANCE

Max Takeoff Weight Lbs	1609
Max Takeoff Weight 912s3 Engine Lbs	1653

SAFETY NOTES

- Carburetor icing notes were revised in the 2012 manuals. Review the carb-heat procedure for the engine fitted.
- The 2012 manual revisions added a canopy caution and revised propeller-movement warnings. Read them before handling the aircraft.
- Verify whether SB DA20-72-03L Rev 2 is installed: coolant and placards differ on aircraft without it.