

Diamond DA20 Model Guide

The Diamond DA20 is a two-seat, single-engine piston trainer built since 1998. It has a composite airframe, fixed tricycle gear and a T-tail. It comes in two variants: the DA20-A1 with a Rotax 912 and the DA20-C1 with a 125 hp Continental IO-240-B. Most figures below are for the C1.

KEY TAKEAWAYS

- Two variants: the DA20-A1 (Rotax 912) and the DA20-C1 (Continental IO-240-B, 125 hp). Confirm which one you are looking at.
- The C1 has a maximum takeoff weight of 1764 lbs and a 44 lb baggage limit. Usable fuel is 24.0 gal.
- The type is approved for VFR only, in non-icing conditions. Check the airworthiness directive status before buying.
- Family-level figures are up to 120 kt cruise, 520 nm range and a 14000 ft ceiling. They are not figures for one variant.

POWERPLANT AND AIRFRAME (C1)

The DA20-C1 has a fuel-injected, air-cooled, 4-cylinder Continental IO-240-B rated at 125 hp at 2800 RPM. It drives a fixed-pitch, two-blade wood propeller 76 inches in diameter. Gear is fixed tricycle with a castering nose wheel. Flaps are electric with three positions. The A1 uses a Rotax 912 with a constant-speed propeller and has 74 L usable fuel.

LIMITS AND LOADING (C1)

Maximum ramp weight is 1770 lbs. Maximum takeoff and landing weight is 1764 lbs. Baggage is limited to 44 lbs. Fuel is 100LL: 24.5 gal total, 24.0 gal usable. Positive limit load factor is +4.4 with flaps up. Normal oil level is 4-6 quarts, and the preflight rule is never to depart below 4.

WHAT TO CHECK WHEN BUYING

Check the airworthiness directive schedule. C1 serial numbers C0001 to C0473 with an IO-240-B13B or B17B engine have a fuel-system AD under service bulletin DAC1-73-05. Early A1s have aileron and rudder-pedal ADs; spins are prohibited until the pedal modification is done. Also check fuel pressure (limit 3.5 psi minimum) and the magneto drop on the run-up.

SPECIFICATIONS

Engine Power Hp	125
Fuel Capacity Gal	24.5
Usable Fuel Gal	24
Propeller Diameter Inches	76

V-SPEEDS

Vs0 Kts	34
Vs1 Kts	42
Vr Kts	44
Va Kts	106
Vno Kts	118
Best Glide Kts	73
Vne Kts	164

WEIGHT & BALANCE

Max Ramp Weight Lbs	1770
Max Takeoff Weight Lbs	1764
Max Landing Weight Lbs	1764
Max Baggage Weight Lbs	44

SAFETY NOTES

- Approved for VFR in non-icing conditions only. Aerobatics are prohibited; intentional spins are allowed only with flaps up.
- Early A1 aircraft, S/N 10002 to 10287, are spin-prohibited until the rudder pedal modification in SB DA20-53-01A is done.
- Boldface items for fuel pressure loss are: fuel pump ON. For engine malfunction with runway remaining, hold 60 KIAS and select flaps LDG.