

Diamond DA42 NG Model Guide

The Diamond DA42 NG is a four-seat, twin-engine piston aircraft, listed as in production since 2009. The load sheet in the documents shows Austro engines, MT propellers and a Garmin G1000 panel. Registry data for the whole DA42 family shows up to 1030 nm range and 185 kt cruise. Treat those as family maxima, not this variant's figures.

KEY TAKEAWAYS

- Four seats. The QRH lists MTOW 1785 kg, landing weight 1700 kg and zero-fuel weight 1650 kg.
- Fuel is 50 US gal standard, or 76.4 US gal with aux tanks. Cruise at 70% load is about 135 kt on 11 US gal/h.
- Confirm EASA AD 2024-0235 (rear passenger door) is complied with, and check the nose gear lever inspection records.
- The aircraft is easily loaded beyond the aft CG limit with rear passengers or baggage, so run a weight and balance check.

SPEEDS AND PERFORMANCE

Per the QRH: VNE 194 kt, VNO 155 kt, flap limits 111 kt (landing) and 137 kt (approach), VMCA 68 kt, VYSE 82 kt. Training notes give rotation at 72 kt and normal climb at 90 kt. Cruise at 70% load is about 135 kt at 11 US gal/h. The sources are a TDI QRH and a school procedures sheet, so verify against the approved AFM.

WEIGHT, FUEL AND LOADING

QRH weights: MTOW 1785 kg, landing 1700 kg, zero fuel 1650 kg. Baggage limits: nose 30 kg, cabin 45 kg, extension 18 kg. Fuel is 50 US gal, or 76.4 US gal with aux tanks. One example aircraft (VH-VMX) weighed 1411.3 kg empty. Its load sheet warns that aft loading with rear passengers or baggage needs particular attention.

RECORDS AND CHECKS TO REQUEST

Ask for the AFM revision status (the NG AFM on file is Rev. 7, 02-Oct-2017) and the AMM (Rev. 3, 16 Aug 2016). Preflight items in the QRH include at least 4 cm of bare gear strut piston and 65 PSI tyre pressure. Cleveland's wheel memo says replacing the tie-bolt set at each tyre change is recommended but optional.

SPECIFICATIONS

Fuel Capacity Gal	50
Fuel Capacity With Aux Gal	76.4

PERFORMANCE

Cruise Speed Kts	135
Cruise Fuel Flow Gph	11
Holding Speed Kts	120
Holding Fuel Flow Gph	7.5

V-SPEEDS

Vne Kts	194
Vno Kts	155
Vfe Landing Kts	111
Vfe Approach Kts	137
Vmca Kts	68
Vyse Kts	82
Vapproach Kts	90
Vclimb Kts	90

WEIGHT & BALANCE

Example Aircraft Empty Weight Lbs	3111.5
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SAFETY NOTES

- EASA AD 2024-0235 (all serial numbers) follows passenger door separation reports. It requires an AFM update, modification and inspections within 50 FH or 50 days of 13 Dec 2024.
- The AD requires repeat door latch inspections at intervals not exceeding 200 FH or 12 months, and calls itself an interim action. Further AD action may follow.
- MSB 42-136/1 covers a cracked nose gear actuator lever that forced the rudder left. It applies to NGs converted from DA 42; inspect every 200 flight hours.