

Mooney M20R Ovation Model Guide

The Mooney M20R Ovation is a four-seat, single-piston-engine, low-wing touring aircraft built from 1994 to 2008. Type data lists a Teledyne Continental IO-550-G engine and a maximum takeoff weight of 3368 lb (1527 kg). This guide draws on the handbook, service bulletins and inspection guide to show what to check before buying.

KEY TAKEAWAYS

- Four seats, Continental IO-550-G engine, maximum takeoff weight 3368 lb (1527 kg) per type acceptance data.
- The handbook (Revision G, 03-2000) applies from S/N 29-0001, so confirm the aircraft's serial number and which manual revision it carries.
- Three service bulletins affect a narrow serial range, S/N 29-0520 thru 29-0525. Verify compliance with SB M20-324 and SB M20-335D.
- Landing gear rigging and lubrication are key pre-buy checks, because Mooney attributes gear mishaps largely to maintenance and pilot error.

AIRFRAME AND POWERPLANT

Type acceptance data lists the M20R with a Teledyne Continental IO-550-G(5), -G(6) or -G(7) engine, McCauley 3A32C418-G or 2A34C241-G propellers, and a maximum of 4 seats. A 1996 AOPA article describes the Ovation as a 20-inch-longer stretch of the M20 airframe with a single-piece wing, steel-tube cabin framework and electrically actuated, rubber-puck-sprung landing gear.

RECORDS AND INSPECTION

Mooney's 100 Hour/Annual Inspection Guide covers the M20R. Check the logbooks, the weight and balance record and AD compliance. Items include a hot engine differential compression check, fuel injection screens and nozzles, and the alternate air valve. Recharge a K & N filter at 100 hours; replace a paper filter at 500 hours. Bendix magnetos are overhauled each 500 hours/4 years.

SERVICE BULLETINS AND ADS

SB M20-324 requires a one-time lower spar cap doubler rivet inspection within 200 flight hours on M20R S/N 29-0523 thru 29-0525. SB M20-335D requires flight control balance checks after outside painting on S/N 29-0520 thru 29-0525. The NZ CAA AD schedule dated 23 February 2023 lists M20-series ADs including the M20R. Confirm FAA AD compliance.

SPECIFICATIONS

Max Takeoff Weight Lbs	3368
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SAFETY NOTES

- SB M20-344A (March 2023) notes gear-up and gear collapse incidents. Causes cited include wrong gear tensions, poor lubrication and improper rigging.
- Check the gear warning lights and horn and the emergency extension. Mooney recommends an Authorized Mooney Service Center and Mooney Factory parts.