

Mooney M20B Mark 21 Model Guide

The Mooney M20B Mark 21 is a four-seat, single-engine piston aircraft built from 1961 to 1963. Its 1961 owner's manual describes a 180 HP Lycoming O-360-A1A, a McCauley constant-speed propeller and a laminar-flow wing. The wider M20 family reaches up to 222 kt cruise and 1050 nm range. Those are family maximums, not figures for this variant.

KEY TAKEAWAYS

- The 180 HP Lycoming O-360-A1A has a 750-hour normal overhaul life. Flying it longer needs a mechanic's approval.
- Minimum fuel is 91-98 octane. 100-130 octane is preferred because of its lower lead content. Never use a lower grade than 91.
- An aileron control link AD applies to all M20B serial numbers. It requires inspection within 100 hours and repeat checks at intervals of up to 100 hours.
- The weight and balance sheet in the file is for an M20C. Get this airframe's own weight and balance records before you buy.

ENGINE AND PROPELLER

The Mark 21 has a Lycoming O-360-A1A rated at 180 HP, with a Bendix dual-magneto ignition and a starting vibrator. The oil system holds eight quarts. It runs safely on as little as two quarts, and the manual says to add one quart when the level falls below six. The McCauley constant-speed propeller is 74 inches in diameter. Check the blades for nicks and cracks before each flight.

PROPELLER OPTIONS AND RECORDS

The original type-certificated propeller on M20A and M20B models is a McCauley, listed at 59 lbs with a 3 lb spinner. An older Hartzell option is listed at 65 lbs. A Hartzell HC-C2YR-1BFP/F7497 STC propeller is approved for the M20B. Its tachometer marking is a 2700 RPM red line with a 2100-2700 RPM green arc. Confirm any propeller swap is in the logbooks with a Form 337 and updated weight and balance.

WHAT TO CHECK BEFORE BUYING

Ask for proof that the aileron control link AD (Mooney SB M20-264, FAA AD 98-24-11) was done. Check for a reinforcement gusset, or for repeat inspection records. Ask for engine hours since overhaul against the 750-hour normal life. Look at the blue band on the cylinders, which the manual says marks the newest O-360-A1A version. Review the generator, vacuum pump and propeller governor condition.

SPECIFICATIONS

Engine Power Hp	180
Propeller Diameter Inches	74

WEIGHT & BALANCE

Original Mccauley Propeller Weight Lbs	59
Original Spinner Weight Lbs	3
Alternative Hartzell Propeller Weight Lbs	65

SAFETY NOTES

- Aileron control link failure could cause loss of aileron control. The AD requires inspection within 100 hours and repeats at intervals of up to 100 hours.
- Never use fuel below 91 octane in the O-360-A1A. The manual gives 80 octane as red, 91 as blue and 100 as green.
- Do not rely on the M20C weight and balance sheet in the file. Load the aircraft only from this airframe's own approved data.