

Piper PA-46 Malibu Model Guide

The Piper PA-46 Malibu is a single-engine piston airplane with a pressurised cabin. It is listed here for 1984 to 1988 with 4 to 6 seats. The source documents cover the PA-46-310P with a turbocharged Continental TSIO-520-BE engine. The inputs give no range, speed or weight figures, so check performance against the POH for the specific airplane.

KEY TAKEAWAYS

- The Piper PA-46 Malibu is a pressurised single with two turbochargers and certified flight into known icing. It is a complex aircraft but needs no type rating as a single.
- Match the POH to the airframe. The VB-1300 handbook is valid only for the serial number on its title page (4608008 through 4608140 in this copy).
- Inspect the exhaust and engine mount closely. A cracked exhaust was linked to carbon monoxide in a fatal 2019 accident, and SB 1103 covers mount cracks.
- Check that the Turbine Inlet Temperature (TIT) gauge and probe comply with the CASA AD. Also check the autopilot, which was faulty in an accident airplane.

PAPERWORK AND HANDBOOK

The PA-46-310P POH (report VB-1300) was issued July 1, 1986 and carries later revisions. It is the FAA approved flight manual and must be carried in the airplane. Check that the revisions are current and that it matches the airplane's serial number. Non-Piper STC installations are not covered by Piper's inspection criteria.

ENGINE MOUNT AND EXHAUST

Piper SB 1103 applies to the TSIO-520-BE airplanes up to S/N 4608140. It calls for inspecting the engine mount actuator attach feet for cracks, repeated every 100 hours until the mount is replaced. Inconel exhaust parts can corrode from the inside without visible flaking. The carbon inside the muffler must be removed for a proper inspection, and pinholes in the welds mean the part fails.

TIT GAUGE AND PROPELLER DE-ICE

CASA AD/PA-46/29 applies to PA-46-310P airplanes with a Lewis or Transicoil TIT gauge and probe. It requires cleaning, inspection and calibration within 100 hours, and revised emergency procedures in the POH. If a Hartzell propeller de-ice STC is fitted, the kit took about 35 hours of labor to install.

SPECIFICATIONS

Seats Min	4
Seats Max	6
First Year	1984
Last Year	1988

V-SPEEDS

Vne Kts	203
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SAFETY NOTES

- Fit a carbon monoxide sensor. The accident report said exhaust inspections do not remove the CO risk, and the passenger's blood CO was 58%.
- If TIT fails in takeoff, climb or descent, keep the mixture FULL RICH per the AD. After cruise power is set, hold the power and lean to 6 GPH above the table.
- The 2019 accident involved night flight, weather and a pilot with little IFR experience. Fly IMC only with proper training and the autopilot working.