

GULFSTREAM G500 Model Guide

GULFSTREAM G500 is a turbofan business jet. The supplied data has no range, speed, weight or seating figures for it, so this guide covers what the maintenance documents show. These are Maintenance Manual Revision 25 (June 15, 2016), an FAA airworthiness directive on fuel boost pumps, and the manual's defueling procedure. The registry lists the variant GVII-G500, so confirm that the manual matches your aircraft.

KEY TAKEAWAYS

- The fuel boost pump leak check is a Certification Maintenance Requirement at 500 flight hours for pumps with part number 1159SCP500-7.
- Since January 7, 2014, no fuel boost pump P/N 1159SCP500-5 may be installed on any airplane. Verify the pump part numbers on the aircraft.
- Manual chapter 05 lists inspections after events such as lightning, hail, severe turbulence, hard landing or bird strike. Ask for the records.
- No performance, range or payload figures were supplied. Get them from the flight manual and the seller's records.

SAFETY NOTES

- Jet fuel is poisonous and flammable. No open flames or sparks within 50 ft of a defuel operation, and no smoking.
- Do not operate the radar while the aircraft is defueled or within 300 feet of other refuel/defuel operations. Never run fuel pumps dry.
- Defuel with the wings level and the nose in normal ground attitude. Otherwise fuel can be trapped in the wings. In some weight configurations, attach the nose gear counterweights to prevent tip-back.

MAINTENANCE PROGRAM AND EVENT INSPECTIONS

Maintenance Manual Revision 25 (June 15, 2016), chapter 05, covers airworthiness limitations, scheduled checks, the Maintenance Review Board report and special inspections. Unscheduled inspections include lightning strike, hail damage, severe turbulence, flap and landing gear airspeed exceedances, volcanic ash, hard or overweight landing, runway departure, bird strike and engine fire extinguisher discharge. Ask whether any of these events are in the history.

FUEL BOOST PUMP DIRECTIVE

The FAA directive covers the G500 and requires the manual revision that includes Table 12 (Certification Maintenance Requirements) and Task 28-26-01, Fuel Boost Pumps - Fuel Leak Check. It references Gulfstream G500 Customer Bulletin 122, dated April 11, 2012. The check is repeated every 500 flight hours for pumps with P/N 1159SCP500-7. After the revision, no alternative actions or intervals are allowed without an approved alternative method of compliance.

FUEL SYSTEM HANDLING

The defueling procedure shows single-point pressure fueling/defueling and manual water/fuel drain valves, three per wing. Pump-assisted defuel is only permitted above 5000 lbs per wing. Below that, use suction defuel or draining. Keep fuel imbalance under 1000 pounds. Suction defueling should start at no more than 50 gpm. If the wing tanks have been drained for a long time, the APU fuel system may need bleeding before an APU start.