



# AIRPLANE MAINTENANCE MANUAL

**PA-46-350P**

**PA-46R-350T**



**(S/N's 4636001 AND UP)**



**(S/N's 4692001 AND UP)**

## PIPER AIRCRAFT, INC.

# CHAPTER

# 5

# TIME LIMITS / MAINTENANCE CHECKS

**PIPER AIRCRAFT, INC.**  
**PA-46-350P, MALIBU MIRAGE / PA-46R-350T, MALIBU MATRIX**  
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**E. Each 500 Hours (cont.)**

- ☐ (5) Check fuel transmitters and electrical connectors for cleanliness, condition, and security.
- ☐ (6) Every two (2) years or after 500 hours, whichever occurs first, check that fuel transmitter floats (mounted on forward access panels #2 and #5 from the wing tip) are secure and that fuel strainers (three in each wing tank) are secure and unobstructed. Strainers maybe inspected by removing the forward and aft access covers, fifth in from the wing tip.
- ☐ (7) Remove propeller; remove sludge from crankshaft. Clean any residual sludge clinging to the exterior of propeller / crankshaft mating surfaces.
- ☐ (8) Remove and flush oil radiator.
- ☐ (9) : inspect and clean magneto(s) per 500 Hour Inspection in the Slick F1100 Master Service Manual, available from Unison Industries, PH: (904) 739-4000, or <http://www.unisonindustries.com/>.
- ☐ (10) Coin-tap erosion shield on composite blades. (See latest revision Hartzell Composite Blade Manual No. 135.)
- ☐ (11) : each 500 hours time-in-service conduct the 500 Hour Inspection as specified in 34-20-00, Integrated Avionics System - Garmin, Inspections.

**F. Each 600 Hours**

- ☐ , replace each pump as it accumulates 600 hours time-in-service.

**G. Each 1000 Hours**

- ☐ (1) Replace engine compartment flexible hoses (fuel, oil, etc.) as required; but not to exceed 1000 hours time-in-service, eight (8) years, or engine overhaul, whichever comes first; except for TSO-C53a - Type D hoses which are replaced on-condition.
- ☐ (2) Replace nose gear hydraulic hoses (gear actuator/door actuator/sequence valve), as required; but not to exceed 1000 hours time-in-service, or eight (8) years, whichever comes first.
- ☐ (3) Coin-tap the entire blade on composite blades. (See latest revision Hartzell Composite Blade Manual No. 135.)
- ☐ (4) Inspect condition of bolts used with flap rollers and aileron hinges. (Replace as required.)
- ☐ (5) Inspect flap tracks for security of attachment, damage, condition, and corrosion.
- ☐ (6) If installed, remove SpeedBrake cartridges and return to Precise Flight Inc. for clutch lubrication and spring replacement.
- ☐ (7) : each 1000 hours time-in-service conduct the 1000 Hour Inspection as specified in 34-20-00, Integrated Avionics System - Garmin, Inspections.

**H. Each 2000 Hours**

- ☐ (1) Each 2000 hours or seven (7) years, whichever occurs first, remove interior panels, and headliner and conduct detailed inspection of aircraft structure (skin, bulkheads, stringers, etc.) for condition and security. Inspection of structure concealed by headliner may be accomplished by alternate means (i.e. - through the use of a borescope) without removing the headliner, providing access is obtained to all concealed areas and borescope provides sufficient detail to adequately accomplish the inspection.

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**SPECIAL INSPECTIONS**

The following inspections are required in addition to those listed in 5-20-00. These inspections are required at intervals of:

- Flight hours;
- Calendar Year; or
- the specific operation being conducted or the environment being operated in.

Unless otherwise indicated, these inspections are to be repeated at each occurrence of the specified interval. Note that the items listed herein are guidelines based on past operating experience. Each operator should closely monitor his own unique operating conditions/environment and react accordingly to keep his aircraft airworthy.

*NOTE: A logbook entry should be made upon completion of each inspection.*

1. **Per Flight Hour**

A. **First 50 Hours**

- ☐ Check security of injector nozzles.

B. **Each 200 Hours**

- ☐ Verify compliance with Piper Service Bulletin No. 1195A.

C. **Each 250 Hours**

- ☐ (1) Replace Turbine Inlet Temperature (TIT) probe. See TIT Gauge, Probe Replacement, 77-20-00, and FAA Airworthiness Directive (AD) 99-15-04.
- ☐ (2) Each 250 hours time-in-service or annually, whichever comes first, comply with the latest revisions of Lycoming Service Bulletins No. 521 and 531.

D. **Each 400 Hours**

- ☐ (1) Inspect Airborne pressure manifold every 400 hours. (See Pressure Manifold Check Valve Testing, 30-10-00.)
- ☐ (2) Remove the battery from the aircraft every 400 hours or 11 calendar months, beginning initially at 800  $\pm$  50 flight hours or 11  $\pm$  1 calendar months, and each 400  $\pm$  50 flight hours or 11  $\pm$  1 calendar months thereafter, the battery should be removed and capacity tested per Battery Capacity Test, 24-30-00.

E. **Each 500 Hours**

- ☐ (1) If installed, replace the vacuum system inlet air filter (i.e., central air filter, gyro filter, etc.) element each 500 hours time-in-service, annually, or at vacuum pump replacement, whichever comes first.
- ☐ (2) Replace engine air filter.
- ☐ (3) Drain wing fuel tanks.
- ☐ (4) Check fuel tank sealing material.