TABLE III-I - INSPECTION REPORT - PA-28-140/150/160/180/235

Refer to Notes 1, 2, 3, and 4 before performing the following inspections.

NATURE OF INSPECTION	Inspection Interval (Hrs) 50	100
A. PROPELLER GROUP		
WARNING: USE EXTREME CAUTION WHEN ROTATING PROPELLER BY HAND; PROPELLER MAY KICK BACK. PRIOR TO ROTATING PROPELLER ENSURE BOTH MAGNETO SWITCHES ARE OFF (GROUNDED). IF MAGNETOS ARE NOT GROUNDED, TURNING PROPELLER MAY START ENGINE.		
1. Inspect spinner and back plate for cracks, dents, missing screws, and security	O	O
2. Inspect blades for nicks and cracks	O	O
3. In PA-28-235 only, if constant speed propeller installed: check for grease and oil leaks	O	O
4. In PA-28-235 only, if constant speed propeller installed: lubricate propeller per Lubrication Chart, Section II		O
5. Inspect spinner mounting brackets for cracks and security		O
6. Inspect propeller mounting bolts for security and safety. Check torque and re-safety if safety is broken		O
7. In PA-28-235 only, if constant speed propeller installed: inspect hub parts for cracks and corrosion		O
8. In PA-28-235 only, if constant speed propeller installed: rotate blades of propeller and check for tightness in hub pilot tube. (Refer to Section VIII.)		O
9. Inspect complete propeller and spinner assembly for security, chafing, cracks, deterioration, wear, and correct installation		O
B. ENGINE GROUP		
WARNING: IF MAGNETOS ARE NOT GROUNDED, TURNING PROPELLER MAY START ENGINE. USE EXTREME CAUTION WHEN ROTATING PROPELLER BY HAND; PROPELLER MAY KICK BACK. PRIOR TO ROTATING PROPELLER ENSURE BOTH MAGNETO SWITCHES ARE OFF (GROUNDED).		
NOTE: Read Note 5 prior to completing this group.		
1. Remove engine cowling and inspect for internal and external damage	O	O
2. Clean and inspect cowling for cracks, distortion, and loose or missing fasteners. (See Note 6.)		O
3. Drain oil sump. (See Note 8.)	O	O
4. Clean suction oil strainer at oil change; inspect strainer for foreign particles	O	O
5. Clean pressure oil strainer or change full-flow (cartridge-type) oil filter element. Inspect strainer or element for foreign particles	O	O
6. Inspect oil temperature sender unit for leaks and security		O
7. Inspect oil lines and fittings for leaks, security, chafing, dents, & cracks	O	O
8. Clean and inspect oil radiator cooling fins		O

TABLE III-I - INSPECTION REPORT - PA-28-140/150/160/180/235

Refer to Notes 1, 2, 3, and 4 before performing the following inspections.

NATURE OF INSPECTION	Inspection Interval (Hrs) 50	100
B. ENGINE GROUP (CONT.)		
9. Fill engine with oil per information on cowling or in Lubrication Chart, Sec. II	O	O
CAUTION: USE CAUTION NOT TO CONTAMINATE VACUUM PUMP WITH CLEANING FLUID. (REFER TO LATEST REVISION OF LYCOMING SERVICE INSTRUCTION NO. 1221.)		
10. Clean engine with approved solvents		O
11. Inspect condition of spark plugs. Clean and adjust gap as required; adjust per latest revision of Lycoming Service Instruction No. 1042		O
NOTE: If fouling of spark plugs is apparent, rotate bottom plugs to upper plugs.		
12. Inspect spark plug cable leads	O	O
13. Check cylinder compression. (Refer to AC 43.13-1, latest revision.)		O
14. Inspect cylinders for cracked or broken fins. (See Note 10.)		O
15. Inspect rocker box covers for evidence of oil leaks. If found, replace gasket; torque cover screws 50 inch-pounds. (See Note 10.)	O	O
16. Inspect ignition harness and insulators for high tension leakage and continuity		O
17. Check magneto points for proper clearance		O
18. Inspect magnetos for oil seal leakage (See Note 34.)		O
19. Inspect breaker felts for proper lubrication		O
20. Inspect magnetos to engine timing		O
21. Remove air filter and clean per Section II. Replace as required	O	O
22. Drain carburetor and clean inlet line fuel strainer	O	O
23. Inspect condition of alternate air valve and housing	O	O
24. Inspect condition of carburetor heat air door and box	O	O
25. Check throttle body attaching screws for tightness. (Correct torque is 40 to 50 in.-lbs.)	O	O
26. Inspect vent lines for evidence of fuel or oil seepage	O	O
27. Inspect intake seals for leaks and clamps for tightness. (Torque clamps 40-50 in.-lbs.)	O	O
28. Inspect all induction air and alternate heat ducts per Induction Air Inlet Duct and Alternate Heat Duct Inspection. (See Special Inspections, Procedures.) (See Note 7.)	O	O
30. Inspect fuel system for leaks	O	O
31. Inspect engine-driven and electric fuel pumps for condition and operation. Replace as required. Clean screens in electric fuel pump(s)	O	O
32. PA-28-140/150/160/180 models only, remove and clean fuel filter bowl and screen on lower left side of firewall	O	O
33. Inspect and operationally test engine driven vacuum pumps and lines		O

TABLE III-I - INSPECTION REPORT - PA-28-140/150/160/180/235

K. NOTES

1. Refer to Piper's Customer Service Information Aerofiche P/N 1753-755 for latest revision dates to Piper Inspection Reports/Manuals and this service manual. References to Section are to the appropriate Section in this manual.

   WARNING: INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA) FOR ALL NON-PIPER APPROVED STC INSTALLATIONS ARE NOT INCLUDED IN THIS MANUAL. WHEN A NON-PIPER APPROVED STC INSTALLATION IS INCORPORATED ON THE AIRPLANE, THOSE PORTIONS OF THE AIRPLANE AFFECTED BY THE INSTALLATION MUST BE INSPECTED IN ACCORDANCE WITH THE ICA PUBLISHED BY THE OWNER OF THE STC. SINCE NON-PIPER APPROVED STC INSTALLATIONS MAY CHANGE SYSTEMS INTERFACE, OPERATING CHARACTERISTICS AND COMPONENT LOADS OR STRESSES ON ADJACENT STRUCTURES, THE PIPER PROVIDED ICA MAY NOT BE VALID FOR AIRPLANES SO MODIFIED.

   (a) The 50 hour inspection accomplishes preventive maintenance, lubrication and servicing as well as inspecting of critical components.

   NOTE: A log book entry should be made upon completion of any inspections.

3. Piper Service Bulletins are of special importance and Piper considers compliance mandatory. In all cases, see Service Bulletin/Service Letter Index P/N 762-332 or Service Bulletin/Service Letter Aerofiche Set P/N 1762-331 to verify latest revision.
4. Piper Service Letters are product improvements and service hints pertaining to servicing the airplane and should be given careful attention.
5. Inspections given for the power plant are based on the engine manufacturer's operator's manuals (See Introduction, Supplementary Publications) for these airplanes. Any changes issued to the engine manufacturer's operator's manuals supersede or supplement the inspections outlined in this report.
6. In PA-150/160/180 S/N's 28-1761 and up; and PA-28-235's: inspect teflon bushings and pins attaching top and bottom engine cowlings at nose for condition and security. Replace as required.
7. In PA-28-140 S/N's 28-20001 thru 28-7225172; PA-28-150/160/180 S/N's 28-03, 28-1 thru 28-7305012; PA-28-235 S/N's 28-10001 thru 28-7310005; for airplanes which have not installed either Piper Kit No. 760-634V, 760-635V, 760-639V, or 760-640V per Piper Service Bulletin No. 360: conduct the Induction Air Inlet Duct and Alternate Heat Duct Inspection (see Special Inspections, Procedures).
8. Refer to latest revision of Lycoming Service Bulletin No. 480 and Service Instruction 1014.

WARNING: FAILURE TO CONSULT APPLICABLE VENDOR PUBLICATION(S), WHEN SERVICING OR INSPECTING VENDOR EQUIPMENT INSTALLED IN PIPER AIRCRAFT, MAY RENDER THE AIRCRAFT UNAIRWORTHY. (SEE INTRODUCTION - SUPPLEMENTARY PUBLICATIONS.)

The following inspections are required in addition to those listed in Scheduled Maintenance, above. These inspections are required at intervals of:

- ☐ Flight hours;
- ☐ 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 log book entry should be made upon completion of any inspections.

(1) Per Flight Hour

Before Each Flight

☐ In PA-28-180s S/N's 28-4378 thru 28-7105122; PA-28-235s S/N's 28-11040 thru 28-7110011; PA-28R-180s S/N's 28R-30005 thru 28R-7130005; PA-28R-200s S/N's 28R-35001 thru 28R-7135102 for airplanes equipped with Manual Electric Pitch Trim which have not installed Piper Kit No. 760-517V or 761-039, before each flight conduct Electric Trim Switch Inspection (see Special Inspections, Procedures).

Each 10 Hours

☐ In PA-28R-180s S/N's 28R-30004 thru 28R-30478, for airplanes which have not installed Piper Kit No. 760-328V per Piper Service Bulletin No. 297, each 10 hours time-in-service conduct Air Induction Inlet Hose 10 Hour Inspection (see Special Inspections, Procedures).

☐ In PA-28R-180s S/N's 28R-30479 thru 28R-31092; and, PA-28R-200s S/N's 28R-35000 thru 35256, less 28R-35238 and 28R-35252; for airplanes which have not installed Piper Kit No. 760-334V per Piper Service Bulletin No. 297, each 10 hours time-in-service conduct Air Induction Inlet Hose 10 Hour Inspection (see Special Inspections, Procedures).

Each 25 Hours

☐ In PA-28R-180s S/N's 28R-30001 thru 28R-31266, less 28R-31072, for airplanes which have not installed Piper Kit No. 760-410V per Piper Service Bulletin No. 309, each 25 hours time-in-service conduct Spinner/Bulkhead 25 Hour Inspection (see Special Inspections, Procedures).

☐ In PA-28R-200s S/N's 28R-35001 thru 28R-35713, less 28R-35699, 28R-35701, 28R-35703, 28R-35706, 28R-35707, 28R-35708, and 28R-35710; for airplanes which have not installed Piper Kit No. 760-410V per Piper Service Bulletin No. 309, each 25 hours time-in-service conduct Spinner/Bulkhead 25 Hour Inspection (see Special Inspections, Procedures).

Each 1000 Hours

- ☐ 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.
- ☐ Overhaul or replace magnetos, as required, and at engine overhaul. In no case may Slick magneto's time-in-service exceed engine TBO.
- ☐ Clean and lubricate all exterior needle bearings.
- ☐ For PA-28-180 and -200 airplanes only, inspect the condition of bolts used on the hinges. Replace as required.
- ☐ In PA-28-150, -160, -180 S/N's 28-1 thru 28-90, 28-92 thru 28-365, 28-367 thru 28-764, 28-766 thru 28-886, 28-888 thru 28-1109, 28-1111 thru 28-1146, 28-1148 thru 28-1154, 28-1156 thru 28-1206, 28-1209 thru 28-1218, 28-1220 thru 28-1223, 28-1225 thru 28-1227, 28-1229, 28-1232, 28-1233, 28-1235 thru 28-1237, 28-1239 thru 28-1245, 28-1248 thru 28-1251, 28-1253, 28-1255 thru 28-1261, 28-1263 thru 28-1268, 28-1270, 28-1273, 28-1274, 28-1276 thru 28-1280, 28-1286, 28-1287, 28-1293, 28-1285, 28-1301 and 28-1303; for airplanes with sealed upper nose gear oleo bearing (P/N 452-419) installed; and later PA-28-150, -160, -180, and -235 airplanes: check upper nose gear oleo bearing for condition.

Each 1200 Hours

- ☐ Overhaul engine at 1200, 1400, or 2000 hours time-in-service (see Lycoming Service Instruction No. 1009, latest revision).

Each 1400 Hours

- ☐ Overhaul engine at 1200, 1400, or 2000 hours time-in-service (see Lycoming Service Instruction No. 1009, latest revision).

Each 1600 Hours

- ☐ In PA-28-140/150/160/180's and PA-28R-180/200's, for airplanes in Usage Class "B" (see 57-10-00), which have accumulated 3700 hours total time-in-service or 3700 hours factored time-in-service; conduct Wing Spar Inspection (see Special Inspections, Procedures).
- ☐ In PA-28-140/150/160/180's and PA-28R-180/200's, for airplanes in Usage Class "C" (see 57-10-00); conduct Wing Spar Inspection (see Special Inspections, Procedures).

NOTE: Instructions for determining "Usage Class" are included in the Wing Spar Inspection (see Special Inspections, Procedures).

Each 2000 Hours

- ☐ 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.

Each Four (4) Years

- ☐ For airplanes equipped with TCM/Bendix Magnetos: overhaul or replace TCM/Bendix magnetos at engine overhaul, or each four (4) years time-in-service, whichever comes first.

Each Five (5) Years

- ☐ Overhaul or replace Hartzell propellers each five (5) or six (6) years or each 2000 or 2400 hours. (Refer to latest revision of Hartzell Service Letter No. 61 to determine specific requirements for individual airplanes.)

Each Six (6) Years

- ☐ Overhaul McCauley Fixed Pitch propellers each 2000 hours or 72 calendar months which ever occurs first. (Refer to the latest revision of McCauley Service Bulletin 137.)
- ☐ Overhaul or replace Hartzell propellers each five (5) or six (6) years or each 2000 or 2400 hours. (Refer to latest revision of Hartzell Service Letter No. 61 to determine specific requirements for individual airplanes.)
- ☐ For airplanes equipped with Aero Accessories, Inc. vacuum pump(s), replace the shear coupling each six (6) years time-in-service.

Each Seven (7) Years

- ☐ 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.
- ☐ Each seven (7) years time-in-service, drain and remove the inboard metal fuel tank from each wing and inspect for corrosion as specified in Fuel Tank/Wing Spar Corrosion Inspection, (see Special Inspections, Procedures).
- ☐ Replace fuel tank flexible hose interconnect couplings and fuel tank vent line flexible hose and hose couplings as required; not to exceed seven (7) years or fuel tank removal, whichever comes first.

Each Ten (10) Years

- ☐ Each ten (10) years time-in-service, test fuselage and wing fluid hoses to system pressure. Visually inspect for leaks. Hoses that pass inspection may remain in service, but must be rechecked each five (5) years additional time-in-service. No fluid hose may exceed twenty (20) years total time-in-service.

Each Twelve (12) Years

- ☐ Hydrostatically test the portable fire extinguisher each twelve (12) years.