



## **CLASSIC AIRPLANES INSPECTION REPORT**

**J-2 SERIES CUB  
J-3, NE-1, L-4 SERIES CUB  
J-4 SERIES COUPE  
J-5, J-5C, L-14, AE-1, HE-1 SERIES CUB CRUISER  
PA-11 CUB SPECIAL  
PA-12 SUPER CRUISER  
PA-14 FAMILY CRUISER  
PA-15 AND PA-17 VAGABOND  
PA-16 CLIPPER**

### **NOTE**

**This inspection report provides recommendations for an inspection program per requirements of FAR Part 43 and Advisory Circular 91-60 (The Continued Airworthiness of older Airplanes). This is a comprehensive inspection report designed to encompass more than one model airplane. It will be necessary to determine which inspection item is applicable to the particular airplane being inspected.**

# **PIPER AIRCRAFT CORPORATION**

PIPER AIRCRAFT CORPORATION

INSPECTION REPORT

THIS FORM MEETS REQUIREMENTS OF FAR PART 43

Make <b>CLASSIC AIRPLANES</b>	Model J-2, J-3, J-4, J-5, J-5C, L-14, AE-1, HE-1, PA-11, -12, -14, -15, -16, -17	Serial No.	Registration No.
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	50	100	500	1000	Inspector		50	100	500	1000	Inspector
Circle Type of Inspection (See Note) 50    100    500    1000    Annual						Perform inspection or operation at each of the inspection intervals as indicated by a circle (○).					
DESCRIPTION						DESCRIPTION					
<b>A. PROPELLER GROUP</b>						31. Overhaul or replace vacuum pump if applicable (See Note 8) .....					
1. Inspect spinner and back plate for damage and security, if applicable .....	○	○	○	○		32. Inspect Venturi Installation .....		○	○	○	
2. Inspect blades for nicks and cracks .....	○	○	○	○		33. Inspect throttle, carburetor heat, and mixture controls for travel and operating condition .....		○	○	○	
3. Inspect spinner mounting brackets for damage and security .....	○	○	○	○		34. Inspect exhaust stacks, connections and gaskets (Replace exhaust gaskets as required) ...	○	○	○	○	
4. Inspect propeller mounting bolts and safety (Check torque if safety is broken) .....		○	○	○		35. Inspect muffler, heat exchanger and baffles .....		○	○	○	
5. Recondition propeller or overhaul (See Note 5) ..				○		36. Inspect exhaust stack braces .....		○	○	○	
<b>B. ENGINE GROUP</b>						37. Inspect breather tube for obstructions and security .....		○	○	○	
CAUTION: Ground Magneto Primary Circuit before working on engine.						38. Check cylinder compression (Ref. AC43.13-1A) ..		○	○	○	
1. Remove engine cowl .....	○	○	○	○		39. Inspect cylinder for cracked or broken fins .....		○	○	○	
2. Clean and inspect cowling for cracks, distortion and loose or missing fasteners .....		○	○	○		40. Inspect crankcase for cracks, leaks and security of seam bolts .....		○	○	○	
3. Drain oil sump (See Note 6) .....	○	○	○	○		41. Inspect wiring to engine and accessories. Replace damaged wires and clamps. Inspect terminals for security and cleanliness if applicable .....		○	○	○	
4. Clean suction oil strainer at oil change (Inspect strainer for foreign particles. See Note 6) .....	○	○	○	○		42. Inspect engine mounts for cracks and loose mountings .....		○	○	○	
5. Clean pressure oil strainer (Inspect strainer for foreign particles) .....	○	○	○	○		43. Inspect rubber engine mount bushings (See Note 9) .....		○	○	○	
6. Inspect oil temperature sender unit for leaks and security .....		○	○	○		44. Inspect all engine baffles for damage and security .....		○	○	○	
7. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 7) .....		○	○	○		45. Inspect condition of fire wall seals .....		○	○	○	
8. Clean and inspect oil radiator cooling fins for damage, if applicable .....		○	○	○		46. Inspect condition and tension of generator or alternator drive belt if applicable .....		○	○	○	
9. Remove and flush oil radiator if applicable .....		○	○	○		47. Inspect condition of generator or alternator and starter if applicable .....		○	○	○	
10. Fill engine with oil per Engine Manufacturer .....	○	○	○	○		48. Lubricate all controls .....		○	○	○	
11. Clean engine .....		○	○	○		49. Complete overhaul of engine or replace with factory rebuilt (See Note 8) .....				○	
12. Inspect condition of spark plugs (Clean and adjust gap as required, adjust per Engine Manufacturer recommendations) .....		○	○	○		50. Reinstall engine cowl .....		○	○	○	
13. Inspect ignition harness and insulators (High tension leakage and continuity) .....		○	○	○		<b>C. CABIN GROUP</b>					
14. Check magneto points for proper clearance per recommendations of Engine Manufacturer ..		○	○	○		1. Inspect cabin entrance, doors, baggage compartment door and windows for damage, operation and security .....		○	○	○	
15. Inspect magneto for oil seal leakage .....		○	○	○		2. Inspect all plexiglas for cracks .....		○	○	○	
16. Inspect breaker felts for proper lubrication .....		○	○	○		3. Inspect upholstery for tears .....		○	○	○	
17. Inspect distributor block for cracks, burned areas or corrosion, and height of contact springs if applicable .....		○	○	○		4. Inspect seats, seat belts, security brackets and bolts .....		○	○	○	
18. Check magnetos to engine timing .....		○	○	○		5. Inspect trim operation and adjustment .....		○	○	○	
19. Overhaul or replace magnetos (See Note 8) .....				○		6. Inspect rudder pedals .....		○	○	○	
20. Check valve clearance per Engine Manufacturer recommendations .....		○	○	○		7. Inspect control stick, torque tube, pulleys and cables .....		○	○	○	
21. Remove air filter and clean (Replace as required) .....	○	○	○	○		8. Inspect flap lever for adjustment and safety if applicable .....		○	○	○	
22. Drain carburetor and clean inlet line fuel strainer .....	○	○	○	○		9. Inspect controls for ease of operation .....		○	○	○	
23. Inspect condition of carburetor heat air door and box .....		○	○	○		10. Check landing, navigation, cabin and instrument lights if applicable .....		○	○	○	
24. Inspect intake seals and hoses for leaks and clamps for tightness .....		○	○	○		11. Inspect fuse box for burned out fuses if applicable .....		○	○	○	
25. Remove drain and clean fuel filter bowl and screen (Drain and clean every 90 days) .....	○	○	○	○		12. Inspect instruments, lines and attachments .....		○	○	○	
26. Inspect condition of flexible fuel and primer lines .....		○	○	○		13. Inspect gyro operated instruments if applicable (Overhaul or replace as required) .....		○	○	○	
27. Replace flexible fuel lines (Every 5 years) .....				○		14. Replace filters on gyro horizon and directional gyro if applicable .....		○	○	○	
28. Inspect fuel system for leaks .....		○	○	○		15. Inspect or replace vacuum regulator filter if applicable .....		○	○	○	
29. Inspect and lubricate fuel selector valve if applicable .....		○	○	○		16. Inspect altimeter (Calibrate altimeter system in accordance with FAR 91.170, if appropriate) .....		○	○	○	
30. Inspect vacuum pump, lines and separator if applicable .....		○	○	○		17. Inspect operation of fuel selector valve if applicable (See Note 9) .....		○	○	○	

Owner \_\_\_\_\_

Circle Type of Inspection (See Note)					Perform inspection or operation at each of the inspection intervals as indicated by a circle (○).				
50	100	500	1000	Annual	50	100	500	1000	Inspector
DESCRIPTION					DESCRIPTION				
<b>C. CABIN GROUP (cont)</b>									
18. Inspect condition of heater control and duct if applicable .....					○	○	○		
19. Inspect condition and operation of air vents if applicable .....					○	○	○		
20. Inspect operation and condition of parking brake if applicable .....					○	○	○		
<b>D. FUSELAGE AND EMPENNAGE GROUP</b>									
1. Remove inspection plates and panels .....					○	○	○		
2. Inspect fabric and finish for cracks and deterioration (If condition of fabric is doubtful, refer to FAA AC 43.13-1A to test fabric use strip test method) .....					○	○	○		
3. Check that fuel tank is marked for minimum octane rating if applicable .....					○	○	○		
4. Check that fuel tank is marked for capacity if applicable .....					○	○	○		
5. Inspect fuel tank and lines for damage, leaks, water and seals for deterioration, and cap for venting if applicable .....					○	○	○		
6. Inspect fuel header tank for security, leaks, and condition if applicable .....					○	○	○		
7. Inspect battery, box and cables (Inspect at least every 30 days. Flush box as required and fill battery) if applicable .....					○	○	○	○	
8. Inspect electronic installations for security if applicable .....					○	○	○		
9. Inspect antenna mounts and electric wiring for damaged insulation and security if applicable .....					○	○	○		
10. Inspect E.L.T. installation and condition of battery and antenna if applicable (See Piper Service Letter No. 820) .....					○	○	○		
11. Inspect rudder, elevator and stabilizer trim cables, turnbuckles, guides and pulleys for safety, damage, corrosion and operation .....					○	○	○		
12. Inspect fuselage longerons and stringers for damage .....					○	○	○		
13. Inspect fuselage frame tubing for corrosion, damage and deterioration .....					○	○	○		
14. Inspect rudder, stabilizer and rudder structures for damage .....					○	○	○		
15. Inspect rudder attachments and horn for damage .....					○	○	○		
16. Inspect rudder hinge pins and bushings for excess wear and corrosion (Replace pins and/or bushings as required) .....					○	○	○		
17. Inspect stabilizer yoke and screw for end play and security if applicable .....					○	○	○		
18. Inspect stabilizer attachments and attachment tube for side play if applicable .....					○	○	○		
19. Inspect stabilizer brace wires for corrosion, tightness and safety .....					○	○	○		
20. Inspect elevator attachments and horn for damage .....					○	○	○		
21. Inspect elevator hinge pins and bushings for excess wear and corrosion (Replace pins and/or bushings as required) .....					○	○	○		
22. Lubricate all controls where applicable .....					○	○	○		
23. Reinstall inspection plates and panels .....					○	○	○		
<b>E. WING GROUP</b>									
1. Remove inspection plates, panels, and fairings ..					○	○	○		
2. Inspect fabric and finish for cracks and deterioration (If condition of fabric is doubtful, refer to FAA AC 43.13-1A to test fabric use strip test method) .....					○	○	○		
3. Inspect fuel tank(s) and lines for damage, leaks and water, seals for deterioration and caps for proper venting if applicable .....					○	○	○		
4. Check fuel tank(s) marked for capacity .....					○	○	○		
5. Check fuel tank(s) marked for minimum octane rating .....					○	○	○		
6. Inspect aileron and if applicable flap cables, turnbuckles, guides and pulleys for safety, damage, corrosion and operation .....					○	○	○		
7. Inspect wing attachment bolts for security .....						○	○	○	
8. Inspect lift and jury struts for security (Refer to latest revision of Piper Service Bulletin No. 528 and 157) (Insure AD 80-22-15 is complied with) .....							○	○	○
9. Inspect lift strut forks for damage (Refer to latest revision of Piper Service Bulletin 157) (Insure AD 80-22-15 for inspection and replacement is complied with) .....							○	○	○
10. Inspect aileron, flap if applicable and wing structure for damage and corrosion .....							○	○	○
11. Inspect aileron attachments and brackets for tightness and damage .....							○	○	○
12. Inspect aileron hinge pins and blocks for excess wear and corrosion (Replace pins and blocks as required.) .....							○	○	○
13. Inspect flap attachments and brackets for tightness, corrosion and damage if applicable ...							○	○	○
14. Inspect flap bellcrank, control rod, pins and blocks for excess wear and corrosion if applicable. (Replace pins and blocks as required)							○	○	○
15. Lubricate all controls where applicable .....							○	○	○
16. Reinstall inspection plates, panels and fairings ..							○	○	○
<b>F. LANDING GEAR GROUP</b>									
1. Remove fairings and shock cord covers if applicable .....							○	○	○
2. Inspect fabric and finish for cracks and deterioration .....							○	○	○
3. Inspect gear, cabane and shock strut bolts and nuts for safety .....							○	○	○
4. Hoist airplane, inspect gear, cabane and shock strut bolts and bushings for excess wear and corrosion (Replace bolts and/or bushings as required) .....							○	○	○
5. Inspect shock cords for broken threads and weakness, and if applicable, shock struts for weakness (Replace cords and/or shock struts as necessary) .....							○	○	○
6. Inspect gear wheel alignment (0° Toe in/out) ...							○	○	○
7. Inspect tires for cuts, uneven or excessive wear and slippage .....							○	○	○
8. Remove wheels, clean, inspect and repack bearings .....							○	○	○
9. Inspect wheels for cracks, corrosion and broken bolts .....							○	○	○
10. Check main wheel tire pressure (800 x 4-24 PSI, or if applicable 600 x 6-28 PSI) .....					○	○	○	○	○
11. Inspect brake lining and drums for excessive wear. (Replace brake lining as necessary) .....							○	○	○
12. Inspect brake lines for chafing, corrosion and security .....							○	○	○
13. Inspect wheel brake tube assembly for leaks and deterioration (Replace as required) on Hayes installation .....							○	○	○
14. Inspect brake cylinders, and parking valves for operation and leaks (Check fluid level as required) .....					○	○	○	○	○
15. Inspect tail wheel attachments for tightness and safety .....							○	○	○
16. Inspect tail wheel fork for looseness on bracket .....							○	○	○
17. Inspect tail wheel for cuts and uneven or excessive wear .....							○	○	○
18. Remove tail wheel, clean, check and repack bearings .....							○	○	○
19. Inspect tail wheel for cracks, corrosion and broken bolts .....							○	○	○
20. Inspect tail wheel tire pressure, if applicable (30 PSI) .....					○	○	○	○	○
21. Inspect tail skid installation if applicable for cracks, corrosion and security .....							○	○	○
22. Lubricate all pivot points where applicable .....					○	○	○	○	○
23. Install fairings and shock cord covers .....							○	○	○

Circle Type of Inspection (See Note)					Inspector	Perform inspection or operation at each of the inspection intervals as indicated by a circle (○).					Inspector
50	100	500	1000	Annual		50	100	500	1000		
DESCRIPTION						DESCRIPTION					
<b>G. FLOAT GROUP (If Applicable)</b>						<b>I. OPERATIONAL INSPECTION</b>					
1. Inspect float attachment fittings .....						1. Check fuel tank selector .....					
2. Inspect floats for damage .....						2. Check fuel quantity .....					
3. Inspect pulleys and cables .....						3. Check oil pressure and temperature .....					
4. Inspect seaplane fin on fuselage for damage corrosion and security if applicable .....						4. Check generator output if applicable .....					
						5. Check carburetor heat .....					
						6. Check parking brake if applicable .....					
						7. Check vacuum gauge if applicable .....					
						8. Check gyros for noise and roughness if applicable .....					
						9. Check cabin heater operation .....					
						10. Check magneto switch operation .....					
						11. Check magneto R.P.M. if applicable .....					
						12. Check throttle and mixture operation if applicable .....					
						13. Check propeller smoothness .....					
						14. Check electronic equipment operation if applicable .....					
						15. Check engine idle and R.P.M. ....					
						16. Check propeller governor action if applicable ....					
<b>H. AGRICULTURAL GROUP (If Applicable)</b>						<b>J. GENERAL</b>					
1. Check oil level - duster gear box .....						1. Aircraft conforms to FAA Specifications .....					
2. Inspect universal drive joints .....						2. All FAA Airworthiness Directives complied with .....					
3. Inspect brakes and controls .....						3. All Manufacturers Service Letters and Bulletins complied with .....					
4. Inspect grease cups, sprayer fan .....						4. Check for proper Flight Manual. (See Note 11) ..					
5. Clean hopper tank screen .....						5. Aircraft papers in proper order .....					
6. Inspect top hopper tank door .....											
7. Inspect button hopper tank seal .....											
8. Remove metal belly plate if applicable and clean fuselage .....											
9. Inspect duster fan mount assembly .....											
10. Check operation of dump valve .....											
11. Check agitator operation .....											
12. Inspect for hopper tank leaks and security .....											
13. Inspect spray boom attachments .....											
14. Clean spray nozzles .....											
15. Inspect all plumbing for leaks .....											
16. Inspect spray pump mount assembly .....											

**NOTES:**

- Refer to the last card of the Piper - Parts Price List - Aerofiche, for a check list of current revision dates to Piper Inspection Reports and Manuals.
- All inspections or operations are required at each of the inspection intervals as marked by a (O). Both the annual and 100 hour inspections are complete inspections of the airplane, identical in scope, while both the 500 and 1000 hour inspections are extensions of the annual or 100 hour inspection, which require a more detailed examination of the airplane, and overhaul or replacement of some major components. Inspections must be accomplished by persons authorized by the FAA.
- Piper Service Bulletins are of special importance and Piper considers compliance mandatory.
- Piper Service Letters are product improvements and service hints pertaining to servicing the airplane and should be given careful attention.
- Overhaul or recondition, (Per latest Hartzell Service Letter 61, or per McCauley Service Bulletin 137B) the recommended flight time between reconditioning for Sensenich fixed-pitch metal propellers is 1000 hours, provided the propeller has not received prior damage requiring immediate attention. Reconditioning accomplishes the removal of fatigued surface metal and accumulated small nicks and cuts too numerous to repair individually. Contact a Sensenich factory approved repair station.
- Lycoming - Intervals between oil changes can be increased as much as 100% on engines equipped with full flow cartridge type oil filters, provided the element is replaced each 50 hours of operation and the specified octane fuel is used. Should fuel other than the specified octane rating for the power plant be used, refer to Lycoming Service Letter No. L185A for additional information and recommended service procedures.
  - Continental - Every 100 hours remove oil sump, clean suction tube screen, replace oil sump and safety.
- Replace flexible oil lines at Engine T.B.O. per latest Lycoming Service Bulletin No. 240, or every five years in service.
- Replace or overhaul as required or at engine overhaul.
  - Lycoming - For engine overhaul, refer to the latest revision of Lycoming Service Letter No. L201A.
  - Continental - For engine overhaul, refer to the latest revision of Continental Service Bulletin M74-20.
- Inspect rubber mount for severe cracking, signs of high temperature of burning, separation of rubber from metal surfaces, excessive "sag" or permanent deflection resulting in internal bottoming with spacer, engine and cowl interference and unusual vibration. The rubber mounts must be replaced no later than engine T.B.O.
- Refer to latest revisions of Piper Service Bulletin No. 354 and Service Letter No. 944. Lubricate fuel selector valve, if valve has 500 hours or more total time in service, within next 100 hours of operation and every 500 hours thereafter. Use Dow Corning Molycoat No. FS-3451 or FS-3452, Piper Part No. 761-281.
- The models J-2, J-3, NE-1, L-4, J-4, J-5, J-5C, L-14, AE-1, HE-1 and PA-11 aircraft were licensed under Part-04 of Civil Air Regulations and therefore do not require flight manuals; However, do require an "Operations Limitations Certificate. This certificate was obtained from your local F.A.A. Regional Office.