

PIPER AIRCRAFT CORPORATION

INSPECTION REPORT

THIS FORM MEETS REQUIREMENTS OF FAR PART 43 • INSPECTIONS MUST BE PERFORMED BY PERSONS AUTHORIZED BY THE FAA.

Make		Model		Serial No.		Registration No.							
CHEROKEE ARROW III		PA-28R-201 PA-28R-201T											
Circle Type of Inspection (See Note 2)					Perform all inspections or operations at each of the inspection intervals as indicated by a circle (O).								
50	100	500	1000	Annual	50	100	500	1000	Inspector				
DESCRIPTION					DESCRIPTION								
A. PROPELLER GROUP					18. Overhaul or replace magnetos (see note 5)								
1. Inspect spinner and back plate for cracks					O	O	O	O					
2. Inspect blades for nicks and cracks					O	O	O	O					
3. Inspect for grease and oil leaks					O	O	O	O					
4. Lubricate propeller per lubrication chart (refer to service manual, section II)					O	O	O	O					
5. Inspect complete spinner and spinner mounting bulkheads for security, chafing, cracks, deterioration, wear, and correct installation						O	O	O					
6. Inspect propeller mounting bolts and safety (check torque if safety is broken) (see note 16)						O	O	O					
7. Inspect hub parts for cracks and corrosion						O	O	O					
8. Rotate blades of propeller and check for tightness in hub pilot tube						O	O	O					
9. Remove propeller and clean sludge from propeller and crankshaft							O	O					
10. Inspect complete propeller assembly for security, chafing, cracks, deterioration, wear, and correct installation						O	O	O					
11. Overhaul propeller (see note 5)								O					
B. ENGINE GROUP (CONTINENTAL)					19. Remove induction air filter and tap gently to remove dirt particles (replace as required)					O	O	O	O
WARNING: Read Note 22 before completing this inspection group.					20. Clean injector nozzles as required (clean with acetone only)					O	O	O	O
WARNING: Ground magneto primary circuit before working on engine.					21. Inspect induction airbox valve and check for excessive wear or cracks; replace defective parts						O	O	O
NOTE: Read Note 4 prior to completing this inspection group.					22. Inspect fuel injector attachments for loose hardware						O	O	O
1. Remove the engine cowl					O	O	O	O					
2. Clean and inspect cowl for cracks, distortion, and loose or missing fasteners						O	O	O					
3. Drain oil sump while engine is warm						O	O	O					
4. Change full flow (spin-on type) oil filter element (inspect element for foreign particles) Check oil level after installing new filter					O	O	O	O					
5. Inspect oil temperature sender unit for leaks and security						O	O	O					
6. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (see note 6)					O	O	O	O					
7. Clean and inspect oil radiator cooling fins						O	O	O					
8. Fill engine with oil per information on cowl or lubrication chart (refer to service manual, section II)						O	O	O					
CAUTION DO NOT USE MULTIGRADE OIL until Hartzell Service Bulletin 142B is complied with.					23. Inspect intake seals for leaks and clamps for tightness						O	O	O
9. Clean engine					O	O	O	O					
CAUTION: Use Caution not to contaminate air pump with cleaning fluid.					24. Inspect all air inlet duct hoses (replace as required)						O	O	O
10. Inspect condition of spark plugs (Clean and adjust gap as required) (see note 8)						O	O	O					
11. Check cylinder compression (see note 12)						O	O	O					
12. Inspect ignition harness and insulators (high tension leakage and continuity) (see notes 5 and 21)					O	O	O	O					
13. Check magneto points for proper clearance (maintain clearance at 0.018 +/- 0.006) (see note 5)						O	O	O					
14. Inspect magneto for oil seal leakage						O	O	O					
15. Inspect breaker felts for proper lubrication						O	O	O					
16. Inspect distributor block for cracks, burned areas or corrosion, and height of contact springs							O	O					
17. Check magneto-to-engine timing (see note 15)						O	O	O					
					25. Inspect condition of flexible fuel lines						O	O	O
					26. Replace flexible fuel lines (See Note 6)						O	O	O
					27. Clean gascolator bowl and screen					O	O	O	O
					28. Inspect fuel system for leaks						O	O	O
					29. Inspect condition and operation of fuel pumps (engine-driven and electric)						O	O	O
					30. Overhaul or replace engine-driven fuel pumps (see note 5)								O
					31. Overhaul or replace electric fuel pump as required								
					32. Inspect pressure pump and lines						O	O	O
					33. Overhaul or replace pressure pump (see note 5)								O
					34. Inspect throttle, alternate air, mixture, and propeller governor controls for security, travel, and operating condition						O	O	O
					35. Inspect exhaust stacks, connections, and gaskets (replace gaskets as required)					O	O	O	O
					36. Inspect breather tubes for obstructions and security						O	O	O
					37. Inspect crankcase for cracks, leaks, and security of seam bolts						O	O	O
					38. Inspect engine mounts for cracks and loose mountings						O	O	O
					39. Inspect rubber engine mount bushings for deterioration (replace as required)						O	O	O
					40. Inspect all engine baffles and seals						O	O	O
					41. Inspect fire wall seals						O	O	O
					42. Inspect condition of alternator and starter						O	O	O
					43. Inspect all lines, air ducts, electrical leads, and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation (see latest Piper Service Bulletin 561)					O	O	O	O
					44. Check air conditioning compressor oil level (see note 13)								
					45. Inspect condition and tension of compressor drive belt (refer to service manual, section XIV)						O	O	O
					46. Inspect security of compressor mounting						O	O	O
					47. Inspect compressor clutch security and condition of wiring						O	O	O
					48. Check fluid in brake reservoir (fill as required)					O	O	O	O
					49. Overhaul or replace propeller governor (refer to latest revision of Hartzell Service Letter 61)								O
					50. Complete overhaul of engine or replace with factory rebuilt (see note 5)								

Owner

Circle Type of Inspection (See Note 2)						Perform all inspections or operations at each of the inspection intervals as indicated by a circle (O).					
50	100	500	1000	Annual		50	100	500	1000	Inspector	
DESCRIPTION						DESCRIPTION					
C. TURBOCHARGER GROUP (CONTINENTAL)						18. Inspect magneto points for condition and proper clearance (refer to service manual, section VIIIA)					
1. Inspect all oil inlet ducting and compressor discharge ducting for worn spots, loose clamps, or leaks	O	O	O	O		19. Inspect magneto for oil leakage	O	O	O	O	
2. Inspect engine air inlet assembly for cracks, loose clamps, and screws	O	O	O	O		20. Inspect breaker felts for proper lubrication	O	O	O	O	
3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness	O	O	O	O		21. Inspect distributor block for cracks, burned areas, or corrosion and height of contact springs		O	O	O	
4. Inspect exhaust heat exchanger		O	O	O		22. Check magnetos to engine timing	O	O	O	O	
5. Carefully inspect all turbo support brackets, struts, etc, for breakage, sagging, or wear	O	O	O	O		23. Overhaul or replace magnetos (see note 5)				O	
6. Inspect all oil lines and fittings for wear, leakage, heat damage, or fatigue	O	O	O	O		24. Remove air filter and tap gently to remove dirt particles (replace as required)	O	O	O	O	
7. Inspect bypass valve for security and safety	O	O	O	O		25. Clean fuel injector inlet line screen (clean injector nozzles as required) (clean with acetone only)	O	O	O	O	
8. Run up engines, check all instruments for smooth, steady response	O	O	O	O		26. Inspect condition of injector, alternate air door and box (see note 7)	O	O	O	O	
9. Remove all turbocharger components from the engine. Inspect and repair or replace as necessary. Inspect turbocharger rotor for excessive play, carbon and dirt deposits. (Refer to troubleshooting chart in section VIII of the service manual for rotor play limits) Remove turbine and compressor housings. Inspect turbine wheel and impeller for physical damage and excessive build up of deposits. If excessive, replace turbocharger assembly				O		27. Inspect vent lines for evidence of fuel or oil seepage	O	O	O	O	
D. ENGINE GROUP (LYCOMING)						28. Inspect intake seals for leaks and clamps for tightness	O	O	O	O	
WARNING: Ground magneto primary circuit before working on engine.						29. Inspect all air inlet duct hoses (replace as required)	O	O	O	O	
NOTE: Read Note 3 prior to completing this inspection group.						30. Inspect condition of flexible fuel lines		O	O	O	O
1. Remove engine cowl and inspect for damage	O	O	O	O		31. Replace flexible fuel lines (see note 5)		O	O	O	O
2. Clean and inspect cowlings for cracks, distortion, and loose or missing fasteners		O	O	O		32. Clean gascolator bowl and screens	O	O	O	O	
3. Drain oil sump while engine is warm		O	O	O		33. Inspect fuel system for leaks	O	O	O	O	
4. Clean oil suction and oil pressure strainers at oil change (inspect strainers for foreign particles)		O	O	O		34. Inspect fuel pumps for operation (engine driven and electric)		O	O	O	
5. Change full flow (cartridge type) oil filter element (inspect element for foreign particles)	O	O	O	O		35. Overhaul or replace fuel pumps (engine driven and electric) (see note 5)				O	
6. Inspect oil temperature sender unit for leaks and security		O	O	O		36. Check vacuum pump and lines		O	O	O	O
7. Inspect oil lines and fittings for leaks, security, chafing, dents, and cracks (see note 6)	O	O	O	O		37. Overhaul or replace vacuum pump (see note 5) ..				O	
8. Clean and inspect oil radiator cooling fins		O	O	O		38. Inspect throttle, alternate air, mixture, propeller, and governor controls for travel and operating condition		O	O	O	
9. Remove and flush oil radiator			O	O		39. Inspect exhaust stacks, connections, and gaskets (replace gaskets as required)		O	O	O	
10. Fill engine with oil per lubrication chart in service manual, section II		O	O	O		40. Inspect muffler, heat exchange, and baffles (Refer to latest revision of Piper S/B 691)		O	O	O	
11. Clean engine		O	O	O		41. Inspect breather tube for obstructions and security		O	O	O	
CAUTION: Do not contaminate the vacuum pump with cleaning fluid. (Refer to latest revision of Lycoming Service Instruction 1221)						42. Inspect crankcase for cracks, leaks, and security of seam bolts		O	O	O	
12. Inspect condition of spark plugs (clean and adjust gap as required, adjust per latest revision of Lycoming Service Instruction 1042)		O	O	O		43. Inspect engine mounts for cracks and loose mountings		O	O	O	
NOTE: If fouling of spark plugs is apparent, rotate bottom plugs to upper plugs, and vice versa.						44. Inspect all engine baffles		O	O	O	
13. Inspect spark plug cable leads and ceramics for corrosion and deposits	O	O	O	O		45. Inspect all wiring connected to the engine or accessories		O	O	O	
14. Check cylinder compression (refer to latest revision of Lycoming Service Instruction 1191)		O	O	O		46. Inspect rubber engine mount bushings for deterioration (replace as required)		O	O	O	
15. Inspect cylinders for cracked or broken fins (see note 10)		O	O	O		47. Inspect fire wall seals		O	O	O	
16. Inspect rocker box covers for evidence of oil leaks. If found, replace gasket; torque cover screws 50 inch-pounds (see note 9)	O	O	O	O		48. Inspect condition and tension of alternator drive belt (refer to service manual, section XI; XIV if air conditioning installed)		O	O	O	
NOTE: Lycoming requires a valve inspection be made after every 400 hours of engine operation. (See note 9.)						49. Alternator idler pulley (if installed); remove front grease seal and add grease. (refer to lubrication chart in service manual, section II)		O	O	O	
17. Inspect ignition harness and insulators (high tension leakage and continuity)	O	O	O	O		50. Inspect condition of alternator and starter		O	O	O	
						51. Inspect security of alternator mounting		O	O	O	
						52. Check air conditioning compressor oil level (see note 13)		O	O	O	
						53. Inspect condition of compressor belt and tension (refer to service manual, section XIV)		O	O	O	
						54. Inspect compressor clutch security and wiring ..		O	O	O	
						55. Inspect security of compressor mounting		O	O	O	
						56. Check fluid in brake reservoir (Fill as required)	O	O	O	O	
						57. Lubricate all controls per lubrication chart in service manual, section II		O	O	O	
						58. Overhaul or replace propeller governor (see note 5)					
						59. Complete overhaul of engine or replace with factory rebuilt (see note 5)					
						60. Install engine cowl	O	O	O	O	

Circle Type of Inspection (See Note 2)						Perform all inspections or operations at each of the inspection intervals as indicated by a circle (O).					
50	100	500	1000	Annual		50	100	500	1000	Inspector	
DESCRIPTION						DESCRIPTION					
E. CABIN GROUP						22. Inspect stabilator, tab hinges, horn, and attachments for damage and operation	O	O	O		
1. Inspect cabin entrance door and windows for damage, operation, and security	O	O	O	O		23. Inspect stabilator attachments (see latest Piper Service Bulletin 856)	O	O	O		
2. Inspect upholstery for tears		O	O	O		24. Inspect stabilator and tab hinge bolts and bearings for excess wear (replace as required)		O	O	O	
3. Inspect seats, seat belts, security brackets, and bolts		O	O	O		25. Inspect stabilator control stops to ensure stop has not loosened and jam nut is tight	O	O	O		
4. Inspect trim operation		O	O	O		26. Inspect stabilator trim mechanism	O	O	O		
5. Inspect rudder pedals		O	O	O		27. Check all cable tensions (use tensiometer) (see note 17)	O	O	O		
6. Inspect parking brake and brake handle for operation and cylinder leaks		O	O	O		28. Inspect aileron, rudder, stabilator, stabilator trim cables, turnbuckles, guides, and pulleys for safety, damage, and operation	O	O	O		
7. Inspect control wheels, column, pulleys, and cables		O	O	O		29. Clean and lubricate stabilator trim drum screw (refer to lubrication chart in service manual, section II)		O	O		
8. Inspect flap control cable attachment bolt	O	O	O	O		30. Inspect stabilator balance weight attachments and arm for security and condition	O	O	O		
9. Check landing, navigation, cabin, and instrument lights	O	O	O	O		31. Inspect emergency locator transmitter battery for replacement date per service manual (see latest revision of Piper S/L 820)	O	O	O		
10. Inspect instruments, lines, and attachments	O	O	O	O		32. Clean and lubricate all exterior needle bearings			O		
11. Inspect gyro-operated instruments and electric turn and bank (overhaul or replace as required)		O	O	O		33. Lubricate per lubrication chart in service manual, section II	O	O	O	O	
12. Replace instrument air, central air filter		O	O	O		34. Inspect rotating beacon for security and operation		O	O	O	
13. Inspect or replace vacuum regulator filter		O	O	O		35. Inspect security of autopilot bridle cable clamps	O	O	O		
14. Check altimeter (calibrate altimeter system in accordance with FAR 91.170, if appropriate) (see note 11)		O	O	O		36. Inspect all control cables, air ducts, electrical leads, lines, radio antenna leads, and attaching parts for security, routing, chafing, deterioration, wear, and correct installation	O	O	O		
15. Inspect operation of fuel selector valve		O	O	O		37. Install inspection plates and panels	O	O	O		
16. Inspect condition of heater controls and ducts		O	O	O							
17. Inspect condition and operation of air vents		O	O	O		G. WING GROUP					
18. Inspect condition of air conditioning ducts		O	O	O		1. Remove inspection plates and fairings	O	O	O		
19. Remove and clean air conditioning evaporator filter		O	O	O		2. Inspect surfaces and tips for damage, loose rivets, and condition of walkway	O	O	O		
F. FUSELAGE AND EMPENNAGE GROUP						3. Inspect aileron hinges and attachments	O	O	O		
1. Remove inspection plates and panels		O	O	O		4. Inspect aileron balance weight and arm for security and condition	O	O	O		
2. Inspect baggage door, latch, and hinges for condition, operation, and security		O	O	O		5. Inspect aileron cables, pulleys, and bellcranks for damage and operation	O	O	O		
3. Inspect battery, box, and cables (Inspect at least every 30 days. Flush box as required and fill battery per instructions on box)	O	O	O	O		6. Inspect aileron control stops to ensure stops have not loosened and locknuts are tight	O	O	O		
4. Inspect electronic installations		O	O	O		7. Inspect flaps and attachments for damage and operation	O	O	O		
5. Inspect bulkheads and stringers for damage		O	O	O		8. Inspect condition of bolts used with hinges (replace as required)			O		
6. Inspect antenna mounts and electric wiring for security and corrosion in plugs		O	O	O		9. Lubricate per lubrication chart in service manual, section II	O	O	O	O	
7. Inspect hydraulic pump motor brushes (refer to note 19)		O	O	O		10. Inspect wing attachment bolts and brackets	O	O	O	O	
8. Check hydraulic pump fluid level (fill as required)	O	O	O	O		11. Inspect fuel tanks and lines for leaks, water, and contamination	O	O	O		
9. Inspect hydraulic pump lines for damage and leaks		O	O	O		12. Fuel tanks marked for capacity	O	O	O		
10. Inspect for obstructions and contamination in inlet of backup landing gear extender actuator inlet head	O	O	O	O		13. Fuel tanks marked for minimum octane rating	O	O	O		
11. Inspect air conditioning system for Freon leaks ..		O	O	O		14. Inspect fuel cell vents	O	O	O		
12. Check Freon level in sight gauge of receiver-dehydrator (refer to service manual, section XIV)	O	O	O	O		15. Inspect all control cables, air ducts, electrical leads, lines, and attaching parts for security, routing, chafing, deterioration, wear, and correct installation	O	O	O		
13. Inspect air conditioner condenser air scoop rigging	O	O	O	O		16. Install inspection plates and fairings	O	O	O		
14. Inspect fuel lines, valves, sender units, and gauges for damage and operation		O	O	O							
15. Inspect security of all lines		O	O	O							
16. Inspect vertical fin and rudder surfaces for damage		O	O	O							
17. Inspect rudder hinges, horn, and attachments for damage and operation		O	O	O							
18. Inspect vertical fin attachments		O	O	O							
19. Inspect rudder hinge bolts for excess wear (replace as required)		O	O	O							
20. Inspect rudder control stops to insure stop has not loosened and jam nut is tight		O	O	O							
21. Inspect stabilator surfaces for damage		O	O	O							

Circle Type of Inspection (See Note 2)					Inspector	Perform all inspections or operations at each of the inspection intervals as indicated by a circle (O).					Inspector
50	100	500	1000	Annual		50	100	500	1000		
DESCRIPTION						DESCRIPTION					
H. LANDING GEAR GROUP						I. OPERATIONAL INSPECTION					
1.						1.					
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NOTES:

1. Refer to the last card of the Piper Parts Price List - Aerofiche, for a checklist of current revision dates to Piper Inspection Reports and Manuals.
2. 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.
3. Inspections given for the Lycoming power plant are based on the engine manufacturer's operator's manual (Lycoming Part No. 60297-12) for this airplane, dated August 1973. Any changes issued to the engine manufacturer's operator's manual after this date shall supersede or supplement the inspection outlined in this report.
4. Inspections given for the Continental power plant are based on the engine manufacturer's operator's manual (Continental Part No. X-30512) for this airplane, dated June 1976. Any changes issued to the engine manufacturer's operator's manual after this date shall supersede or supplement the inspection outlined in this report.
5. Replace or overhaul as required or at engine overhaul. (Refer to latest revision of Hartzell Service Letter 61.) For engine overhaul, refer to latest revision of one of the following: Lycoming Service Instructions No. 1009, for recommended engine overhaul period, or Continental Service Bulletin M86-6 Rev. 1, for recommended engine overhaul period.
6. Replace flexible oil lines as required, but no later than 1000 hours.
7. Check throttle body attaching screws for tightness; the correct torque for these screws is 40 to 50 inch-pounds.
8. Rotate spark plugs from upper to lower positions and vice versa to lengthen plug life.
9. At every 400 hours of engine operation, remove the rocker box covers and check for freedom of valve rockers when valves are closed. Look for evidence of abnormal wear or broken parts in the area of the valve tips, valve keeper, springs and spring seat. If any indications are found, the cylinder and all of its components should be removed (including the piston and connecting rod assembly) and inspected for further damage. Replace any parts that do not conform with limits shown in the latest revision for Lycoming's Service Table of Limits No. SSP1776.
10. Check cylinders for evidence of excessive heat which is indicated by burned paint on the cylinders. This condition is indicative of internal damage to the cylinder and, if found, its cause must be determined and corrected before the aircraft is returned to service. Heavy discoloration and appearance of seepage at the cylinder head barrel attachment area is usually due to emission of thread lubricant used during assembly of the barrel at the factory, or by slight gas leakage which stops after the cylinder has been in service for awhile. This condition is neither harmful nor detrimental to engine performance and operation. If it can be proven that leakage exceeds these conditions, the cylinder should be replaced.
11. If the altimeter is damaged, defective or inaccurate, work must be done by an FAA approved instrument repair facility only. A logbook entry must be made.
12. Refer to latest revision of Continental Motors Service Bulletin M84-15.
13. The compressor oil level should not be checked unless a Freon leak has occurred which requires an addition of Freon to the system.
14. Aircraft must be flown to check the landing gear system in accordance with instructions given in section VI, of the Service Manual. (Refer to latest revision of Service Bulletin 810.)
15. For operation above 12,000 feet, more frequent ignition system maintenance is required. (Refer to latest revision of Continental Service Bulletin M78-8.)
16. On Continental installation check torque of mounting bolts.
17. Maintain cable tensions specified in section V of the service manual.
18. **Refer to latest revision of Piper Service Bulletin 578.**
19. Inspect brushes every 100 hours if airplane is used for training or every 500 hours if used for normal service. (Refer to service manual, section VI.)
20. Refer to flight manual supplement for preflight and flight check, for intended function in all modes.
21. Refer to latest revision of Bendix S/B 612 for inspection of magneto and ignition harnesses.
22. Refer to Teledyne Continental Service Bulletin M86-11, latest revision.

Signature of Mechanic or Inspector:	Certificate No.:	Date:	Total Time on Airplane:
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