SENECA II

PIPER PROGRAMMED INSPECTION 50 HOUR CYCLE

PA-34-200T

PIPER AIRCRAFT CORPORATION

(PART NUMBER 761 592)

PIPER AIRCRAFT CORPORATION
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INTRODUCTION

— WARNING —

When servicing or inspecting vendor equipment installed in Piper aircraft, it is the user's responsibility to refer to the applicable vendor publication.

FACTS YOU SHOULD KNOW

Every two weeks the Federal Aviation Administration (FAA) publishes Airworthiness Directives (ADs) that apply to specific groups of aircraft. They are mandatory changes and are to be complied with within a time limit set by the FAA. When the AD is issued, it is sent to the latest registered owner of the affected aircraft and also to subscribers of the service. The owner should periodically check with his Piper Service Center or A & P mechanic to see whether he has the latest issued AD against his airplane. The owner is solely responsible for keeping up with AD's.

Piper Aircraft Corporation takes a continuing interest in having the owner get the most efficient use from his airplane and keeping it in the best mechanical condition. Consequently, Piper Aircraft from time to time issues Service Bulletins, Service Letters, and Service Spares Letters relating to the aircraft.

Service Bulletins are of special importance and Piper considers compliance mandatory. These are sent to the latest registered owners and Piper Service Centers.

Service Letters deal with product improvements and service hints pertaining to the aircraft. They are sent to Piper Service Centers and sometimes directly to owners so they can properly service the aircraft and keep it up to date with the latest changes. Owners should give careful attention to the Service Letter information.

Service Spares Letters, which are usually sent to Piper Service Centers, offer improved parts, kits and optional equipment which are not available originally and which may be of interest to the owner.

An owner should periodically check with a Piper Service Center to find out the latest information to keep his aircraft up to date.

Piper Aircraft Corporation has a Subscription Service for the Service Bulletins, Service Letters and Service Spares Letters. The service is offered to interested persons such as owners, pilots and mechanics at a nominal fee, and may be obtained through Piper Service Centers. Owners residing outside of the United States are urged to subscribe to this service since Piper can seldom otherwise obtain the addresses of foreign owners. Service Product Support Manuals and revisions are available through a Piper Service Center.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

TABLE OF CONTENTS (cont.)

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

PROCEDURE MANUAL

The Piper Programmed Inspection meets the requirements of the Progressive Inspection Procedures as outlined in the Federal Aviation Regulations Part 43 - Part 91 and Circular #A/C 135-3.

The purpose of the Piper Programmed Inspection is to allow maximum utilization of the aircraft, reduce maintenance inspection cost and maintain a maximum standard of continuous airworthiness.

Owners and operators of the Piper Seneca II are reminded that certain requirements must be met before the Piper Continuous Inspection Procedures can be utilized. These requirements are contained in the Federal Aviation Regulations Part 43, Maintenance, Preventive Maintenance, rebuilding and alteration, and Part 91, General Operating and Flight Rules. Before the aircraft is started on the Piper Programmed Inspection, a complete initial inspection is required; the Piper Inspection Report may be used to meet this requirement.

The inspection frequency used in the Piper Programmed Inspection is based on previous PA-34 Operating experience. However, adjustments to the inspection intervals can be made should experience indicate this is necessary.

Discrepancies found during inspections will be corrected and entered on the Discrepancy Record. The person conducting the inspection will determine if the condition is of a nature that must be corrected during the Inspection or entered on the Discrepancy record to be corrected at the next Event Inspection.

Equipment changes necessary as a result of work done on the Routine Inspection will be entered on the (ECR) Equipment Change Record for equipment time control.

The Piper Programmed Inspection has the following basic features:

1. The Four -4- Event Inspections.
2. The Special Inspections
3. The Operational Inspection
4. The Event Inspection Record and Sign Off Sheet.
5. The Continuous Cycle Inspection Record and Sign Off Sheet.
6. The Discrepancy Record.
7. Service Publication Compliance Record.
8. The Federal Aviation Airworthiness Directives Compliance Record.
9. The ECR - Equipment Change Record
10. Access Panels and Plates.

1. Event Inspections.

Consist of four predetermined location inspections, both routine and detailed as indicated on each event sample. The Event Inspection is conducted each 50 hours and must be done in sequence.

Late compliance with the Event Inspection Interval of 50 hours may be extended by not more than five flying hours (10% of Event Inspection Interval). The excess time, however, is included in computing the next 50 flying hours of service.

Early compliance can be done at the owner/operator's discretion for convenience of scheduling. However, while early compliance is accomplished, the 50 flying hour interval for the next event inspection will be maintained.

The Event Inspections are arranged so that the 200 flying hour cycle results in a complete inspection. When the Four Events are complete and recorded, an entry is made in the cycle record which is the running log or current status of the aircraft inspections.

Each event will be recorded in the event record.

Event #1

To be performed at the 50 - 250 - 450 - 650 - 850 Flying Hour Intervals.

Consist of -

1. Right Propeller, Routine
2. Right Engine, Routine
3. Right Turbocharger, Routine
4. Left Propeller, Detailed
5. Left Engine, Detailed
6. Left Turbocharger, Detailed
7. Cabin, Detailed
8. Fuselage, Empennage, Detailed
9. Landing Gear, Routine
10. Right Wing, Routine
11. Left Wing, Detailed

Event #2

To be performed at the 100 - 300 - 500 - 700 - 900 Flying Hour Intervals.

Consist of -

1. Left Propeller, Routine
2. Left Engine, Routine
3. Left Turbocharger, Routine
4. Right Propeller, Detailed
5. Right Engine, Detailed
6. Right Turbocharger, Detailed
7. Cabin, Routine
8. Fuselage, Empennage, Routine
9. Landing Gear, Detailed
10. Left Wing Routine
11. Right Wing, Detailed

Event #3

To be performed at the 150 - 350 - 550 - 750 - 950 Flying Hour Intervals.

Consist of -

1. Right Propeller, Routine
2. Right Engine, Routine
3. Right Turbocharger, Routine

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

Event #3 (cont.)

4. Left Propeller, Detailed
5. Left Engine, Detailed
6. Left Turbocharger, Detailed
7. Cabin, Detailed
8. Fuselage, Empennage, Detailed
9. Landing Gear, Routine
10. Right Wing, Routine
11. Left Wing, Detailed

Event #4

To be performed at the 200 - 400 - 600 - 800 - 1000 Flying Hour Intervals.

Consist of -

1. Left Propeller, Routine
2. Left Engine, Routine
3. Left Turbocharger, Routine
4. Right Propeller, Detailed
5. Right Engine, Detailed
6. Right Turbocharger, Detailed
7. Cabin, Routine
8. Fuselage, Empennage, Routine
9. Landing Gear, Detailed
10. Left Wing, Routine
11. Right Wing, Detailed

2. Special Inspections - are special inspections to be performed and recorded with the appropriate Event Inspection.

3. Inspection Notes - are special notes which give more detail to items in Event Inspection.

4. Operational Inspection - to be performed upon completion of each Event Inspection.

5. Event Inspection Record and Sign Off Sheet - is a permanent record and contains the following:

    1. Inspection Period Number
    2. Aircraft Hours - (Tach)
    3. Date
    4. Work Order Number
    5. Signature and Certificate Number of person conducting Inspection
    6. The following Certification Statement:

        I have inspected this aircraft in accordance with Piper Aircraft Corporation's Continuous Inspection Procedures and a list of discrepancies have been given to the owner/operator, and appropriate entries have been made in the Aircraft and Engine Logbooks.

6. Continuous Cycle Inspection Record and Sign Off Sheet - is conducted upon completion of four (4) event inspections (200 flying hours). The cycle inspection consists of ten (10) items, which determine that the cycle paperwork and inspection records are in order before starting on the next cycle. The CR (cycle record) has the aircraft registration number, serial number, and columns for recording each cycle inspection.

NOTE: MINIMUM ONE CYCLE COMPLETED WITHIN 12 MONTHS.

7. Discrepancy Record (DR) - is a log of conditions for corrective action at the next routine or event inspection as determined by the maintenance personnel. FAA Airworthiness Directives and/or manufacturer's service publications, not requiring immediate action may be entered on the (DR) providing compliance with the A.D. or service publication at the next routine or event will be within the time allowance permitted. Certain FAA or manufacturer's mandatory inspections may have to be accomplished before further flight, in which case, their compliance should be recorded on the appropriate record.

Event #4 (cont.)

8. Service Publication Compliance Record - is used to record the compliance of all manufacturers service publications, and contains the following information:

    1. Name of Manufacturer
    2. Publication - Bulletin - Letter - etc.
    3. Number
    4. Compliance Date
    5. Aircraft Hours
    6. Work Order Number
    7. Signature and Certificate Number of person accomplishing the compliance

9. FAA Airworthiness Directives Compliance Record - is used to record the compliance of applicable A.D. Notes and contains the following:

    1. A.D. Note Number
    2. Compliance Date
    3. Aircraft Hours - (Tach)
    4. Method of Compliance
    5. Work Order Number
    6. Signature and Certificate Number

10. ECR - Equipment Change Record - is a form to record equipment changes, which allows the control of equipment times for inspection or overhaul replacement. By use of the ECR the "Out of Sequence" equipment can be reviewed to permit a projection of equipment "due" times in relation to the aircraft tachometer times.

11. Access Panels and Plates Chart - This chart shows the location of removable access panels and plates utilized during inspections.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

DEFINITIONS

1. Inspections - Utilizing acceptable methods, techniques, and practices to determine physical condition and detect defects.

2. Detailed Inspections - Consists of a thorough examination of the appliances, the aircraft, and the components and systems with such disassembly as is necessary to determine condition.

3. Approved Inspection - Means a continuing airworthiness inspection of an airplane and its various component and system at scheduled interval in accordance with procedures approved by the Administrator of the Federal Aviation Administration.

4. Inspection Time Limitations - Inspection intervals called out in the inspection schedule shall not be exceeded by more than ten (10) percent and will be deducted from the next inspection. This ten (10) percent shall only be used to return the aircraft back to the maintenance base when inspection intervals fall due and the aircraft is away from home base.

5. Test - Operation of aircraft components, appliances, or systems to evaluate functional performance.

6. Operational Test - This test is used to ascertain that a system component is in operable condition and can be performed with the equipment installed in the aircraft. In addition, each operational test must be performed by an FAA Certificated Repair Station appropriately rated or by a Certificated Mechanic. The recording of the above function must be made in the permanent aircraft records by the authorized individual performing the test.

7. Functional Test - This test is used to ascertain that a system or component is functioning properly in all aspects in conformance with minimum acceptable design specifications. This test may require the use of supplemental ground support of bench test equipment. In addition, each functional test must be performed by an FAA Certificated Repair Station with appropriate ratings or by a Certificated Mechanic. The recording of the above function must be made in the permanent aircraft records by the authorized individual performing the test.

8. Checks - Examinations in the form of comparisons with stated standards for the purpose of verifying condition, accuracy, and tolerances.

9. Bench Check - Means removal of component from aircraft for a visual inspection for cleanliness, impending failure, need for lubrication, repair or replacement of parts; correction of items found by the visual inspection, calibration to at least the manufacturer's specifications using the manufacturer's recommended test equipment or standards or the equivalent.

DEFINITIONS (cont.)

Each bench test will be performed by the manufacturer or by an FAA Certificated Repair Station with appropriate rating or by a certificated mechanic. This test will be performed at the scheduled interval regardless of any bench test performed on a particular component while being repaired/overhauled before scheduled interval bench test. The authorized person re-installing component in aircraft will perform necessary operational test to ascertain that the system is functioning properly. This person will log bench test and operational test in the permanent aircraft records. Serviceable parts that were issued to the component will be filed in the aircraft permanent records.

10. Maintenance - The word maintenance as defined by FAR 1 means "inspection, overhaul, repair preservation, and the replacement of parts, but excludes preventive maintenance." However, where referenced in this inspection program the word "maintenance" means inspection and the replacement of time life limited parts as listed in FAA approved data.

11. Routine Inspections - Consists of a visual examination or check of the appliances, the aircraft, and its components and systems insofar as practicable without disassembly.

12. Special Inspections - Involve those components, systems or structure which by their application or intended use require an inspection peculiar to more extensive in scope or at a time period other than beyond that which is normally accomplished during the 200 hour cycle of events.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

PROGRAM RESPONSIBILITY

The person responsible for scheduling the inspections required under this program must enter his or her name below and forward the original copy of this form to their local FAA-GADO office. A duplicate copy should be maintained in this manual.

Name _____

Address _____
Street

_____
City State Zip

Telephone Number _____

Any change in personnel responsible for scheduling the inspection program, will be added with the appropriate information on a separate sheet of paper and the original copy sent to the local FAA-GADO office, while a duplicate copy is attached behind this page. The previous information sheet will be left in the booklet and the word "CHANGED" will be written across the deleted information.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

REVISIONS

All necessary revisions to this Inspection Program will be the direct responsibility of the manufacturer. No changes can be made to this Inspection Program unless prior notice is given to the responsible F.A.A. District Office--who, in turn, must approve of the change prior to its enactment. A record of all revisions will be maintained by the owner/operator on the revision of this manual.

RECORD OF NORMAL REVISIONS

REV. NO.	REV. APPROVAL DATE	PAGE NO.	INSERTED BY/DATE

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

AWAY FROM HOME STATION REQUIREMENTS

If the airplane is to be away from the home location at the time an inspection is due, the Pilot-in-Command of the flight will take with him all Sign Off Sheets which will be required for the inspection, and a copy of this manual. The inspection will be conducted or supervised by one of the following:

1. An appropriately certified repair station.
2. An appropriately rated certified mechanic.

The results of the inspection will be noted on the proper Sign Off Sheets which are then brought back to the home base. The pilot will be responsible for all inspection forms and work sheet entries with mechanics and/or inspector's signature and identification.

The Pilot-in-Command should also ascertain that the appropriate logbook entries have been made in the aircraft and engine logbooks.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #1

RIGHT PROPELLER, ROUTINE

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart (See Note 10).
- ☐ 5. Check propeller air pressure (at least once a month).

RIGHT ENGINE, ROUTINE

CAUTION

Ground Magneto Primary Circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 3. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 4. Clean engine.

CAUTION

Use caution not to contaminate pressure pump with cleaning fluid.

- ☐ 5. Inspect ignition harness and insulators (high tension leakage and continuity) (See Note 9).
- ☐ 6. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 7. Clean injector nozzles as required (Clean with acetone only).
- ☐ 8. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 9. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 10. Check magneto RPM drop.
- ☐ 11. Check full power RPM.
- ☐ 12. Check full power manifold pressure.
- ☐ 13. Check full power fuel flow.
- ☐ 14. Check idle RPM and mixture.
- ☐ 15. Reinstall engine cowl.

RIGHT TURBOCHARGER, ROUTINE

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps
- ☐ or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT 1 (cont.)

- ☐ 4. Check carefully all turbo support brackets, struts, etc, for breakage, bagging, or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run up engines and check all instruments for smooth, steady response.

LEFT PROPELLER, DETAILED

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart (see note 10).
- ☐ 5. Inspect spinner mounting brackets for cracks.
- ☐ 6. Inspect propeller mounting bolts and safety (check torque if safety is broken).
- ☐ 7. Inspect hub parts for cracks and corrosion.
- ☐ 8. Rotate blades of constant speed propeller and check for tightness in hub pilot tube.
- ☐ 9. Inspect complete propeller and spinner assembly for security, chafing, cracks, deterioration, wear and correct installation.
- ☐ 10. Check propeller air pressure (at least once a month).

LEFT ENGINE, DETAILED (refer to VSP 69)

— WARNING —

Ground magneto primary circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Clean and inspect cowling for cracks, distortion and loose or missing fasteners.
- ☐ 3. Drain oil sump.
- ☐ 4. Clean suction oil strainer at oil change (Inspect strainer for foreign particles).
- ☐ 5. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 6. Inspect oil temperature sender unit for leaks and security.
- ☐ 7. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (see note 6).
- ☐ 8. Clean and inspect oil radiator cooling fins.
- ☐ 9. Fill engine with oil per information on cowl or lubrication chart.

— CAUTION —

Do not contaminate pressure pump with cleaning fluid.

- ☐ 10. Clean engine.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #1 (cont.)

- ☐ 11. Inspect condition of spark plugs (clean and adjust gap as required) (See Note 9).
- ☐ 12. Check cylinder compression (See Note 7).
- ☐ 13. Inspect ignition harness and insulators (high tension leakage and continuity) (See Notes 9 and 23).
- ☐ 14. Check magneto points for proper clearance (maintain clearance at .018 +/- .006) (See Note 9).
- ☐ 15. Inspect magneto for oil seal leakage.
- ☐ 16. Inspect breaker felts for proper lubrication.
- ☐ 17. Check magnetos to engine timing.
- ☐ 18. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 19. Clean injector nozzles as required (Clean with acetone only).
- ☐ 20. Replace gyro air inlet filter, left and right (See Note 13).
- ☐ 21. Remove induction air box valve and inspect for evidence of excessive wear or cracks. Replace defective parts.
- ☐ 22. Inspect fuel injector attachments for loose hardware.
- ☐ 23. Inspect intake seals for leaks and clamps for tightness.
- ☐ 24. Inspect all air inlet duct hoses (Replace as required).
- ☐ 25. Inspect condition of flexible fuel lines.
- ☐ 26. Inspect fuel system for leaks (See Note 17).
- ☐ 27. Inspect condition and operation of fuel pumps (engine driven and electric).
- ☐ 28. Inspect pressure pumps and lines.
- ☐ 29. Inspect throttle, alternate air, mixture and propeller governor controls for security, travel and operating condition.
- ☐ 30. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 31. Inspect breather tubes for obstructions and security.
- ☐ 32. Inspect crankcase for cracks, leaks and security of seam bolts.
- ☐ 33. Inspect engine mounts for cracks and loose mountings.
- ☐ 34. Inspect rubber engine mount bushings for deterioration (Replace as required).
- ☐ 35. Inspect all engine baffles.
- ☐ 36. Inspect firewall seals.
- ☐ 37. Inspect condition of alternator and starter.
- ☐ 38. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 39. Lubricate all controls (See Note 10).
- ☐ 40. Check magneto RPM drop.
- ☐ 41. Check full power RPM.
- ☐ 42. Check full power manifold pressure.
- ☐ 43. Check full power fuel flow.
- ☐ 44. Check idle RPM and mixture.
- ☐ 45. Inspect and clean oil pressure relief valve.
- ☐ 46. Check unmetered fuel pressure at idle.
- ☐ 47. Reinstall engine cowl.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #1 (cont.)

LEFT TURBOCHARGER, DETAILED

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.
- ☐ 4. Carefully check all turbo support brackets, struts, etc., for breakage, bagging or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run-up engines, check all instruments for smooth, steady response.

CABIN, DETAILED

- ☐ 1. Inspect entrance doors, cargo and baggage doors for damage and operation. Inspect condition and security of latches and hinges. (See latest Piper Service Bulletin No. 633).
- ☐ 2. Inspect windows for condition and security.
- ☐ 3. Inspect upholstery for tears.
- ☐ 4. Inspect seats, seat belts, security brackets and bolts.
- ☐ 5. Inspect trim system operation.
- ☐ 6. Inspect operation and condition of rudder pedals.
- ☐ 7. Inspect parking brake handle and toe brakes for operation and cylinder leaks.
- ☐ 8. Inspect operation and condition of control wheels, column, pulleys, bobweight and cables.
- ☐ 9. Inspect condition of flap control cable attachment bolt.
- ☐ 10. Check landing, navigation, cabin and instrument lights.
- ☐ 11. Inspect instruments, lines and attachments (See latest Piper Service Bulletin No. 584).
- ☐ 12. Inspect gyro operated instruments and electric turn and bank (Overhaul or replace as required).
- ☐ 13. Replace filters of gyro horizon and directional gyro or replace central air filters (where applicable) (See Note 13).
- ☐ 14. Inspect altimeter (Calibrate system in accordance with FAR 91.170 if appropriate).
- ☐ 15. Perform pitot-static tests if appropriate (Refer to FAR 91.170).
- ☐ 16. Inspect operation of fuel selector valves.
- ☐ 17. Inspect operation of fuel drains.
- ☐ 18. Inspect condition and operation of heater controls and ducts.
- ☐ 19. Inspect condition and operation of air vents.
- ☐ 20. Inspect condition of air conditioning ducts.
- ☐ 21. Remove and clean air conditioning evaporator filter.
- ☐ 22. Inspect stabilator control stops to insure stops have not loosened and jam nuts are tight.
- ☐ 23. Inspect rudder control stops to insure stops have not loosened and jam nuts are tight.

FUSELAGE, EMPENNAGE, DETAILED

- ☐ 1. Remove inspection plates and panels.
- ☐ 2. Inspect battery, box and cables. (Inspect at least every 30 days. Flush box as required and fill battery per instructions on box.)

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left: Right:	Left: Right:

EVENT #1 (cont.)

- ☐ 3. Check fluid in brake reservoir (Fill as required).
- ☐ 4. Inspect electronics installations for security (See latest Piper Service Bulletin No. 553).
- ☐ 5. Inspect antenna mounts and wiring for security and condition.
- ☐ 6. Inspect bulkheads and stringers for damage.
- ☐ 7. Inspect hydraulic pump motor brushes (Refer to Note 16).
- ☐ 8. Check hydraulic pump fluid level (Fill as required).
- ☐ 9. Inspect hydraulic lines for damage and leaks.
- ☐ 10. Check air conditioning system for freon leaks.
- ☐ 11. Check freon level in sight gauge of receiver-dehydrator (Refer to Service Manual - Section XIV).
- ☐ 12. Inspect air conditioning condenser air scoop rigging (Refer to Service Manual - Section XIV).
- ☐ 13. Inspect heater (See Note 18 for overhaul information).
- ☐ 14. Inspect fuel lines, valves and gauges for damage and operation.
- ☐ 15. Inspect security of all lines.
- ☐ 16. Inspect vertical fin and rudder surface for damage.
- ☐ 17. Inspect rudder hinges, horn and attachments for damage and operation. (Refer to latest Piper Service Bulletin No. 699).
- ☐ 18. Inspect vertical fin attachments for condition and security (See latest Piper Service Bulletin No. 579).
- ☐ 19. Inspect ELT installation and condition of battery and antenna (See latest Piper Service Letter No. 820).
- ☐ 20. Inspect rudder tab hinge bolts for excess wear (Replace as required) (See Note 14).
- ☐ 21. Inspect rudder trim mechanism (See Note 14).
- ☐ 22. Inspect aileron control stops to insure stops have not loosened and jam nuts are tight.
- ☐ 23. Inspect stabilator surface for damage.
- ☐ 24. Inspect stabilator, tab hinges, horn and attachments for damage and operation.
- ☐ 25. Inspect condition of stabilator attachment **(See latest Piper Service Bulletins 579 and 856.)**
- ☐ 26. Inspect stabilator and tab hinge bolts and bearings for excess wear.
- ☐ 27. Inspect condition and operation of stabilator trim mechanism.
- ☐ 28. Check all cable tensions using tensiometer (See Note 15).
- ☐ 29. Inspect aileron, rudder, stabilator, stabilator trim cables, turnbuckles, guides and pulleys for condition, damage, safety, tension and operation.
- ☐ 30. Inspect all control cables, electrical leads, air ducts and attaching parts for security, routing, chafing, deterioration, wear and correct installation (Refer to latest Piper Service Bulletin No. 555).
- ☐ 31. Lubricate per lubrication chart (See Note 10).
- ☐ 32. Inspect strobe lights for security and operation.
- ☐ 33. Inspect condition and security of Autopilot bridle cable clamps.
- ☐ 34. Reinstall inspection plates and panels.

LANDING GEAR, ROUTINE

- ☐ 1. Inspect oleo struts for proper extension (Check for proper fluid level and air pressure as required).
- ☐ 2. Check tire pressure (Refer to Service Manual).
- ☐ 3. Lubricate per lubrication chart (See Note 10).

SERIAL NUMBER REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
	Left:	Left:
	Right:	Right:

EVENT #1 (cont.)

RIGHT WING, ROUTINE

- ☐ 1. Lubricate per lubrication chart (See Note 10).
- ☐ 2. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).

LEFT WING, DETAILED

- ☐ 1. Remove inspection plates and fairings.
- ☐ 2. Inspect surfaces and tips for damage, loose rivets and condition of walkway.
- ☐ 3. Inspect aileron hinges and attachments.
- ☐ 4. Inspect aileron cables, pulleys and bellcrank for damage and operation.
- ☐ 5. Inspect flaps and attachments for damage and operation.
- ☐ 6. Inspect condition of bolts used with hinges (Replace as required).
- ☐ 7. Lubricate per lubrication chart (See Note 10).
- ☐ 8. Inspect wing attachment bolts, nuts and brackets for security and condition.
- ☐ 9. Inspect all control cables, electrical leads, air ducts, lines and attaching parts for security, routing, chafing, deterioration, wear and correct installation.
- ☐ 10. Inspect fuel tanks and lines for leaks, water and contamination (See Note 11).
- ☐ 11. Remove drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).
- ☐ 12. Ascertain that fuel tanks are marked for minimum octane rating and capacity.
- ☐ 13. Inspect condition of fuel tank vents (See Note 12).
- ☐ 14. Reinstall inspection plates and fairings.

SPECIAL INSTRUCTIONS
INSPECTION NOTES
OPERATIONAL INSPECTION
SERVICE PUBLICATIONS
INSPECTION RECORD - WRITTEN ENTRY
CHECK CONDITION REPORT ENTRIES

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #2

LEFT PROPELLER, ROUTINE

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart (See Note 10).
- ☐ 5. Check propeller air pressure (at least once a month).

LEFT ENGINE, ROUTINE

CAUTION

Ground Magneto Primary Circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 3. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 4. Clean engine.

CAUTION

Use caution not to contaminate pressure pump with cleaning fluid.

- ☐ 5. Inspect ignition harness and insulators (high tension leakage and continuity) (See Note 9).
- ☐ 6. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 7. Clean injector nozzles as required (Clean with acetone only).
- ☐ 8. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 9. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 10. Check magneto RPM drop.
- ☐ 11. Check full power RPM.
- ☐ 12. Check full power manifold pressure.
- ☐ 13. Check full power fuel flow.
- ☐ 14. Check idle RPM and mixture.
- ☐ 15. Reinstall engine cowl.

LEFT TURBOCHARGER, ROUTINE

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.
- ☐ 4. Carefully check all turbo support brackets, struts, etc., for breakage, bagging or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run-up engines, check all instruments for smooth, steady response.

SERIAL NUMBER	SERIAL NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT 2 (cont)

RIGHT PROPELLER, DETAILED

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart.
- ☐ 5. Inspect spinner mounting brackets for cracks.
- ☐ 6. Inspect propeller mounting bolts and safety (check torque if safety is broken).
- ☐ 7. Inspect hub parts for cracks and corrosion.
- ☐ 8. Rotate blades of constant speed propeller and check for tightness in hub pilot tube.
- ☐ 9. Inspect complete propeller and spinner assembly for security, chafing, cracks, deterioration, wear, and correct installation.
- ☐ 10. Check propeller air pressure (at least once a month).

RIGHT ENGINE, DETAILED (refer to VSP 69)

— WARNING —

Ground magneto primary circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Clean and inspect cowling for cracks, distortion and loose or missing fasteners.
- ☐ 3. Drain oil sump.
- ☐ 4. Clean suction oil strainer at oil change (inspect strainer for foreign particles).
- ☐ 5. Change full flow (spin-on type) oil filter element (inspect element for foreign particles). Check oil level after installing new filter.
- ☐ 6. Inspect oil temperature sender unit for leaks and security.
- ☐ 7. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 8. Clean and inspect oil radiator cooling fins.
- ☐ 9. Fill engine with oil per information on cowl or lubrication chart.

— CAUTION —

Do not contaminate pressure pump with cleaning fluid.

- ☐ 10. Clean engine.

- ☐ 11. Inspect condition of spark plugs (clean and adjust gap as required) (see note 9).
- ☐ 12. Check cylinder compression (see note 7).
- ☐ 13. Inspect ignition harness and insulators for high tension leakage and continuity (see notes 9 and 23).
- ☐ 14. Check magneto points for proper clearance (maintain clearance at 0.018 +/- 0.006) (see ☐ note 9).
- ☐ 15. Inspect magneto for oil seal leakage.
- ☐ 16. Inspect breaker felts for proper lubrication.
- ☐ 17. Check magnetos to engine timing.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #2 (cont.)

- ☐ 18. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 19. Clean injector nozzles as required (Clean with acetone only).
- ☐ 20. Replace gyro air inlet filter, left and right (See Note 13).
- ☐ 21. Remove induction air box valve and inspect for evidence of excessive wear or cracks. Replace defective parts.
- ☐ 22. Inspect fuel injector attachments for loose hardware.
- ☐ 23. Inspect intake seals for leaks and clamps for tightness.
- ☐ 24. Inspect all air inlet duct hoses (Replace as required).
- ☐ 25. Inspect condition of flexibile fuel lines.
- ☐ 26. Inspect fuel system for leaks (See Note 17).
- ☐ 27. Inspect condition and operation of fuel pumps (engine driven and electric).
- ☐ 28. Inspect pressure pumps and lines.
- ☐ 29. Inspect throttle, alternate air, mixture and propeller governor controls for security, travel and operating condition.
- ☐ 30. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 31. Inspect breather tubes for obstructions and security.
- ☐ 32. Inspect crankcase for cracks, leaks and security of seam bolts.
- ☐ 33. Inspect engine mounts for cracks and loose mountings.
- ☐ 34. Inspect rubber engine mount bushings for deterioration (Replace as required).
- ☐ 35. Inspect all engine baffles.
- ☐ 36. Inspect firewall seals.
- ☐ 37. Inspect condition of alternator and starter.
- ☐ 38. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 39. Lubricate all controls (See Note 10).
- ☐ 40. Check magneto RPM drop.
- ☐ 41. Check full power RPM.
- ☐ 42. Check full power manifold pressure.
- ☐ 43. Check full power fuel flow.
- ☐ 44. Check idle RPM and mixture.
- ☐ 45. Inspect and clean oil pressure relief valve.
- ☐ 46. Check unmetered fuel pressure at idle.
- ☐ 47. Reinstall engine cowl.

RIGHT TURBOCHARGER, DETAILED

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.
- ☐ 4. Carefully check all turbo support brackets, struts, etc., for breakage, bagging or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run-up engines, check all instruments for smooth, steady response.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #2 (cont.)

CABIN, ROUTINE

☐ 1. Check landing, navigation, cabin and instrument lights.

FUSELAGE, EMPENNAGE, ROUTINE

☐ 1. Inspect battery, box and cables. (Inspect at least every 30 days. Flush box as required and fill battery per instructions on box.)
☐ 2. Check fluid in brake reservoir (Fill as required).
☐ 3. Check hydraulic pump fluid level (Fill as required).
☐ 4. Inspect ELT installation and condition of battery and antenna (See latest revision Piper Service Letter No. 820).
☐ 5. Inspect heater (See Note 18 for overhaul information).
☐ 6. Lubricate per lubrication chart (See Note 10).

LANDING GEAR, DETAILED

☐ 1. Inspect oleo struts for proper extension (Check for proper fluid level and air pressure as required).
☐ 2. Inspect nose gear steering control and travel.
☐ 3. Inspect wheel alignment.
☐ 4. Put airplane on jacks (Refer to Maintenance Manual).
☐ 5. Inspect tires for cuts, uneven or excessive wear and slippage.
☐ 6. Remove wheels, clean, check and repack bearings.
☐ 7. Inspect wheels for cracks, corrosion and broken bolts.
☐ 8. Check tire pressure (Refer to Service Manual).
☐ 9. Inspect condition of brake lining and disc.
☐ 10. Inspect condition of brake backing plates.
☐ 11. Inspect condition and security of brake lines and retaining clamps.
☐ 12. Inspect condition of centering spring and bungees.
☐ 13. Inspect gear forks for damage.
☐ 14. Inspect oleo struts for fluid leaks and scoring.
☐ 15. Inspect gear struts, attachments, torque links, retraction links and bolts for condition and security. (See Note 20).
☐ 16. Inspect downlocks for operation and adjustment.
☐ 17. Inspect torque link bolts and bushings (Rebush as required).
☐ 18. Inspect drag and side brace link bolts (Replace as required).
☐ 19. Inspect gear doors and attachments for condition and security.
☐ 20. Inspect gear warning horn and light for operation.
☐ 21. Retract gear - check operation and gear doors for clearance.
☐ 22. With gear retracted, check "Free Fall" valve operation.
☐ 23. Check operation of squat switch.
☐ 24. Check downlock switches, up switches and electrical leads for operation, condition and security of mounting.
☐ 25. Inspect all hydraulic lines, electrical leads and attaching parts for security, routing, chafing, deterioration, wear and correct installation (See latest Piper Service Letter No. 808).
☐ 26. Lubricate per lubrication chart (See Note 10).
☐ 27. Ascertain landing gear is down and locked; remove airplane from jacks.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #2 (cont.)

LEFT WING, ROUTINE

- ☐ 1. Lubricate per lubrication chart (See Note 10).
- ☐ 2. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).

RIGHT WING, DETAILED

- ☐ 1. Remove inspection plates and fairings.
- ☐ 2. Inspect surface and tips for damage, loose rivets and condition of walkway.
- ☐ 3. Inspect aileron hinges and attachments.
- ☐ 4. Inspect aileron cables, pulleys and bellcranks for damage and operation.
- ☐ 5. Inspect flaps and attachments for damage and operation.
- ☐ 6. Inspect condition of bolts used with hinges (Replace as required).
- ☐ 7. Lubricate per lubrication chart (See Note 10).
- ☐ 8. Inspect wing attachment bolts, nuts and brackets for security and condition.
- ☐ 9. Inspect all control cables, air ducts, electrical leads, lines and attaching parts for security, routing, chafing, deterioration, wear and correct installation.
- ☐ 10. Inspect fuel tanks and lines for leaks, water and contamination (See Note 11).
- ☐ 11. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).
- ☐ 12. Ascertain that fuel tanks are marked for minimum octane rating and capacity.
- ☐ 13. Inspect condition of fuel tank vents (See Note 12).
- ☐ 14. Reinstall inspection plates and fairings.

SPECIAL INSTRUCTIONS
INSPECTION NOTES
OPERATIONAL INSPECTION
SERVICE PUBLICATIONS
INSPECTION RECORD - WRITTEN ENTRY
CHECK CONDITION REPORT ENTRIES

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #3

RIGHT PROPELLER, ROUTINE

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart.
- ☐ 5. Check propeller air pressure (at least once a month).

RIGHT ENGINE, ROUTINE

CAUTION

Ground Magneto Primary Circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 3. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 4. Clean engine.

CAUTION

Use caution not to contaminate pressure pump with cleaning fluid.

- ☐ 5. Inspect ignition harness and insulators (high tension leakage and continuity) (See Note 9).
- ☐ 6. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 7. Clean injector nozzles as required (Clean with acetone only).
- ☐ 8. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 9. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 10. Check magneto RPM drop.
- ☐ 11. Check full power RPM.
- ☐ 12. Check full power manifold pressure.
- ☐ 13. Check full power fuel flow.
- ☐ 14. Check idle RPM and mixture.
- ☐ 15. Reinstall engine cowl.

RIGHT TURBOCHARGER, ROUTINE

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT 3 (cont)

- ☐ 4. Check carefully all turbo support brackets, struts, etc, for breakage, bagging, or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run up engines, check all instruments for smooth, steady response.

LEFT PROPELLER, DETAILED

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart.
- ☐ 5. Inspect spinner mounting brackets for cracks.
- ☐ 6. Inspect propeller mounting bolts and safety (check torque if safety is broken).
- ☐ 7. Inspect hub parts for cracks and corrosion.
- ☐ 8. Rotate blades of constant speed propeller and check for tightness in hub pilot tube.
- ☐ 9. Inspect complete propeller and spinner assembly for security, chafing, cracks, deterioration, wear and correct installation.
- ☐ 10. Check propeller air pressure (at least once a month).

LEFT ENGINE, DETAILED (refer to VSP 69)

— WARNING —

Ground magneto primary circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Clean and inspect cowling for cracks, distortion and loose or missing fasteners.
- ☐ 3. Drain oil sump.
- ☐ 4. Clean suction oil strainer at oil change (inspect strainer for foreign particles).
- ☐ 5. Change full flow (spin-on type) oil filter element(inspect element for foreign particles). Check oil level after installing new filter.
- ☐ 6. Inspect oil temperature sender unit for leaks and security.
- ☐ 7. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (see note 6).
- ☐ 8. Clean and inspect oil radiator cooling fins.
- ☐ 9. Fill engine with oil per information on cowl or lubrication chart.

— CAUTION —

Do not contaminate pressure pump with cleaning fluid.

- ☐ 10. Clean engine.

- ☐ 11. Inspect condition of spark plugs (clean and adjust gap as required) (see note 9).
- ☐ 12. Check cylinder compression (see note 7).
- ☐ 13. Inspect ignition harness and insulators for high tension leakage and continuity (see notes 9 and 23).

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #3 (cont.)

- ☐ 14. Check magneto points for proper clearance (maintain clearance at .018 +/- .006) (See Note 9).
- ☐ 15. Inspect magneto for oil seal leakage.
- ☐ 16. Inspect breaker felts for proper lubrication.
- ☐ 17. Check magnetos to engine timing.
- ☐ 18. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 19. Clean injector nozzles as required (Clean with acetone only).
- ☐ 20. Replace gyro air inlet filter, left and right (See Note 13).
- ☐ 21. Remove induction air box valve and inspect for evidence of excessive wear or cracks. Replace defective parts.
- ☐ 22. Inspect fuel injector attachments for loose hardware.
- ☐ 23. Inspect intake seals for leaks and clamps for tightness.
- ☐ 24. Inspect all air inlet duct hoses (Replace as required).
- ☐ 25. Inspect condition of flexible fuel lines.
- ☐ 26. Inspect fuel system for leaks (See Note 17).
- ☐ 27. Inspect condition and operation of fuel pumps (engine driven and electric).
- ☐ 28. Inspect pressure pumps and lines.
- ☐ 29. Inspect throttle, alternate air, mixture and propeller governor controls for security, travel and operating condition.
- ☐ 30. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 31. Inspect breather tubes for obstructions and security.
- ☐ 32. Inspect crankcase for cracks, leaks and security of seam bolts.
- ☐ 33. Inspect engine mounts for cracks and loose mountings.
- ☐ 34. Inspect rubber engine mount bushings for deterioration (Replace as required).
- ☐ 35. Inspect all engine baffles.
- ☐ 36. Inspect firewall seals.
- ☐ 37. Inspect condition of alternator and starter.
- ☐ 38. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 39. Lubricate all controls (See Note 10).
- ☐ 40. Check magneto RPM drop.
- ☐ 41. Check full power RPM.
- ☐ 42. Check full power manifold pressure.
- ☐ 43. Check full power fuel flow.
- ☐ 44. Check idle RPM and mixture.
- ☐ 45. Inspect and clean oil pressure relief valve.
- ☐ 46. Check unmetered fuel pressure at idle.
- ☐ 47. Reinstall engine cowl.

LEFT TURBOCHARGER, DETAILED

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #3 (cont.)

- ☐ 4. Carefully check all turbo support brackets, struts, etc., for breakage, bagging or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run-up engines, check all instruments for smooth, steady response.

CABIN, DETAILED

- ☐ 1. Inspect entrance doors, cargo and baggage doors for damage and operation. Inspect condition and security of latches and hinges. (See latest Piper Service Bulletin No. 633).
- ☐ 2. Inspect windows for condition and security.
- ☐ 3. Inspect upholstery for tears.
- ☐ 4. Inspect seats, seat belts, security brackets and bolts.
- ☐ 5. Inspect trim system operation.
- ☐ 6. Inspect operation and condition of rudder pedals.
- ☐ 7. Inspect parking brake handle and toe brakes for operation and cylinder leaks.
- ☐ 8. Inspect operation and condition of control wheels, column, pulleys, bobweight and cables.
- ☐ 9. Inspect condition of flap control cable attachment bolt.
- ☐ 10. Check landing, navigation, cabin and instrument lights.
- ☐ 11. Inspect instruments, lines and attachments (See latest revision Piper Service Bulletin No. 584).
- ☐ 12. Inspect gyro operated instruments and electric turn and bank (Overhaul or replace as required).
- ☐ 13. Replace filters of gyro horizon and directional gyro or replace central air filters (where applicable) (See Note 13).
- ☐ 14. Inspect altimeter (Calibrate system in accordance with FAR 91.170 if appropriate).
- ☐ 15. Perform pitot-static tests if appropriate (Refer to FAR 91.170).
- ☐ 16. Inspect operation of fuel selector valves.
- ☐ 17. Inspect operation of fuel drains.
- ☐ 18. Inspect condition and operation of heater controls and ducts.
- ☐ 19. Inspect condition and operation of air vents.
- ☐ 20. Inspect condition of air conditioning ducts.
- ☐ 21. Remove and clean air conditioning evaporator filter.
- ☐ 22. Inspect stabilator control stops to insure stops have not loosened and jam nuts are tight.
- ☐ 23. Inspect rudder control stops to insure stops have not loosened and jam nuts are tight.

FUSELAGE, EMPENNAGE, DETAILED

- ☐ 1. Remove inspection plates and panels.
- ☐ 2. Inspect battery, box and cables. (Inspect at least every 30 days. Flush box as required and fill battery per instructions on box).
- ☐ 3. Check fluid in brake reservoir (Fill as required).
- ☐ 4. Inspect electronics installations for security (See latest Piper Service Bulletin No. 553).
- ☐ 5. Inspect antenna mounts and wiring for security and condition.
- ☐ 6. Inspect bulkheads and stringers for damage.
- ☐ 7. Inspect hydraulic pump motor brushes (Refer to Note 16).
- ☐ 8. Check hydraulic pump fluid level (Fill as required).
- ☐ 9. Inspect hydraulic lines for damage and leaks.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left: Right:	Left: Right:

EVENT #3 (cont.)

- ☐ 10. Check air conditioning system for freon leaks.
- ☐ 11. Check freon level in sight gauge of receiver-dehydrator (Refer to Service Manual - Section XIV).
- ☐ 12. Inspect air conditioning condenser air scoop rigging (Refer to Service Manual - Section XIV).
- ☐ 13. Inspect heater (See Note 18 for overhaul information).
- ☐ 14. Inspect fuel lines, valves and gauges for damage and operation.
- ☐ 15. Inspect security of all lines.
- ☐ 16. Inspect vertical fin and rudder surface for damage.
- ☐ 17. Inspect rudder hinges, horn and attachments for damage and operation.
- ☐ 18. Inspect vertical fin attachments for condition and security (See latest Piper Service Bulletin No. 579).
- ☐ 19. Inspect ELT installation and condition of battery and antenna (See latest Piper Service Letter No. 820).
- ☐ 20. Inspect rudder tab hinge bolts for excess wear (Replace as required) (See Note 14).
- ☐ 21. Inspect rudder trim mechanism (See Note 14).
- ☐ 22. Inspect aileron control stops to insure stops have not loosened and jam nuts are tight.
- ☐ 23. Inspect stabilator surface for damage.
- ☐ 24. Inspect stabilator, tab hinges, horn and attachments for damage and operation.
- ☐ 25. Inspect condition of stabilator attachment. **(See latest Piper Service Bulletin 579 and 856.)**
- ☐ 26. Inspect stabilator and tab hinge bolts and bearings for excess wear.
- ☐ 27. Inspect condition and operation of stabilator trim mechanism.
- ☐ 28. Check all cable tensions using tensiometer (See Note 15).
- ☐ 29. Inspect aileron, rudder, stabilator, stabilator trim cables, turnbuckles, guides and pulleys for condition, damage, safety, tension and operation.
- ☐ 30. Inspect all control cables, electrical leads, air ducts and attaching parts for security, routing, chafing, deterioration, wear and correct installation (Refer to latest Piper Service Bulletin No. 555).
- ☐ 31. Lubricate per lubrication chart (See Note 10).
- ☐ 32. Inspect strobe lights for security and operation.
- ☐ 33. Inspect condition and security of Autopilot bridle cable clamps.
- ☐ 34. Reinstall inspection plates and panels.

LANDING GEAR, ROUTINE

- ☐ 1. Inspect oleo struts for proper extension (Check for proper fluid level and air pressure as required).
- ☐ 2. Check tire pressure (Refer to Service Manual).
- ☐ 3. Lubricate per lubrication chart (See Note 10).

RIGHT WING, ROUTINE

- ☐ 1. Lubricate per lubrication chart (See Note 10).
- ☐ 2. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).

LEFT WING, DETAILED

- ☐ 1. Remove inspection plates and fairings.
- ☐ 2. Inspect surfaces and tips for damage, loose rivets and condition of walkway.
- ☐ 3. Inspect aileron hinges and attachments.
- ☐ 4. Inspect aileron cables, pulleys and bellcrank for damage and operation.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #3 (cont.)

- ☐ 5. Inspect flaps and attachments for damage and operation.
- ☐ 6. Inspect condition of bolts used with hinges (Replace as required).
- ☐ 7. Lubricate per lubrication chart (See Note 10).
- ☐ 8. Inspect wing attachment bolts, nuts and brackets for security and condition.
- ☐ 9. Inspect all control cables, electrical leads, air ducts, lines and attaching parts for security, routing, chafing, deterioration, wear and correct installation.
- ☐ 10. Inspect fuel tanks and lines for leaks, water and contamination (See Note 11).
- ☐ 11. Remove drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).
- ☐ 12. Ascertain that fuel tanks are marked for minimum octane rating and capacity.
- ☐ 13. Inspect condition of fuel tank vents (See Note 12).
- ☐ 14. Reinstall inspection plates and fairings.

SPECIAL INSTRUCTIONS
INSPECTION NOTES
OPERATIONAL INSPECTION
SERVICE PUBLICATIONS
INSPECTION RECORD - WRITTEN ENTRY
CHECK CONDITION REPORT ENTRIES

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #4

LEFT PROPELLER, ROUTINE

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart (See Note 10).
- ☐ 5. Check propeller air pressure (at least once a month).

LEFT ENGINE, ROUTINE

CAUTION

Ground Magneto Primary Circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 3. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 4. Clean engine.

CAUTION

Use caution not to contaminate pressure pump with cleaning fluid.

- ☐ 5. Inspect ignition harness and insulators (high tension leakage and continuity) (See Note 9).
- ☐ 6. Remove air filters and tap gently to remove dirt particles (Replace as required).
- ☐ 7. Clean injector nozzles as required (Clean with acetone only).
- ☐ 8. Inspect exhaust stacks, connections and gaskets (Replace gaskets as required).
- ☐ 9. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 10. Check magneto RPM drop.
- ☐ 11. Check full power RPM.
- ☐ 12. Check full power manifold pressure.
- ☐ 13. Check full power fuel flow.
- ☐ 14. Check idle RPM and mixture.
- ☐ 15. Reinstall engine cowl.

LEFT TURBOCHARGER, ROUTINE

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT 4 (cont)

- ☐ 4. Check carefully all turbo support brackets, struts, etc, for breakage, bagging, or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run up engines, check all instruments for smooth, steady response.

RIGHT PROPELLER, DETAILED

- ☐ 1. Inspect spinner and back plate for cracks.
- ☐ 2. Inspect blades for nicks and cracks.
- ☐ 3. Inspect for grease and oil leaks.
- ☐ 4. Lubricate propeller per lubrication chart.
- ☐ 5. Inspect spinner mounting brackets for cracks.
- ☐ 6. Inspect propeller mounting bolts and safety (check torque if safety is broken).
- ☐ 7. Inspect hub parts for cracks and corrosion.
- ☐ 8. Rotate blades of constant speed propeller and check for tightness in hub pilot tube.
- ☐ 9. Inspect complete propeller and spinner assembly for security, chafing, cracks, deterioration, wear and correct installation.
- ☐ 10. Check propeller air pressure (at least once a month).

RIGHT ENGINE, DETAILED (refer to VSP 69)

— WARNING —

Ground magneto primary circuit before working on engine.

- ☐ 1. Remove engine cowl.
- ☐ 2. Clean and inspect cowling for cracks, distortion and loose or missing fasteners.
- ☐ 3. Drain oil sump.
- ☐ 4. Clean suction oil strainer at oil change (Inspect strainer for foreign particles).
- ☐ 5. Change full flow (spin-on type) oil filter element. (Inspect element for foreign particles. Check oil level after installing new filter.)
- ☐ 6. Inspect oil temperature sender unit for leaks and security.
- ☐ 7. Inspect oil lines and fittings for leaks, security, chafing, dents and cracks (See Note 6).
- ☐ 8. Clean and inspect oil radiator cooling fins.
- ☐ 9. Fill engine with oil per information on cowl or lubrication chart.

— CAUTION —

Do not contaminate pressure pump with cleaning fluid.

- ☐ 10. Clean engine.

- ☐ 11. Inspect condition of spark plugs (clean and adjust gap as required) (see note 9).
- ☐ 12. Check cylinder compression (see note 7).
- ☐ 13. Inspect ignition harness and insulators for high tension leakage and continuity) (see notes 9 and 23).
- ☐ 14. Check magneto points for proper clearance (maintain clearance at 0.018 +/ 0.006) (see note 9).

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT 4 (cont)

- ☐ 15. Inspect magneto for oil seal leakage.
- ☐ 16. Inspect breaker felts for proper lubrication.
- ☐ 17. Check magnetos to engine timing.
- ☐ 18. Remove air filters and tap gently to remove dirt particles (replace as required).
- ☐ 19. Clean injector nozzles as required (clean with acetone only).
- ☐ 20. Replace left and right gyro air inlet filter (see note 13).
- ☐ 21. Remove induction air box valve and inspect for evidence of excessive wear or cracks. Replace defective parts.
- ☐ 22. Inspect fuel injector attachments for loose hardware.
- ☐ 23. Inspect intake seals for leaks and clamps for tightness.
- ☐ 24. Inspect all air inlet duct hoses (replace as required).
- ☐ 25. Inspect condition of flexible fuel lines.
- ☐ 26. Inspect fuel system for leaks (see note 17).
- ☐ 27. Inspect condition and operation of fuel pumps (engine driven and electric).
- ☐ 28. Inspect pressure pumps and lines.
- ☐ 29. Inspect throttle, alternate air, mixture and propeller governor controls for security, travel and operating condition.
- ☐ 30. Inspect exhaust stacks, connections and gaskets (replace gaskets as required).
- ☐ 31. Inspect breather tubes for obstructions and security.
- ☐ 32. Inspect crankcase for cracks, leaks and security of seam bolts.
- ☐ 33. Inspect engine mounts for cracks and loose mountings.
- ☐ 34. Inspect rubber engine mount bushings for deterioration (replace as required).
- ☐ 35. Inspect all engine baffles.
- ☐ 36. Inspect firewall seals.
- ☐ 37. Inspect condition of alternator and starter.
- ☐ 38. Inspect all lines, air ducts, electrical leads and engine attachments for security, proper routing, chafing, cracks, deterioration and correct installation.
- ☐ 39. Lubricate all controls (see note 10).
- ☐ 40. Check magneto rpm drop.
- ☐ 41. Check full power rpm.
- ☐ 42. Check full power manifold pressure.
- ☐ 43. Check full power fuel flow.
- ☐ 44. Check idle rpm and mixture.
- ☐ 45. Inspect and clean oil pressure relief valve.
- ☐ 46. Check unmetered fuel pressure at idle.
- ☐ 47. Reinstall engine cowl.

RIGHT TURBOCHARGER, DETAILED

- ☐ 1. Inspect all air inlet ducting and compressor discharge ducting for worn spots, loose clamps or leaks.
- ☐ 2. Inspect engine air inlet assembly for cracks, loose clamps and screws.
- ☐ 3. Inspect exhaust ducting and exhaust stacks for signs of leaks or cracks. Check all clamps for tightness.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #4 (cont.)

- ☐ 4. Carefully check all turbo support brackets, struts, etc., for breakage, bagging or wear.
- ☐ 5. Inspect all oil lines and fittings for wear, leakage, heat damage or fatigue.
- ☐ 6. Inspect bypass valve for security and safety.
- ☐ 7. Run-up engines, check all instruments for smooth, steady response.

CABIN, ROUTINE

- ☐ 1. Check landing, navigation, cabin and instrument lights.

FUSELAGE, EMPENNAGE, ROUTINE

- ☐ 1. Inspect battery, box and cables. (Inspect at least every 30 days. Flush box as required and fill battery per instructions on box.)
- ☐ 2. Check fluid in brake reservoir (Fill as required).
- ☐ 3. Check hydraulic pump fluid level (Fill as required).
- ☐ 4. Inspect ELT installation and condition of battery and antenna (See latest Piper Service Letter No. 820).
- ☐ 5. Inspect heater (See Note 18 for overhaul information).
- ☐ 6. Lubricate per lubrication chart (See Note 10).

LANDING GEAR, DETAILED

- ☐ 1. Inspect oleo struts for proper extension. (Check for proper fluid level and air pressure as required.)
- ☐ 2. Inspect nose gear steering control and travel.
- ☐ 3. Inspect wheel alignment.
- ☐ 4. Put airplane on jacks (Refer to Maintenance Manual).
- ☐ 5. Inspect tires for cuts, uneven or excessive wear and slippage.
- ☐ 6. Remove wheels, clean, check and repack bearings.
- ☐ 7. Inspect wheels for cracks, corrosion and broken bolts.
- ☐ 8. Check tire pressure (Refer to Service Manual).
- ☐ 9. Inspect condition of brake lining and disc.
- ☐ 10. Inspect condition of brake backing plates.
- ☐ 11. Inspect condition and security of brake lines and retaining clamps.
- ☐ 12. Inspect condition of centering spring and bungees.
- ☐ 13. Inspect gear forks for damage.
- ☐ 14. Inspect oleo struts for fluid leaks and scoring.
- ☐ 15. Inspect gear struts, attachments, torque links, retraction links and bolts for condition and security. (See Note 20).
- ☐ 16. Inspect downlocks for operation and adjustment.
- ☐ 17. Inspect torque link bolts and bushings (Rebush as required).
- ☐ 18. Inspect drag and side brace link bolts (Replace as required).
- ☐ 19. Inspect gear doors and attachments for condition and security.
- ☐ 20. Inspect gear warning horn and light for operation.
- ☐ 21. Retract gear - check operation and gear doors for clearance.
- ☐ 22. With gear retracted, check "Free Fall" valve operation.
- ☐ 23. Check operation of squat switch.

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT #4 (cont.)

- ☐ 24. Check downlock switches, up switches and electrical leads for operation, condition and security of mounting.
- ☐ 25. Inspect all hydraulic lines, electrical leads and attaching parts for security, routing, chafing, deterioration, wear and correct installation (See latest Piper Service Letter No. 808).
- ☐ 26. Lubricate per lubrication chart (See Note 10).
- ☐ 27. Ascertain landing gear is down and locked; remove airplane from jacks.

LEFT WING, ROUTINE

- ☐ 1. Lubricate per lubrication chart (See Note 10).
- ☐ 2. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).

RIGHT WING, DETAILED

- ☐ 1. Remove inspection plates and fairings.
- ☐ 2. Inspect surface and tips for damage, loose rivets and condition of walkway.
- ☐ 3. Inspect aileron hinges and attachments.
- ☐ 4. Inspect aileron cables, pulleys and bellcranks for damage and operation.
- ☐ 5. Inspect flaps and attachments for damage and operation.
- ☐ 6. Inspect condition of bolts used with hinges (Replace as required).
- ☐ 7. Lubricate per lubrication chart (See Note 10).
- ☐ 8. Inspect wing attachment bolts, nuts and brackets for security and condition.
- ☐ 9. Inspect all control cables, air ducts, electrical leads, lines and attaching parts for security, routing, chafing, deterioration, wear and correct installation.
- ☐ 10. Inspect fuel tanks and lines for leaks, water and contamination (See Note 11).
- ☐ 11. Remove, drain and clean fuel filter bowls and screens (Drain and clean at least every 90 days).
- ☐ 12. Ascertain that fuel tanks are marked for minimum octane rating and capacity.
- ☐ 13. Inspect condition of fuel tank vents (See Note 12).
- ☐ 14. Reinstall inspection plates and fairings.

SPECIAL INSTRUCTIONS
INSPECTION NOTES
OPERATIONAL INSPECTION
SERVICE PUBLICATIONS
INSPECTION RECORD - WRITTEN ENTRY
CHECK CONDITION REPORT ENTRIES

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left: Right:	Left: Right:

SPECIAL INSPECTION

500 HOUR

LEFT AND RIGHT PROPELLER

☐ 1. Remove constant speed propeller; remove sludge from propeller and crankshaft.

LEFT AND RIGHT ENGINE

☐ 1. Inspect distributor block for cracks, burned areas or corrosion and height of contact springs.
☐ 2. Replace gyro air inline filter (where applicable), left and right (See Note 13).

FUSELAGE AND EMPENNAGE GROUP

☐ 1. Clean and lubricate stabilator trim screw (See Note 10).

1000 HOUR

LEFT AND RIGHT PROPELLER (HARTZELL)

☐ 1. Overhaul propeller (See latest revision Hartzell Service Letter No. 61).

LEFT AND RIGHT ENGINE

☐ 1. Overhaul or replace magnetos (See Note 8).
☐ 2. Replace flexible fuel lines.
☐ 3. Overhaul or replace fuel pumps (engine driven and electric) (See Note 8).
☐ 4. Overhaul or replace pressure pumps (See Note 8).
☐ 5. Overhaul or replace propeller governor (Refer to latest Hartzell Service Letter No. 61).
☐ 6. Complete overhaul of engine or replace with factory rebuilt (See Note 8).

LEFT AND RIGHT TURBOCHARGERS

☐ 1. Remove all turbocharger components from the engine. Inspect and repair or replace as necessary. Inspect turbocharger rotor for excessive play, carbon and dirt deposits. See Troubleshooting Section of 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.

FUSELAGE AND EMPENNAGE

☐ 1. Clean and lubricate all exterior needle bearings.

1500 HOUR

LEFT AND RIGHT PROPELLER (McCAULEY)

☐ 1. Overhaul propeller (See latest McCauley Service Bulletin No. 137).

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

SPECIAL OR UNUSUAL CONDITIONS INSPECTIONS

This section contains inspections required in addition to the normal event schedule; when the aircraft is operated continuously in adverse environmental conditions or subjected to unusual incidents.

The unusual incident inspection is normally accomplished on a one time basis associated with each condition.

The special inspections required under adverse environmental operating conditions should be repeated in accordance with the time intervals specified.

Items indicated in this procedure are guidelines based on past operating experience. Each operator should review his own operating conditions and react accordingly to keep his aircraft airworthy.

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

Operation in High Dust or Industrial Pollution

Item	Inspection	Inspection Interval
Air Filters	Clean and inspect for damage.	100 Hours
Engine Oil Filter	Clean and inspect condition.	100 Hours
Engine Oil	Drain and replace.	200 Hours
Propellers	Reference latest revision Hartzell service letter 61.	1000 Hours 2 Years
Pitot/Static System	Check for obstruction. Reverse flow to lines. Caution Assure that lines are disconnected from system.	200 Hours or as required.
Landing Gear Up and Down Lock Assemblies	Clean, inspect and lubricate (Refer to lubrication chart in maintenance manual).	100 Hours

Operation in High Dust or Industrial Pollution (cont.)

Item	Inspection	Inspection Interval
Landing Gear Actuators and Oleos	Clean and inspect.	100 Hours
Landing Gear Wheel Bearings	Clean, inspect and repack.	100 Hours
Instrument Air Filters	Inspect and/or replace.	100 Hours
Windows	Inspect for crazing, erosion, visibility and cleanliness.	Daily
Operation in High Salt or High Humidity Environment		
Fuselage, Empennage and Wings	Remove floor panels and exterior access plates and inspect for corrosion.	200 Hours
Landing Gear	Inspect for corrosion, lubrication, switches and wiring for condition.	200 Hours
Instruments and Wiring	Inspect for proper seal of cases and corrosion.	100 Hours
Interior	Inspect upholstery, seat belts, seats, rugs for corrosion and integrity.	100 Hours
Soft or Unusual Terrain		
Landing Gear	Inspect for cracks, attachment, damage, cleanliness and lubrication.	100 Hours
Wheels	Inspect for cracks, damage, chipped rims, bearings for damage, corrosion and lubrication.	100 Hours
Tires	Inspect for cuts, wear, inflation and deterioration.	Daily
Wheel Wells	Inspect for foreign material, damage and corrosion.	100 Hours
Brakes	Inspect for damage, foreign material, cracks and overheating.	Daily

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

Soft or Unusual Terrain (cont.)

Item	Inspection	Inspection Interval
Flaps, Lower Fuselage and Wing	Inspect for damage, cracks and corrosion.	100 Hours
	Operation in Extreme Cold	
Hydraulic, Pneumatic, Environmental	Check all fittings and attachments for security and leaks.	First 100 Hours then as required.
	Lightning Strike	
Propellers	Inspect propeller for signs of arcing damage.	Replace or overhaul where necessary.
Engine Oil Filter	Inspect for contamination.	Replace as required.
Electrical and Avionics System	Inspect and check for high voltage damage and operation.	Replace & overhaul where necessary.
All exterior surfaces and bearings	Inspect for burns, evidence of arcing and damage on surfaces and bearings.	Replace or repair affected areas.
Static Wicks	Inspect for damage and condition.	Replace as required.
	Engine Overspeed or Sudden Stoppage	
Engine and Propeller	Inspect per Maintenance Manual.	As required
Engine Mount and Attachments	Distortion and damage.	Replace or repair as required.
Engine Oil Filter	Inspect for contamination.	Maintenance Manual

Severe Turbulence, Hard or Overweight Landing

NOTE: Inspection for damage in the event of any of the following conditions requires basically the same procedure, therefore, these procedures are placed in the same section. Remember that minor superficial damage may indicate a more severe condition somewhere else in the structure.

1. The aircraft should be placed in a normal level attitude.
2. A preliminary inspection consisting of checking alignment or obvious out of track condition of nacelles, engines, wings, tail, tip tanks, landing gear and doors should be made.
3. The following items should be inspected closely to determine the extent of damage.
4. Piper and Continental maintenance manual procedures should be followed. If there are any questions as to the repairs or procedure contact the Piper Aircraft Corporation Service Department.

Item	Inspection	Inspection Interval
Landing Gear Struts	Cracks, signs of overstress deformation, loose or damaged trunnion mounts, axles for cracks bending, flat spots, damaged oleos and seals, hydraulic leaks and landing gear alignment.	Hard or overweight landing
Wheels, Tires, Brakes	Cracks, chips, loose or cracked mounting bolts, alignment of slippage marks, sidewall distress, hydraulic or air leaks, dye check or magnaflux wheels and bolts.	Hard or overweight landing
Wheel Wells and Landing Gear attach points	Buckling, cracks, overstress, wing skin buckling, actuator and side brace damage and condition, magnaflux landing, gear attach and drag link bolts.	Hard or overweight landing
Wings	Wing attach bolts for slippage, damage and overstress upper and lower wing skins for wrinkles, cracks, popped or loose rivets. Remove access plates and inspect for internal damage to ribs, stringers and sparwebs; fuel tanks and liners, for damage, attachment and leaks.	Hard or overweight landing severe turbulence

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

Severe Turbulence, Hard or Overweight Landing (cont.)

Item	Inspection	Inspection Interval
Engines and Nacelles	Engine oil filters for contamination, accessories for mounting and damage. Oil, hydraulic and air lines for attachment and leaks. Engine mount for distortion and damage, propeller for evidence of ground strike (hard or overweight landing) nacelles for buckling.	Hard or overweight landing, severe turbulence
Fuselage	Loose or missing rivets, door alignment, windows and attachments for overstress, cracks or damage, wing carry through member for damage, overstress, stringers, bulkheads, keel beams for buckling, cracks or damage. Avionics, instruments and accessories installation for security and operation.	Hard or overweight landing, severe turbulence
Empennage	Skins for buckling wrinkles, loose or missing rivets, elevator, rudder, vertical fins and horizontal stabilizer for security of attachment, overstress of bolts. Ribs, stringers for buckling, cracks and damage.	Hard or overweight landing, severe turbulence

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

OPERATIONAL INSPECTION

- ☐ 1. Check fuel pump and fuel tank selector and crossfeed operation.
- ☐ 2. Check fuel quantity, pressure or flow gauges.
- ☐ 3. Check oil pressure and temperature gauges.
- ☐ 4. Check alternator output - left and right engines.
- ☐ 5. Check manifold pressure gauge.
- ☐ 6. Check alternate air.
- ☐ 7. Check parking and toe brake.
- ☐ 8. Check pressure gauge.
- ☐ 9. Check gyros for noise and roughness.
- ☐ 10. Check cabin heater and defroster.
- ☐ 11. Check magneto switch operation.
- ☐ 12. Check magneto RPM variation.
- ☐ 13. Check throttle and mixture controls.
- ☐ 14. Check propeller controls and propeller action.
- ☐ 15. Check engine idle.
- ☐ 16. Check electronic equipment operation (Refer to Service Manual for ELT check).
- ☐ 17. Check air conditioning compressor clutch operation.
- ☐ 18. Check air conditioning condenser scoop operation.
- ☐ 19. Check operation of flight controls and flaps.
- ☐ 20. Check operation of Autopilot, including automatic pitch trim and Manual Electric Trim (See Note 22).

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

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. All inspections or operations are required at each inspection interval indicated 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 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.
3. Piper service bulletins are of special importance and Piper considers compliance mandatory.
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 manual for this airplane. Any changes issued to the engine manufacturer's operator's manual supersede or supplement the inspections outlined in this report.
6. Replace flexible oil lines as required, but no later than 1000 hours of service.
7. Refer to latest Continental Motors Service Bulletin M73-19.
8. Replace or overhaul as required or at engine overhaul. Refer to latest Continental Service Bulletin M74-20.
9. For operation at higher altitudes (12,000 feet and up) more frequent ignition system maintenance is required. Refer to latest Continental Service Bulletin M78-8.
10. Refer to service manual lubrication chart.
11. Replace fuel supply hose and interconnect hose couplings at time of engine overhaul.
12. Replace fuel tank vent line flexible connections as required, but not later than 1000 hours of service.
13. Early Seneca's had in-line filter in cabin; later models have filter located in nacelle.
14. Refer to service manual section V for allowable rudder tab and trim free play.
15. Maintain cable tensions specified in section V of service manual.
16. 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.)
17. Refer to latest Piper Service Bulletin 596.
18. At end of 500 hours of operation, conduct 100 hour inspection in accordance with Janitrol Maintenance and Overhaul Manual, p/n 24E25-1, dated October 1981 and AD 82-07-03.
19. The compressor oil level should not be checked unless a Freon leak has occured, requiring an addition of Freon to the system.
20. For all aircraft in excess of 1000 hours, carefully inspect the trunnion forging barrel for cracks with a 10 power glass at the lower end of the fillet every 100 hours thereafter unless replaced by p/n 67926-12, 67926-13, 67926-14 or 67926-15.
21. Refer to section XIII of service manual for appropriate subject manual part number.
22. Refer to flight manual supplement for preflight and flight check and for intended function in all modes.
23. Refer to latest revision of Bendix Service Bulletin 612 for inspection of magneto and ignition harness.

MODEL	SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
			Left:	Left:
			Right:	Right:

SERVICE PUBLICATION COMPLIANCE RECORD

MANUFACTURER	PUBLICATION	NUMBER	COMPLIANCE DATE	A/C HOURS	W.O.#	SIGNATURE & CERTIFICATE #

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

EVENT INSPECTION RECORD AND SIGN OFF SHEET

I have inspected this aircraft in accordance with Piper Aircraft Corporation's Programmed Inspection Procedures and a list of discrepancies have been given to the owner/operator, and appropriate entries have been made in the Aircraft and Engine Logbooks. Read Notes below before signing sheet.

NOTES

1. Proper inspection procedures are the responsibility of the individual performing the inspection and must be made in accordance with all applicable current Federal Aviation Regulations. Always check for and use only current information.
2. The signatures signify that this aircraft has been thoroughly inspected and found airworthy in accordance with all appropriate current Federal Aviation Regulations and that appropriate entries have been made in Aircraft and Engine Logbooks.
3. Work order column is applicable only to FAA Approved Repair Stations.

EVENT #	INSP	A/C TIME	DATE	W.O.#	SIGNATURE - CERTIFICATE #
1	50				
2	100				
3	150				
4	200				
1	250				
2	300				
3	350				
4	400				
1	450				
2	500				
3	550				
4	600				
1	650				
2	700				
3	750				
4	800				
1	850				
2	900				
3	950				
4	1000				

PA-34-200T
PROGRAMMED INSPECTION

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

CONTINUOUS CYCLE INSPECTION RECORD AND SIGN OFF SHEET

1. CURRENT F.A.A. APPROVED FLIGHT AND OWNER'S MANUAL ARE IN THE AIRCRAFT.
2. AIRCRAFT AND ENGINE LOGBOOKS ARE IN THE AIRCRAFT AND APPROPRIATE ENTRIES MADE IN THESE LOGBOOKS.
3. REGISTRATION CERTIFICATE IN AIRCRAFT AND PROPERLY DISPLAYED.
4. AIRWORTHINESS CERTIFICATE IN AIRCRAFT AND PROPERLY DISPLAYED.
5. RADIO STATION F.C.C. LICENSES IN AIRCRAFT AND PROPERLY DISPLAYED.
6. AIRCRAFT EQUIPMENT LIST - WEIGHT AND BALANCE - F.A.A. FORM 337 (IF APPLICABLE) ARE IN AIRCRAFT AND IN PROPER ORDER.
7. APPLICABLE MANUFACTURER'S SERVICE INFORMATION HAS BEEN COMPLIED WITH.
8. APPLICABLE F.A.A. AIRWORTHINESS DIRECTIVES ARE COMPLIED WITH.
9. PIPER PROGRAMMED INSPECTION RECORDS IN ORDER AND PROPERLY SIGNED OFF.
10. OUTSTANDING CONDITIONS HAVE BEEN CORRECTED AS LISTED ON CONDITION RECORD.

CYCLE #	DATE	TACH	REMARKS	SIGNATURE AND CERTIFICATE #
1 200 Hr.				
2 400 Hr.				
3 600 Hr.				
4 800 Hr.				
5 1000 Hr.				
6 1200 Hr.				
7 1400 Hr.				
8 1600 Hr.				
9 1800 Hr.				
10 2000 Hr.				
11 2200 Hr.				
12 2400 Hr.				
13 2600 Hr.				
14 2800 Hr.				
15 3000 Hr.				

MODEL	SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO. Left: Right:	PROPELLER SERIAL NO. Left: Right:

DISCREPANCY REPORT

DISCREPANCY	A/C HOURS	SIGNATURE	DATE	CORRECTIVE ACTION	W.O.#	SIGNATURE	DATE

DISCREPANCY REPORT (cont.)

DISCREPANCY	A/C HOURS	SIGNATURE	DATE	CORRECTIVE ACTION	W.O.#	SIGNATURE	DATE

REISSUED: 11/9/83

PA-34-200T
PROGRAMMED INSPECTION

SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO.	PROPELLER SERIAL NO.
		Left:	Left:
		Right:	Right:

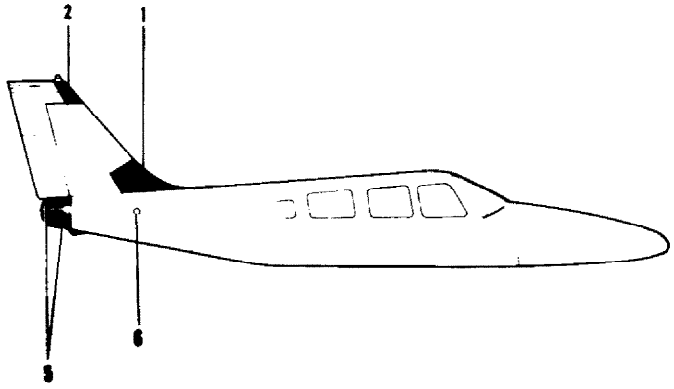
FAA AIRWORTHINESS DIRECTIVES COMPLIANCE RECORD

A.D. NUMBER	A.D. DATE	A/C HOURS	METHOD OF COMPLIANCE	ONE TIME	RECURRING	NEXT DUE DATE OR HOURS	WORK ORDER NO.	SIGNATURE AND CERTIFICATE NO.

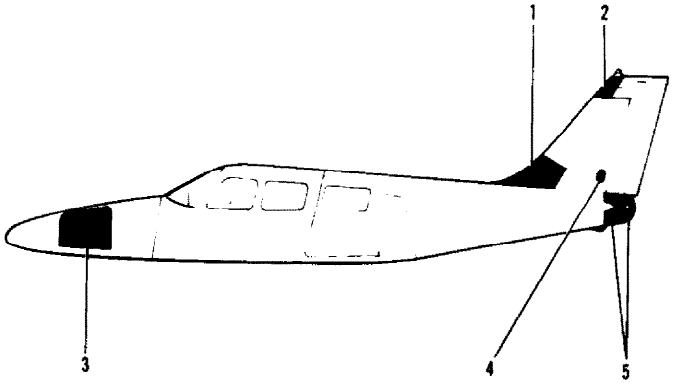
MODEL	SERIAL NUMBER	REGISTRATION NUMBER	ENGINE SERIAL NO. Left: Right:	PROPELLER SERIAL NO. Left: Right:

ECR EQUIPMENT CHANGE RECORD

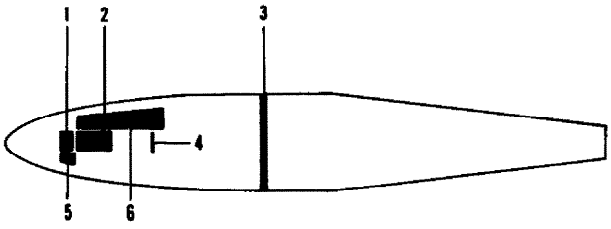
DATE	TACH	REMOVED PART # SERIAL #	INSTLI. PART # SERIAL #	SIGNATURE



1. VENTILATING AIR INTAKE
2. FAIRING FIN
3. BATTERY, BRAKE RESERVOIR, ELECTRONIC EQUIPMENT, HYDRAULIC POWER PACK
4. RUDDER TRIM TAB SCREW
5. STABILATOR AND RUDDER STOPS, STABILATOR TRIM TAB SCREW
6. COMBUSTION HEATER, COMBUSTION AIR INTAKE

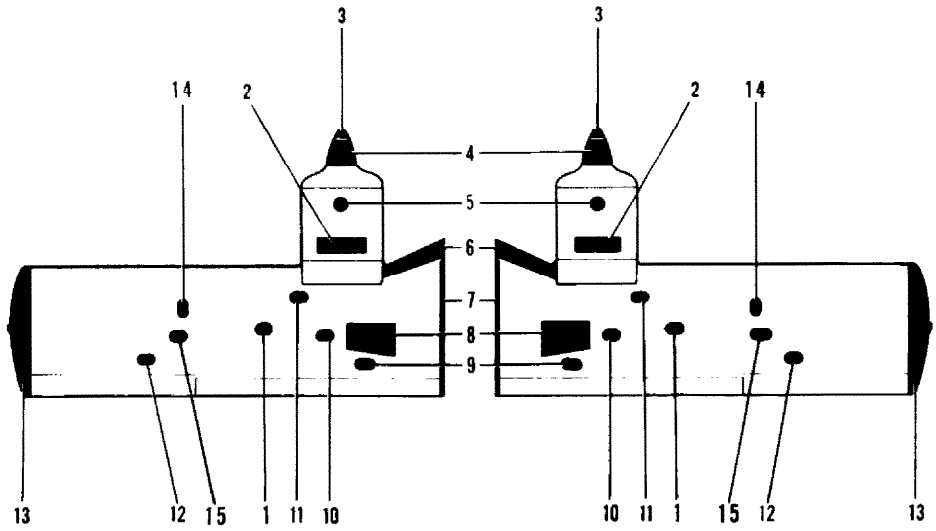


1. DOOR, NOSE GEAR, LANDING
2. HYDRAULIC PRESSURE SWITCH, NOSE GEAR ACTUATING CYLINDER AND LIMIT SWITCH, VOLTAGE REGULATORS

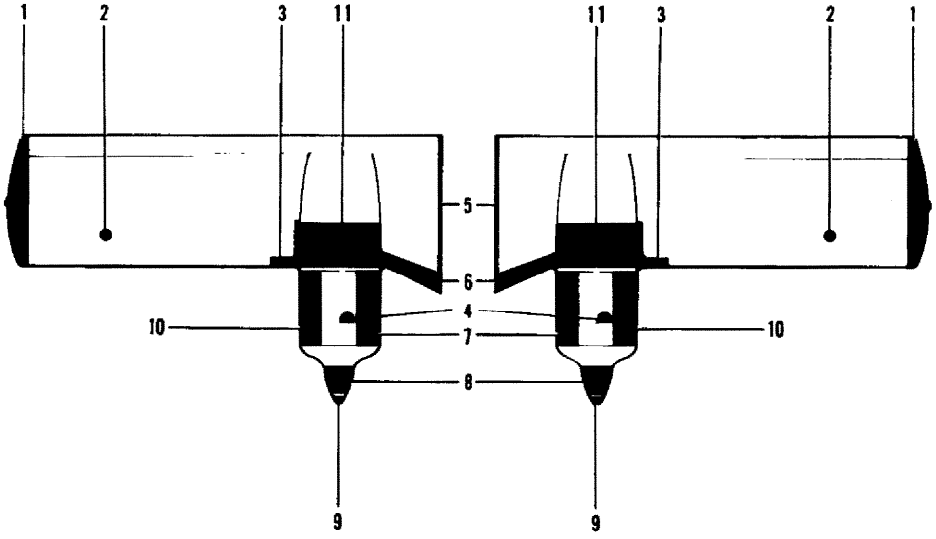


1. BATTERY
2. NOSE LANDING GEAR
3. MAIN SPAR
4. BRAKE RESERVOIR
5. EXTERNAL POWER PLUG
6. RADIO

Access Panels and Plates, Fuselage



1. FUEL GAUGE SENDER
2. COWL FLAP
3. PROPELLER RECHARGE VALVE
4. SPINNER, PROPELLER
5. ENGINE OIL DRAIN
6. LINES, WIRES, CABLES
7. FAIRING
8. DOOR, MAIN GEAR, LANDING
9. COVER, GEAR ATTACHMENT FITTING
10. ELECTRIC WIRING
11. FUEL VALVE
12. COVER, BELLCRANK AND CONTROL CABLE
13. WING TIP
14. STALL WARNING & DEICER BOOTS
15. PITOT HEAT WIRING - AILERON CABLES DEICER LINES



1. WING TIP
2. CAP, FUEL TANK ASSEMBLY
3. FAIRING
4. OIL FILLER DOOR
5. FAIRING
6. LINES, WIRES, CABLES
7. COWL, INBOARD
8. SPINNER, PROPELLER
9. PROPELLER RECHARGE VALVE
10. COWL, OUTBOARD
11. HATCH, NACELLE

Access Panels and Plates, Wings