

# SERVICE No. 611 BULLETIN

# Piper Aircraft Corporation

FAA/DOA SO-l Approved

Lock Haven, Pennsylvania, U.S.A. November 14, 1978 S/M

# Subject:

Hose Assembly Inspection and Replacement

#### IMPORTANT NOTICE:

If any of the below listed models, regardless of the serial numbers affected or if any PA-28R-180/PA-28R-200 models in operation have had any of the Part Number 63901-41 Hose Assemblies changed (replaced) between December 12, 1977 and the date of this release, they are to be inspected in accordance with this Service Bulletin.

Models Affected:

PA-28R-201 Cherokee Arrow III 28R-7837105 to 28R-7837317 Inclusive

Serial Numbers Affected:

PA-28R-201T Cherokee Turbo Arrow III

PA-34-200T Seneca II

PA-44-180 Seminole

Compliance Time:

28R-7803154 to 28R-7803372 Inclusive

34-7870100 to 34-7870361 Inclusive 34-7870363 to 34-7870428 Inclusive 34-7870430 to 34-7870446 Inclusive 34-7870448 to 34-7870456 Inclusive 34-7870459 to 34-7870464 Inclusive 34-7870467 to 34-7870474 Inclusive

44-7995001 to 44-7995064 Inclusive 44-7995066 to 44-7995069 Inclusive 44-7995071 to 44-7995084 Inclusive 44-7995086, 44-7995091, 44-7995095, 44-7995099, and 44-7995106, 44-7995108 to 44-7995127 Inclusive

Within the next ten (10) hours of operation or at the next regularly scheduled progressive, 100 hour or annual inspection, whichever occurs first. Service Bulletin No. 611

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Purpose: We have been advised by the Deutsch Metal Components Division of Los Angeles, California that some of the Hose Assemblies identified above, which have the assembly date of 4Q77 or 1Q78, could have been assembled from a batch of hose material, some of which was found to have a delaminated tube condition. Delamination of a hose can cause intermittent, partial or full blockage, or leakage because the delamination can act like a flap within the hose. It is also possible that pieces of the tube may break away and be free within the system affected.

As a precaution, all Part Number 63901-41 Hose Assemblies, used on the above affected models, or purchased for replacement between December 12, 1977 and the date of this Service Release, which have the 4Q77 or 1Q78 assembly date on the metal identification tag, are to be removed from service and returned to Piper Aircraft Corporation, Vero Beach Division.

#### Instructions:

#### NOTE:

If an equivalent substitute hose assembly is found in the locations described in this Service Bulletin, replacement is not necessary. This inspection and replacement (if required) <u>only applies</u> to Part Number 63901-41.

#### PA-28R-201 (180/200 if affected) and PA-28R-201T

- 1.a. On the PA-28R-180/200/201 models affected remove top cowl, locate the Part Number 63901-41 Hose Assembly, Fuel Pressure, installed at the Engine Injector. Inspect the metal identification tag on the Hose Assembly for the assembly date of 4Q77 or 1Q78. (See attached sketch).
  - b. If the Hose Assembly has an assembly date <u>other</u> than 4Q77 or 1Q78, no further action is necessary. Replace top cowl removed in <u>Instruction 1.a.</u> and proceed to Instruction 3.a.
  - c. If the Hose Assembly has an assembly date of 4Q77 or 1Q78, it is to be replaced. See <u>Material Required</u>. Replace top cowl removed in <u>Instruction 1.a.</u> and proceed to Instruction 3.a.
- 2.a. On the PA-28R-201T models affected remove top cowl, locate the Part Number 63901-41 Hose Assembly. Manifold Pressure, installed at the left hand rear of the engine. Inspect the metal identification tag on the Hose Assembly for the assembly date of 4Q77 or 1Q78. (See attached sketch).
  - b. If the Hose Assembly has an assembly date <u>other</u> than 4Q77 or 1Q78, no further action is necessary. Replace top cowl removed in <u>Instruction 2.a.</u> and proceed to Instruction 3.a.
  - c. If the Hose Assembly has an assembly date of 4Q77 or 1Q78, it is to be replaced. See Material Required. Replace top cowl removed in Instruction 2.a. and proceed to Instruction 3.a.

#### Instructions: (continued)

- 3.a. On the PA-28R-180/200/201 and PA-28R-201T models affected, locate the Part Number 63901-41, Nose Gear Actuator Hose Assembly, two (2) each, one (1) gear up side and one (1) gear down side. Inspect the metal identification tag on the Hose Assemblies for the assembly date of 4Q77 or 1Q78. (See attached sketch).
  - b. If the Hose Assemblies both have an assembly date other than 4Q77 or 1Q78, no further action is required. Make an appropriate log book entry that this Service Release has been complied with.
  - c. If either or both Hose Assemblies have an assembly date of 4Q77 or 1Q78, place the aircraft on jacks (See Service Manual) and proceed with Instruction 4.
- **4.a.** Remove the Hose Assembly(ies) with the 4Q77 or 1Q78 assembly date(s). Visually inspect theHose Assembly(ies) for any blockage, deterioration or signs of leakage that would indicate delamination.
  - b. If no signs of delamination are present, replace the line(s) with new Hose Assemblies and proceed to Instruction 4.d.
  - c. If signs of delamination are indicated, obtain newHose Assembly(ies) and proceed with Instruction 5.a. through 5.g.
  - d. Cycle landing gear and check for leaks. (See Service Manual).
  - e. Remove aircraft from jacks and make appropriate log book entry that this Service Bulletin has been complied with.
- 5.a. If the Hose Assembly(ies) removed in <u>Instruction 4.a.</u>, indicate signs of delamination, the Nose Gear Retraction Hydraulic Lines will require flushing as a precaution against delaminated pieces of inner lining of the Hose Assembly being lodged in the lines.
  - b. With the Hose Assembly(ies) removed, allow sufficient hydraulic fluid to flow out of the system through the open line(s) by placing the landing gear selector in the appropriate position and operating the hydraulic power pack. Keep sufficient clean hydraulic fluid in the power pack reservoir to thoroughly flush out the line(s).
  - c. Remove the nose gear actuator and flush with clean hydraulic fluid. (See Service Manual).
  - d. Reinstall the Nose Gear Actuator, (See Service Manual).
  - e. Install replacement Hose Assembly(ies). See Material Required.
  - f. Cycle landing gear and check for leaks. (See Service Manual).
  - g. Remove aircraft from jacks and make an appropriate log book entry that this Service Bulletin has been complied with.

# PA-34-200T

- 1. Remove engine side cowlings left and right, both engines.
- 2. Locate the Part Number 63901-41 Hose Assembly, cylinder drain. Two (2) each per engine, total of four (4) per aircraft.
- 3. Inspect the metal identification tags on theHose Assemblies for the assembly date of 4Q77 or 1Q78. (See attached sketch).
- 4. If the Hose Assemblies have an assembly date other than 4Q77 or 1Q78, no further action is necessary. Proceed to Instruction 6.

### Instructions: (continued)

- 5. If any of the Hose Assemblies have an assembly date of 4Q77 or 1Q78, they are to be replaced. See Material Required.
- 6. Replace cowlings removed in Instruction 1.
- 7. Make an appropriate log book entry that this Service Bulletin has been complied with.

# PA-44-180

- 1. Remove top cowling, both engines.
- 2. Locate the Part Number 63901-41 Hose Assembly, oil pressure installed between the engine oil filter base and the firewall.
- 3. Inspect the metal identification tag on the Hose Assembly for the assembly date of 4Q77 or 1Q78. (See attached sketch).
- 4. If the Hose Assembly has an assembly date other that 4Q77 or 1Q78, no further action is necessary. Proceed to Instruction 6.
- 5. If the Hose Assembly has an assembly date of 4Q77 or 1Q78, it is to be replaced. See <u>Material Required</u>. Run engine, check oil pressure and temperature. After shutdown check for leaks.
- 6. Replace cowlings removed in Instruction 1.
- 7. Make an appropriate log book entry that this Service Bulletin has been complied with.

# Material Required:

The following Piper Part Number 63901-41 Hose Assemblies are required by model and locations as required per applicable Instructions:

Two (2) each Nose Gear Cylinder, one (1) each fuel pressure; total three (3).
Two (2) each Nose Gear Cylinder, one (1) each Manifold Pressure; total three (3).
Four (4) each cylinder drain.
Two (2) each oil pressure.

Availability of Parts: Your Piper Field Service Facility.

Effectivity Date: This Service Release is effective upon receipt.

Summary: Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of this Service Release in accordance with the <u>Compliance</u> Time indicated.

For all affected aircraft, reimbursement is available for material and labor, (based on the number of Hose Assemblies requiring replacement), through your Piper Field Service Facility in accordance with their respective material/labor allowance credit application procedure for a period of six (6) months from the date of this release. There is no reimbursement for inspection only to determine the number of hose assemblies requiring replacement.

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