



The New Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE No. 1005 BULLETIN

FINAL DRAFT

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: August 11, 1997

(S/M)

SUBJECT:

Addition of Drain Holes to the Engine Induction Air Inlet Scoops

MODELS AFFECTED:

PA-28-181 Archer III
PA-32R-301 Saratoga II HP
PA-34-220T Seneca V

SERIAL NUMBERS AFFECTED:

2890206 through 2890231, 2843001
through 2843071
3213029, 3213042 through 3213103,
3246001 through 3246070
3449001 through 3449008

COMPLIANCE TIME:

To coincide with the next scheduled maintenance, but not to exceed the next one-hundred (100) hours time in service.

APPROVAL:

The technical contents of this Service Bulletin have been approved by the Federal Aviation Administration (F.A.A.).

PURPOSE:

It has been discovered that the axisymmetric cowling incorporating a NACA style engine induction air inlet scoop may retain water in the lower portion of the scoop cavity. To provide for proper water removal a drain hole must be placed in the bottom of the scoop. Left uncorrected, the engine induction air inlet filter and scoop housing may become damaged through the formation of ice.

This Service Bulletin provides instructions necessary for the addition of a drain hole in the bottom of the engine induction air inlet scoop.

INSTRUCTIONS: (Refer to the applicable chapter of the appropriate Maintenance Manual as required.)

1. Locate the NACA engine induction air inlet scoop on the right side of each Seneca V engine cowling, and on the left side of the Archer III and Saratoga II HP. (See Fig. 1.) Remove the upper cowl(s) to access the air filter assembly.
2. Remove the air filter assembly to access the inlet air scoop housing.

Note:

Inspect the air filter and the inside of the engine induction air inlet scoop for evidence of damage. (i.e. torn filter elements or cracks in the housing.) Replace the air filter and/or repair the engine induction air inlet scoop as required.

3. Level the aircraft per the Maintenance Manual.

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INSTRUCTIONS: (cont'd)

- Determine the low point in the bottom of the engine induction air inlet scoop.

Note:

One method of determining the low point in the engine induction air inlet scoop is to place a marble or large spherical ball bearing on the floor of the scoop. When the marble or bearing has stopped moving, the lowest point has been established and may be marked for drilling. (*Aircraft must be level.*)

- At the point marked in instruction 4 above, drill a .25 hole. Fill the .25 hole with aircraft quality fiberglass resin and allow to cure. Obtain fiberglass resin locally. (Cure times may vary, consult resin manufacturers recommendations.)
- In the center of the resin filled hole drill a .191 drain hole. Smooth the hole edges as required.
- Clean the engine induction air inlet scoop thoroughly of all debris and install the air filter assembly. (*Remove from jacks if used to level aircraft previously.*) Perform an engine ground run to check for security and operation of the air induction system.
- Re-install the upper cowling.
- Make an appropriate airframe logbook entry of compliance with this Service Bulletin.

MATERIAL REQUIRED:

There are no parts associated with this Service Bulletin.

AVAILABILITY OF PARTS:

Your Piper Field Service Facility.

SUMMARY:

Applicable Factory Participation is limited to new aircraft in warranty at the time of compliance. Factory Participation will remain in effect for a period of time **not to exceed 180 days** from the date of this Service Bulletin.

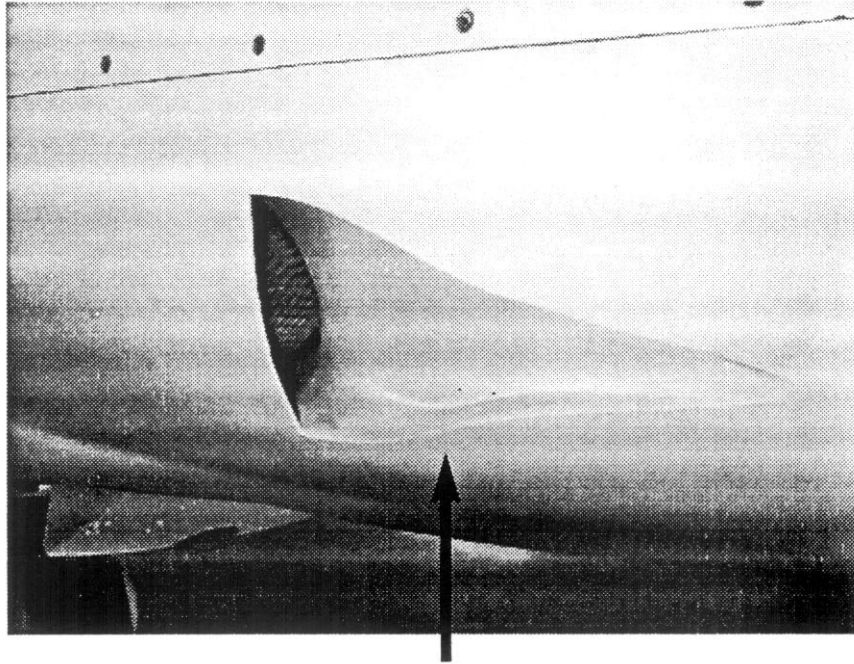
Please contact your factory authorized Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated and to obtain additional information concerning any applicable factory participation.

NOTE:

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections/Changes should be directed to:

The New Piper Aircraft, Inc.
ATTN: Customer Services
2926 Piper Drive
Vero Beach, FL 32960



Typical NACA Engine Induction Air Inlet Scoop
(Seneca V shown, Archer III and Saratoga II HP similar.)

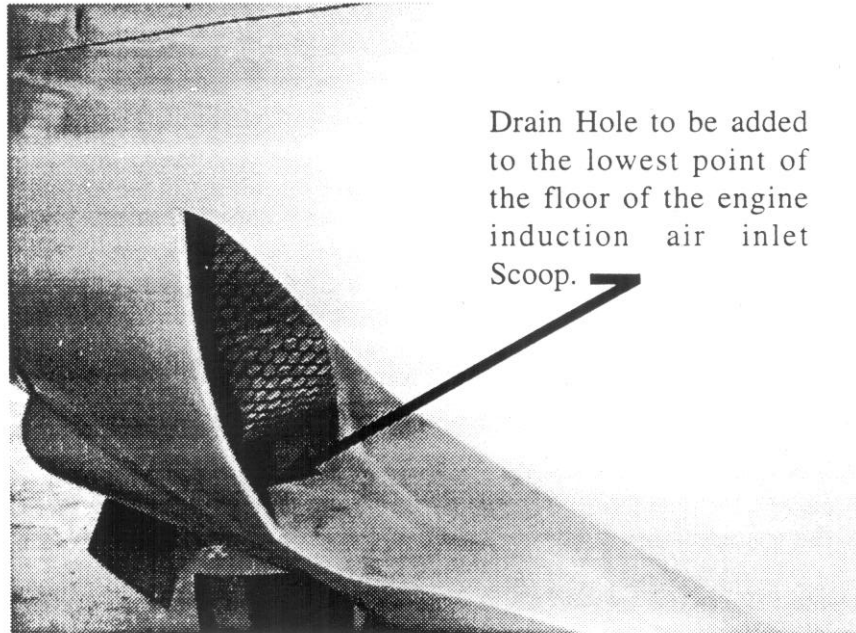


FIG. 1