



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

SERVICE No. 1011 BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: November 14, 1997

(S)

SUBJECT:

**Inspection and Replacement of the Aileron
Inboard Hinge Nose Rib Nutplates**

MODELS AFFECTED:

PA-32-301 Saratoga
PA-32-301T Turbo Saratoga
PA-32R-301 Saratoga SP
PA-32R-301T Turbo Saratoga SP
PA-32R-301 Saratoga II HP
PA-32R-301T Saratoga II TC

SERIAL NUMBERS AFFECTED:

32-8006001 through 32-8606023,
3206001 through 3206088
32-8024001 through 32-8424002
32R-8013001 through 32R-8613006
3213001 through 3213041
32R-8029001 through 32R-8629006,
3229001, 3229002 and 3229003
3213029, 3213042 through 3213103,
3246001 through 3246081
3257001 and 3257002

COMPLIANCE TIME:

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

NOTE:

The repetitive requirements of this Service Bulletin may be relieved by the installation of Piper Part Number 406-825 nutplates on existing uncracked nose ribs or new replacement nose ribs.

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 nose rib for the aileron inboard hinge may crack around the nutplates used as fasteners to attach the hinge fitting. Evaluation of these cracks has indicated that the sharp corners of the square ended nutplates initiate the condition. Cracks may be detected externally through repetitive inspection. Left uncorrected, this condition may result in the impairment of the aileron inboard hinge.

This Service Bulletin requires an initial and repetitive inspection of the aileron inboard hinge nose rib and announces the availability of improved nutplates, which when installed, will relieve the conditions described above.

INSTRUCTIONS: (Refer to the Service or Maintenance Manual as Required)

1. Inspect the left and right ailerons at the inboard hinge attachment. Referring to Sketch "A", Fig. 1 and Fig. 2 determine if the hinge utilizes a nut and bolt combination or a bolt and nutplate combination to attach the hinge. *Inspections may take place while the aileron is installed.*
2. If examination of the hinge attachment shows a lock nut holding the hinge on, no further action is required, proceed to instruction 12. (See Fig 1.)

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INSTRUCTIONS: (Cont'd)

3. If the hinge attachment shows a bolt head holding the hinge fitting on, look just forward of the hinge fitting for countersunk rivets indicating a nutplate installation (remove paint if necessary). (Refer to Fig. 4) If nutplates are not installed, no further action is required, proceed to instruction 12. (See Fig 2.)
4. If the hinge attachment bolt holding the hinge fitting on with nutplates, but no cracks exist, proceed to instruction 12 and refer to the repetitive requirements of the Compliance Time above.
5. If cracks are detected or it is desired to relieve the repetitive inspection requirements of the Compliance Time above, continue with these instructions.
6. Remove the left and right ailerons per instructions contained in the appropriate chapter of the applicable Service or Maintenance Manual.

CAUTION:

Disassembly of the aileron leading edge is required to remove the affected nose rib. Care in handling and holding the aileron must be taken. Improper reassembly may result in difficulty in rigging the ailerons upon completion.

7. Remove the hinge fitting from the nose rib. Gain access as required and remove the nose rib.
8. Examine the area around the existing nutplates for visible cracks. Figure 3 and 4 point out the general area where cracks may appear. If cracks are found replace the nose rib and install two new Piper Part Number 406-825 nutplates on the new nose rib. (See material required below.)
9. If no cracks are apparent, remove the existing nutplates and perform a dye penetrant method inspection on the rib to be sure no cracks exist. If no cracks exist, install two new Piper Part Number 406-825 nutplates on the existing nose rib. (Nutplates are fastened with MS20426AD3 countersunk rivets, obtain locally.)
10. Reinstall the nose rib in the aileron as appropriate. Install the hinge fitting with the proper hardware and reinstall the ailerons.
11. Perform a rigging check per the applicable chapter of the appropriate Maintenance Manual to assure proper flight control operation.
12. Make an appropriate logbook entry of compliance with this Service Bulletin. (or entry of each repetitive inspection thereafter.)

MATERIAL REQUIRED:

Determined by inspection, up to four (4) each nutplates, Piper Part Number, 406-825, up to eight (8) each MS20426AD3 countersunk rivets, up to (1) each nose rib, left, Piper Part Number, 86398-02 and/or up to (1) each nose rib, right, Piper Part Number, 86398-03, per aircraft. (Rivets must be obtained locally.) (The new nose rib does not come with nutplates, assemblies may be purchased with hinge, nutplates and hardware installed by ordering the nose ribs by p/n 86398-802 and 86398-803.)

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

FIGURES 1 & 2

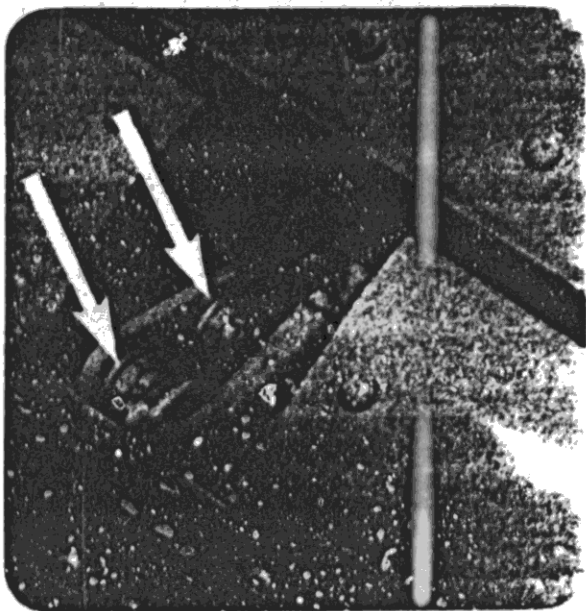


FIG. 1

Inspect for lock nuts. If installed, no further action is required. Make an appropriate logbook entry of compliance with this Service Bulletin.

Inspect for bolt heads. If there is no evidence of nutplates being installed, further action is not required. Make an appropriate logbook entry of compliance with this Service Bulletin.

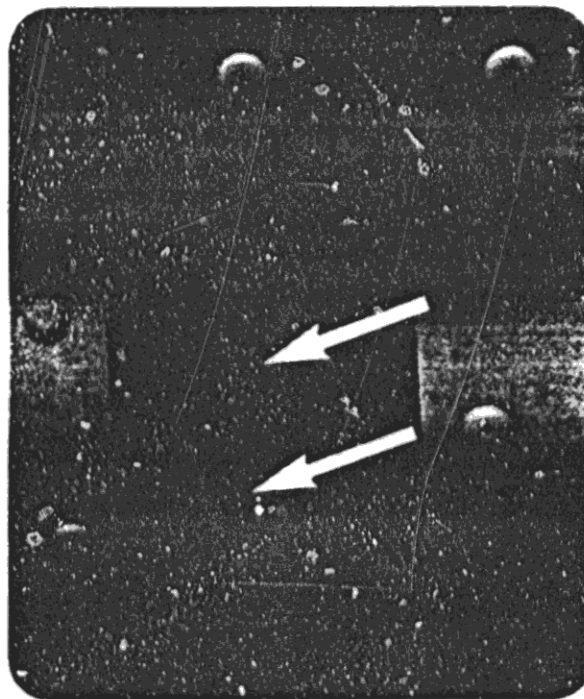


FIG. 2

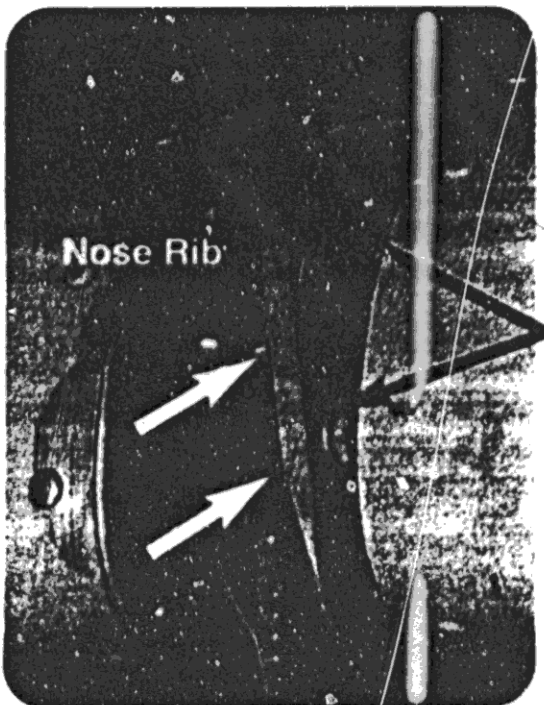
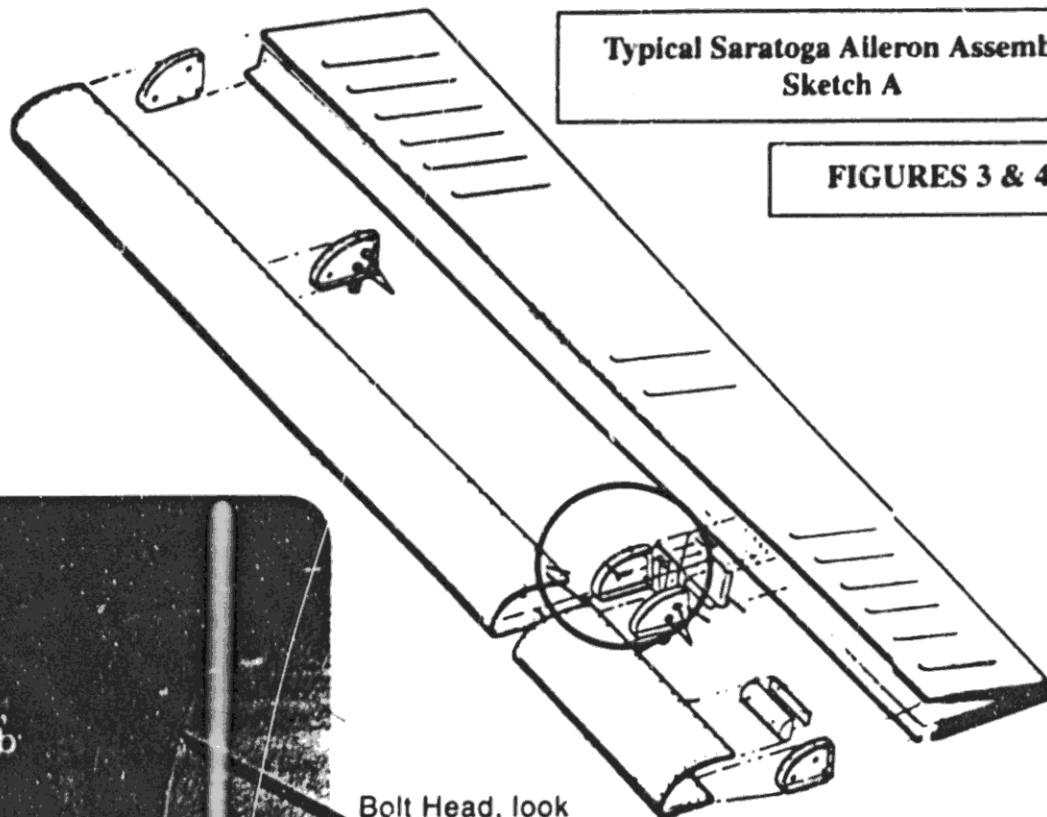


FIG. 3

Look for cracks appearing from under the hinge fitting.

Bolt Head, look for nutplates.

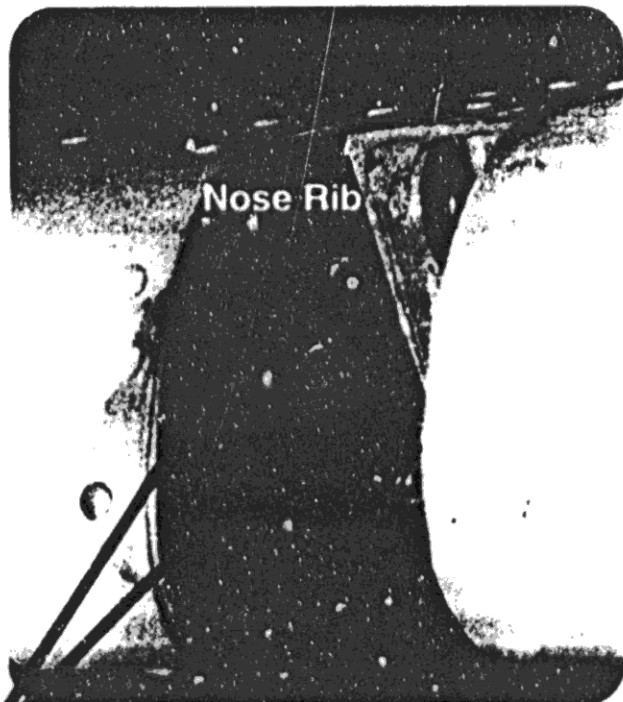


FIG. 4

Look for countersunk rivets indicating nutplates are installed. (Shown with hinge fitting removed.)