

SERVICE BULLETIN NO. 149
"FAA DOA EA-4 APPROVED"

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DATE: March 3, 1975

SUBJECT: NOSE GEAR STRUT INSPECTION AND PROTECTION

SERIALS AFFECTED: Group 1. All Model AA-1 and AA-1A, AA1B-0001 thru AA1B-0357, AA5-0001 thru AA5-0515 and all spare nose gear struts supplied prior to February 4, 1974.

Group 2. AA1B-0358 thru AA1B-0496, AA5-0516 thru AA5-0697, AA5B-0001 thru AA5B-0013 and all spare nose gear struts supplied from February 4, 1974 thru November 1, 1974.

TIME OF COMPLIANCE: Group 1. Within 60 days from date of this Bulletin.

Group 2. As indicated in text.

GENERAL

The nose gear strut is constructed by bonding a nose fork bearing cup to the lower end of a tubular steel strut. To prevent metal corrosion and subsequent bondline damage between the mating surfaces, a fillet has been provided around the strut at the intersection of the cup stop plate. This fillet, if not properly maintained, may deteriorate and crack due to propeller blast, abrasion or excessive nose gear loads. The resulting corrosion could affect nose gear strut design strength.

The information contained below provides instructions to inspect the strut and stipulates the improved procedure that must be incorporated to protect the bondline from damage.

The serials affected and time of compliance have been divided into two groups, based on bondline protection provided on original equipment nose gear struts.

GROUP 1 INSPECTION AND PROTECTION

1. Inspect the nose fork bearing cup to strut fillet for cracks and/or corrosion. If cracks/corrosion is found, place a 150 ft. lb. torque load on cup (suitably protecting the bearing surface), preferably around the stop plate. Any detectable rotation is reason for strut replacement.
2. Hand abrasive remove cup to strut fillet, rust and paint on strut up 1.5 inches minimum from cup stop plate.
3. Apply Loctite 290 Adhesive/Sealant (wicking), Loctite Corporation, to any cracks remaining in cup to strut bondline.

4. Apply a uniform .12 inch radius fillet of sealant* to replace fillet removed in Step 2. Also apply sealant on strut up 1.5 inches minimum from cup stop plate.
5. After sealant has cured, prime area with two light coats of zinc chromate primer and paint strut to match aircraft color.

GROUP 2 INSPECTION AND PROTECTION

Nose gear struts installed on aircraft listed in Group 2 were produced with the adhesive fillet removed and a fillet of 732 RTV added. This fillet is satisfactory as long as it is maintained and not subjected to prolonged exposure to petroleum products. If the fillet is damaged or becomes deteriorated, the strut must be inspected and protected as indicated in Steps 1 thru 5, Group 1 Inspection and Protection.

*APPROVED SEALANTS: EC-1675B, Class B-1/2, B-2 or B-4 with EC-1675A accelerator, 3M Company.
 890, Class B-2 or B-4 with 890A curing agent, Coast Pro-Seal Company.
 PR-1422, Class B-1/2 or B-2 with accelerator, Products Research & Chemical Corporation.
 PR-1436G, Class B-1/2, B-2 or B-4 with accelerator, Products Research & Chemical Corporation.

PARTS INFORMATION

Sealant required for strut protection may be purchased locally or from your authorized Grumman American Aviation Corporation Dealer.

<u>Sealant</u>	<u>Contents</u>	<u>Price</u>
Loctite 290	.34 fl. oz.	\$3.25 (E)
PR-1422, Class B-1/2	3-1/2 fl. oz.	\$5.00 (E)

Since the improved strut protection is a design improvement, no parts or labor allowance will be available for compliance with this Bulletin.

The above information will be included in the next revision of each applicable service manual.

Price subject to change without notice.

GRUMMAN AMERICAN AVIATION CORPORATION

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