



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

SERVICE No. 1156 BULLETIN

**PIPER CONSIDERS
 COMPLIANCE MANDATORY**

Date: April 7, 2005

(S)(M)

SUBJECT:

PERIODIC REPLACEMENT OF NOSE GEAR DRAG LINK BOLT

MODELS AFFECTED:

SERIAL NUMBERS AFFECTED:

- PA-28R-180 Arrow
- PA-28R-200 Arrow
- PA-28R-200 Arrow II
- PA-28R-201 Arrow III
- PA-28R-201T Turbo Arrow III
- PA-28RT-201 Arrow IV
- PA-28RT-201T Turbo Arrow IV
- PA-44-180 Seminole
- PA-44-180T Seminole

- 28R-30002 through 28R-31270; 28R-7130001 through 28R-7130013
- 28R-35001 through 28R-35820; 28R-7135001 through 28R-7135229
- 28R-7235001 through 28R-7635545
- 28R-7737002 through 28R-7837317; 2837001 through 2837061; 2844001 and Up
- 28R-7703001 through 28R-7803374; 2803001 through 2803012
- 28R-7918001 through 28R-7918267; 28R-8018001 through 28R-8218026
- 28R-7931001 through 28R-8631005; 2831001 through 2831038
- 44-7995001 through 44-8195026; 4495001 through 4495013; 4496001 and Up
- 44-8107001 through 44-8207020

COMPLIANCE TIME:

To coincide with next regularly scheduled maintenance event, but not to exceed the next fifty (50) hours time in service for aircraft with 500 hours flight time or more. Aircraft under 500 hours are not affected by this service bulletin until they have accrued a minimum of 500 hours.

APPROVAL:

The technical content of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.

PURPOSE:

It has been determined that, under certain conditions, the bolt that fastens the Upper and Lower Nose Gear (NG) Drag Links can develop wear in a manner that may not be detectable during routine maintenance and inspection. Specifically: on some aircraft, score marks have been discovered around the circumference of the bolt shank, midway along the length of the bolt.

By design, the bolt is free to rotate inside a set of bushings to allow relative movement between the Upper and Lower Drag Links during Landing Gear extension and retraction. Over an extended number of operating hours, this rotation can generate the score marks described, causing stress concentrations to develop in the bolt.

(OVER)

ATA: 3220

PURPOSE: (Continued)

Left uncorrected, this condition could eventually result in bolt failure, with subsequent Nose Gear collapse.

This Service Bulletin provides a schedule for the removal and replacement of this bolt (along with associated hardware), and the inspection of the mating bushings.

The applicable Aircraft Service Manuals/Maintenance Manuals will be updated to include the contents of this Service Bulletin at their next revision requiring the NG drag link bolt and pin replacement at the 500 hour inspections.

INSTRUCTIONS:

1. Jack the aircraft per the Aircraft Service Manuals/Maintenance Manuals.
2. Disassemble Upper Drag Link from Lower Drag Link, by removing the NAS464P4-27 bolt that functions as a hinge pin for the two parts. See Figure 1 or Figure 2 as applicable. Discard bolt and cotter pin, regardless of condition. Nut and washers may be reused, depending on condition.
3. Inspect bushings for excessive wear, and verify that bushing IDs are within Service Dimension range of .2515 to .2495 inches, replacing as necessary.
4. Reassemble Upper and Lower Drag Links per the Aircraft Service Manuals/Maintenance Manuals, by installing a new NAS464P4-27 bolt, taking care to reposition washers retained in Step 2. Reinstall castellated nut retained in Step 2. and secure with a new MS24665-134 cotter pin.
5. Lubricate per the Aircraft Service Manuals/Maintenance Manuals, as required.
6. Verify proper operation of the Nose Gear.
7. Remove airplane from jacks, and return to service.
8. Make a logbook entry indicating compliance with this Service Bulletin.

NOTE: A repetitive inspection and bolt/pin replacement are required every 500 hours.

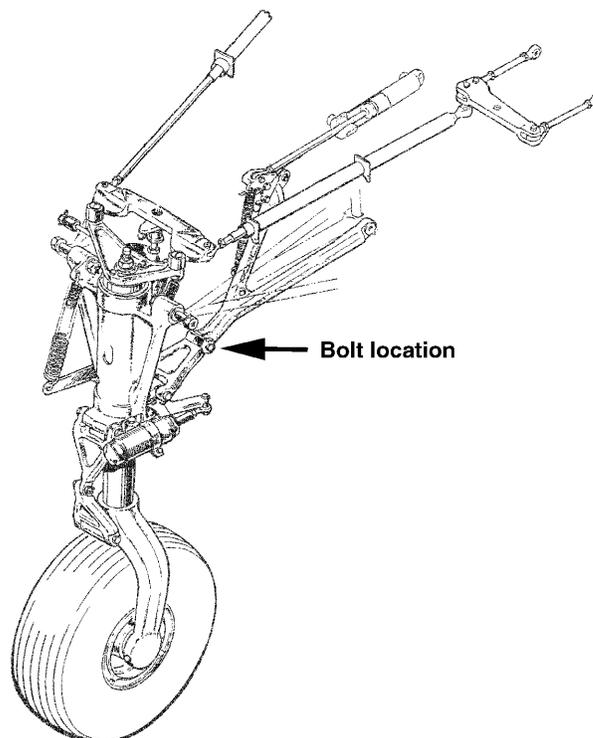


Figure 1
Typical PA-28R Bolt Location

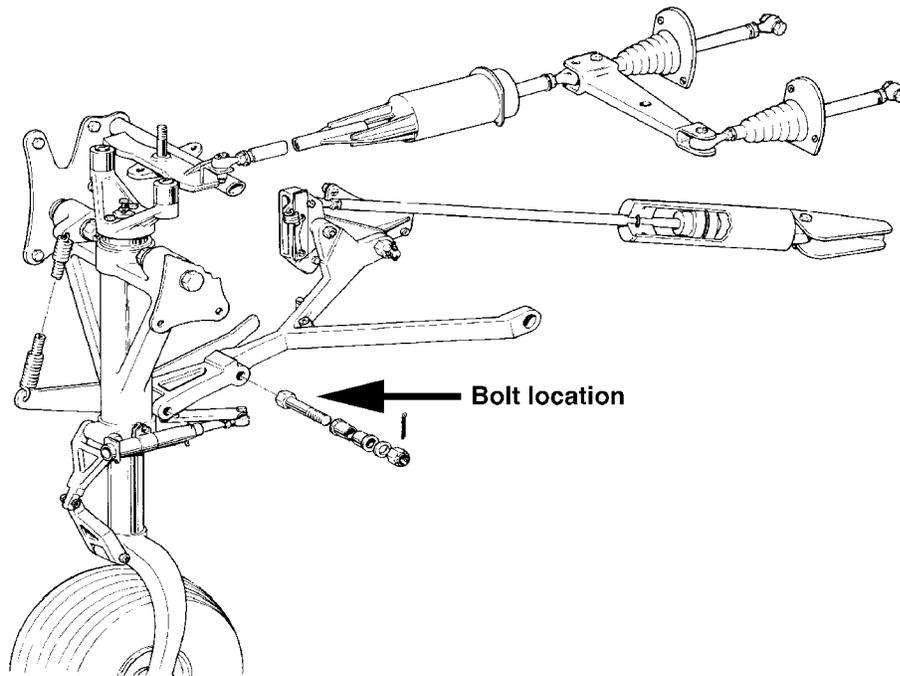


Figure 2
Typical PA-44 Bolt Location

<u>MATERIAL REQUIRED:</u>	<u>Qty</u>	<u>Piper Code #</u>	<u>Nomenclature</u>
	1 (required)	402-940	BOLT (NAS464P4-27)
	2 (on condition)	407-565	WASHER (AN960-416 or NAS1149F0463P)
	1 (on condition)	404-393	NUT - (AN320-4)
	1 (required)	424-052	COTTER PIN (MS24665-134)
	2 (on condition)	452-800	BEARING (87319-002)

AVAILABILITY OF PARTS: Your Piper Service Facility.

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

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 Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated.

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 and/or changes should be directed to:

THE NEW PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960