



# SERVICE LETTER

No. 596A

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

September 5, 1975 S/M

(Supersedes and voids Service Letter No. 596 dated November 19, 1971)

Subject: Nose Landing Gear System Product Advancement Information.

Reason for Revision: Availability of new Nose Gear Aligner Guide Bracket Assembly and "High Strength" attachment bolts for PA-24 Comanche series.

Models Affected: Serial Numbers Affected:

PA-24-180, PA-24-250,  
PA-24-260 Comanche;  
PA-24-400 Comanche;  
PA-30 Twin Comanche;  
PA-39 Twin Comanche C/R



Refer to Material Required section, below.

Compliance Time:

At owner/operators discretion, recommended at a regularly scheduled inspection interval.

NOTE:

The provisions of this service release primarily involve PA-24 Comanche series aircraft relative to the new Nose Gear Aligner Guide Bracket Assembly and "High Strength" attachment bolts (reference Material Required, below) in addition to PA-30 and PA-39 aircraft which have not been modified in accordance with the provisions of the original issue of this service letter.

Purpose:

As referenced previously on Piper Service Letter No. 575, dated April 8, 1971, analyses of product serviceability information revealed that, in some cases, the nose landing gear system on the above referenced aircraft has been exposed to varying degrees of inadequate inspection and maintenance practices. Further, Piper Service Letter No. 575 contained detailed inspection data to insure proper nose landing gear system inspection and maintenance practices.

This service letter announces the availability of three recently developed product advancement items that will help maintain the nose landing gear system on the above referenced aircraft in proper operating condition during the retraction and extension cycles, and to help deter improper ground handling practices. They are:

1. Improved nose gear aligner guide bracket assembly.
2. New "High Strength" bolts to attach the nose gear steering arm assembly and the nose gear aligner guide bracket to the nose gear strut housing assembly (refer to attached sketch for a pictorial description).

(over)

Purpose (Continued):

3. A Tow Turn Limits Placard Installation Kit (refer to attached sketch for a pictorial description).

Instructions:

1. Nose Gear Aligner Guide Bracket Assembly - applies to all aircraft specified in Material Required No. 1, below:
  - a. Inspect existing Nose Gear Aligner Guide Bracket; if guide channel material thickness is .062", replace with new Aligner Guide Bracket Assembly, part number 21719-11. NOTE: It is recommended that the new Aligner Guide Bracket be installed using the new "High Strength" Attachment Bolts, specified below. Prior to installation, check attachment bolt hole size (in Aligner Guide Bracket) to insure .202" diameter, as shown on top portion of attached sketch. .204
  - b. If existing Aligner Guide Bracket channel material thickness is .095", remove, ream attachment bolt hole size to .202" diameter (as shown on top portion of attached sketch) .204 and reinstall using new "High Strength" bolts.
  - c. The following aircraft contain the latest configuration (i.e., part number 21719-11) Aligner Guide Bracket Assembly, but have not had the new "High Strength" attachment bolts installed:
    - (1.) PA-24-260, serial numbers 24-4980 to 24-4983 inclusive, 24-4985, 24-4986, 24-4988 to 24-5047 inclusive.
    - (2.) PA-39, serial numbers 39-114 to 39-117 inclusive, 39-119 to 39-121 inclusive, and 39-123 to 39-127 inclusive, 39-129 and 39-131.Remove the Aligner Guide Bracket Assembly, ream attachment bolt hole size to .202" diameter, and reinstall using "High Strength" attachment bolts. .204
2. Tow Turn Limits Placard installation material and instructions are contained in Piper kit number 760 557, Tow Turn Limits Placard Installation.

Material Required:

1. Nose Gear Aligner Guide Bracket Assembly, one (1) each per aircraft Piper part number 21719-11 @ Suggested Unit List Price \$17.65; applicable to the following aircraft:
  - a. PA-24-180 and PA-24-250 Comanche, serial numbers 24-215 to 24-3641 inclusive, and 24-3643 to 24-3687 inclusive.
  - b. PA-24-260 Comanche, serial numbers 24-3642, 24-4000 to 24-5047 inclusive.
  - c. PA-24-400 Comanche, serial numbers 26-2 to 26-148 inclusive.
  - d. PA-30 Twin Comanche, serial numbers 30-1 to 30-2000 inclusive.
  - e. PA-39 Twin Comanche C/R, serial numbers 39-1 to 39-113 inclusive, 39-118 and 39-122 (as required per Instructions, No. 1 c., above).

Material Required (Continued):

2. "High Strength" Bolts, three (3) each per aircraft Piper part number 402 800 (NAS 1303-8H)  
@ suggested unit list price \$.48 C; applicable to the following aircraft:
- a. PA-24 Comanche Series, same as 1.; a., b., c. above.
  - b. PA-30 Twin Comanche, same as 1.; d. above.
  - c. PA-39 Twin Comanche C/R, serial numbers 39-1 to 39-127 inclusive, 39-129 and 39-131.

NOTE: To be installed with new Nose Gear Aligner Guide Bracket Assembly (reference Material Required No. 1, above).

3. One (1) each (per aircraft Piper part number 760 557, Tow Turn Limits Placard Installation  
@ suggested unit list price \$1.70 A; applies to the following aircraft:
- a. PA-24 Series, serial numbers 24-1 to 24-4998 inclusive, 24-5001, 24-5002 and 24-5003 and PA-24-400, serial numbers 26-2 and up.
  - b. PA-30, serial numbers 30-2 to 30-2000 inclusive.
  - c. PA-39, serial numbers 39-1 to 39-127 inclusive, 39-129 and 39-131.

Availability of Parts:

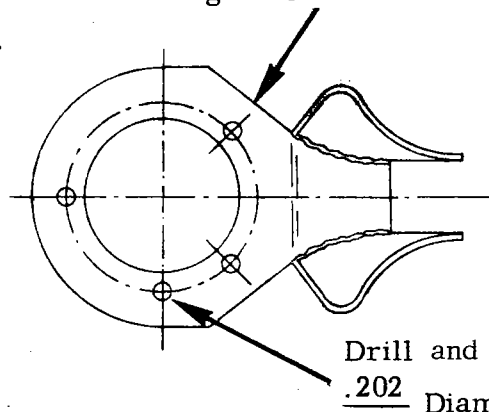
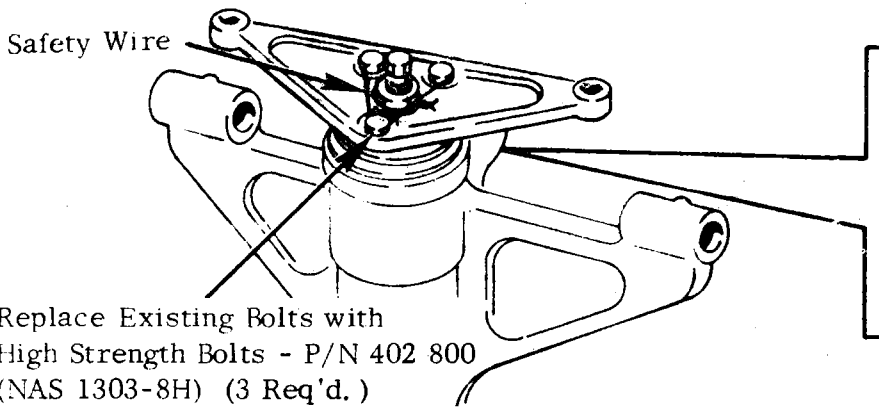
Your Piper field service facility.

Effectivity Date:

This Service Letter is effective upon receipt.

Summary:

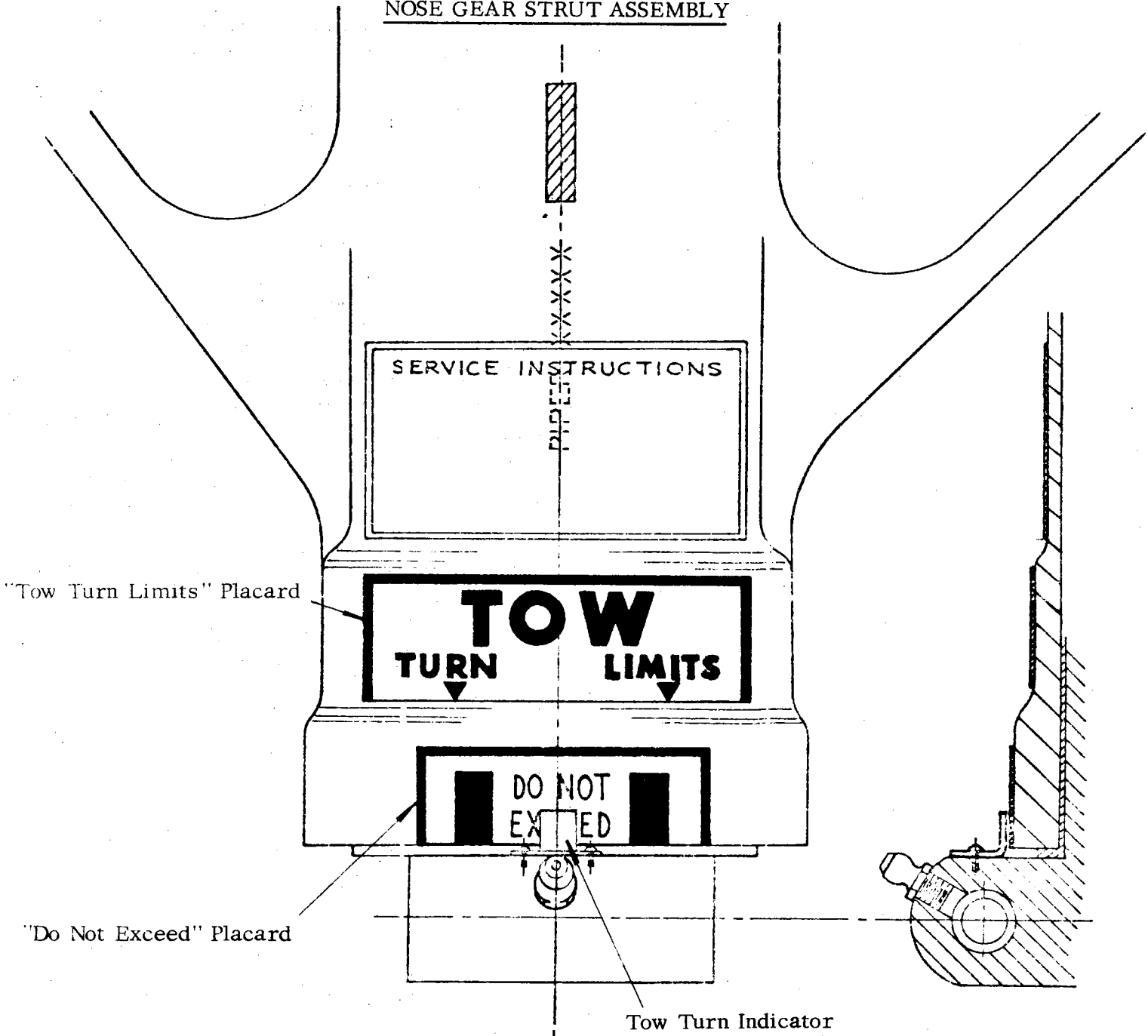
The product advancement features described herein may be procured through your Piper field service facility, and installed on your aircraft in a minimum amount of time during your next 100 hour or annual inspection.



Replace Existing Bolts with High Strength Bolts - P/N 402 800 (NAS 1303-8H) (3 Req'd.) Torque 30-35 in. lbs.

Drill and Ream Holes .202 / .204 Diameter

NOSE GEAR STRUT ASSEMBLY



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