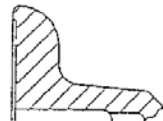


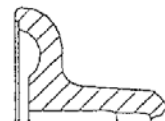
UPGRADE OF 40-77B NOSE WHEEL ASSEMBLY TO 40-77G CONFIGURATION

- EFFECTIVITY:** Parker P/N 40-77B Nose Wheel Assemblies configured with wheel flange Style "A" as shown in Figure 1.
- APPLICABILITY:** The New Piper Aircraft Inc. Model PA46-500TP Meridian aircraft equipped with 40-77B Nose Wheel Assemblies having Style "A" flange configuration.
- REASON:** Product Upgrade - The New Piper Aircraft, Inc. has requested an upgrade in Nose Wheel from Model 40-77B to Model 40-77G. The 40-77G Nose Wheel is identical to 40-77B except for the use of a higher strength wheel tie bolts system. The result of this upgrade is improved service life of wheel tie bolts.
- DESCRIPTION:** Product Upgrade- The 40-77G wheel assembly is identical to the 40-77B except that it uses a high strength wheel tie bolt system. Upgrading 40-77B Nose Wheel to the 40-77G configuration permits improved tie bolt service life.
- This document provides the necessary instructions and identifies required hardware to upgrade the 40-77B Nose Wheel Assembly to 40-77G configuration. Replacement parts may be procured from Parker Hannifin as Kit part number SB7083-1. Upgrade may **ONLY** be performed on existing 40-77B wheel assemblies that have the Style A solid flange as shown below.
- COMPLIANCE:** **MANDATORY**, Perform the accomplishment instructions at earliest convenience before next annual or within the next 100 hours of operation, whichever comes first. The service life of the wheel assembly and supporting structure may be negatively affected if upgrade is not performed.
- APPROVAL:** The design contents of this Service Bulletin are FAA DER approved.
- WEIGHT & BALANCE:** None.
- PUBLICATIONS:** Parker AWBCMM0001 Component Maintenance Manual
The New Piper Aircraft Inc. PA46 Aircraft Maintenance Manual

NOTE: 40-77B Wheel Assemblies may be converted to 40-77G configuration only if the Wheel Flanges on those wheels shown as Style "A" are in use. If the existing 40-77B Wheels have flange styles as shown in Style "B", then those wheels may not be converted to 40-77G



STYLE "A" (solid Flange)
Permissible to reconfigure



STYLE "B" (scalloped flange)
Do not reconfigure

Figure 1. Wheel Flange Styles



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MATERIALS:

Table 1- Kit list for P/N SB7083-1, Service Bulletin Kit, Upgrade of 40-77B Nose Wheel Assembly to 40-77G Configuration

<u>Parker P/N</u>	<u>Description</u>	<u>Quantity</u>
103-85600	Bolt, External Wrenching, (MS21250-04030)	3
095-14600	Washer, Double C'sunk, (MS14155-4)	6
094-13800	Nut	3
217-30653	Grommet	1
166-19700	Nameplate, Replacement (P/N 40-77G) (see step 10)	1
166-20000	Nameplate, Warning (see step 11)	1
SB7083	Service Bulletin (This Document)	1

ACCOMPLISHMENT INSTRUCTIONS:

The 40-77B nose wheel assembly **MAY** be converted to the 40-77G configuration. **ONLY** Style "A" flange configuration wheels may be converted.

- 1) Visually inspect to determine flange configuration per Figure 1. Proceed **ONLY** if the product has the Style "A" flange configuration. Note: Wheels that have Style "B" flange configuration **ARE NOT** eligible for upgrade, a newly manufactured 40-77G Wheel Assembly is required.
- 2) For new wheels that have not been mounted with tire, proceed to step 3. Jack aircraft, **DEFLATE TIRE** by threading a valve core depressing tool into the valve stem. Assure all air is removed from tire and remove valve core. Remove wheel IAW The New Piper Aircraft maintenance procedures. Disassemble wheel only after deflating tire and thoroughly inspect the wheel halves and components (except as noted in Table 2) for airworthiness IAW Parker AWBCMM0006 Component Maintenance Manual.
- 3) Disassemble wheel, remove and discard the wheel tie bolt hardware and nameplates listed in Table 2, below and as shown in Figure 2.

**CAUTION: DO NOT USE SHARP BLADE TO REMOVE NAMEPLATES.
DAMAGE TO WHEEL SURFACE CAN RENDER WHEEL NON-SERVICABLE.**

Table 2- Removal Items

<u>Parker P/N</u>	<u>Description</u>	<u>Quantity</u>
103-10500	Bolt, (AN4-22A)	3
095-10200	Washer, (AN960-416L)	6
094-10300	Nut, (MS21044-N4)	3
166-19700	Nameplate, (P/N 40-77B Nose Wheel Assy)	1

- 4) Apply anti-seize compound per AMS 2518 to bolt threads, washer faces, and nut base prior to assembly. Avoid getting anti-seize compound on wheel surfaces. Re-assemble the wheel-tire assembly with the hardware listed in SB7083-1 Upgrade Kit, (Table 1) IAW Parker AWBCMM0006 Component Maintenance Manual and as shown in Figure 3.



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- 5) Restrain the bolt head and torque the nuts using a circular pattern. Torque the bolts evenly to 20 in-lb.
- 6) Torque the nuts evenly to 45-50 in-lbs (one half the final torque) starting with the next tie bolt.
- 7) Torque the nuts evenly to 90 in-lbs starting with the next tie bolt.
- 8) When all nuts are properly torqued to the value specified on the wheel nameplate or maintenance publication, clean the wheel using a non-residue cleanser / degreaser. Nameplates will not adhere to dirty or oily surfaces.
- 9) Excess amounts of anti-seize that squeeze out during torquing is normal and may be removed with a clean dry shop cloth and non-residue cleanser / degreaser.

Note: Use only AMS 2518 (previously known as MIL-T-5544) anti-seize compound only when LUBTORK, AMS 2518, or MIL-T-5544 is specified on the nameplate.

- 10) Apply replacement nameplate, P/N 166-19700, on clean outboard wheel half opposite inflation valve hole. (The manufacturing date code for all replacement nameplates will include "R" between the month and year that it is printed to indicate a replacement nameplate. A nameplate printed in April of 2006 will be identified as Mfg. 04R06).
- 11) Apply P/N 166-20000 Warning Nameplate, adjacent to the inflation valve hole on clean outboard wheel half, see Figure 3.
- 12) Inflate and install the wheel-tire assembly IAW aircraft maintenance manuals and make appropriate maintenance log book entry that the 40-77B wheel assembly was upgraded to the 40-77G configuration per SB7083.



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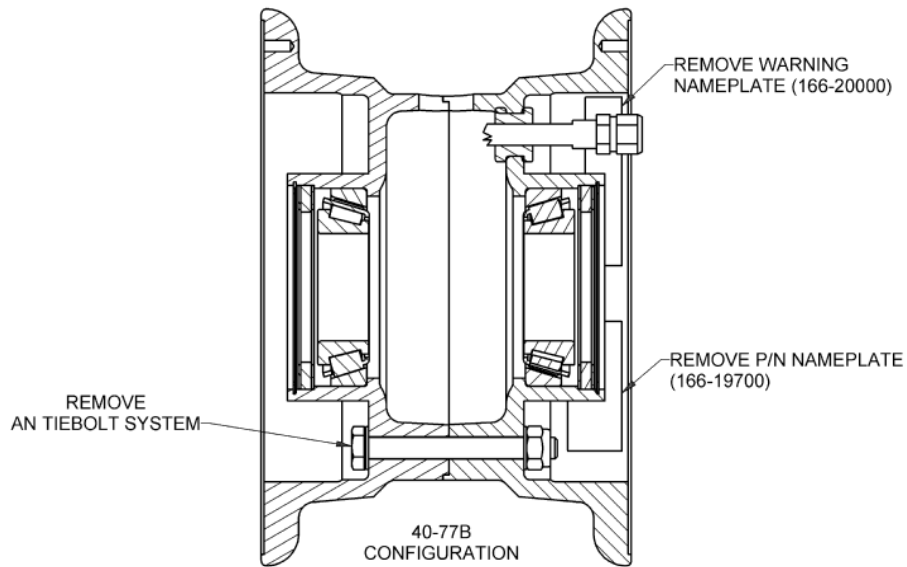


Figure 2

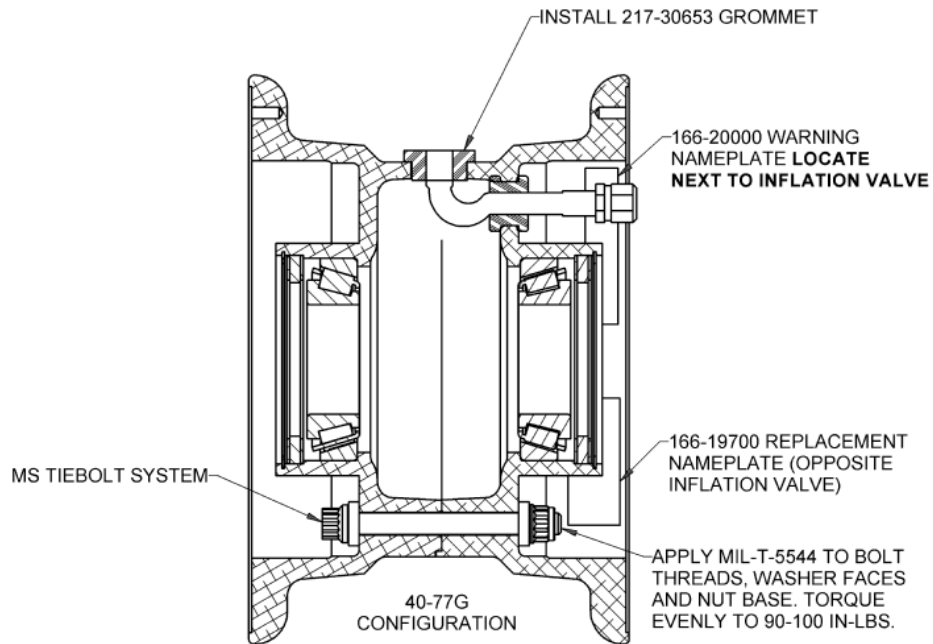


Figure 3