

# Cleveland

Wheels & Brakes

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# SERVICE BULLETIN

## CONVERSION OF P/N 40-414 WHEEL ASSEMBLY TO P/N 40-75P CONFIGURATION

- EFFECTIVITY:** Parker P/N 40-414 Wheel Assemblies.
- APPLICABILITY:** All Cirrus, Model SR20 aircraft equipped with the P/N 40-414 wheel assemblies that are to be upgraded to use P/N 30-52AB brake and P/N 40-75P wheel assemblies.
- Current spares inventory of P/N 40-414 wheel assembly for Cirrus Model SR20.
- REASON:** Product conversion to permit brake upgrade - To allow reconfiguration of the P/N 40-414 wheel assembly to P/N 40-75P which uses the same inboard and outboard wheel halves and a thicker brake disc that is compatible with P/N 30-52AB brake assembly.
- DESCRIPTION:** This document provides the necessary instructions and identifies the required hardware to upgrade P/N 40-414 wheel assembly to P/N 40-75P configuration.
- COMPLIANCE:** **Mandatory-** If P/N 30-52AB brake assembly is used on SR20 aircraft the main wheel assembly **MUST** be reconfigured to P/N 40-75P.
- APPROVAL:** The design contents of this Service Bulletin are FAA DER approved.
- WEIGHT & BALANCE:** Accomplishing this Service Bulletin results in a 0.30 pound weight increase per wheel.
- PUBLICATIONS:** P/N 40-75P IPL is published in the Cleveland Wheels & Brakes Product Catalog and service information is published Parker AWBCM0001-6 Component Maintenance Manual.
- MATERIALS:** SB7084-1 Service Bulletin Kit Parts List:
- Each Kit will contain the parts required to convert **ONE** (1) P/N 40-414 wheel assembly to P/N 40-75P configuration.

**Table 1 Conversion Hardware**

<u>P/N</u>	<u>DESCRIPTION</u>	<u>QUANTITY PER KIT</u>
164-01501	Brake Disc	1
154-00300	Felt, Grease Seal	2
153-00400	Ring, Grease Seal	4
095-10500	Washer ( AN960-516)	3
094-10400	Nut (MS21044-N5)	3
166-19700	Nameplate (Replacement, 40-75P Ass'y)	1
166-20000	Nameplate "Warning"	1
SB7084	Service Bulletin (This Document)	1



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## INSTRUCTIONS:

<b><u>WARNING:</u> DEFLATE TIRE BEFORE LOOSENING WHEEL TIEBOLTS</b>
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P/N 40-414 main wheel assembly **MUST** be converted to P/N 40-75P configuration to operate with heavy duty brake assemblies P/N 30-52AB.

- 1) For new wheels that have not been in service, proceed to step 3.
- 2) Jack aircraft, **DEFLATE** tire and remove valve core, remove wheel IAW Cirrus Design Aircraft maintenance procedures, disassemble wheel, and thoroughly inspect the wheel halves and components ( except as noted in Table 2) for airworthiness IAW Cleveland Wheels & Brakes AWBCMM0001-6 Component Maintenance Manual.
- 3) **DEFLATE** tire and remove valve core, remove and discard the hardware and nameplates as shown in Figure 1 and listed in Table 2 below.

The following components must be removed from the existing P/N 40-414 wheel assembly and discarded. CAUTION: Do not use sharp tool to remove nameplate.

**Table 2- Removal Items**

<u>P/N</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
153-00400	Ring, Grease Seal	4
154-00300	Felt, Grease Seal	2
095-10500	Washer ( AN960-516)	3
094-10401	Nut (MS21045-5S)	3
164-24400	Brake Disc	1
166-19700	Nameplate (located on Outboard Wheel Half)	1

- 4) Disassemble the wheel and inspect components IAW Cleveland Wheel and Brake Component Maintenance Manual, AWBCMM0001-6.
- 5) Assemble the wheel-tire assembly with the hardware listed in SB7084-1 Conversion Kit, (Table 1) IAW Parker AWBCMM0001-6 Component Maintenance Manual and as shown in Figure 2.
- 5a) Prior to installing new grease seal rings and grease seal felts on inboard and outboard wheel hubs, lightly coat the I.D. and inner face of grease seal felts, P/N 154-01400 with MIL-G-81322 bearing grease.
- 5b) Install grease seal rings P/N 153-00400 and grease seal felts P/N 154-00300 on inboard and outboard wheel hubs and secure with retaining rings P/N 155-00100. Ref. Figures 3. Torque wheel tiebolt system evenly to one half the final torque then evenly to 150 in-lbs **DRY**.
- 6) Apply replacement nameplate, P/N 166-19700, on 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 February of 2006 will bear Mfg. Date of 02R06).

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7) Apply P/N 166-20000 Warning Nameplate adjacent to the inflation valve hole, Ref. Figure 2.  
Do not apply over existing nameplate. (Two warning nameplates are permissible.)

8) Replace valve core, tube, and tire. Inflate the wheel-tire assembly IAW aircraft maintenance manuals and make appropriate maintenance log book entry that P/N 40- 414 wheel assemblies were converted to P/N 40-75P configuration per SB7084.

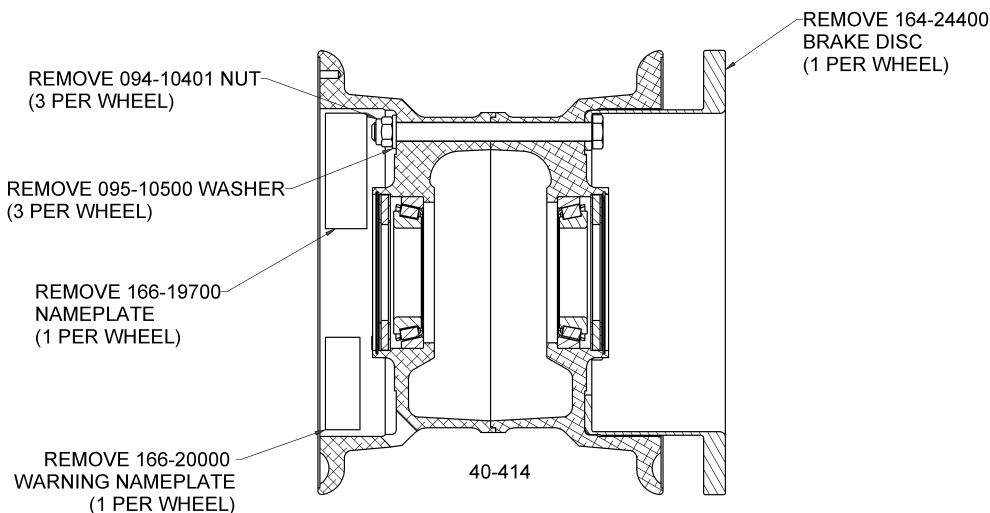


Figure 1

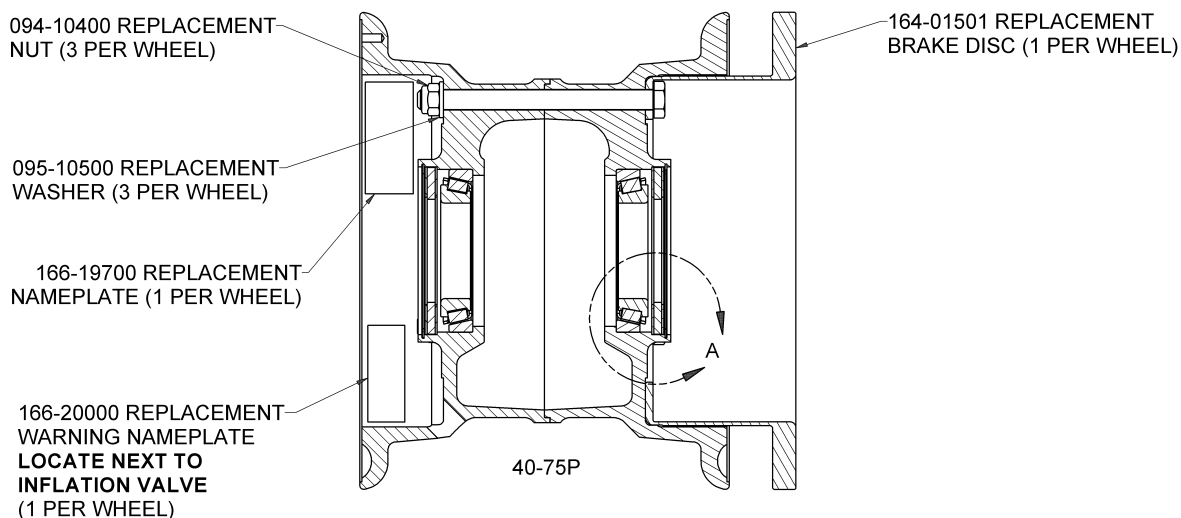
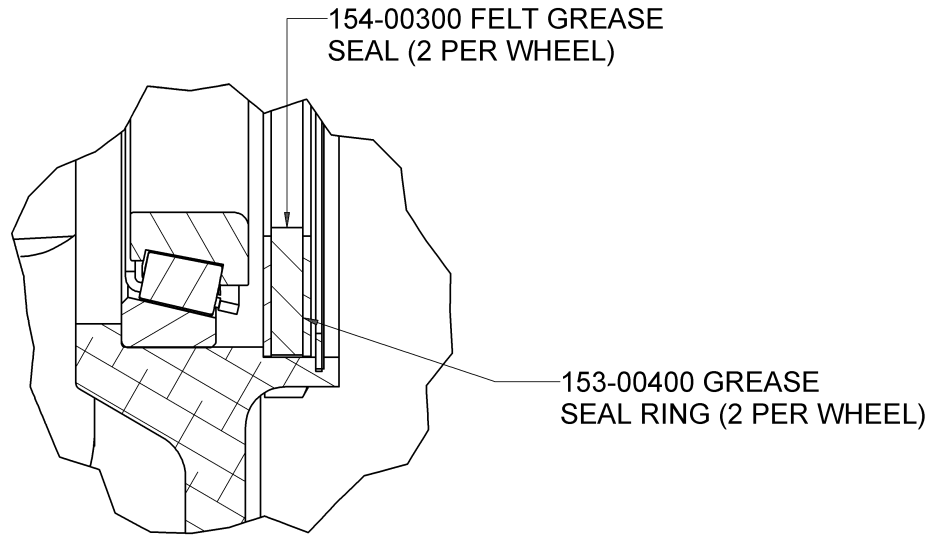


Figure 2

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Inner and outer grease seal (View A)  
Figure 3

END