

SERVICE BULLETIN

FELT GREASE SEAL – INSIDE DIAMETER – INSPECT / REPLACE

EFFECTIVITY: Parker Hannifin Felt Grease Seals, P/N 154-01400 for use as a spare part or used in the following wheel assemblies identified with the MFG DATE 01/04 through 04/04 or on wheel assemblies that were part of the various conversion kits shipped from Parker during the affected time period.

Felt Grease Seals P/N 154-01400- All parts shipped from Parker between January 9, 2004 and April 14, 2004 for use as a spares replacement.

Wheel Assembly P/N's: All wheel assemblies listed in Applicability section below shipped between January 9, 2004 and April 14, 2004 identified with a MFG DATE 01/04 through 04/04 may have been assembled with the incorrect felt grease seal.

Conversion Kit P/N's: All conversion kits listed in Applicability section below shipped between January 9, 2004 and April 14, 2004 contain the following wheel assemblies with MFG DATE 01/04 through 04/04 that may have been assembled with the incorrect felt grease seal.

APPLICABILITY:

Wheel Assy	#Seals (location)	Used on
40-56	2 (Inbd & Outbd)	Piper PA-28 series & Tomahawk
40-56B	2 (Inbd & Outbd)	Piper PA-34 series
40-76B	2 (Inbd & Outbd)	Aerostar 600 series, PA-600 & PA-700P series, PA-23, PA-28, PA-30, PA-31, PA-32, PA-34 series,
40-76F	2 (Inbd & Outbd)	Aerostar 600 series, PA-600 & PA-700P series, Piper PA-28, PA-32, PA-34
40-101D	2 (Inbd & Outbd)	Wipaire 13000 Floats
40-140	2 (Inbd & Outbd)	Piper PA31, PA31T, PA-31T2, PA-42, T1020 & T1040
40-406A	1 (Inbd location)	Lancair Columbia, Model 300
40-414A	2 (Inbd & Outbd)	Diamond DA40

Conv Kit P/N	Wheel Assy	#Seals (location)	Used on
199-50	40-98	1 (Inbd location)	Beech Models 33, 35,45,55 & 95
199-52A	40-98D	1 (Inbd location)	Navion A thru H
199-73	40-128	1 (Inbd location)	Beech 50, A60, B60, 58P & 58TC
199-174	40-140	2 (Inbd & Outbd)	Twin Commander- 500 & 600series

REASON: Parker Hannifin has received a report of installation difficulties of subject wheel assemblies that contain the P/N 154-01400 Felt Grease Seal. It has been determined that the inside diameter of the P/N 154-01400 Felt Grease Seals shipped between the affected dates is too small because of a part misidentification. Continued use of the felt seal with a small inside diameter may result in installation difficulty, loss of bearing preload and or reduced bearing service life.

DESCRIPTION: This service bulletin is issued to inform users of the installation difficulty reported for the above products suspected of containing the 154-01400 felt grease seals with incorrect inside diameter. Specific accomplishment instructions are furnished for spares inventory and installed product. Replacement seals can be obtained by contacting the Parker Hannifin Service Center at 440-937-1272.



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COMPLIANCE: **Mandatory- Perform accomplishment instructions as outlined on page 2.**

APPROVAL: The contents of this service bulletin are FAA DER approved.

WT. & BAL.: Not Applicable:

MATERIALS: Contact Parker Hannifin for information on how to obtain replacement 154-01400 Felt Grease Seals.

PUBLICATIONS: This service bulletin will be incorporated into the Cleveland Wheels & Brakes Component Maintenance Manual during the next scheduled revision.

ACCOMPLISHMENT INSTRUCTIONS:

A. SPARES INVENTORY-FELT GREASE SEALS

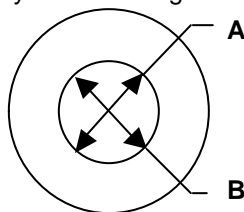
- 1) Immediately upon receipt of this Service Bulletin, review receiving inspection records for 154-01400 Felt Grease Seals shipped from Parker between January 9, 2004 and April 14, 2004. Contact Parker Hannifin Service Center at 440-937-1272 to obtain replacement seals.

B. SPARES INVENTORY OF WHEEL ASSEMBLIES OR CONVERSION KITS

- 1) Immediately upon receipt of this Service Bulletin, review receiving inspection records for Wheel Assemblies and Conversion Kits listed in the Effectivity and Applicability sections shipped from Parker between January 9, 2004 and April 14, 2004.
- 2) Inspect stock for wheel assemblies with MFG DATE 01/04 through 04/04. Contact Parker Hannifin Service Center at 440-937-1272 to obtain replacement seals. Prior to release from stock or installation on aircraft, remove and replace the seals and tag wheel assemblies or conversion kits to identify them as complying with SB7081.

C. PRODUCT INSTALLED ON AIRCRAFT

- 1) Immediately upon receipt of this Service Bulletin, and prior to next flight, if wheel products have been purchased and installed on aircraft referenced in the Applicability section between January 9, 2004 and April 14, 2004, then it may be possible that an affected part was involved. If so, then gain access to the wheel assembly and inspect for the MFG DATE 01/04 through 04/04.
- 2) Aircraft that have been identified as not being equipped with the affected products may be returned to service. Make appropriate entry in aircraft logbooks. **No further action is required.**
- 3) For aircraft that are identified as being equipped with affected products then the product is suspect of containing a nonconforming seal. Contact Parker Hannifin Service Center at 440-937-1272 to obtain replacement seals or inspect the seal, to determine if replacement is necessary.
- 4) To inspect/replace the seal, jack the aircraft, deflate tire and remove wheel assembly per airframe maintenance manual. Remove felt grease seal from the wheel. The felt material is soft and it will flex under application of pressure by the caliper jaws or be out of round in the uninstalled condition. Use a 6 inch dial caliper, measure the inside diameter of the felt grease seal in two radial locations approximately 90° apart and average the two readings. The inside diameter of a new seal in an unrestrained condition should measure $1.74 \pm .03$ inches. The seal should fit snugly around the bearing stop spacer but shall be free to rotate with the wheel about the axle. Any seal that is found to be undersize or observed to be excessively worn or stressed from service shall be replaced. Dampen replacement seals with SAE 10W motor oil and assemble in reverse order of disassembly (Refer to AWBCMM0001 Aircraft Wheel & Brake Maintenance Manual). Reinstall wheel assembly and make appropriate entry in aircraft log books.



$$(\text{Dia A} + \text{Dia B}) / 2 = 1.74 \pm .03$$