

# Cleveland

Wheels & Brakes

## Parker Hannifin Corporation

Aircraft Wheel & Brake  
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# PRODUCT REFERENCE MEMO

## REPLACEMENT AND RETORQUE OF BOLTS ON 40-107A WHEEL ASSEMBLY

EFFECTIVITY: Gulfstream Aerospace Models:  
560F, 680F, 680FL, 680FL(P), 680T, 680V,  
680W, 681, 685, 690, 690A, 690B, 690C,  
690D, 695, 695A, 695B, 840, 980, 1000

Those equipped with Cleveland Main Wheels & Brakes.

PURPOSE: The purpose of this Product Reference Memo is to advise owner/operators that are using Cleveland 40-107A Wheel Assemblies on their aircraft that some commuter operators are experiencing bolt failures while operating at gross weight conditions. As a result, Bolt Torque Value has been increased from 180 in-lb. to 300 in-lb.

MATERIALS REQUIRED: Cleveland Kit 199-17022 will convert one (1) aircraft. It consists of two (2) 166-09400 Nameplates, this PRM, and Maintenance Manual for 40-107/30-107 Series Main Wheel & Brake.

NOTE: See Section III. New wheel bolts, washers and nuts may be required, to be ordered separately.

INSPECTION PROCEDURE: WITHIN THE NEXT 100 HOURS remove and disassemble 40-107A Wheel Assembly per maintenance manual instructions and inspect all AN6-40A Tie Bolts (Parker P/N 103-31000) for cracks by magnaflux inspection procedures per MIL-I-6868.

ACCEPTANCE: After inspecting bolts 100% for cracks, AN6-40A Bolts may be returned to service if NO evidence of cracks exists.

REJECTION: Any crack in bolt shank, root radius of head, or minor dia. of thread necessitates replacement of all bolts, washers and nuts with new hardware of same part number.

<u>ITEM</u>	<u>AN DESIGNATION</u>	<u>PARKER P/N</u>	<u>QTY</u>
Bolt	AN6-40A	103-31000	8
Washer	AN960-616	095-10600	16
Nut	AN364-624	094-10100	8

NOTE: Parts listed above are NOT included in Kit 199-17200 and must be ordered separately, if required.

REASSEMBLY:  
1) Locate existing nameplate on outer wheel half and note month and year of manufacture, stamped in block titled "Mfg."

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- 2) Take new nameplate P/N 166-09400; verify that it is stamped with the following information:

Model	<u>40-107A</u>	Static Rating	<u>6000 #</u>
Size	<u>24 x 7.7</u>	Mfg. _____	Wgt. <u>24.9 #</u>

Then impression stamp or scribe in block titled "Mfg." the original month and year of manufacture as noted in Step 1.

- 3) Remove original nameplate and replace with new nameplate in same location on outer wheel half.
- 4) Reassemble wheel as per Maintenance Manual, torquing wheel bolts at 300 in-lb.
- 5) Repeat Inspection, Acceptance, Rejection and Reassembly procedures for the other wheel, then reinstall both wheels on aircraft, per manual.
- 6) Make a log book entry referencing conformance to PRM 48, add PRM and Maintenance Manual to aircraft paperwork and then return aircraft to service.