

# Cleveland

Wheels & Brakes

Parker Hannifin Corporation

**Aircraft Wheel & Brake**

1160 Center Road, P.O. Box 158

Avon, Ohio 44011 USA

1-800-BRAKING (272-5464)

216-937-1272 • FAX 216-937-5409

# PRODUCT REFERENCE MEMO

## NEW HIGH STRENGTH WHEEL BOLTS, PART NUMBER 103-15500

APPLICABILITY: Cessna 310, 320, 335, 340, 401, 402, 411, 414 and 421 series. Wheel Assemblies 40-40A, 40-40B, 40-135 having nameplate dates of 3-85 and prior.

It has been brought to our attention that some owners/operators are experiencing difficulties with the wheel bolts used in the above referenced wheel assemblies. These reported difficulties include our initially released high strength bolts bearing hex head identification (SPL).

1. To remedy this situation, we are introducing a new high tensile strength bolt which should be introduced whenever the previously used bolt is removed.
2. The new bolt is interchangeable with the existing bolts, but must be used in conjunction with AN365-428C (094-10301) FlexLoc Style Nuts. The new bolt is identified by the marking on the hex head as shown below. The FlexLoc Style Nut is identified by six slots in the crown as shown below. Do not use the shorter style, all metal deformed (squash) nut or nuts having nonmetallic (plastic) inserts as frictional devices.



With the following exceptions, to install the new hardware, follow the aircraft maintenance procedure covering removal, disassembly, reassembly and installation of the wheel assemblies.

**ALWAYS BE SURE TO DEFLATE THE TIRES PRIOR TO LOOSENING THE BOLTS AND SPLITTING THE WHEEL HALVES.** During the reassembly of the wheel, special attention should be given to torquing the new bolt-nut combination. An increased torque value must be used on the new hardware; **DRY TORQUE VALUES FOR THE NEW HARDWARE IS 125 ± 5 IN-LB.**



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Tightening Procedure:

1. Hand turn the nut onto the bolt until it stops.
2. Using a torque wrench, measure the running torque (the torque required to turn the nut on the bolts).
3. This running torque must be added to  $125 \pm 5$  in-lb dry torque value to insure proper bolt utilization.

<u>Example:</u>	Average running torque for 9 bolts	15	in-lb
	<u>Dry torque required</u>	+ 125 ± 5	in-lb
	Final torque wrench reading	= 140 ± 5	in-lb

4. Since running torque will become less, due to nut-bolt reuse at tire change intervals, this procedure must be repeated each time service necessitates disturbing the wheel bolts.