

# Cleveland

Wheels & Brakes

## Parker Hannifin Corporation

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# SERVICE BULLETIN

## REPLACEMENT OF 103-22700 BOLTS USED IN CLEVELAND BRAKE ASSEMBLIES ON THE CESSNA CITATION

**SUBJECT:** Replacement of 103-22700 bolts with 103-85300 bolts in the following Cleveland Brake Assemblies, Conversion Kits and Replacement Heat Stacks.

<u>BRAKE ASSEMBLY</u>	<u>KIT P/N</u>	<u>HEAT STACK P/N</u>
30-161A	199-16900	235-01200
30-189A	199-17700	
030-18902	199-16400	
	199-18000	

**PURPOSE:** 103-22700 bolts do not offer any type of locking feature to insure maintainability of preload and engagement.

103-85300 bolts offer safety wire capability to insure maintainability of preload and engagement throughout service life of aircraft.

**APPLICABILITY:**

1. Cessna Aircraft Models: 500, 501, 550, 551, S550 (or S/II) which are equipped with brake models 30-161A, 30-189A and 030-18902.
2. All part numbers listed in Subject above which are in inventory.

**EFFECTIVITY:** All 30-161A, 30-189A and 030-18902 Brake Assemblies with nameplates dated 11-92 or prior, that are installed on aircraft or are contained within uninstalled kit part numbers 199-16400, 199-16900 ( received prior to 12-1-92 ), 199-17700 or 199-18000. All rotatable spares stock of P/N 235-01200 Heat Stack assemblies that have either a yellow tag or nameplate dated 11-92 or prior.

**DESCRIPTION:** This service bulletin is divided into two parts. Part I contains interim inspection and maintenance instructions to be performed on effected equipment until bolt replacement hardware kits P/N 199-20600 are available. Part II requires the replacement of hardware that will relieve repetitive inspections of the assemblies allowing normal maintenance inspection intervals.

**COMPLIANCE:** Mandatory. Within the next ten flight hours after receipt of this service bulletin inspect all applicable aircraft, rotating spares inventory or uninstalled kits for effected brake assemblies and heat stacks. Perform Part I interim inspection and maintenance procedures. Perform Part II rework instructions when 199-20600 Hardware Kit is received.

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MATERIAL  
REQUIRED:

1. Material for this upgrade will be supplied in the form of kit 199-20600 which will consist of the following:

Item #1	Bolt - P/N 103-85300	5 ea.
Item #2	Safety Wire - MS20995C32	36"
Item #3	Service Bulletin Compliance	

2. Each 199-20600 kit will upgrade one brake assembly or one 235-01200 heat stack.
3. Kits will be supplied free of charge. Please place orders through the Aftermarket Sales Department, 1-800-272-5464.
4. Thirty minutes of labor will be reimbursed per kit based on a shop rate of \$50.00 per hour. Authorization for reimbursement will be initiated by returning the Service Bulletin Compliance card. Please return to the attention of Customer Support.

PART I  
PROCEDURE:

Instructions for all effected assemblies and kits as listed, on or off the aircraft.

1. Within the next ten flight hours, torque the five (5) brake assembly bolts (P/N 103-22700) that are contained on the brake or heat stack assemblies to  $150 \pm 10$  in-lbs.
2. After torquing, use torque seal or equivalent to mark torqued fasteners for visual inspection purposes.
3. Torque seal is then to be checked prior to every flight until 199-20600 kit is installed.
4. If torque seal is found to be disturbed, bolts must be re-torqued to  $150 \pm 10$  in-lbs., re-stripped and continue inspection per step 3.

PART II  
PROCEDURES:

Instructions for equipment installed on aircraft. To be performed when the 199-20600 replacement hardware kit is received.

1. Chock wheels and release parking brake.
2. Remove each 103-22700 brake assembly bolt one at a time, replacing each with a new 103-85300 bolt per maintenance manual (supplied in kit 199-20600) before proceeding to the next 103-22700 bolt. As each new bolt is installed, snug up with appropriate wrench or socket.
3. Upon completion of new bolt installation, torque all five (5) to  $150 \pm 10$  in-lbs. and safety wire per MS 33540 with material supplied in 199-20600 kit.
4. Proceed to other side of aircraft and repeat step 2.
5. Select the applicable revised maintenance manual pages supplied with this service bulletin and insert.
6. Make a maintenance manual and log book entry referencing compliance with SB7028 and return the aircraft to service.

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## Instructions for brake assemblies in rotating inventory or on un-installed kits 199-18000, 199-16400 AND 199-17700:

1. Remove each 103-22700 brake assembly bolt one at a time, replacing each with a new 103-85300 bolt per maintenance manual (supplied in kit 199-20600) before proceeding to the next 103-22700 bolt. As each new bolt is installed, snug up with appropriate wrench or socket.
2. Upon completion of new bolt installation, torque all five (5) to  $150 \pm 10$  in-lbs. and safety wire per MS 33540 with material supplied in 199-20600 kit.
3. Select the applicable revised maintenance manual pages supplied with this service bulletin and insert.
4. Make a maintenance manual entry referencing compliance with ESB7028.

## Instructions for un-installed 199-16900 Kits:

1. Remove existing 103-22700 bolts supplied in 199-16900 kit and discard.
2. Replace with 103-85300 bolts supplied in 199-20600 kit.
3. When installing kit 199-16900 to transition brake assemblies to one piece backplate/torque tube design, torque and safety wire bolts as described above.
4. Make a maintenance manual entry and log book entry (if applicable) referencing compliance with SB7028.

## Instructions for 235-01200 Heat Stack Assemblies:

1. Remove existing 103-22700 bolts supplied with heat stack and discard.
2. Replace with 103-85300 bolts supplied in 199-20600 kit.
3. When installing 235-01200 heat stack, torque and safety wire bolts as described above.
4. Make a maintenance manual entry and log entry (if applicable) referencing compliance with SB7028.