

AIRCRAFT WHEEL & BRAKE DIVISION

PARKER HANNIFIN CORPORATION

AVON, OHIO

PARTS LIST

199-20000 BRAKE RETROFIT KIT

UPGRADE CLEVELAND BRAKE
MODEL 30-181 TO 30-181A

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
066-10600	Lining	2
068-00401	Shim	1
105-00200	Rivet	6
103-11500	Bolt	2
-----	PRM No. 58	1
-----	PRM No. 13A	1

This Kit will convert one (1)
Brake Model 30-181 to 30-181A

199-20000
06-03-92 NC (306-11)
199

Cleveland

Wheels & Brakes

Parker Hannifin Corporation

Aircraft Wheel & Brake

1160 Center Road

Avon, Ohio 44011 USA

1-800-BRAKING (272-5464)

216-937-1272 • FAX 216-937-5409

PRODUCT REFERENCE MEMO

CONDITIONING PROCEDURE FOR NON ASBESTOS ORGANIC BRAKE LINING

The brake lining material used in this brake assembly is a non asbestos organic composition. This material must be properly conditioned in order to provide maximum performance and service life.

Conditioning may be accomplished as follows:

1. Taxi aircraft for 1500 feet with engine at 1700 rpm applying brake pedal force as needed to develop a 5 - 10 mph taxi speed.
2. Allow brakes to cool for 10 - 15 minutes.
3. Apply brakes and check to see if a high throttle static run up may be held with normal pedal force. If so, conditioning is completed.
4. If static run up cannot be held, repeat steps 1 through 3 as needed to successfully hold.

This conditioning procedure will generate sufficient heat to create a thin layer of glazed material at the lining friction surface. Normal brake usage should generate enough heat to maintain the glaze throughout the life of the lining.

Light brake usage can cause the glaze to wear off, resulting in reduced brake performance. In such cases, the lining may be conditioned again following the instructions set forth in this PRM.

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AVAILABILITY OF KIT TO RETROFIT OBSOLETE BRAKE MODEL 30-181 TO BECOME 30-181A

PURPOSE: Cleveland Brake Model 30-181 and Lining P/N 066-10200 are now obsolete, and spares support will no longer be offered. It is suggested that all 30-181 brakes be retrofitted to become 30-181A per Kit 199-200 and this PRM.

APPLICABILITY: All aircraft currently equipped with Brake Model 30-181. (NOTE: Model 30-181A is a TSO Minor Change to 30-181. It meets TSO performance requirements for 30-181 and is directly interchangeable.)

EFFECTIVITY: 07-01-92.

COMPLIANCE: Mandatory. At next scheduled lining replacement.

MATERIALS

REQUIRED: Kit 199-200

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
066-10600	Lining	2
068-00401	Shim	1
105-00200	Rivet	6
103-11500	Bolt	2


NOTE: Quantity indicated will retrofit one brake.

PROCEDURE: **NOTE:** All maintenance to be done per Aircraft Wheel & Brake Manual.

1. Unless wheel maintenance is required, this procedure can be done without jacking aircraft. It is, however, suggested that brake discs be inspected per Manual and replaced, if needed, at this time.
2. Assure that all hydraulic pressure is relieved from brakes and remove backplates and pressure plates, as required, to replace linings.
3. Discard existing aluminum backplate shims P/N 068-12300 (1 ea.) and tie bolts P/N 103-12000 (2 ea.). Retain and reuse tie bolt washers P/N 095-10200 (2 ea.).
4. Remove old lining from pressure and backplate by drilling out all rivets using a 5/32 inch drill. Install new linings P/N 066-10600 with new rivets P/N 105-00200.
5. Clean exposed surfaces of piston and push fully back into cylinder.

PRODUCT REFERENCE MEMO

6. Slide pressure plate onto anchor bolts on brake cylinder and slide cylinder assembly into torque plate.
7. Insert new brake tie bolts P/N 102-11500 with washers into brake cylinder. Slide new shim P/N 068-00401 over the bolts. Place backplate between brake disc and wheel flange, align with tie bolts and tighten. Torque at 75-80 in-lbs.
8. Locate existing nameplate on brake and scribe a letter "A" after brake Model 30-181.

This equipment upgraded to		A	
40-230 Wheel/30-181 Brake			
per Cleveland Conversion Kit 199-93			
Mfg under FAA-TSO-C26c			
Install Date	<input style="width: 90%;" type="text"/>	Mfg Date	<input style="width: 90%;" type="text"/>
Wheel Weight	4.80 LBS.	Brake Weight	1.45 LBS.

NOTE: If Wheels and Brakes have been retrofitted to 30-181 per Kit 199-93, locate nameplates 166-12500, one each on the Brake and Wheel and scribe an "A" in location shown below.

9. Depress and release pedals several times. Rotate wheels and check for brake drag. Bleed brakes if needed. A slight amount of drag is allowable, however, a severely bound unit should be investigated and corrected. Excessive drag can be caused by improperly seated linings.
10. Remove aircraft from jacks and condition linings per PRM13A.
11. Make a log book entry referencing this activity and return aircraft to service.