

AIRCRAFT WHEEL & BRAKE DIVISION

PARKER HANNIFIN CORPORATION

AVON, OHIO

PARTS LIST

199-224A WHEEL & BRAKE HEAVY DUTY UPGRADE KIT

6.00-6 EQUIPMENT

FOR LANCAIR AIRCRAFT

<u>PART / CODE NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
091-21200	Brake Caliper Assembly (Torque plate not included.)	2
166-19700	Nameplate, P/N 40-406 Main Wheel Assembly (See Note 4)	2
166-20100	Nameplate, P/N 30-233 Brake Assembly (See Note 4)	2
166-20000	Nameplate, Warning	2
PRM14A	Metallic Lining Conditioning Procedure	1

NOTES:

1. This kit is may be used to upgrade existing 199-208 Kits in stock to 199-224 W&B Kit, Heavy Duty or may be used to upgrade delivered aircraft that use the 40-96E /30-61E wheels and brakes.
2. Brake Assembly: The brake caliper assembly is compatible for use with MIL-H-5606 Hydraulic Fluid. Brake may be used for both the L.H. & R.H. installation by positioning bleeder valve and inlet fittings in brake as required. Remove existing calipers from torque plate, affix 166-20100 Nameplate to the new 091-21200 caliper and reassemble to torque plate or install on aircraft. Removed calipers may be used as spares for aircraft equipped with the 30-61E Brake assemblies.
3. Wheel Assembly: Remove existing nameplates and discard. Affix Warning Nameplate P/N 166-20000 adjacent to valve stem hole. Install new nameplate P/N 166-19700 on outboard wheel half.
4. The manufacturing date code for all replacement nameplates will be coded with the current date that the nameplate is printed. Example: A nameplate that is printed in February of 1997 will be identified as Mfg. 05R97 (An "R" between the month and year indicates that this is a replacement nameplate).

199-224A
04-12-97 Rev. N/C (0325-09)
08-07-97 Rev A (0325-89) 05

Cleveland

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PRODUCT REFERENCE MEMO

METALLIC BRAKE LINING CONDITIONING PROCEDURE

The brake lining material used in this brake assembly is an iron based metallic composition. This material must be properly conditioned (glazed) in order to provide optimum service life.

Dynamometer tests have shown that at low braking energies, unglazed linings experience greater wear and the brake discs can become severely scored.

Conditioning may be accomplished as follows:

1. Perform two (2) consecutive full stop braking applications from 30 to 35 kts. Do not allow the brake discs to cool substantially between stops.
2. On aircraft with tail wheels, exercise caution during stopping to prevent tail lifting. Due to the efficiency of these brakes, extremely hard braking could result in lifting the tail from the ground.

This conditioning procedure will wear off high spots and generate sufficient heat to glaze the linings. Once the linings are glazed, the braking system will provide many hours of maintenance free service.

Visual inspection of the brake disc will indicate the lining condition. A smooth surface, without grooves, indicates the linings are properly glazed. If the disc is rough (grooved), the linings must be reglazed. The conditioning procedure should be performed whenever the rough disc condition is evident.

Light use, such as in taxiing, will cause the glaze to be worn rapidly.

Use caution in performing this procedure, as higher speeds with successive stops could cause the brakes to overheat resulting in warped discs and/or pressure plates.