



Aircraft Wheel & Brake
 Parker Hannifin Corporation
 1160 Center Road
 Avon, Ohio 44011

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FAA-PMA

PARTS LIST

199-112 CONVERSION KIT

PIPER AIRCRAFT CORP.
MODELS PA-42 AND PA-42-720
CHEYENNE III

<u>PART NO.</u>	<u>CODE NO.</u>	<u>DRAWING REVISION</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
30-141	030-14100	Rev. F dated 04-24-1997	Brake Assembly	2
40-166	040-16600	Rev. B dated 08-30-2010	Wheel Assembly	2
101-00700	101-00700		O-Ring (MS28775-012)	2
104-00200	104-00200		Fitting, Brake Inlet (AN815-4D)	2
094-91500	094-91500		Nut, Self Locking (MS21045-6S)	12
095-10100	095-10100		Washer (AN960-616L) Qty 1 each under bolt head	12
095-10600	095-10600		Washer (AN960-616) Qty 1 each under bolt head	12
103-31300	103-31300		Bolt (AN6-11A)	12
<u>Publication Package (P/N PP199-11200)</u>				
199-112			Kit Parts List (This Document)	
50-81		Rev. E, dated 07-26-2002	Installation Drawing	
SA600GL			Supplemental Type Certificate	
PRM14A			Conditioning Procedure for Metallic Brake Lining	
PRM69			Availability of General Maintenance Information and Torquing Procedures	
			Warranty Registration Card	

NOTES:

- This kit will convert one aircraft to Cleveland Wheels and Brakes.
- The 30-141 brake assembly is designed for use with MIL-H-5606 Brake Fluid.

199-112
 Rev. A 01-16-1990 (293-3)
 Rev. B 07-26-2002 (0352-41)
 Rev. C 02-22-2011 (0392-56)



Ergänzung zur Musterzulassung Supplemental Type Certificate

Nr.: SA 1283

Ausgabestand: 2

Status of Issue :

Die nach den Bestimmungen der Luftverkehrs-Zulassungs-Ordnung ergänzte Musterzulassung des Luftfahrtgeräts wird durch diese ERGÄNZUNG ZUR MUSTERZULASSUNG beurkundet. Sie erweitert die Angaben des Musterzulassungsscheins und des zugehörigen Geräte-Kennblatts und ist nur in Verbindung mit diesen gültig.

The Supplemental Type Certificate of the aeronautical product supplemented in accordance with the provisions of the „Luftverkehrs-Zulassungs-Ordnung“ (Air Navigation Certification Order) is documented by means of this „ERGÄNZUNG zur MUSTERZULASSUNG“ (SUPPLEMENTAL TYPE CERTIFICATE) It amends the data of the Type Certificate and of the pertinent Type Certificate Data Sheet and will only be valid in conjunction with them

Anwendbarkeit:

Applicability:

- **Gerätemuster/Baureihen:** PA-42, PA-42-720
Type / variants :
- **Geräte-Kennblatt Nr.:** 2063 **ab Ausgabe:** 6
No. of Type Certificate Data Sheet . since Issue :

Antragsteller:

Applicant :

Parker Hannifin Corporation
Aircraft Wheel & Brake
1160 Center Road
Avon, Ohio 44011
USA

Beschreibung der Ergänzung:

Description of the Supplement :

Main Wheel & Brake Conversion Kit 199-112

Zulassungsbasis:

Certification Basis :

Bezugsdokument:

Reference Document :

Installation Drawing No. 50-81, Rev. A vom 22. April
1982 oder spätere FAA-anerkannte Revisionen

Zulassung im Ursprungsland:*Certification in the Country of Origin :*

- **Halter der Zulassung:** Parker Hannifin Corporation
STC Holder : Aircraft Wheel & Brake Division
- **Nr. der Zulassung:** SA600GL
STC No :
- **zugelassen von:** Federal Aviation Administration, USA
certified by :

Betriebs- und Instandhaltungsanweisungen*Operating and Maintenance Instructions***1. Anweisungen für den Betrieb:***Instructions for operation:*

2. Anweisungen für die Instandhaltung und die Nachprüfung:*Instructions for maintenance and inspection*

Es gelten die Anweisungen für das Originalmuster
The instructions for the type are applicable

Bemerkungen und Beschränkungen*Notes and Limitations*


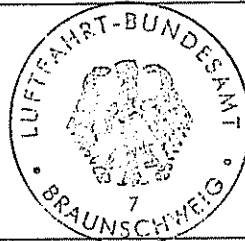
- 1. Die Verträglichkeit dieser Modifikation mit anderen zugelassenen Modifikationen ist von dem Betrieb, der die Änderung einrüstet, sicherzustellen.**
The compatibility of this modification with other approved modifications has to be ensured by the company installing the modification
- 2. Die Installationshinweise seitens Cleveland PRM14A und PRM69 sind zu beachten.**

Diese Ergänzung zur Musterzulassung kann in den in § 4 Abs. 3 der Luftverkehrs-Zulassungs-Ordnung vorgesehenen Fällen widerrufen werden.

This Supplemental Type Certificate may be revoked in the cases provided for by § 4 section 3 of the „Luftverkehrs - Zulassungs - Ordnung“ (Air Navigation Certification Order)

LBA-Zulassung:
Certificate Issued by LBA :

Braunschweig, 14. Oktober 2002


Düsing

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

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.

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PRODUCT REFERENCE MEMO

AVAILABILITY OF GENERAL MAINTENANCE INFORMATION AND TORQUING PROCEDURES

EFFECTIVITY: All Parker Hannifin (Cleveland Wheels & Brakes) External Disc Design wheel & brake assemblies.

APPLICABILITY: Aircraft converted per STC approved kits to use Cleveland External Disc Design wheel & brake assemblies.

REASON: This PRM is issued to inform Wheel & Brake Conversion Kit users and installers that information regarding general maintenance and proper bolt / nut torquing procedures is available. This information is contained in the Cleveland Wheels & Brakes Component Maintenance Manual (CMM) and in the Cleveland Technicians Service Guide, PRM64. Most Cleveland Conversion Kits were designed prior to creation of the CMM. Parker Hannifin is in process of upgrading kit paperwork to include a requirement to use the CMM and PRM64 as wheel & brake service information. This PRM serves the same purpose for kits whose paperwork has not yet been upgraded.

DESCRIPTION: The Cleveland Wheels & Brakes Component Maintenance Manual and PRM64, Technician's Service Guide shall be used as service information when performing general maintenance on Cleveland External Disc Design wheels & brakes. Particular attention should be paid to instructions regarding wheel bolt torquing procedures.

NOTE: Refer to the CMM or PRM64 to determine the required torque procedure (Dry or Lubtork). While using the required torque procedure, observe the torque required to turn the nut (free running torque). This value must be added to the value stated on the casting or nameplate (or in the CMM or PRM64) to obtain a true torque value. Proper torque is imperative to prevent premature bolt or mating component failure.

COMPLIANCE: Highly Recommended.

APPROVAL: The engineering contents of this Product Reference Memo are FAA DER approved.

WEIGHT & BALANCE: Not applicable.

PUBLICATIONS: Cleveland Wheels & Brakes Component Maintenance Manual and PRM64 are available from:

Customer Support
Parker Hannifin Corporation
Aircraft Wheel & Brake
1160 Center Road
Avon, Ohio

Phone: 1-800- BRAKING (272-5464)
FAX: 216-937-5409

Initial Release February 01, 1997



PRM69
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Parker Hannifin Corporation
Aerospace/Aircraft Wheel & Brake
1160 Center Road
Avon, OH 44011

Date: __ __/__ __/20__ __

Subject: Letter of Authorization for Installation of STC'd Conversion Kits

To whom it may concern:

Parker Hannifin Corporation, Aircraft Wheel & Brake Division, hereby states that the following item(s):

KIT NUMBER: 199-_____

FAA APPROVAL: 1) STC # _____

NO OTHER APPROVALS NECESSARY

AUTHORIZATION TO INSTALL: With the sale of this STC KIT, OWNER of the Supplemental Type Certificate agrees to permit the buyer or buyer's agent or agency to use the certificate to alter the product under the terms and conditions of this STC.

A/C MAKE: _____

A/C MODEL _____

TAIL # _____

Regards,

Technical Support Team
Technical Hotline (800) 272-5464
Clevelandwbhelp@parker.com
Web-site: www.clevelandwheelandbrake.com
Manufacturer of Cleveland Wheels & Brakes

United States of America
Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SA600GL

This certificate, issued to Aircraft Wheel & Brake Division
Parker Hannifin Corporation
1160 Center Road
Avon, Ohio 44011

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations. See Type Certificate Data Sheet A23S0 for complete certification basis.

Original Product — Type Certificate Number A23S0
Make Piper
Model PA-42, PA-42-720

Description of Type Design Change.

Installation of Cleveland Wheel & Brake Conversion Kit No. 199-112 per Installation Drawing No. 50-81, rev. A, dated April 22, 1982, or later FAA approved revisions.

Limitations and Conditions.

Compatibility of this modification with other previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application February 4, 1982

Date issued

Date of issuance March 31, 1982

Date amended May 4, 1982, August 20, 1984



By direction of the Administrator

W. F. Horn

W. F. Horn (Signature)
Manager, Chicago Aircraft Certification Office,
ACE-115C, FAA Central Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47