

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

FAA-PMA

PARTS LIST
199-49 CONVERSION KIT
Beech Aircraft – Models 33, 35 & 36
6.00 - 6 Equipment

PART NUMBER	DRAWING REVISION	DESCRIPTION	QUANTITY
30-54	Rev. G dated 11-23-1998	Brake Assembly	2
40-83	Rev. K dated 11-22-2006	Wheel Assembly	2
207-01800	Rev. H dated 02-20-2019	Hose Assembly	2
067-02600	Rev. J dated 06-25-2003	Inboard Spacer	4
067-03200	Rev. J dated 06-25-2003	Outboard Spacer	8
103-22100	----------	Bolt (AN5-10A)	8
095-10500	----------	Washer (AN960-516)	24
094-10400	----------	Nut (MS21044-N5)	8
104-02000	----------	45° Bulkhead Fitting (AN837-4D)	2
094-90500	----------	Nut, Bulkhead (AN924-4D)	4

Publication Package (P/N PP199-49)

199-49		Kit Parts List (This Document)
IM199-49	Rev. C dated 10-20-2019	Installation Manual
50-28	Rev. F dated 08-29-1994	Installation Drawing
SA11GL	Amendment dated 09-02-1987	Supplemental Type Certificate
PRM03	Rev. A dated 07-01-1995	Master Cylinders for 199-49 and 199-50 Kits
PRM13A	Rev. A dated 07-01-1995	Non Asbestos Organic Brake Lining Conditioning Procedure
		Pilot Operating Manual Inserts
		Product Registration Card

NOTES:

1. This kit will convert one aircraft to Cleveland Wheels and Brakes.
2. The 30-54 brake assembly is designed for use with MIL-H-5606 or MIL-PRF-5606 hydraulic fluid.

199-49
Rev. NC 12-09-1972
Rev. A 06-18-1987 (C/N 283-61)
Rev. B 09-02-1987 (C/N 285-35)
Rev. C 12-15-1994 (DCN 0311-72)
Rev. D 07-09-2003 (DCN 0356-95)
Rev. E 11-01-2004 (DCN 0363-51)
Rev. F 11-27-2007 (DCN-0377-43)
Rev. G 08-26-2013 (ECO-0025552)
Rev. H 10-20-2019 (ECO-0107574)

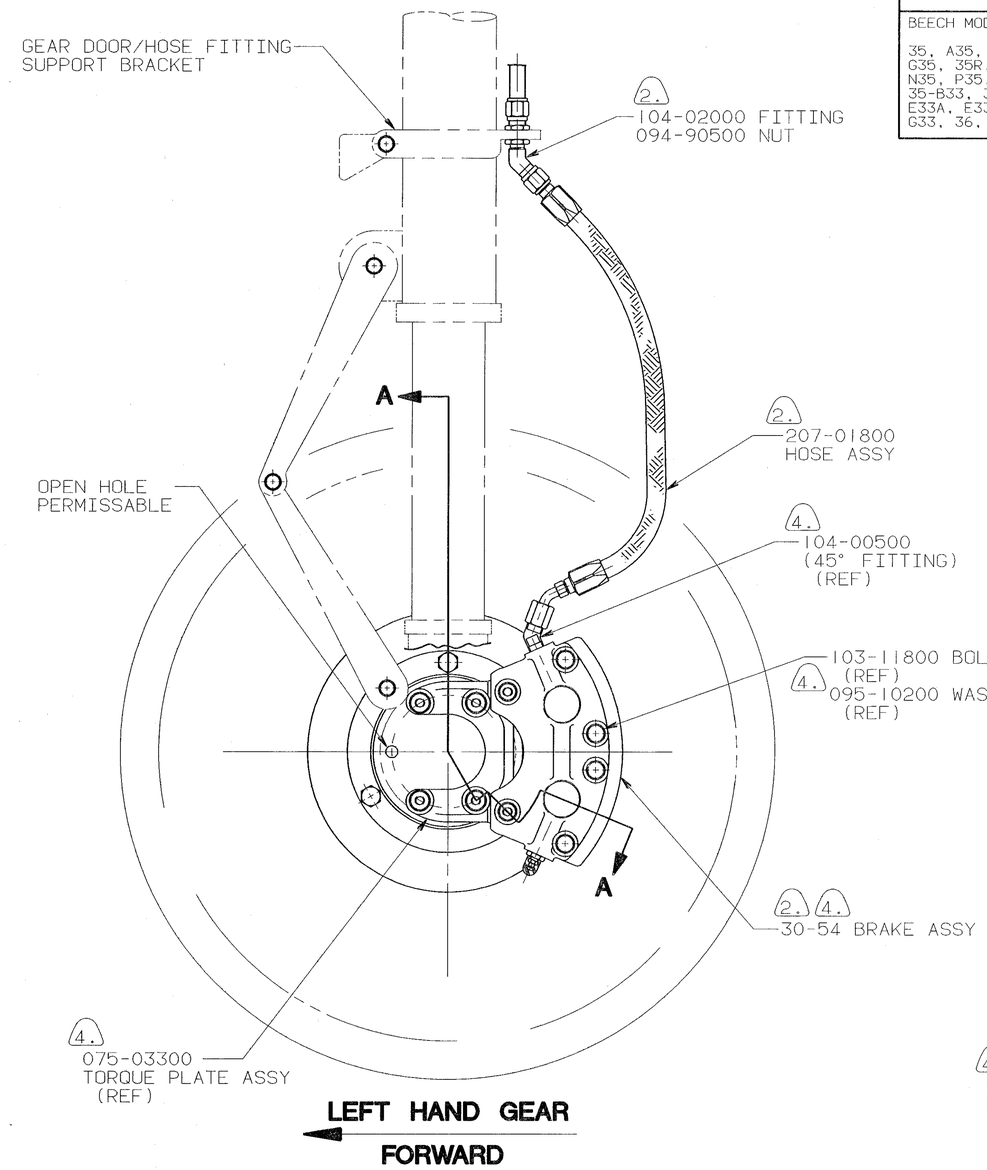
DWG. NO. 50-28 | SHEET 1/1 | REV. F

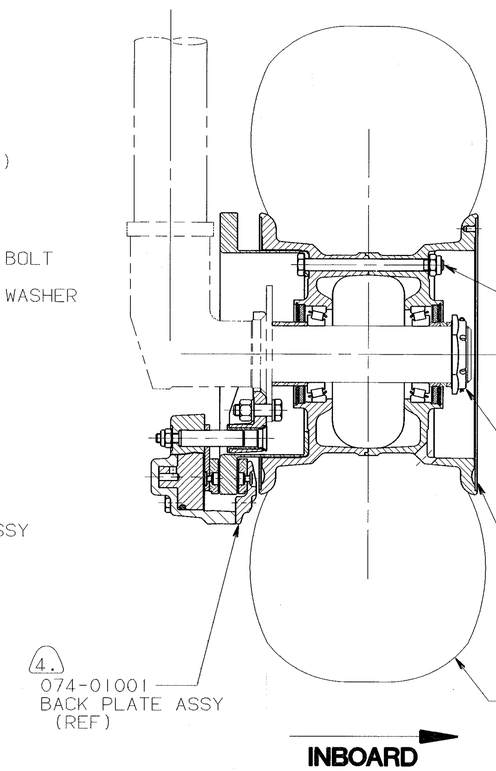
REV STATUS	
SHEET	LTR
.	.

REVISIONS						
CHANGE NOTICE	ZONE	LTR	DESCRIPTION OF CHANGE	CHG BY	DATE	APPROVED
0311-72	.	F	REDRAWN ON CAD; SEE C/N	PMH	08-29-94	P. Hubbs

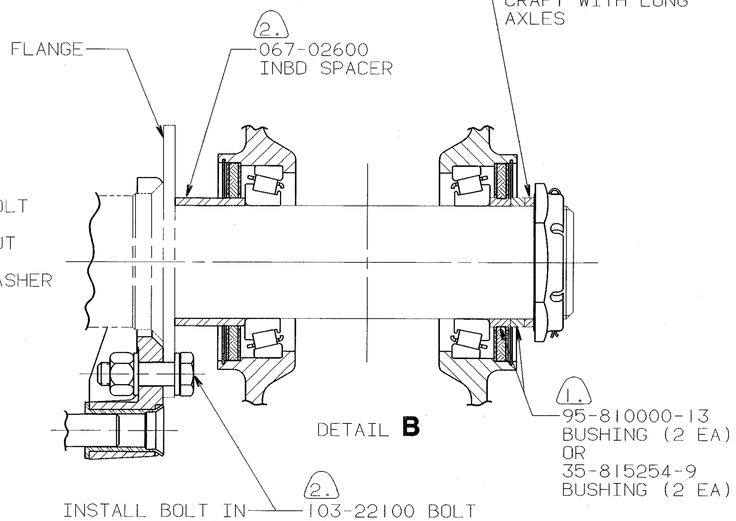
APPLICABILITY OF AIRCRAFT INSTALLATION CLEVELAND KIT 199-49 OR 199-49 CHROME

MODEL	TIRE SIZE	NOTES	PLY	TYPE	PRESSURE
BEECH MODELS: 35, A35, C35, D35, E35, F35, G35, 35R, H35, J35, K35, M35, N35, P35, S35, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36	6.00-6 TYPE III	STANDARD ON MODEL 33 SERIES	6 PLY	TUBETYPE	PER BEECH MAINTENANCE MANUAL
	7.00-6 TYPE III	STANDARD ON MODEL 35 SERIES OPTIONAL ON MODEL 33 SERIES	6 PLY	TUBETYPE	PER BEECH MAINTENANCE MANUAL





SECTION **A-A**



NOTES:

1. EXISTING HARDWARE TO BE RETAINED AND REUSED
2. PARTS SUPPLIED IN KIT 199-49 OR 199-49 CHROME
3. REFER TO IM199-49 INSTALLATION INSTRUCTIONS MANUAL FOR DETAILED INSTALLATION INSTRUCTIONS.
4. FOR PARTS IDENTIFICATION: SEE FIG 2; 30-54 IPL
5. FOR PARTS IDENTIFICATION: SEE FIG 1; 40-83 IPL

QTY	QTY	ITEM	FSCM NO.	PART NO.	DESCRIPTION	MATERIAL/SPEC.	ACT WGT.-LB.	CALC WGT.-LB.
.	.	.	.	.	.	.	.	.

USED ON	QTY	FINAL ASSY	QTY	NEXT ASSY	QTY	RAW STOCK NO
.	.	.	.	.	.	.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES:
DECIMALS XX ±.030 ANGULAR DIMS. ±1/2°
DECIMALS XXX ±.010 FRACTIONAL DIMS: ±.030

DO NOT SCALE DRAWING

GENERAL MACHINED SURFACES TO BE .125 FINISH UNLESS NOTED

WTS .	DATE .	DWN P.C.S.	DATE .
STRESS .	.	CHK B. BARKER	.
MFG ENGR .	.	ENGR .	.
QUAL ASSUR .	.	PROJ APPROVAL .	.

CLEVELAND WHEELS & BRAKES
Aircraft Wheel And Brake Division
Parker Hannifin Corporation
1160 Center Road
Avon, Ohio 44011

DWG. TITLE
INSTALLATION DRAWING 199-49 KIT

SIZE	FSCM NO.	DWG. NO.
D	33269	50-28

SCALE 1/2

RELEASE DATE: . REV: F SHEET: 1 OF 1

Released: 2/21/2020

CLEVELAND WHEELS & BRAKES
IM199-49
INSTALLATION MANUAL
FOR
CONVERSION KIT
199-49 OR 199-49 CHROME
FOR
BEECH AIRCRAFT
MODELS 33, 35 & 36

Cleveland
Wheels & Brakes

Parker
Aerospace

PARKER HANNIFIN CORPORATION - AIRCRAFT WHEEL & BRAKE
1160 Center Road - Avon, Ohio 44011 - Customer Service 1-800-Braking

STOP!

PLEASE TAKE A FEW MOMENTS TO COMPLETE AND RETURN THE ATTACHED REGISTRATION CARD. IT IS IMPORTANT THAT ALL INFORMATION IS LEGIBLY PRINTED. THIS DATA WILL ASSIST PARKER HANNIFIN, AIRCRAFT WHEEL & BRAKE IN THE EVENT THAT NOTIFICATION TO END USERS OF SPECIFIC AIRWORTHINESS DOCUMENTS IS NECESSARY.

Released: 2/21/2020

Aerospace

IM199-49 INSTALLATION MANUAL FOR CONVERSION KIT 199-49 OR 199-49 CHROME

TABLE OF CONTENTS

Aerospace

IM199-49 INSTALLATION MANUAL FOR
CONVERSION KIT 199-49 OR 199-49 CHROME

LIST OF REVISIONS

REVISION	DATE	PAGE	DESCRIPTION	APVD
NC	05/29/87	---	Production Release Installation Instructions Cleveland Wheels & Brakes Conversion Kit 199-49	BB
A	09/02/87	18	Item 30: P/N "74-10A 074-01001" was "74-12 074-01200" Item 31: P/N "64-15A 064-01501" was "64-17 064-01700"	BB (285-35)
		20	Item 49: Qty. 24 was 16 Item 54: Qty. 4 was 2 Add Item 55: "67-32 067-03200 Outboard Spacer 8"	
B	12/15/94	ALL PAGES	Reformatted, 207-01800 was 207-02700	BB (0311-72)
C	10/20/2019	As follows		ML (0108453)

Title page: Add proprietary and export statement

Page 3, 7.1 (now) … for use with brake fluid conforming to MIL-H-5606 or MIL-PRF-5606.
(was) … for use with brake fluid conforming to MIL-H-5606.

Page 4, 7.2 (now) The wheel is cast magnesium, size 6.00-6 divided type wheel. It is a tube-type design only.
(was) The wheel is cast magnesium and conforms to all tire and rim association standards for a 6.00-6 divided type wheel. It is a tube-type design only.

Page 4, 8.3 (now) **NOTE:** Extended storage of lubricated bearings may require relubrication. Use Mobil Aviation Grease SHC100 bearing grease.
(was) **NOTE:** Extended storage of lubricated bearings may require relubrication. Use bearing grease conforming to MIL-G-81322.

Page 10: Delete Kit parts list. A separate parts list document exists.

 Released: 2/21/2020

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IM199-49 INSTALLATION MANUAL FOR
CONVERSION KIT 199-49 OR 199-49 CHROME

1.0 INTRODUCTION

The information herein addresses the installation of Cleveland Conversion Kit . It is published for the guidance of qualified maintenance personnel responsible for the installation of Cleveland Conversion Kit , manufactured by Parker Hannifin Corporation, Aircraft Wheel and Brake.

1.1 PURPOSE

This manual provides the necessary procedures to accomplish installation of Cleveland Conversion Kit for information regarding service limits, maintenance and component overhaul, consult the Wheel and Brake Assemblies Component Maintenance Manual, published by Parker Hannifin, Aircraft Wheel and Brake. This manual should be passed on to the owner or retained by the maintenance facility for future reference.

1.2 KIT EQUIPMENT

Each kit contains all materials needed to replace existing equipment with Cleveland Wheels and Brakes. Kit 199-49 or 199-49 CHROME will completely retrofit one aircraft to Cleveland equipment. Refer to Kit Parts List.

2.0 TSO NOTICE

The wheels and brakes used in this conversion kit carry a “TSO” marking which identifies them as having been fully laboratory tested and qualified to meet the applicable Federal Aviation Agency (FAA) specifications and requirements.

After final certification, substitution of critical parts or changes of processes or materials are not permitted without requalification of the assemblies and resubmittal of the test data to the FAA for approval.

FAA regulations subject both Parker Hannifin, Aircraft Wheel and Brake and the user to constant surveillance to assure that uncompromising Quality Assurance materials and processing controls are maintained in order to provide replacement parts that are the same as the parts originally certified in the assembly.

Released: 2/21/2020

3.0 APPLICABILITY

3.1 KIT 199-49 OR 199-49 CHROME

The equipment supplied under Kit No. 199-49 or 199-49 CHROME is applicable to the following aircraft provided aircraft are equipped with compatible master cylinders as noted in paragraph 3.2.

TABLE I, APPLICABILITY

MAKE	MODELS
BEECH	35, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35R
BEECH	35-33, 35-A33, 35-B33, 35-C33, 35-C33A
BEECH	E33, E33A, E33C, F33, F33A, F33C, G33
BEECH	36, A36

(1) 199-49 or 199-49 CHROME kit apply to aircraft currently equipped with 6 inch wheels and brakes. Beech Bonanzas equipped with 8 inch wheels and brakes may be converted to Cleveland equipment with kit no. 199-50.

3.2 MASTER CYLINDER SPECIFICATION

Prior to installation of kit, check master cylinder bore and stroke. If present system has a bore of no less than 0.625 in., and a stroke of at least 1.50 in., no master cylinder change is required.

3.2.1 PRODUCT REFERENCE MEMO PRM03

If present master cylinders do not meet this specification, new Beech master cylinders must be installed to assure proper brake pedal travel. For order information, refer to attached product reference memo PRM03.

4.0 SAFETY

Always follow proper safety precautions when handling or servicing any aircraft braking system or component(s) of such systems.

CAUTIONS and **WARNINGS** are noted throughout this manual, where applicable. Follow them when servicing aircraft wheel and brake equipment.

5.0 PRODUCT REGISTRATION

The product registration card is located at the front of this manual. The card is our way of tracking the conversion kits and your guarantee of receiving any future airworthiness information applicable to Conversion Kit No. 199-49 or 199-49 CHROME. Please fill out the registration card completely and return promptly. Postage is prepaid.

6.0 ORDER INFORMATION

To order spare parts, contact the nearest Parker Hannifin, Aircraft Wheel and Brake distributor in your area, or contact Aircraft Wheel and Brake at the following address or numbers:

Parker Hannifin Corporation
Aircraft Wheel and Brake
Attn: Customer Service Dept.
1160 Center Road
Avon, Ohio 44011

Telephone: (216) 937-6211
1-800-272-5464

Fax: (216) 937-5409

NOTE: to order the Wheel and Brake Assemblies Component Maintenance Manual, contact Aircraft Wheel and Brake.

7.0 EQUIPMENT DESCRIPTION

7.1 BRAKE ASSEMBLY

The brake is a single caliper, 2 piston external disc design, with organic lining. It is suitable for use with brake fluid conforming to MIL-H-5606 or MIL-PRF-5606.

The cylinder contains the brake fluid which operates the pistons and pressure plate. Back plates are secured to the cylinder with bolts and washers on the opposite side of the brake disc. The back plates and pressure plate each hold brake linings. Two anchor bolts, attached to the cylinder with nuts and washers, slide or float in torque plate bushings. The torque plate is mounted to the landing gear axle. The caliper (cylinder assembly) is the assembly which includes the cylinder, pistons, back and pressure plates, linings and other related components.

 Released: 2/21/2020

7.2 WHEEL ASSEMBLY

The wheel is cast magnesium, size 6.00-6 divided type wheel. It is a tube-type design only.

The wheel incorporates inboard and outboard halves which are fastened together with bolts, washers, and nuts. The brake disc is attached to the wheel by the bolts. The wheel rotates on two tapered roller bearings, which seat in bearing cups in the wheel half hubs. Felt grease seals provide protection and lubricant retention for the bearing.

8.0 KIT INSTALLATION

WARNING: Insure aircraft is secure and stable before beginning any work. Working under an improperly stabilized aircraft could cause injury or death.

8.1 MASTER CYLINDER VERIFICATION

Verify or install proper Beech master cylinder per paragraph 3.2 and PRM03.

8.2 REMOVE EXISTING EQUIPMENT

a. Jack aircraft in accordance with Beech Service manual until tire is clear of ground. Fully deflate tire.

b. Remove and retain axle nut and inboard and outboard spacers.

c. Remove existing main gear wheels.

d. Disconnect lower hydraulic line at brake and cap.

e. Disconnect existing brake assemblies from axle and remove.

8.3 INSTALL CLEVELAND EQUIPMENT

a. On Beech models with 1/4 in. brake mounting bolts, it will be necessary to drill out the landing gear flange holes for 5/16 in. bolt usage. Since the flange is made of hardened steel, it is advisable to use a cobalt, long shanked drill bit for this operation.

b. The brakes are shipped from the factory as a complete assembly.

c. The wheels are shipped from the factory as a complete assembly. The bearings are packed with grease and installed in the wheel halves.

NOTE: Extended storage of lubricated bearings may require relubrication. Use Mobil Aviation Grease SHC100 bearing grease.

d. Remove the following items from both the inboard and outboard side of wheel assembly: snap rings, grease seals (rings and felts) and bearing cones. Place items on a clean surface to avoid contamination.

e. Lightly coat/dampen grease seal felts with SAE 10 engine oil.

f. Re-assemble bearing cones, grease seals (rings and felts) and snap rings.

CAUTION: Do not use impact or power wrenches to remove wheel nuts and bolts.

g. Remove all three nuts, washer and bolts to separate wheel halves.

h. Position disc and inner wheel half sub-assembly on a flat surface with the register side up.

i. Place serviceable tire and tube over inner wheel, half sub-assembly and then place outer wheel half sub-assembly in tire, making sure to properly align inner and outer registers.

j. Slide bolts through the wheel assembly. Install washers and nuts onto bolts. Torque to 150 in-lbs (dry).

k. Inflate tire to airframe manufacturers recommended pressure in a safety cage.

WARNING: Place the wheel/tire in an inflation cage for initial inflation, to prevent injury to personnel from possible explosion.

l. Mount torque plate assembly to axle flange using new bolts (103-22100), washers (095-10500), and nuts (094-10400) supplied in 199-49 or 199-49 CHROME Conversion Kit. Torque to 150 in-lbs (dry).

NOTE: Install bolts with the bolt head inboard or towards the wheel.

m. Mount wheel/tire assembly on axle using new spacers.

n. Apply a thin coat of bearing grease to axle nut and threads.

o. Install axle nut and torque following airframe manufacturers recommended procedure.

p. Loosen four bolts on 30-54 brake assembly and remove two back plate assemblies.

q. Slide brake cylinder assembly into torque plate assembly.

r. Install backplate assemblies between brake disc and inner wheel flange. Align back plate assemblies with bolts and torque bolts to 80-90 in-lbs (dry).

s. Remove existing hydraulic inlet hose and upper fitting from gear.

t. Replace with 45° bulkhead fitting (104-02000), nut (094-90500), and inlet hose (207-01800). Orientate bulkhead fitting to point directly aft.

u. Rotate 45° brake assembly fitting (104-00500) approximately 45° aft-outboard.

v. Attach inlet hose (207-01800) so that 45° fitting end attaches to 45° brake assembly fitting (104-00500) and align so that hose sweeps outboard.

8.4 GEAR RETRACT CHECK

Perform a progressive gear retraction to assure clearance of inlet hose to gear door opening.

Certain Beech models may require the use of existing hose shortened as needed to assure that:

a. Hose is not too tight (e.g. gear fully extended and hanging).

b. Hose clears gear door opening (e.g. gear fully retracted).

Hose clearance to both door and wheel well structure may require one or more of the following:

a. Additional rotation of the hose ends 45° fitting (attached to 45° brake assembly fitting (104-00500). Refer to 50-28 installation drawing.

b. Shortening of hose

c. Vertical relocation of gear door/ hose fitting support bracket (refer to 50-28 installation drawing). This may require the re-rigging of the outboard door).

8.5 BLEED BRAKES

Check brake system reservoir fluid level and bleed brakes per Beech Maintenance Manual.

8.6 BRAKE LINING CONDITIONING

When new linings are installed, it is important to condition them properly to obtain the service life designed into them. Condition linings per attached product reference memo PRM13A.

9.0 WEIGHT AND BALANCE COMPUTATIONS

Weigh existing wheels and brakes. Subtract from new weights to derive weight increase created by the kit installation. Multiply weight increase by applicable aircraft moment and revise weight and balance information in log book.

9.1 WEIGHT AND BALANCE DATA

New installed (per gear leg)

Wheel assy..... 7.45 lbs.
Brake assy ..... 2.81 lbs.
Total..... 10.26 lbs.

Complete form 337 and make appropriate log book entries.

10. PILOT OPERATING INSERTS

Inserts are located in front with conversion kit documentation.

Attach label in pilot operating manual as close as possible to the original section labeled Main Wheel Assembly. Enter the correct arm and moment in blocks provided. Zero items out for the original main wheel and brake assemblies that have been removed.

Inserts are reprinted below for reference:

x	Two dual piston, single disc Brake Assemblies, Cleveland P/N 30-54	2.81 ea.
x	Two 6.00-6 Type III Wheel Assemblies, Cleveland P/N 40-83	7.45 ea.

Cleveland Brake Assembly P/N 30-54 is a single caliper, single fixed disc design, using two pistons per caliper which respond to fluid pressure from the master cylinders for brake application.

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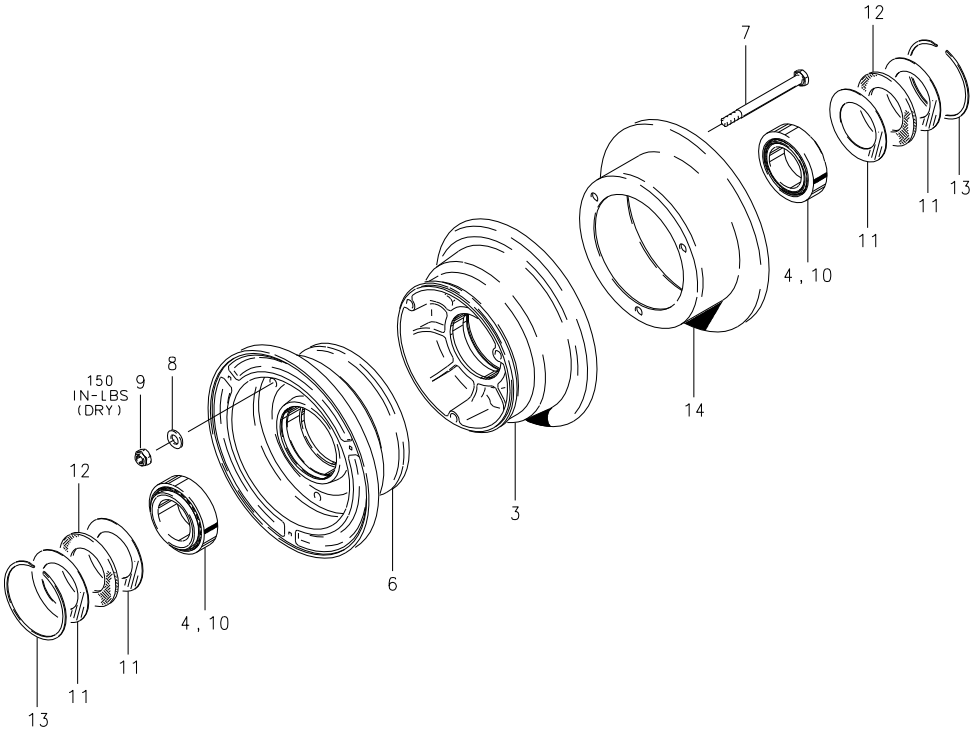
IM199-49 INSTALLATION MANUAL FOR
CONVERSION KIT 199-49 OR 199-49 CHROME

11.0 WHEEL ASSEMBLY IPL

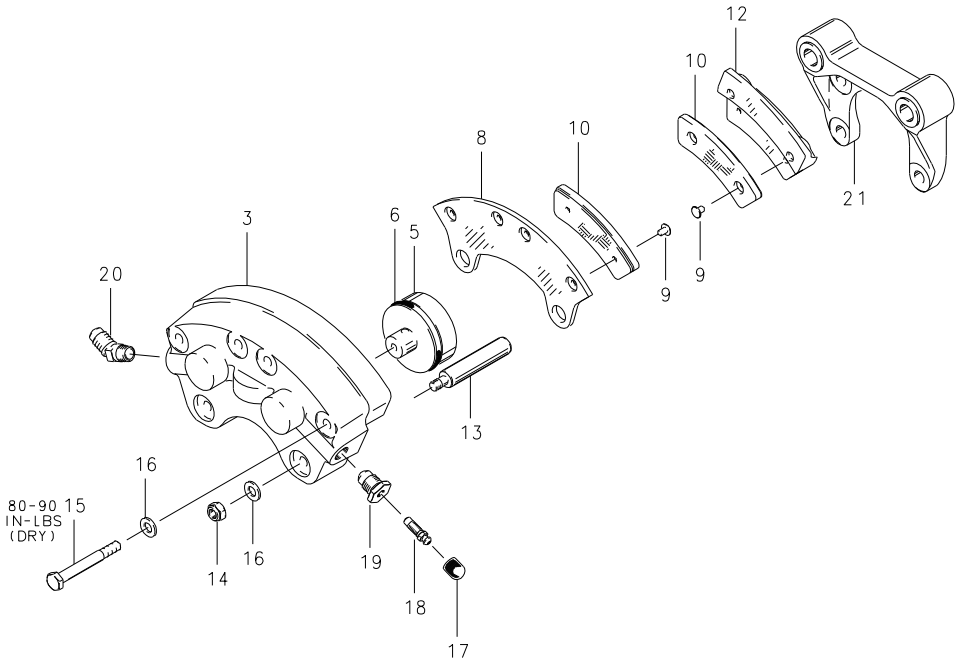


ITEM	PART NUMBER	DESCRIPTION	QTY
	40-83	Wheel Assembly	
1	40-83CHROME	Wheel Assembly	1
2	161-03000	Inner Wheel Half Assembly	1
3	151-02600	Inner Wheel Half	1
4	214-00100	Cup-Bearing	1
5	162-02700	Outer Wheel Half Assembly	1
6	152-02400	Outer Wheel Half	1
4	214-00100	Cup-Bearing	1
7	103-20400	Bolt AN5-35A	3
8	095-10500	Washer AN960-516	3
9	094-10400	Nut MS21044-N5	3
10	214-00200	Cone-Bearing	2
11	153-00900	Ring-Grease Seal	4
12	154-00800	Felt-Grease Seal	2
13	155-00100	Snap Ring	2
	164-02504	Brake Disc (1)	
14	164-12504	Brake Disc, Chrome (2)	1
15	166-06400	Nameplate (3)	1
16	166-04800	Nameplate (3)	1

NOTES:
(1) SUPERSEDES 164-02501 PER PRM61
(2) SUPERSEDES 164-12501 PER PRM 61
(3) NOT ILLUSTRATED

FIGURE 1
ILLUSTRATED PARTS LIST (IPL) FOR 40-83 WHEEL ASSEMBLY

12.0 BRAKE ASSEMBLY IPL



ITEM	PART NUMBER	DESCRIPTION	QTY
1	30-54	Brake Assembly	1
2	091-02500	Cylinder Assembly	1
3	061-02400	Cylinder	1
4	092-01600	Piston Assembly	2
5	062-01500	Piston	2
6	101-02700	O-Ring MS28775-222	2
7	073-01000	Pressure Plate Assembly	1
8	063-01100	Pressure Plate	1
9	105-00200	Rivet	4
10	066-10500	Lining	2
11	074-01001	Back Plate Assembly	2
12	064-01501	Back Plate	2
9	105-00200	Rivet	4
10	066-10500	Lining	2
13	069-00400	Anchor Bolt	2
14	094-10300	Nut MS21044-N4	2
15	103-11800	Bolt ABP4-21AM	4
16	095-10200	Washer AN960-416L	6
17	183-00100	Cap-Bleeder	1
18	079-00300	Screw Bleeder	1
19	081-00100	Seat-Bleeder	1
20	104-00500	Tube Fitting MS20823-4D	1
21	075-03300	Torque Plate Assembly	1
22	065-02700	Torque Plate	1
23	166-06500	Nameplate (1)	1
24	166-04800	Nameplate (1)	1

NOTES:
(1) NOT ILLUSTRATED

FIGURE 2
ILLUSTRATED PARTS LIST (IPL) FOR 30-54 BRAKE ASSEMBLY

13.0 KIT PARTS LIST

(Deleted)

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

199-49 and 199-50 CONVERSION KITS

Cleveland installation drawings 50-27 and 50-28 for kits 199-50 and 199-49, respectively, list three Beech master cylinders that are compatible with the particular wheel and brake assemblies (40-98/30-66) or (40-83/30-54) provided in these kits. Design data is listed below:

Beech Part No.	Bore Diameter	Stroke	Installed Length
96-3800034-1	.750 inch	1.50 inch	8.62 inches
96-3800034-3	.625 inch	1.50 inch	8.75 inches
96-3800034-7	.750 inch	1.50 inch	7.37 inches

These master cylinders may also carry a part number with “VV” prefix, which can be interpreted as follows:

VV-15-62 = Master Cylinder Stroke 1.5 inch Bore .625 inch
VV-15-75 = Master Cylinder Stroke 1.5 inch Bore .750 inch

Before ordering replacement master cylinders, check installed length of present system and replace with the same length.

If present system has master cylinders with at least 1.5 inch useable stroke, and a minimum bore of .625 inches, no change is necessary.

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.

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 SA11GL

This certificate, issued to Aircraft Wheel and 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 thereof as specified hereon meets the airworthiness requirements of Part 3 *of the* Civil Air *Regulations.* and Part 03 of the Civil Air Regulations.

Original Product—Type Certificate Number A-777, 3A15

Make Beechcraft

Model 35, A35, B35, C35, D35, E35, F35, G35, 35R, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36

Description of Type Design Change

Install Cleveland 6.00-6 Wheels and Brakes Conversion Kit 199-49, Rev B, dated September 2, 1987, in accordance with Cleveland Installation Drawing 50-28, Rev E, dated September 2, 1987 and Installation Manual 199-49, Rev A, dated September 2, 1987, or later FAA approved revision.

Limitations and Conditions

This approval should not be extended to other airplanes of this model that incorporate any other previously approved modification, unless it is determined that the interrelationship between this change and any other previously approved modification will introduce no adverse effect on the airworthiness of these airplanes.

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 October 4, 1972

Date of issuance December 11, 1972

Date reissued July 23, 1974, October 28, 1980

Date amended December 28,1973: September 23,1974; May 20, 1985; September 2, 1987

By direction of the Administrator

C L Smalley
(Signature)

for W. F. Horn
Manager, Chicago Aircraft Certification Office
ACE-115C, 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.

FAA Form 8110-2 (10-68)