

AIRCRAFT WHEEL & BRAKE DIVISION  
PARKER HANNIFIN CORPORATION  
AVON, OHIO

PARTS LIST

199-118 CONVERSION KIT

CONVERSION OF 40-120 OR 40-120C WHEEL TO USE SLOTTED BRAKE DISC.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
164-21600	Brake Disc Assembly	2
094-12700	Nut (MS21042-5)	12
095-03000	Washer	12
<u>Publication Package (P/N PP199-11800)</u>		
199-118 P/L	Parts List for 199-118 Kit (This Document)	1
PRM33	Product Reference Memo Conversion of Cleveland 40-120 and 40-120C Main Wheel to use Slotted Brake Disc, Part Number 164-21600.	1
50-93	Wheel Modification Drawing	1

**NOTES:**

1. This Kit will convert one aircraft
2. See Maintenance Manual AWBCMM0001-7 for maintenance information, available on-line at [WWW.clevelandwheelsandbrakes.com](http://WWW.clevelandwheelsandbrakes.com)

199-118  
NC  
Rev A  
Rev B  
Rev C  
05-02-1983 (272-6)  
02-21-1984 (273-49)  
10-10-1997 (0319-68)  
08-14-2007 (0 375-39)

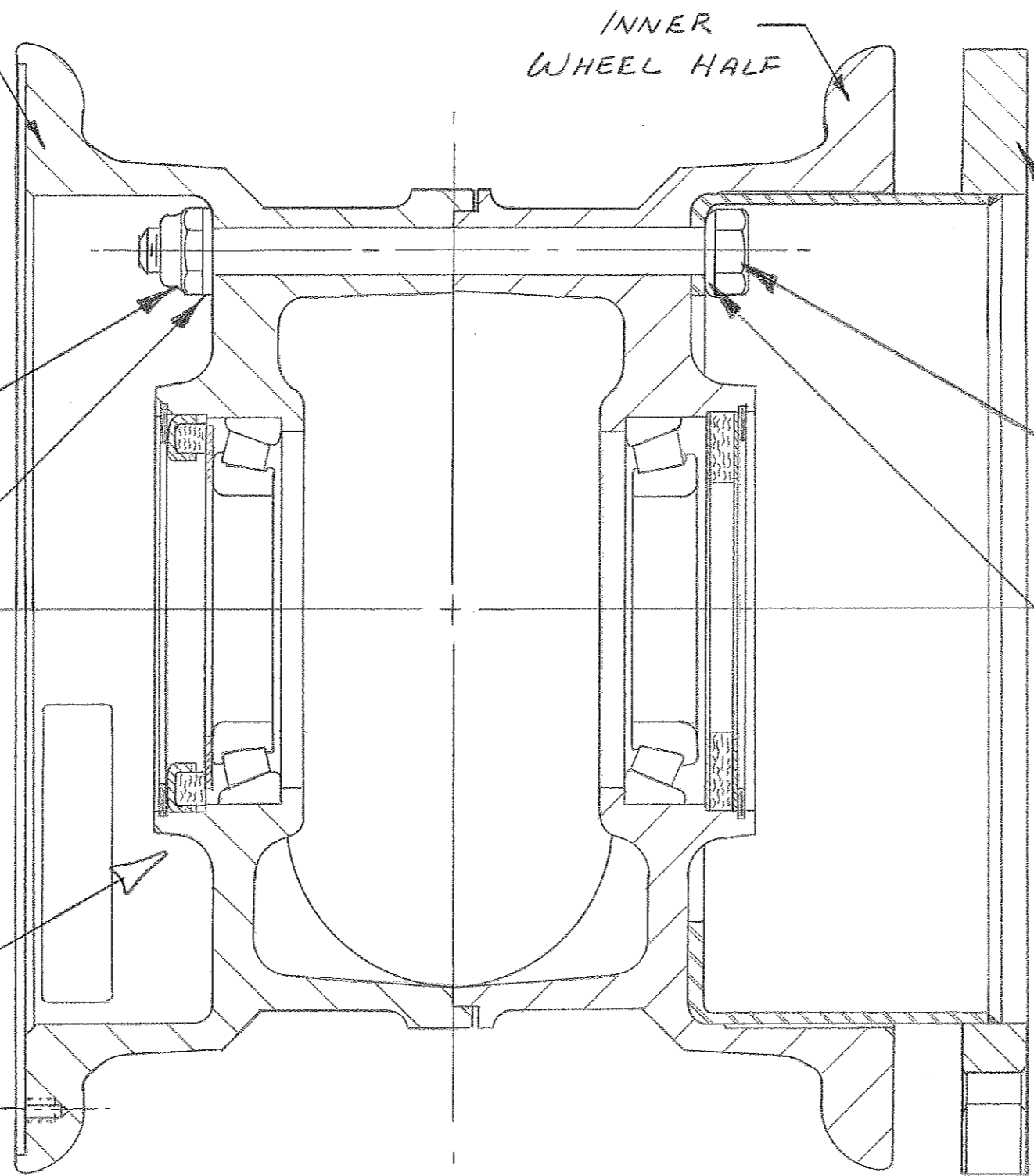
DO NOT SCALE

50-93				A	
CHANGE NOTICE	LET-TER	DESCRIPTION OF CHANGE	CHG. BY	DATE	CHK'D. BY
273/49	INT.	INITIAL RELEASE	BB	2/2/84	
0319/68	A	SEE CIN	GL	10/10/97	BR

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OUTER WHEEL HALF

INNER WHEEL HALF



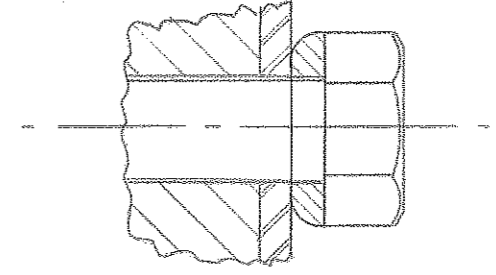
164-21600  
BRAKE DISC ASSEMBLY

(AI)  
094-12700 NUT  
6 EA. PER WHEEL

EXISTING WASHER  
P/N 095-10500  
6 EA. PER WHEEL

EXISTING BOLT  
P/N 103-20400  
6 EA. PER WHEEL

095-03000 WASHER  
6 EA. PER WHEEL



NOTE: RADIUSED SIDE OF 095-03000 WASHER TO BE FACING AWAY FROM BOLT HEAD AS SHOWN ABOVE

40-120  
OR  
40-120C  
WHEEL ASSEMBLY

NOTE  
THIS DRAWING DEPICTS A 40-120 OR 40-120C WHEEL ASSEMBLY AS MODIFIED TO USE SLOTTED DISC P/N 164-21600 PER CLEVELAND CONVERSION KIT 199-118 AND P.R.M. # 33.

QTY	QTY	ITEM	PART NO.	DESCRIPTION	MATERIAL & SPEC.	HEAT TREAT & SPEC.	FINISH & SPEC.	WGT.
				NEXT ASSEMBLY	QTY	FINAL ASSEMBLY	QTY	PATTERN, CASTING OR BLANK NO.
				THIS DESIGN IS THE PROPERTY OF PARKER HANNIFIN CORP. AIRCRAFT WHEEL AND BRAKE DIVISION AND IS NOT TO BE COPIED, DUPLICATED, OR USED AS THE BASIS FOR MANUFACTURE OR SALE OF EQUIPMENT WITHOUT OUR WRITTEN PERMISSION.		ZYGLO PER MIL-I-6866 STAMP P ON PART		WORK TO DIMENSIONS - DO NOT SCALE TOLERANCE FOR .XXX ± .010 TOLERANCE FOR .XX ± .030 TOLERANCE FOR ANGULAR DIMS. ± 1/2° TOLERANCE FOR FRACTIONAL DIMS. ± .030
						MAGNAFLUX PER MIL-I-6868 STAMP M ON PART		BREAK SHARP EDGES .010 UNLESS NOTED. REMOVE ALL BURRS BEFORE PLATING. DRILL PER INSP. PROCEDURE NO. 114.
						✓ GENERAL MACHINED SURFACES TO BE 125 FINISH UNLESS NOTED		
						UNLESS NOTED ALL THREADS PER MIL-S-7742		
				DRAWN BY BB 2/20/84		Cleveland Wheels & Brakes Aircraft Wheel and Brake Division Parker Hannifin Corporation 1160 Center Road Avon, Ohio 44011		
				CHECKED BY		Parker		
				SCALE NONE		NAME WHEEL MODIFICATION DRAWING		
						50-93		

# Cleveland

Wheels & Brakes

Parker Hannifin Corporation

**Aircraft Wheel & Brake**

1160 Center Road, P.O. Box 158

Avon, Ohio 44011 USA

1-800-BRAKING (272-5464)

216-937-1272 • FAX 216-937-5409

# PRODUCT REFERENCE MEMO

## CONVERSION OF CLEVELAND 40-120 AND 40-120C MAIN WHEEL TO USE SLOTTED BRAKE DISC, PART NUMBER 164-21600

**APPLICABILITY:** Piper Cherokee 6, Lance, Saratoga, Seneca and Seminole Models; those equipped with Cleveland Main Wheel, Part Number 40-120 or 40-120C

**PURPOSE:** Product improvements to prevent possible disc flange thermal cracking and increase disc service life

### MATERIALS

**REQUIRED:** Cleveland conversion kit 199-118, one (1) kit required per aircraft

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
164-21600	Brake Disc Assembly	2
094-12700	Nut	12
095-03000	Washer	12
	Wheel Modification Drawing 50-93	1

### PROCEDURE:

1. Properly jack up aircraft.
2. Loosen brake tie bolts and remove back plates from brake.
3. Deflate tire and remove wheel from axle.
4. Loosen 6 wheel bolts and nuts and remove existing 164-04600 brake disc from wheel.
5. Install new 164-21600 brake disc using existing 103-20400 bolts, existing 095-10500 washers (mounted under each nut on outer side of wheel), new 094-12700 nuts and new 095-03000 washers (mounted under bolt head with radiused side of washer facing away from bolt head). Torque bolts at 150 in-lb.
6. Reinstall wheel on axle and inflate tire.
7. Reinstall back plates on brake and torque bolts at 70-80 in-lb.
8. Repeat steps 2 through 7 for opposite side.
9. Make a log book entry referencing this activity and return aircraft to service.