

Cleveland

Wheels & Brakes

Parker Hannifin Corporation

Aircraft Wheel & Brake

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PRODUCT REFERENCE MEMO

HEAT CHECK SERVICE LIMITS FOR THE 164-00806 BRAKE DISC

EFFECTIVITY: All Parker Hannifin P/N 40-40A and 40-40C wheel assemblies equipped with P/N 164-00806 brake discs.

APPLICABILITY: All Cessna model 190, model 195, model 195A, model 195B, model 310, model 335 series, model 340 series, model 401 series, model 411, model 411A, and model 414 aircraft utilizing the 40-40A or 40-40C wheel assemblies.

PURPOSE: To inform Owner/Operators of the above aircraft who utilize Parker part number 40-40A or 40-40C main wheel assemblies on their aircraft of the service life limits for heat checks (cracks) on the wearing surfaces of the 164-00806 brake disc.

COMPLIANCE: Mandatory.

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

WEIGHT AND BALANCE: No Change.

PUBLICATIONS: The information contained in this Product Reference Memo (PRM67) is to be incorporated into the Product Catalog and Maintenance Manual at the next revision of each.

PRODUCT REFERENCE MEMO

**MATERIALS
REQUIRED:**

A soft bristle brush, dry cleaning solution per Federal Specification P-D-680 Type I (stoddard solvent, mineral spirits, white spirits, naphtha) and penetrant (see table below):

| Type | Penetrant | Developer | Supplier |
|-------------|-------------------------------------|---------------------------------------|--------------------------------|
| Fluorescent | Zyglo ZL-16 | Zyglo ZP-13 (wet) optional | Magnaflux Corp. Chicago, IL |
| | Penetrex ZL-2A with emulsifier ZE-4 | Penetrex ZP-4 (dry) or ZP-13 optional | |
| Red Dye | Spot Check | Spot Check | |
| | Dy-Chek | Dy-Chek | |
| | Met-L-Chek | Met-L-Chek | Met-L-Chek Santa Monica, CA |

PROCEDURE:

At each brake lining change, inspect both wearing surfaces of the brake disc for cracks as follows:

1. Clean disc wearing surfaces using dry-cleaning solution per P-D-680, Type I, and a soft bristle brush.
2. Dry part thoroughly using filtered and dried compressed air.
3. Using either fluorescent or dye penetrant, check brake disc wearing surfaces for cracks. Pay particular attention to the brake disc wearing surface which faces the wheel assembly.
4. Replace brake discs if any one crack has a length greater than .820 in. (20.8 mm), if the crack depth exceeds .210 in. (5.3 mm), if more than one crack can be found in any 90° quadrant of the disc, or if more than three (3) cracks can be found in the disc.

