



# SERVICE LETTER

No. 766

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

January 6, 1977 M

Subject:

Inspection of Cleveland Brake Discs; reference attached Cleveland Engineering Service Letter 7006 dated October 1, 1976.

Models Affected:

Serial Numbers Affected:

PA-31 and PA-31-325 Navajo.....	31-7512007 to 31-7512064 Inclusive, 31-7612066 to 31-7612073 Inclusive.
PA-31-350 Navajo Chieftain.....	31-7552029 to 31-7652015 Inclusive, 31-7652017 to 31-7652099 Inclusive, 31-7652101, 31-7652103 to 31-7652109 Inclusive, 31-7652111 to 31-7652119 Inclusive.

Compliance Time: Recommended in accordance with Instructions per attached Cleveland Engineering Service Letter 7006 dated October 1, 1976.

Purpose: It has been determined that the brake discs installed on the above referenced aircraft may be prone to circumferential cracking in the welded area of the disc radius. Continued use of flawed discs may lead to progressive cracking and eventual separation of the discs (see attached Cleveland E.S.L. 7006 for an illustrated view of this area).

This service release provides supplemental distribution of Cleveland Engineering Service Letter 7006 dated October 1, 1976, containing inspection provisions to expose and correct possible brake disc circumferential cracks.

Instructions:

1. Expose brake discs to view in accordance with airframe service manual Landing Gear and Brake System section, Removal and Disassembly of Main Wheel sub-section.
2. Inspect discs per attached Cleveland E.S.L. 7006 Instructions.
3. If evidence of above described cracks is found, replace affected disc(s).
4. If no cracks are found, disc replacement is not required.
5. Prepare aircraft for return to service and make appropriate log book entry.

Material Required: Refer to current PA-31 Navajo and PA-31-350 Navajo Chieftain parts catalog for proper brake disc identification (Cleveland brakes), should brake disc replacement be required per Instructions, above.

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January 6, 1977

Availability of Parts: Your Piper Field Service Facility.

Effectivity Date: This service release is effective upon receipt.

Summary: Please make arrangements to conduct the above described inspection as recommended in Cleveland Engineering Service Letter 7006, attached. Check with your Piper Field Service Facility for details regarding material provisioning, should brake disc replacement be necessitated per this service release.

ENGINEERING SERVICE LETTER 7006  
CLEVELAND WHEELS AND BRAKES  
AVON, OHIO

Effective Date:  
10-1-76

Subject: Possible development of circumferential cracks in Cleveland brake discs used on certain models of the Piper PA-31 Navajo Aircraft.

Purpose: To inspect the welded area of the brake disc for circumferential cracks. Affected brake disc assemblies are:

P/N 164-44 (Piper P/N 754 574) used in wheel assembly 40-102A  
P/N 164-52 (Piper P/N 754 613) used in wheel assembly 40-130

Aircraft Affected:

PA-31, PA-31-325  
S/N 31-7512007 thru 31-7612064  
31-7612066 thru 31-7612073

PA-31-350  
S/N 31-7552029 thru 31-7652015  
31-7652017 thru 31-7652099, 31-7652101  
31-7652103 thru 31-7652109  
31-7652111 thru 31-7652119

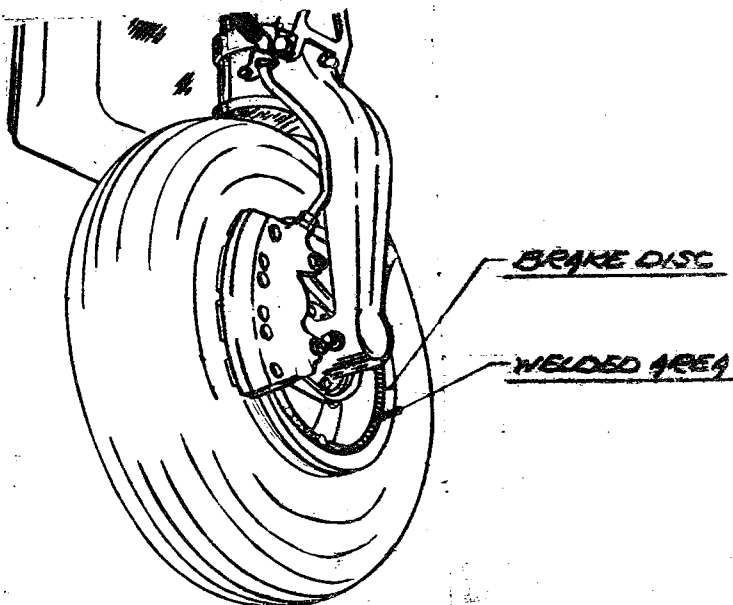
Instructions:

Within the next 25 hours, or at the next scheduled maintenance inspection, whichever occurs first, perform the following inspection:

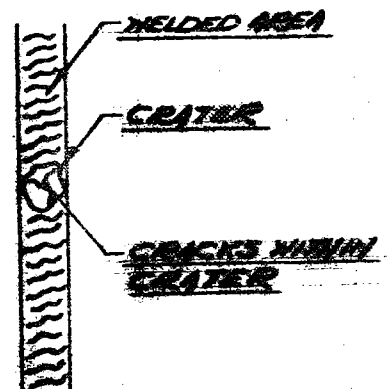
Visually inspect the welded area (see sketch #1) for evidence of circumferential cracks. This type of crack will split the paint, and is readily visible to the naked eye. If cracks are found, replace with a new brake disc of the corresponding part number.

NOTE!

A slight impression or crater may be found in the weld bead (see sketch #2). This crater is caused by electrode removal at the end of the welding cycle. Small cracks contained within this crater are not detrimental and does not necessitate brake disc replacement.



SKETCH #1



SKETCH #2