

DESCRIPTION AND MAINTENANCE INSTRUCTIONS

CRANKCASE CYLINDER PAD CRACK LIMITS

(This EO replaces EO 10A-10AA-2C dated 14 Feb 58)

1 It is the purpose of this Engineering Order to establish limits for acceptability of cracks on crankcase cylinder pads of P & W R985 engines.

TYPE 1 CRACKS ACCEPTABLE

2 These cracks are usually circumferential in pattern and confined to the leg area. Indications of this type are generally shallow, and do not tend to progress with time. Continuous cracks up to approximately 1-1/2" long may be accepted. No limitations have been placed on non-continuous type cracks of the circumferential variety. Concentric cracks being non-continuous also fall into this category. See Figure 1 for examples of circumferential cracks.

NOTE

Circumferential cracks which extend to the crankcase section mating surfaces and which do not extend more than .050 inch over the edge may be accepted.

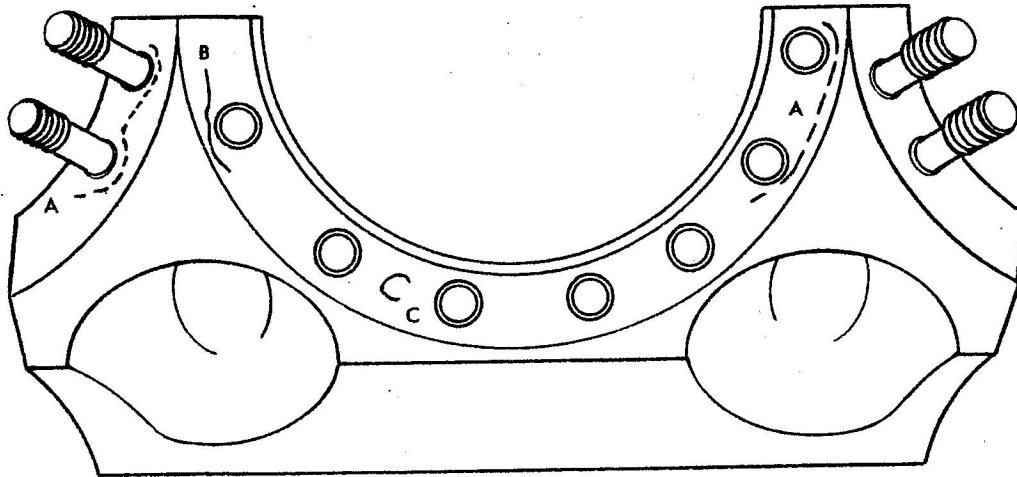
3 It will be permissible to accept cracks in the through-bolt holes provided they do not exceed 1.00" in length.

TYPE 11 CRACKS NON-ACCEPTABLE

4 Deviating Cracks - This type of crack generally starts on the pad surface at the periphery of the cylinder flange, and in the vicinity of a stud and/or bolt hole. It almost immediately tends to depart from the characteristic circumferential pattern and progress to the adjoining pad. This type may enter one or both stud and/or bolt holes, and is usually of considerable depth, and progressive by nature.

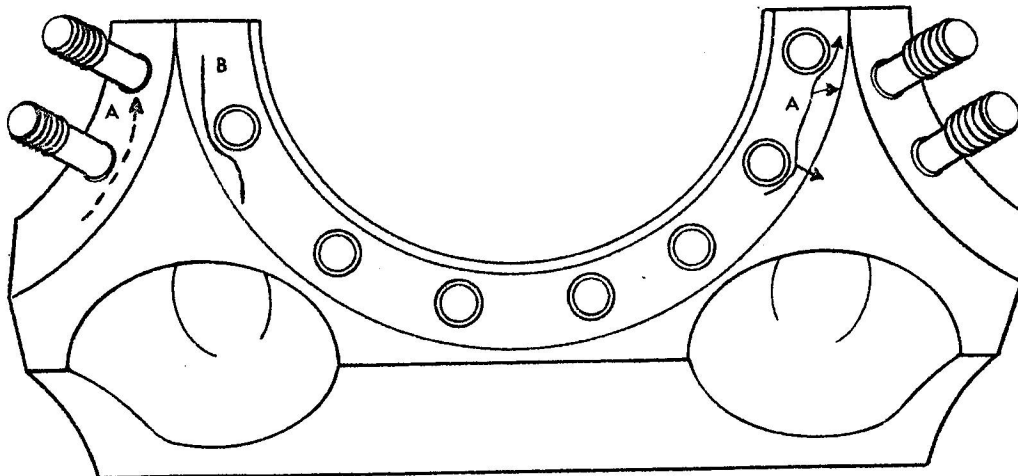
5 Circumferential cracks which run parallel to a stud and/or bolt hole closer than 1/32", or which deviate into a stud and/or bolt hole are unacceptable, see Figure 2.

6 In summation, any cylinder pad cracks which show any tendency to depart from the circumferential pattern by running off or showing a tendency to run off the cylinder pad or into a stud and/or bolt hole will cause rejection of the affected crankcase section. See Figure 2 for examples.



A = NON-CONTINUOUS
B = CONTINUOUS - NOT EXCEEDING 1-1/2 INCH IN LENGTH
C = CONCENTRIC

Figure 1 (Issue 1)



A = DEVIATING
B = LESS THAN 1/32 INCH FROM STUD OR BOLT HOLE

Figure 2

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

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