

Propellers - Variable Pitch - Hartzell

AD/PHZL/53
Amdt 2

Blade Clamps

5/89

Applicability: All model ()HC-() () (X,V) Series propellers fitted with P/No C-3-() blade clamp assemblies.

- Requirement:
1. Replace all propeller blade clamp assemblies S/No. 0 to D5293 or inspect as follows:
 - (a) Visually inspect the internal inboard radius area of the clamp, especially next to the clamp bolt hole, for corrosion. Remove from service all clamps showing signs of corrosion.
 - (b) Magnetic particle inspect all internal and external surfaces of the clamp in accordance with Hartzell specification No H-S-7.
 - (c) Dye penetrant inspect all external surfaces of clamp assemblies S/No 0 to D5293 which, after initial inspection 1(a) and 1(b), remain in service.
 2. Replace all propeller blade clamp assemblies which have mismatching serial numbers on each clamp half or have unreadable serial numbers.
 3. Carry out the following on propeller blade clamp assemblies with S/No. D5294 to K6336:
 - (a) using a 10x power magnifying glass, inspect the inner bearing race radius, especially next to the inner clamp bolt hole, for defects in the form of corrosion, tool marks, gouges, scratches, etc.
 - (b) remove all evidence of defects in the clamp inner bearing race radius. Replace all reworked clamps that exceed the rework limitations defined in SI No. 159B.
 - (c) magnetic particle inspect the clamp for evidence of cracks in accordance with Hartzell Specification H-S-7. Replace all cracked clamps.
 - (d) replate all reworked clamps before placing back in service in accordance with Hartzell Specification H-S-5.

Note: Hartzell SI No 159B and FAA AD85-14-10 Amdt 39-5414 refer.

Compliance: Except for requirement 1(C), at next overhaul, recondition or repair which necessitates disassembly after 30 November 1986 or within 12 months, whichever occurs first. For requirement 1 (C), inspect clamps at each inspection for issue of maintenance release.

SCHEDULE OF AIRWORTHINESS DIRECTIVES

Background: Due to the high stresses in this area, surface damage of any type impairs the airworthiness of the clamp. This Directive has been amended to provide an additional inspection as an alternative to replacement of some clamps. This directive further amended to clarify the S/No 0 to D5293 clamp inspection requirements.