

FIELD SERVICE BULLETIN NO. 10
DECEMBER 29, 1950

TO: ALL NAVION DISTRIBUTORS, DEALERS AND OWNERS OF AFFECTED NAVIONS

SUBJECT: INSPECTION AND MODIFICATION OF HARTZELL PROPELLER CONTROL UNIT
METHOD OF ATTACHMENT TO LYCOMING ENGINE NOSE SECTION.

EFFECTIVITY: 1951 MODEL NAVIONS, FACTORY SERIAL NOS. 2201 THRU 2205; 2207
THRU 2233; 2235 THRU 2238; 2240, 2245 THRU 2248; 2251, 2253
AND 2254, AND ALL OTHER LYCOMING POWERED NAVIONS EQUIPPED
WITH THE -8 HARTZELL PROPELLER.

Installation experience has revealed that the threads in the AN 364-624 elastic stop nuts used to attach the Hartzell propeller hydraulic control units on some Lycoming engines have a tendency to strip when tightened sufficiently for this application. Therefore, it is mandatory that the propeller installations on the airplanes referred to above be immediately inspected to determine if AN 364-624 elastic stop nuts were used originally to attach the propeller control unit to the engine. On installations where this type nut was used, they must be replaced with Flexloc Nuts, Part No. 22FT-624. The required inspection can be quickly accomplished by removing the twelve AN 501-A10-18 screws securing the outer diaphragm retaining ring and folding back the outer edge of the diaphragm so that the subject nuts can be seen.

On units where the nut change described above is necessary, the following modification should be performed on the propeller hydraulic element to prevent oil seepage at the thrust plate surfaces. Countersink aft face of hydraulic element using a 100 degree countersink until diameter of cut measures 9/16 inch, plus 0, minus 1/32 inch in six places as shown in sketch (CAUTION: DO NOT over countersink holes using a countersink with a 3/8 inch pilot if possible). Install an AN 6227-7 "O" ring on each nose section stud as shown in sketch and reinstall propeller hydraulic element, using existing plain washers and Flexloc nuts tightened carefully to 320 to 340 inch pounds torque. Do not install paper gasket between hydraulic element and thrust plate. At this torque, there must be no gap between hydraulic element and engine thrust plate, (CAUTION: DO NOT over-tighten nuts).

Airplanes, equipped at the factory with 22FT-624 nuts, that do not show any signs of oil seepage at thrust plate, will not require "O" ring seals. 22FT-624 nuts are required, retroactive on all Hartzell Propeller equipped Navion B airplanes. Navion distributors, dealers, and the Hartzell Propeller Company will be held responsible for notifying the owners of any Navion B airplanes on which they have installed Hartzell Propellers as replacements for the standard Aeromatic Propellers.

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