

P. Ponk Aviation

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INSTALLATION INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

P/N PPA-1401 elevator and rudder hinge bearing on
Cessna single engine aircraft Per Approved Model List

Document Number: PPA-1401-ICA

RETAIN THIS DOCUMENT WITH THE AIRCRAFT RECORDS

REVISION HISTORY

Revision	Description	Pages	Date	FAA Acceptance
	Original Issue		9-1-04	DPS 5/2/06

1.0 Modification Description

P.Ponk Aviation P/N PPA-1401 bearings are for replacement of existing rudder and elevator hinge bearings on Cessna 180, 182, 185, and 206 aircraft. The new bearing is a plain type which utilizes an acetal polymer outer sleeve and a stainless steel inner sleeve. The new plain bearing replaces the existing MS24462 and NAS296-4A steel roller bearings in the elevator and rudder. The new bearing offers a longer service life and better corrosion resistance.

This bearing is a suitable replacement for elevator hinge bearings and all rudder hinge bearings except the very bottom rudder bearing. The bottom rudder bearing must be replaced with the original approved parts when necessary.

2.0 Installation and Removal

Refer to the applicable maintenance manual before attempting installation or removal. General guidelines for bearing installation and removal are shown below.

BEFORE INSTALLATION

Measure each housing and verify that the diameter falls between 0.620 and 0.624 inches. If the housing is smaller than the range specified, it may be enlarged as necessary. If the housing is larger than the range specified, wear has taken place and the necessary housing components must be replaced.

INSTALLATION

CENTER THE BEARING IN THE HOUSING. DO NOT ALLOW THE BEARING TO BE CANTED OR BOUND IN THE HOLE.

APPLY THE INSTALLING LOAD TO THE OUTER RACE OF THE BEARING.

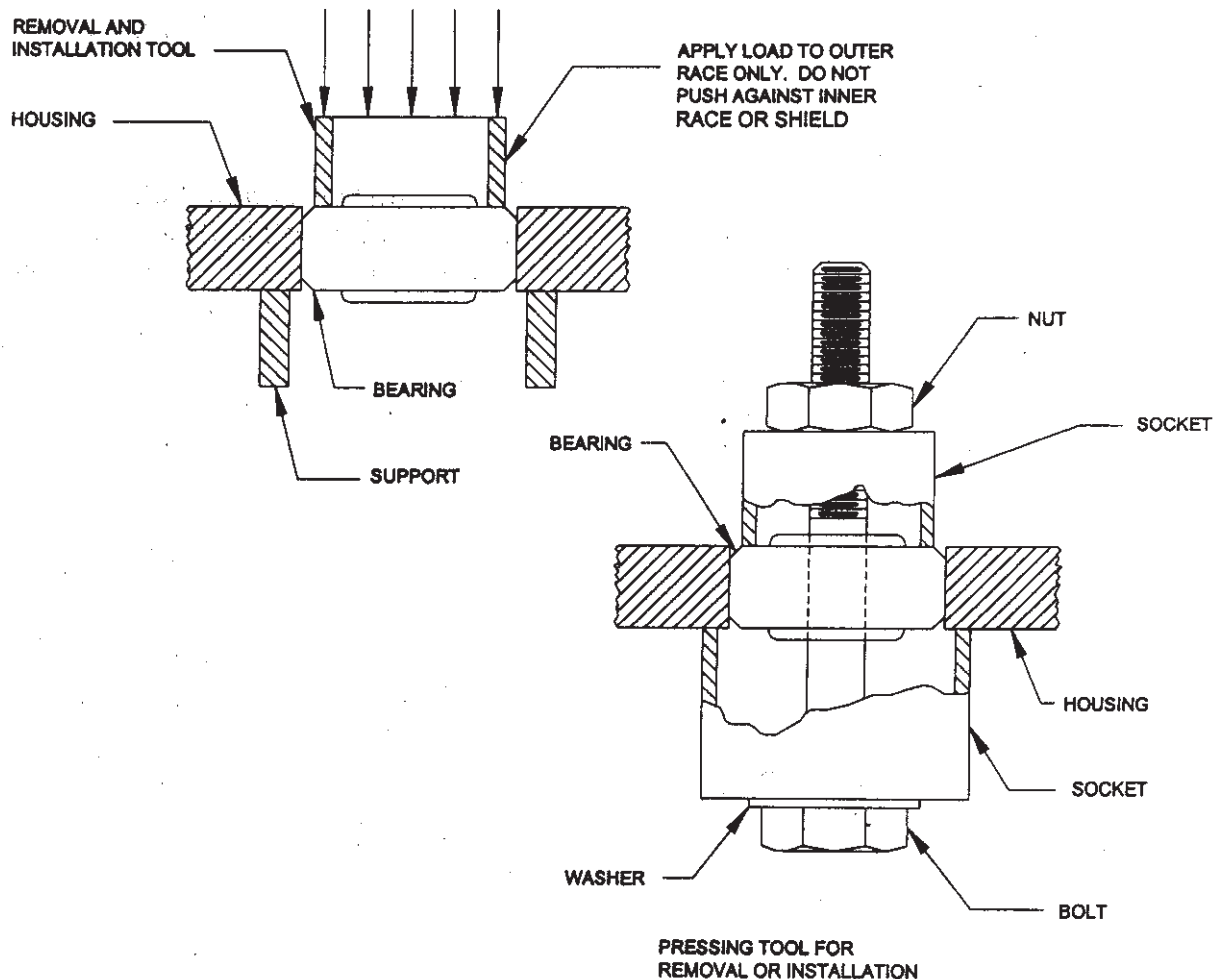


Figure 1
General Bearing Removal and Installation

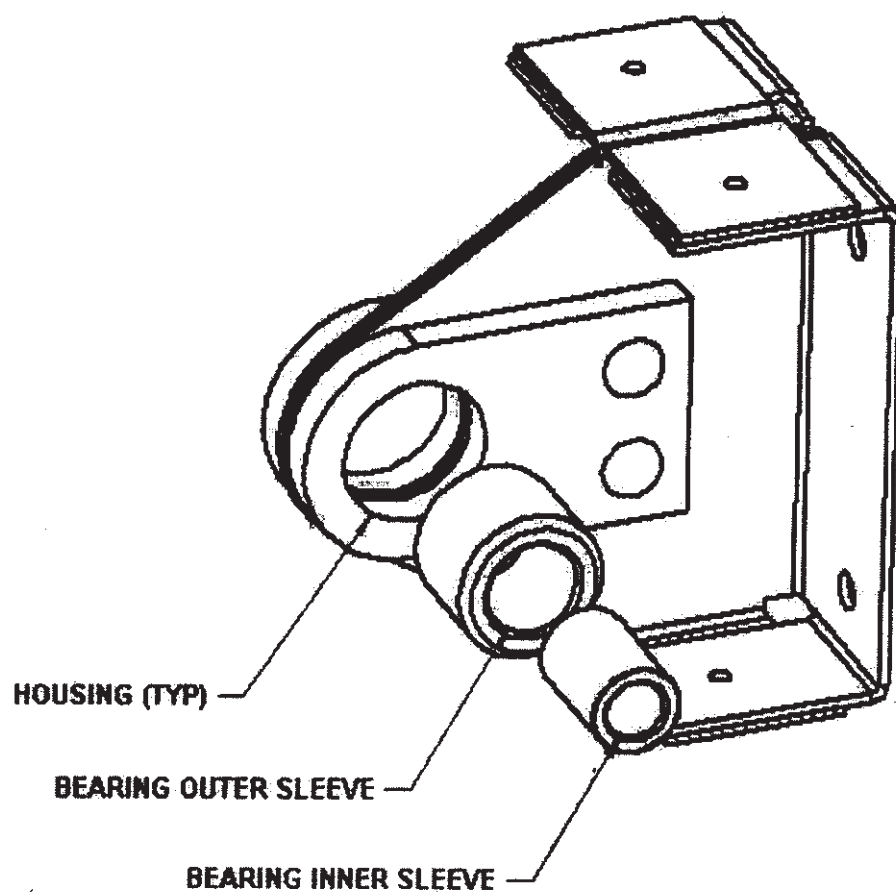


Figure 2
P.Ponk Bearing Installation

3.0 Airworthiness Limitations

This Airworthiness Limitations Section is FAA approved and specifies maintenance required under paragraphs 43.16 and 91.403 of the Federal Aviation Regulations unless an alternate program has been FAA approved. This modification does not affect the airworthiness section of the FAA Approved Maintenance Manual.

3.1 Inspection Requirements

P/N PPA-1401 rudder and elevator bearings should be inspected on a regular 100 hr/annual or progressive basis in accordance with applicable maintenance manual. Replace hardware as required. See Figure 1 for bearing removal and installation guidelines.

100hr/Annual and Progressive Inspections

1. Check hinge bolts and bearings for evidence of damage or wear
Wear will be indicated by free play in the bearing.
If total free play of the bearing in one direction is more than **0.020** inches, the bearing must be replaced.
2. Check for failed or corroded fasteners
3. Check for security and proper safetying of nuts

FAA Approved



4.0 Lubrication

LUBRICATION OF THESE BEARINGS IS NEITHER NECESSARY OR ALLOWED.
LUBRICATING MAY CAUSE PREMATURE WEAR OR FAILURE!

5.0 Contact Information

To obtain copies of the latest revision of this document or for general inquiries, please contact P. Ponk Aviation at the location below.

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