

# SERVICE No. 738 BULLETIN

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

FAA DOA SO-1 Approved

April 20, 1982 S/M

This Service Bulletin is divided into two (2) PARTS. Check each PART for Models and Serial Numbers Affected.

PART	ΓΙ
Subject:	Nose Landing Gear Actuator Rod End Replacement
Models Affected:	Serial Numbers Affected:
PA-28RT-201 Arrow IV	28R-8118061 through 28R-8118064 28R-8118066 through 28R-8218005 28R-8218007 through 28R-8218011
PA-28RT-201T Turbo Arrow IV	28R-8131113 through 28R-8131160 28R-8131162 through 28R-8131169 28R-8131172 through 28R-8131184 28R-8131188 through 28R-8231027
PA-32R-301 Saratoga S.P.	28R-8231029 and 28R-8231030 32R-8113055 through 32R-8113117 32R-8113119 through 32R-8213018 32R-8213020 through 32R-8213028 and 32R-8213030
PA-32R-301T Turbo Saratoga S.P.	32R-8129055 through 32R-8229020 32R-8229022 through 32R-8229030
PA-44-180 Seminole	44-8195018 through 44-8195023
PA-44-180T Turbo Seminole	44-8107047 through 44-8107058, 44-8107060, 44-8107062 through 44-8107064, 44-8107066, 44-8207003 through 44-8207006

Compliance Time: Within the next twenty-five (25) hours of operation.

<u>Purpose:</u> It has been determined that the nose landing gear actuator rod end bearing on the above-listed aircraft may not have been heat treated by our vendor. If this is the case, the rod end bearing will be of insufficient strength.

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Purpose: (continued)

If this condition exists and is left uncorrected, the rod end is likely to fail and the nose landing gear will extend to the down and locked position and will not retract.

PART I of this Service Bulletin provides instructions for a replacement with a rod end bearing of the designed strength.

## Instructions:

- 1. Per the appropriate Maintenance Manual, place aircraft on jacks and remove the nose landing gear actuator rod end bearing.
- 2. Install new rod end bearing. NOTE: New rod end bearing can be identified by the letters "HT" etched into each side of the rod end. Rig per the instructions in the appropriate Maintenance Manual.
- 3. Make appropriate logbook entry of compliance with PART I of this Service Bulletin.

Material Required: One (1) each Rod End Bearing, Piper Part Number 452 729V, per aircraft.

## PART II

Subject:	Nose Landing Gear Actuator Rod End Inspection/Replacement
Models Affected:	Serial Numbers Affected:
PA-28R-180 Arrow PA-28R-200 Arrow II PA-28R-201 Arrow III PA-28R-201T Turbo Arrow III PA-28RT-201 Arrow IV PA-28RT-201T Turbo Arrow IV PA-32R-300 Lance PA-32RT-300 Lance II PA-32RT-300T Turbo Lance II PA-32R-301 Saratoga S.P. PA-32R-301T Turbo Saratoga S.P. PA-44-180 Seminole	28R-30004 through 28R-7130013 28R-35001 through 28R-7635545 28R-7737001 through 28R-7837317 28R-7703001 through 28R-7803373 28R-7918001 through 28R-8118060 28R-7931001 through 28R-8131112 32R-7680001 through 32R-7880068 32R-7885001 through 32R-7985105 32R-7887002 through 32R-7987126 32R-8013001 through 32R-8113054 32R-8029001 through 32R-8129054 44-7995001 through 44-8195017
PA-44-180T Turbo Seminole	44-8107001 through 44-8107046

Compliance Time:

Within the next twenty-five (25) hours of operation.

Purpose: It has come to our attention that nose landing gear actuator rod end bearings sold from the Vero Beach Service Stock since February, 1981, may not have been heat treated by our vendor. If this is the case the rod end bearing will be of insufficient strength.

If the nose landing gear actuator rod end bearing has been replaced with a new one (Piper Part Number 452 729V) from February, 1981, through the date of this Service Bulletin, the rod end bearing installed may be non-heat treated.

If this condition exists and is left uncorrected, the rod end is likely to fail and the nose landing gear will extend to the down and locked position and will not retract.

PART II of this Service Bulletin provides instructions for inspecting and, if necessary, replacing the nose landing gear actuator rod end bearing.

Instructions:

- 1. Thoroughly review all maintenance records (i.e., logbook, workorders, etc.) for evidence of replacement of the nose landing gear actuator rod end bearing, Piper Part Number 452 729V, from February, 1981, through the date of this Service Bulletin.
- 2. If records indicate no history during this time frame, no further action is necessary. Make appropriate logbook entry of compliance with PART II of this Service Bulletin.
- 3. If records do indicate a replacement has been installed since February, 1981, replacement is required with a heat treated rod end, Piper Part Number 452 729V.
- 4. Per the appropriate Maintenance Manual, place aircraft on jacks and remove the existing rod end bearing.
- 5. Install new rod end bearing. <u>NOTE</u>: New rod end bearing can be identified by the letters "HT" etched into each side of the rod end. Rig per the instructions in the appropriate Maintenance Manual.
- 6. Make appropriate logbook entry of compliance with PART II of this Service Bulletin.

Material Required: If required, one (1) each Rod End Bearing, Piper Part Number 452 729V, per aircraft.

Availability of Parts: Your Piper Field Service Facility.

Effectivity Date: This Service Bulletin is effective upon receipt.

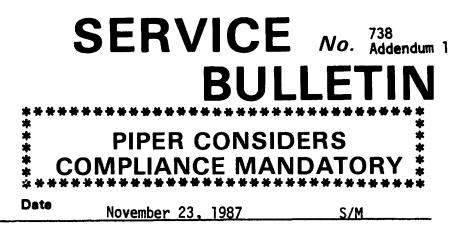
Summary: Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of this Service Release in accordance with Compliance Time, indicated.

Any applicable Factory Participation will be in effect for a period of time not to exceed 180 days from the date of this Service Bulletin.



# **Piper Aircraft Corporation**

Vero Beach, Florida, U.S.A.



(This Addendum provides supplemental information to Piper Service Bulletin No. 738, dated April 20, 1982. Subject: Nose Landing Gear Actuator Rod End Inspection/Replacement.)

<u>NOTE</u>: Insure that this Addendum is permanently attached to Piper Service Bulletin No. 738.

## MODELS AFFECTED:

PA-28R-180 Arrow PA-28R-200 Arrow/Arrow II PA-28R-201 Arrow III PA-28R-201T Turbo Arrow III PA-28RT-201 Arrow IV

PA-28RT-201T Turbo Arrow IV

PA-32R-300 Lance PA-32RT-300 Lance II PA-32RT-300T Turbo Lance II PA-32R-301 Saratoga S.P.

PA-32R-301T Turbo Saratoga S.P.

PA-44-180 Seminole PA-44-180T Turbo Seminole

## SERIAL NUMBERS AFFECTED:

28R-30004 through 28R-7130013 28R-35001 through 28R-7635545 28R-7737001 through 28R-7837317 28R-7703001 through 28R-7803373 28R-7918001 through 28R-8118064 28R-8118066 through 28R-8218005 28R-8218007 through 28R-8218011 28R-7931001 through 28R-8131160 28R-8131162 through 28R-8131169 28R-8131172 through 28R-8131184 28R-8131188 through 28R-8231027 28R-8231029 and 28R-8231030 32R-7680001 through 32R-7880068 32R-7885001 through 32R-7985105 32R-7887002 through 32R-7987126 32R-8013001 through 32R-8113117 32R-8113119 through 32R-8213018 32R-8213020 through 32R-8213028 and 32R-8213030 32R-8029001 through 32R-8229020 32R-8229022 through 32R-8229030 44-7995001 through 44-8195023 44-8107001 through 44-8107058, 44-8107060, 44-8107062 through 44-8107064, 44-8107066, 44-8207003 through 44-8207006

<u>PURPOSE</u>: The Instructions of PART I and PART II of Piper Service Bulletin No. 738, dated April 20, 1982; state: "that new rod end bearings can be identified by the letters "HT" etched into each side of the rod end.

<u>APPROVAL</u>: The technical contents of this Service Bulletin Addendum have been approved by the  $F \cdot A \cdot A \cdot$ 

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## SERVICE BULLETIN NO. 738 ADDENDUM 1

Subsequent to the original publication of this Service Bulletin rod end bearings have been procured from alternate vendors, properly heat treated or manufactured from hardened material, but without the identifying "HT" etched onto each side. These rod ends are all identified as Piper Part Number 452-729 and meet the specifications established for this specific part number.

Thus, new rod end bearings, Piper Part Number 452-729, received from our inventory have been heat treated by their manufacturer and are acceptable for use.

<u>SUMMARY:</u> This Addendum DOES NOT supersede or void any other information contained in Service Bulletin No. 738, dated April 20, 1982. The information contained herein is supplemental to that contained in Service Bulletin No. 738.