

Piper Aircraft Corporation Vero Beach, Florida, U.S.A. PIPER CONSIDERS COMPLIANCE MANDATORY

SERVICE No.

866A

(Service Bulletin No. 866A supersedes and voids Service Bulletin No. 866 dated June 19, 1987)

This Service Bulletin is divided into Two (2) PARTS. Refer to each PART for specific means of compliance and Compliance Time.

REASON FOR REVISION:

To revise Purpose, add PART II, and revise Summary.

SUBJECT:

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.

Back Up Landing Gear Extender Removal

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-8218026 28R-7931001 through 28R-8631005, 2831001 and 2831002 32R-7680001 through 32R-7880068 32R-7885001 through 32R-7885105 32R-7887001 through 32R-7987126 32R-8013001 through 32R-8613005, 3213001 and 3213002 32R-8029001 through 32R-8029110, 32R-8029121 through 32R-8629006, and 3229001 through 3229003

(*) NOTE: Some PA-28R-180/200 Arrow/Arrow II aircraft are affected by Piper Service Bulletin No. 769: "Landing Gear Back-Up Actuator Override Mechanism" installation. Compliance with Service Bulletin No. 769 is required prior to or concurrent with compliance with this Service Bulletin.

APPROVAL:

The technical contents of this Service Builetin have been approved by the F.A.A.

(Over) ATA: 3236

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PURPOSE:

The Piper Back Up Gear Extender System (the 'System'), originally installed in the above listed aircraft, is designed as a safety device to help prevent both inadvertent landing with the gear retracted and premature retraction of the gear during take off. When properly operated and maintained, the System automatically extends the landing gear when airspeed falls below a certain value and prevents the landing gear from retracting before a certain airspeed is attained. The airspeed values vary according to the aircraft model. The System can be deactivated ("overridden") by the pilot. (See Note * on page 1)

It has been alleged that properly functioning Systems were contributory factors in aircraft accidents, propagated by other emergencies. In view of controversies concerning the benefits versus potential hazards of the System's operation, Piper Issued Service Bulletin No. 866, dated June 19, 1987, requiring removal of the System from all affected aircraft.

Piper's primary concern is that pilots, not familiar with all aspects of the System's operation, might inadvertently encounter situations that would adversely affect safe flight. However, Piper also recognizes the owner/operator of an aircraft bears the <u>ULTIMATE</u> responsibility for assuring continued airworthiness and safe operation of his or her aircraft at <u>ALL TIMES</u>, (Refer to FAA FAR's 91.3 and 91.163).

Therefore, after thoroughly reviewing the facts to date, including significant customer comments, Service Bulletin No. 866A is being issued. It reiterates the System removal requirements of Service Bulletin No. 866, and provides an alternative means of compliance for affected owner/operators who choose to continue operation of their aircraft with the Back Up Gear Extender <u>installed</u> and <u>functioning</u>.

Piper considers compliance with EITHER PART I or PART II of this Service Bulletin to be MANDATORY and further recommends that the System, if presently installed, be "locked out" until PART I or PART II of this Service Bulletin has been complied with.

Failure to comply with this Service Bulletin could result in an inability to attain/maintain safe airspeeds including, but not limited to:

Reduced rate of climb due to delayed gear retraction; reduced glide ratio due to premature Gear Extension; and failure of the Backup Gear Extender due to impact icing on the air pressure mast.

PART 1

SUBJECT:

Back Up Landing Gear Extender Removal.

<u>COMPLIANCE TIME</u>: Within the next one hundred (100) hours of operation or at the next scheduled maintenance event, whichever occurs first.

<u>INSTRUCTIONS</u>: All instructions necessary to accomplish this modification are contained in the Back Up Landing Gear Extender Removal Kits, Piper Part Number 765-303 for the PA-28R/28RT Series and Piper Part Number 765-199 for the PA-32R/32RT Series.

<u>MATERIAL REQUIRED</u>: One (1) each Back Up Landing Gear Extender Removal Kit, Piper Part Number 765-303 for PA-28R/28RT or 765-199 for PA-32R/32RT Series, per aircraft.

<u>NOTE</u>: Special list pricing will be extended for a period of 180 days from the date of this Service Bulletin. The Back Up Landing Gear Extender Removal Kits will again be offered at a special list price of \$132.00 each for Piper Part Number 765-303 and \$127.00 each for Piper Part Number 765-199.

PART 11

SUBJECT:

Alternate Means of Compliance.

<u>COMPLIANCE TIME</u>: Prior to further flight if the Back Up Landing Gear Extender system is installed and operational.

INSTRUCTIONS:

Compliance with <u>all</u> instructions below is required of <u>ALL</u> persons acting as <u>Pilot in Command</u> of the affected aircraft.

- Review and understand all information contained in the applicable Airplane Flight Manual/Pilot's Operating Handbook, Operations, Limitations and Systems sections, pertaining to the normal and emergency operation of the Back Up Landing Gear Extension System for the affected aircraft model.
- 2. Review and understand all information contained in the Pilot's Operating Handbook pertaining to the normal and emergency operation of the affected aircraft model with the landing gear extended; with particular emphasis on stall speeds; take off, climb, glide and slow flight performance; and Back Up Landing Gear Extension System operating airspeeds.
- 3. Attach a copy of this Service Bulletin to the Airplane Flight Manual or Pilots Operating Handbook.

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INSTRUCTIONS Cont:

4. Make an entry in the aircraft logbook indicating compliance with PART II of this Service Bulletin.

MATERIAL REQUIRED: Not Applicable.

AVAILABILITY OF PARTS: Your Piper Field Service Facility.

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

<u>SUMMARY</u>: Please contact your Factory Authorized Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the Compliance Time Indicated, and to obtain information concerning any applicable Factory Participation.

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

<u>NOTE</u>: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the Factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections/Changes should be directed to:

Piper Aircraft Corporation Attn: Customer Services P.O. Box 1328 Vero Beach, FL 32961-1328