

Piper PA-28 Luggage Door Strut Kit	Issue Date: 6-10-2004
STC No. SA02022CH	Rev. B
Manual No. 28LUG-M	Rev Date: 2-28-2011

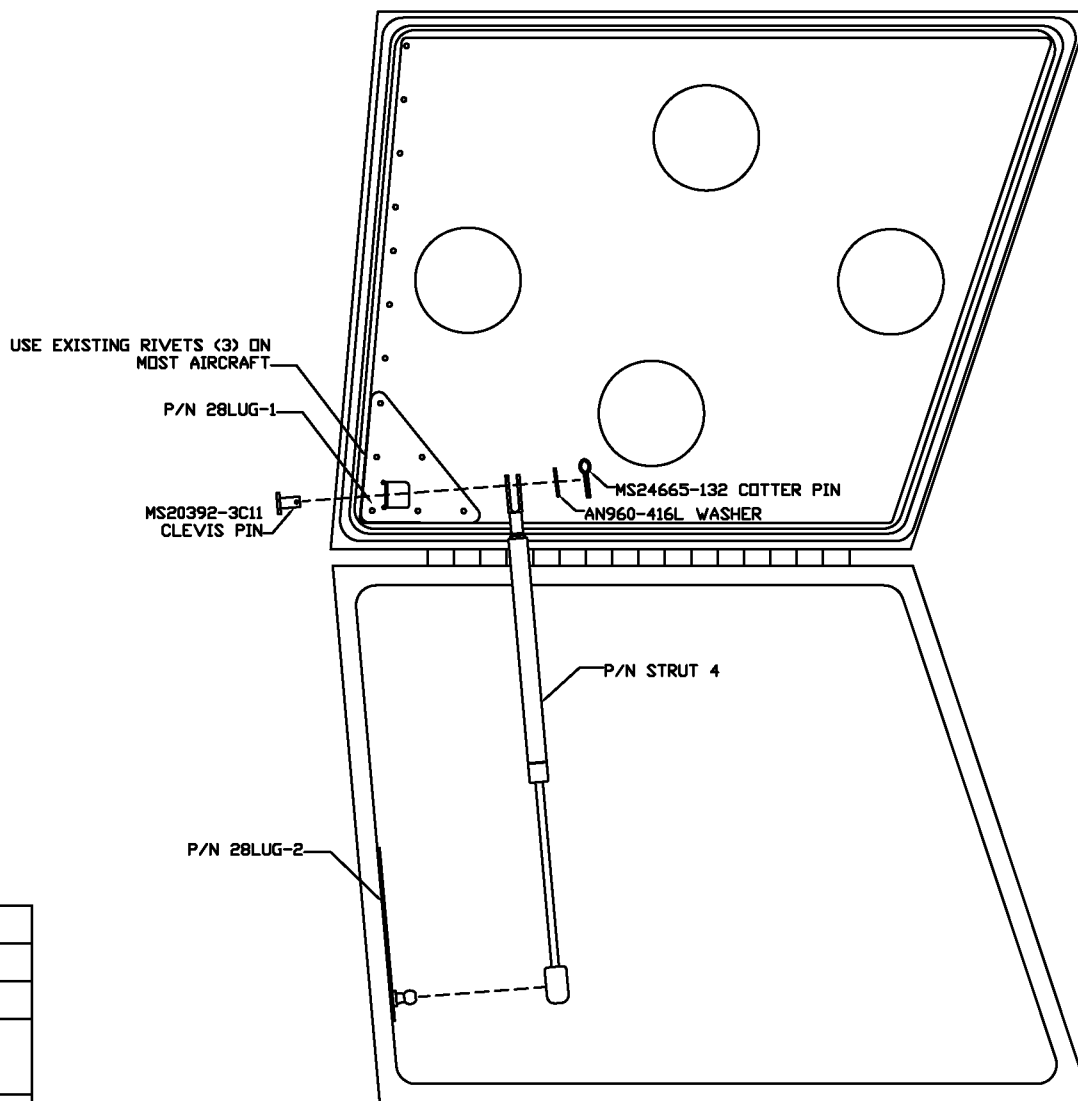
PIPER PA-28 LUGGAGE DOOR STRUT KIT INSTALLATION AND MAINTENANCE MANUAL

Aircraft Eligibility: Piper PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-181, PA-28-201T, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T, PA-28S-160, PA-28S-180.

Knots 2U, Ltd.
709 Airport Road
Burlington, WI 53105
www.knots2u.com

NOTE No. 1: BEFORE INSTALLING THE LUGGAGE DOOR STRUT KIT CHECK THE DOOR'S PIANO HINGE AND ATTCHING STRUCTURE. IF HINGE APPEARS WORN OR MISALIGNED IT SHOULD BE REPAIRED OR REPLACED. IF AREA AROUND HINGE APPEARS WEAK IT SHOULD BE REPAIRED OR REINFORCED.

- 1) Raise the baggage door and secure it in the up position using the existing strap.
- 2) Remove the lower strap holder from the lower left hand corner of the door so that it will not interfere with the installation of the upper attach bracket P/N 28LUG-1.
- 3) Locate P/N 28LUG-1 in the lower left hand corner of the door so that it is flush with the edge of the door on two sides.
- 4) On most aircraft you will need to drill (3) existing rivets. The holes from the rivets just removed will be used to attach P/N 28LUG-1. With the bracket properly located install using (6) CR3243-4-2 rivets. (Drill all holes to a #27 hole size)
- 5) Attach strut P/N STRUT4 to the upper bracket just installed using the clevis pin, washer, and cotter pin.
- 6) With the door in it's proper up position and P/N STRUT4 attached to the upper bracket, attach the other end of the strut to lower bracket P/N 28LUG-2. With the strut in its fully extended state as a guide, locate P/N 28LUG-2 on the inside of the door frame. Confirm proper positioning before drilling (3) #27 holes in the door frame. With P/N 28LUG-2 properly located attach using (3) CR3243-4-2 rivets.
- 7) Function test the door for any binding and proper operation of the strut through its full travel. Confirm that when the door is fully closed, at least 1/8" of the strut piston is exposed. With the door closed confirm there is no flexing in the upper part of the door and that the piano hinge is properly aligned.
- 8) The existing strap for holding the door open with it's attachment hardware may be removed from the aircraft at this time.
- 9) Complete the log book entry and FAA Form 337. Place STC and maintenance manual with the aircraft logbooks. Weight and balance change: Negligible.
- 10) If it is necessary to remove the luggage door strut kit it can be accomplished by removing the rivets holding P/N 28LUG-1 and 28LUG-2.



Part No.	Qty.	Description
28LUG-1	1	UPPER ATTACH BRACKET
28LUG-2	1	LOWER ATTACH BRACKET
STRUT 4	1	PNEUMATIC STRUT 30 P.S.I. (MINIMUM 20 P.S.I.)
MS24665-132	1	COTTER PIN
MS20392-3C11	1	CLEVIS PIN
AN960-416L	1	WASHER
CR3243-4-2	9	CHERRY MAX RIVETS
	1	INSTALLATION MANUAL

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Section 2.0

Maintenance / Instructions for Continued Airworthiness

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

For the current copy of this manual please contact Knots 2U, Ltd. at 262 763-5100 or via email at technical@knots2u.com.

Part A. Inspection

1. During annual or 100 hour inspections, inspect attachment hardware and confirm strut pressure is sufficient to retain luggage door in the open position.
2. Inspect door attachment for any flexing or cracking.
3. Inspect piano hinge for excessive wear.

Part B. Maintenance

1. If the attachment hardware is found to be excessively worn or loose during the 100 hour/annual inspection, it should be replaced.
2. If the strut pressure is insufficient to support the door in the open position the strut should be replaced.

Part C. Cracking or Defects

1. If a crack is found in the door or area where the triangular door bracket is attached, repair the crack in accordance with FAR 43.13.