



The New Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE No. 1131 BULLETIN

**PIPER CONSIDERS
COMPLIANCE MANDATORY**

Date: August 18, 2003

(S)

SUBJECT:

**INSPECTION OF "CAST" MAIN LANDING GEAR
STRUT CYLINDERS (P/N's 65319-002, -003, & -004)**

MODELS AFFECTED:

PA-28-140 Cherokee Cruiser
PA-28-150 Cherokee
PA-28-151 Warrior
PA-28-160 Cherokee
PA-28-161 Warrior II
PA-28-161 Warrior III
PA-28-161 Cadet
PA-28-180 Cherokee
PA-28-180 Archer
PA-28-235 Cherokee Pathfinder
PA-32-260 Cherokee Six 260

SERIAL NUMBERS AFFECTED:

28-20001 through 28-7725290
28-1 through 28-4377 and 28-1760A
28-7415001 through 28-7715314
28-1 through 28-4377 and 28-1760A
28-7716001 through 2816109
2816110 Only
2841001 through 2841365
28-3 through 28-7205318
28-E13, 28-7305001 through 28-7505259
28-10001 through 28-7710089 and 28-E11
32-1 through 32-7800008

COMPLIANCE TIME:

To coincide with next regularly scheduled maintenance event, but not to exceed the next one hundred (100) hours time in service and at each one hundred (100) hour inspection thereafter.

APPROVAL:

The alteration as specified in the instructions section of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.

PURPOSE:

A review of service difficulty reports concerning failures of the "cast" main landing gear strut cylinders (Piper P/N 65319-002, -003, -004) indicates a need to implement a periodic inspection requirement to inspect the upper torque link attach lugs for cracks.

These "cast" main landing gear strut cylinders have been replaced on the Warrior III and the Archer III aircraft with a stronger, "forged" landing gear strut cylinder (Piper P/N 65490-000).

For those aircraft that do not have the "forged" landing gear strut cylinder, this service bulletin incorporates a 100 hour recurrent inspection requirement to inspect for cracks at the torque link attach lugs on the "cast" main landing gear strut cylinders.

This publication also announces the availability a "forged" strut cylinder which, when installed, eliminates the recurrent inspection requirement. Those aircraft that have replaced both right hand and left hand "cast" main gear strut cylinders with the "forged" strut cylinders are exempt from this periodic inspection requirement.

(OVER)

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INSTRUCTIONS:

For aircraft having the "cast" main landing gear strut cylinders (P/N's 65319-002, -003, or -004), perform the following inspection **each 100 hrs of aircraft operation**.

1. Thoroughly clean the area to be inspected as indicated in Figure 1 using a suitable cleaner.
2. Using a 10X power magnifying glass, visually inspect the gear cylinder top and bottom radii at the torque link attach lugs for cracks (Ref Figure 1). If no cracks are found by visual inspection, proceed to Liquid Penetrant Inspection per AC43.13-1B Chapter 5, Section 5 to check for cracks. Strip the paint and primer from the area to be inspected using a commercially available chemical paint stripper taking care only to remove paint and primer from the inspection area.
3. If a crack is detected, prior to further flight, replace the "cast" main gear strut cylinder with the "forged" main gear strut cylinder per the applicable Aircraft Maintenance Manual (See the "Material Required" section for applicable part number to order). Installation of the "forged" main gear strut cylinder in both the right hand and left hand gear position eliminates the need for the 100 hr repetitive inspection requirement for the aircraft.
4. If no cracks are detected, thoroughly clean the surfaces and touch-up paint and primer removed during the inspection process.
5. Make an appropriate logbook entry indicating compliance with this Service Bulletin.

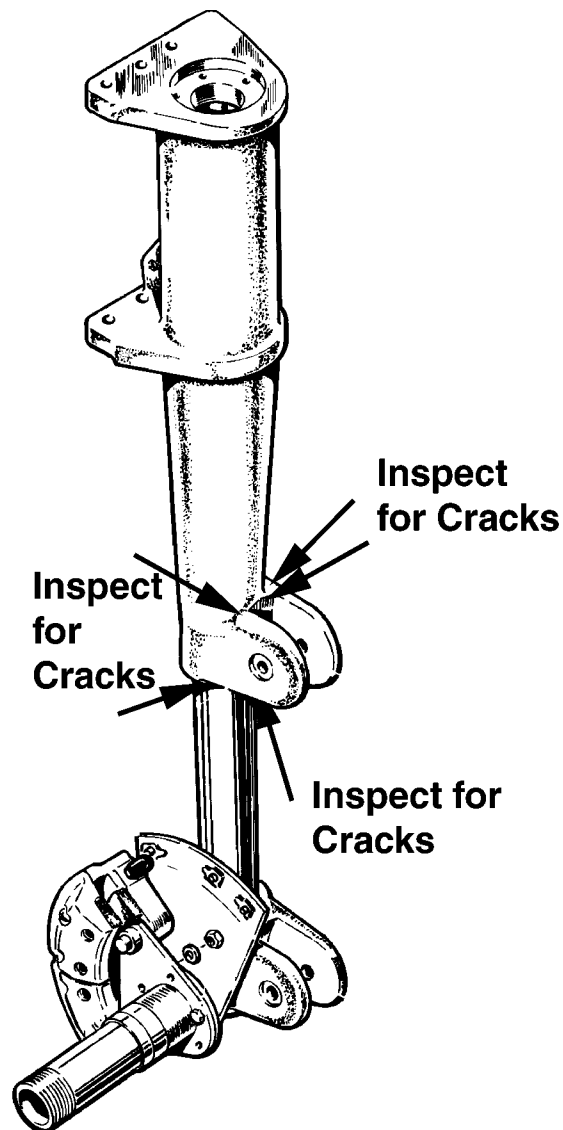


Figure 1
Inspection Area

MATERIAL REQUIRED: Two (2) each, if required, complete main gear cylinder (forged) assemblies, Piper part number 65489-002, per aircraft.

NOTE: The P/N 65489-002 cylinder assembly is a finished unit that only requires the installation of the stub axle and oleo strut assembly prior to installing the gear assembly to the aircraft.

The Main Gear Cylinder Assembly P/N 65489-002 contains the following parts:

<u>Qty.</u>	<u>Part Number</u>	<u>Nomenclature</u>
1	63307-000	Spacer Ring
1	63314-000	Retainer Ring
1	65488-000	Head Assembly
1	65490-000	Cylinder (forged)
2	151-296	Lock Wire
6	401-918	Bolt
2	462-036	Gasket
1	484-769	Quad Ring
1	486-188	Scraper

AVAILABILITY OF PARTS: Your Piper Field Service Facility.

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

SUMMARY: No aircraft warranty available.

Please contact your Factory Authorized Piper Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated.

NOTE: 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:

THE NEW PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960