

Czech Sport Aircraft a.s.	SERVICE BULLETIN	Czech Sport Aircraft a.s. Na Záhonech 1177/212, 686 04 Kunovice Czech Republic office@czechsportaircraft.com
No. SB-CR-016		Rev.: 6
Date: 2013-10-09		
Page: 1 of 4		Date: 2015-08-31

MODEL AFFECTED:	SportCruiser, PiperSport, PS-28 Cruiser with the NLG SG0270N
SUBJECT:	Inspection of the nose landing gear leg and its replacement (if required)
AIRCRAFT AFFECTED:	All SportCruiser aircraft with the NLG SG0270N installed All PiperSport aircraft with the NLG SG0270N installed All PS-28 Cruiser aircraft with the NLG SG0270N installed
COMPLIANCE:	Before next flight after issue of this bulletin.

DESCRIPTION:

This Service Bulletin contains instructions for a repetitive inspection and replacement (if required) of the nose landing gear (NLG).

REASON:

Some SportCruiser / PiperSport / PS-28 Cruiser aircraft have developed cracks in the bottom side of the lower section of the nose landing gear (NLG). The cracks develop on the NLG assembly along the weld of the tube and the bracket. Furthermore, on several aircraft bending of the pivot connecting the fork with leg was discovered and cracks from holes of bolts on the fork. To address this potentially unsafe condition, a repetitive inspection is required of the bottom side of the lower section, in the area of the weld of the tube, the bracket and the pivot and the fork in the place of the bolts mounting the fork to the landing gear.

COMPLIANCE:

- A. Before next flight after issue of this bulletin.
- B. Periodically at each 25 FH or 50 cycles whatever occurs first check as described in documents [1] for PS-28 Cruiser and [2] for SportCruiser (see REFERENCES).
- C. During pre-flight check (see POH , Section 4, 4.1 Pre-flight check, Inspection Check List, Point 4 - Nose gear) visually inspect pivot (see the picture on the Page 3 of 4 of this Service Bulletin) and verify that there is no evidence of cracks or bending.

MANPOWER:

Inspection / Check – Nose Landing Gear Leg: 0.5 man-hour
Replacement – Nose Landing Gear Leg: 2 man-hours
Replacement – Wheel fork: 1 man-hour

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

- [1] PS-28 Cruiser/SportCruiser Maintenance Manual, CR-MM-1-0-00, Rev. 13. pages i to iv, 0-3, 0-5, 2-1, 2-3, 2-4, 2-7, 2-8, 2-20.
- [2] SportCruiser Airplane Maintenance Manual, SC-AMM-1-0-00, Rev. 5. Pages i to iv, 0-1, 0-5, 2-1, 2-4, 2-5, 2-8, 2-9.
- [3] PS-28 Cruiser, SportCruiser, PiperSport Illustrated Parts Catalogue, CR-IPC-1-0-00, Rev. 2.
- [4] AC 43.12-1B, Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair.

MATERIAL:

In case of confirmation of cracking or pivot bending as per point G., the following parts are required to meet the terminating action requirement for this Service Bulletin and have to be ordered from the aircraft manufacturer:

- NLG No. SG0300N

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ACCOMPLISHMENT INSTRUCTIONS:

- A. Remove key from ignition switch.
 - B. Disconnect battery.
 - C. Remove nose wheel fairing according to [1] or [2], Chapter 8 (see the REFERENCES).
 - D. Visually inspect in accordance with FAA AC 43.13-1B, Chapter 5, Section 2, Visual Inspection
 - the bottom side of the nose landing gear leg lower section, in the area of the weld of the tube and the bracket
 - the pivot in the area of the pivot shoulder
 - the fork in the area of the bolts mounting the fork to the landing gear.
1. Acquire the following necessary tools, equipment, and supplies:

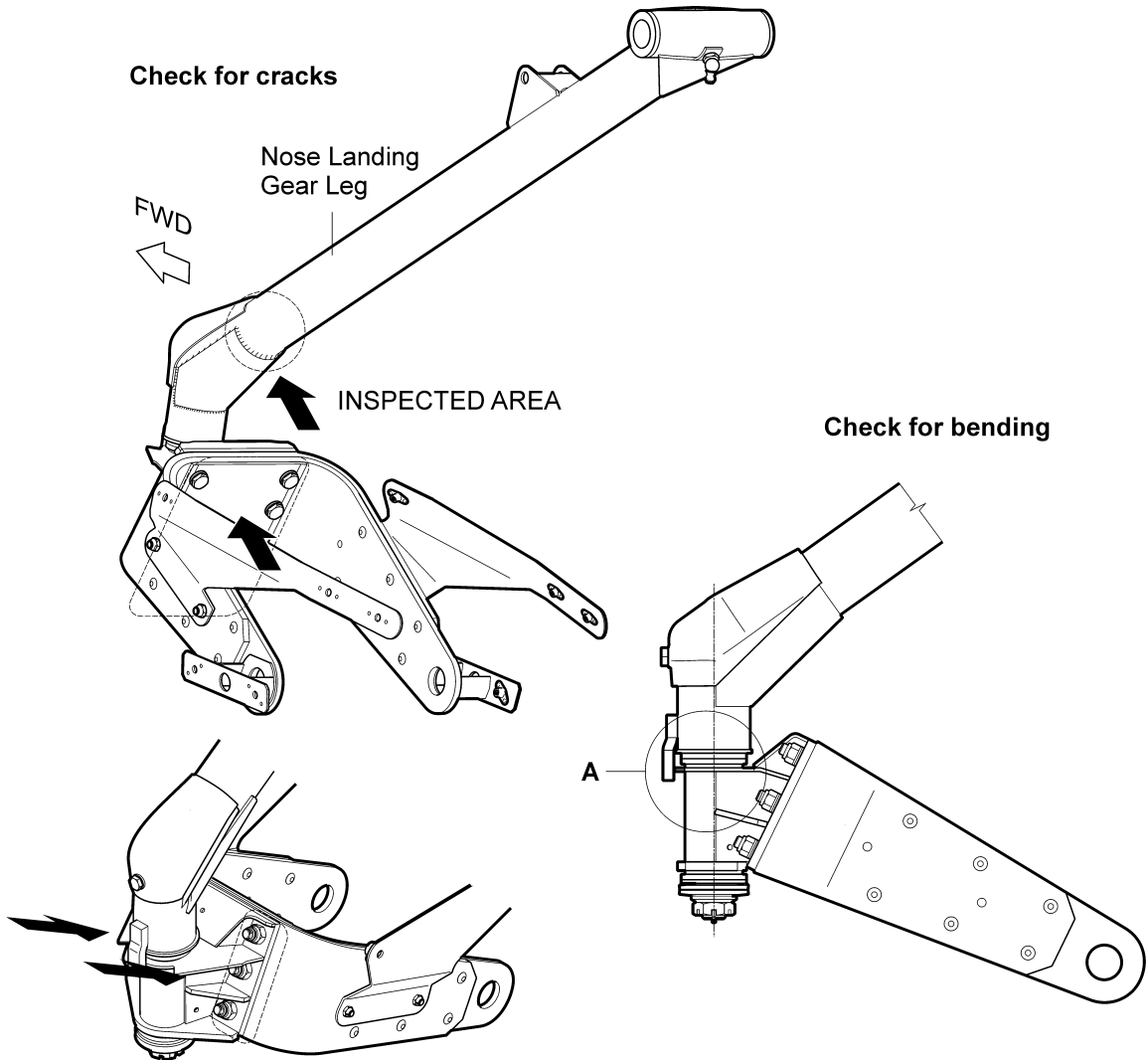
Description	P/N or Spec.	Supplier	Purpose
Flashlight	-	Any source	NLG inspection
10x Magnifier	-	Any source	NLG inspection

- 2. Using flashlight and 10x magnifier, visually inspect nose landing gear leg lower section and verify there is no evidence of cracking in paint on or around the area of the weld of the tube and the bracket.
 - 3. Using flashlight and 10x magnifier, visually inspect the fork in the area of the bolts mounting the fork to the landing gear and verify there is no evidence of cracking in paint.
 - 4. Visually inspect pivot and verify there is no evidence of bending.
- E. If no cracking or pivot bending is evident, perform the following steps:
- 1. Nose wheel fairing will not be installed.
 - 2. Connect battery.
 - 3. Restore aircraft to an airworthy condition.
 - 4. Update the aircraft maintenance records to reflect compliance with this Service Bulletin.
- F. If during inspection described in point D. the cracking is not evident but is suspected, perform the following steps for confirmation or not of cracking:
1. Acquire the following necessary tools, equipment, and supplies:

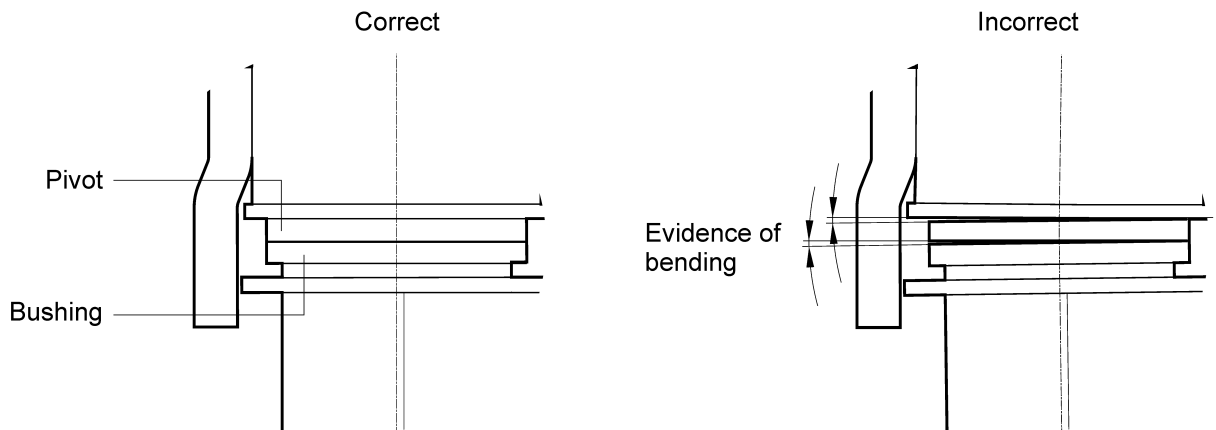
Description	P/N or Spec.	Supplier	Purpose
NDT Penetration Check Kit		Any source	NLG inspection

- 2. Remove nose landing gear according to [1] or [2], Chapter 8.
 - 3. Perform a NDT penetration check in accordance with FAA AC 43.13-1B, Chapter 5, Section 5, Penetrant Inspection.
- G. In case of **confirmation** of cracking or pivot bending, perform the following steps:
- 1. Assure Aircraft on Ground (AOG).
 - 2. Report this occurrence to the manufacturer (CSA) within 72 hours.
 - 3. Order from the manufacturer (CSA) NLG No. SG0300N.
 - 4. Install new nose landing gear NLG No. SG0300N according to bulletin SB-CR-021 or according to Chapter 8 of the relevant Maintenance Manual.
 - 5. Install nose wheel fairing according to [1] or [2], Chapter 8.
 - 6. Connect battery.
 - 7. Restore aircraft to an airworthy condition.
 - 8. Update the aircraft maintenance records to reflect compliance with this Service Bulletin.
- H. Follow the checks of the NLG in accordance with Chapter 2.5.2 "Tables of inspection tasks" of [1] or [2] (see the REFERENCES).

SERVICE BULLETIN



Detail A



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APPROVAL:

This Service Bulletin is approved by:

Title	Head of the Design Organisation	Airworthiness Manager
Name	Jiří Konečný	Miroslav Koukal
Hand written signature	