



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation

**Federal Aviation
Administration**

CE-05-54
May 24, 2005

<http://www.faa.gov/aircraft/safety/alerts/>

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of **Apex Aircraft model CAP 10 B airplanes** that the airworthiness authority for France, issued French Airworthiness Directive (AD) No. F-2004-108, dated July 7, 2004. This AD concerns CAP 10B aircraft from serial number 300 (included) or modified in accordance with modification 000302 "CAP 10C Wing".

Background

The main landing gears have a minimum separation zone of 1 mm between the chrome plated area of the moving strut and the torque link attachment. The torque link attachment to the Oleo strut of the main landing gear was welded in some places to the surface treatment (chrome plating), which might embrittle the welding, leading to cracks. Inspection of the separation zone every 100 hours as described in the French AD will show if the gap between the chrome plated area of the moving strut and the torque link attachment is too small.

Recommendation

We recommend that you comply with French AD F-2004-108. Specifics of this AD are as follows:

- Inspect the torque link attachment welding for cracks every 100 hours (tolerance 10 hours).
- If cracks are found, return gear leg to APEX Aircraft Company for repair.
- Comply with the technical instructions as described in APEX Aircraft Service Bulletin No. 040506, dated July 07, 2004 (attached).

For Reference Materials, Contact

APEX Aircraft, 1, Route De Troyes, 21121,
Darois-France

For Further Information, Contact

Mr. Sarjapur Nagarajan, Aerospace Engineer,
Small Airplane Directorate, ACE 112, 901
Locust, Room 301, Kansas City, MO 64106;
phone: (816) 329-4145; fax: (816) 329-4090;
email: sarjapur.nagarajan@faa.gov



APEX Aircraft Bureau de Navigabilité 1, route de Troyes 21121 DAROIS - France Tél +33 380 35 65 10 Fax +33 380 35 65 15 www.apex-aircraft.com	<h1 style="margin: 0;">SERVICE BULLETIN</h1> <h2 style="margin: 0;">No. 040506</h2>
CAP10C – MAIN LANDING GEAR – Torque link attaching weld	ATA : 32
Supersedes : N/A	

This document is a courtesy translation of its original French version.
 In case of any difficulty, reference should be made to the French original issue.

EFFECTIVITY

Models	Serial numbers affected
CAP10B	From s/n 300 and all CAP10B modified modification in accordance with modification 000302 « CAP10C wing»

Spare part with s/n	S/n
Main landing oleo strut Ref : 3212-9912062	Only oleo struts concerned according to §2 of “Accomplishment Instructions”

COMPLIANCE

MANDATORY

Is the subject of an airworthiness Directive (AD)

TIME OF COMPLIANCE

- **Every 100 hours (tolerance 10 hours):** perform inspection described in § “Accomplishment Instructions”.
- For landing gear with more than 100 flight hours: perform inspection **within 50 hours (tolerance 5 hours) then every 100 hours (tolerance 10 hours).**

REASON

The torque links attachment to the moving strut of the main landing gear has been welded for some part on the surface treatment (chrome plating). This is not complying with the welding standard and might embrittle the welding.

DESCRIPTION

The aim of this SB is to provide instructions to repeatedly inspect the welding of torque links attachment to main landing gear moving strut, if the chrome and weld are not sufficiently separated.



APPROVAL

This document is a courtesy translation of its original French version. Whereas the original French version of the information and instructions is approved, this *translation* is *not* approved.

As a consequence, the observations below concerning approval are to be understood as applicable to the *original French version* of this Service Bulletin.

Inspection data described in the original French version of this Service Bulletin are approved in accordance with CE 1702/203 Regulation and are mandatory as stated in an EASA Airworthiness Directive.

MANPOWER

The instructions in this Service Bulletin are only to be implemented by an individual/organization authorized by the relevant supervisory Authority.

The additional time required to implement the inspection during a 100 hours maintenance inspection is not significant.

TOOLING

Standard tools.

PUBLICATIONS AFFECTED

- Service Letter 990813: SB/SL list to update.

FEEDBACK

Please inform APEX Aircraft Airworthiness Office about the implementation whenever the inspection shows cracks. You may use:

- postal mail: address on the first page of this Service Bulletin,
- fax : (+33) (0) 380 356 515,
- e-mail: airworthiness@apex-aircraft.com,
- the APEX Aircraft web page: <http://www.apex-aircraft.com>.

ACCOMPLISHMENT INSTRUCTIONS

1. Removal

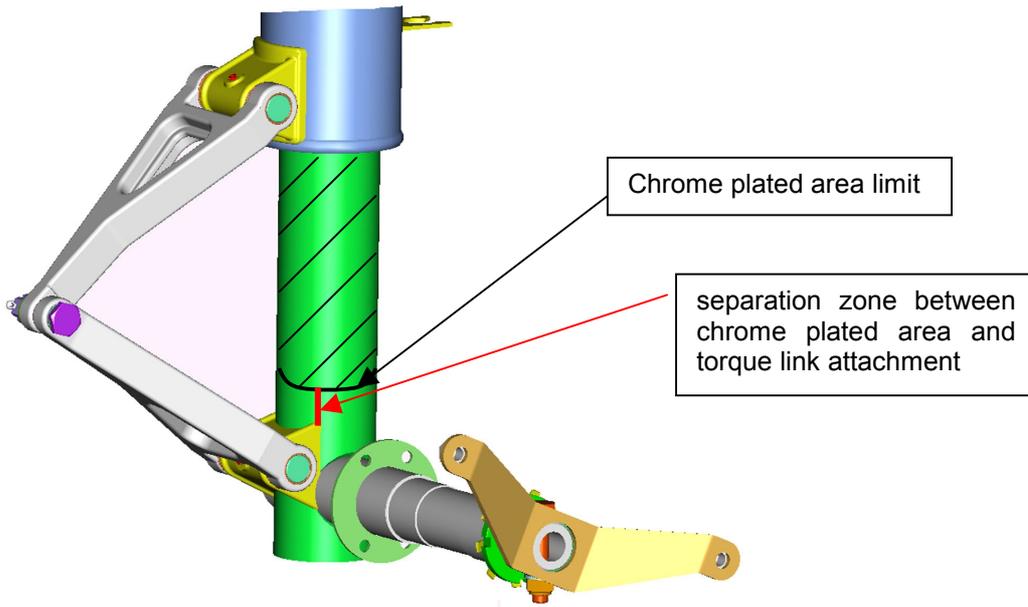
Remove wheel fairings and gear leg fairings.

2. Determining the landing gear concerned

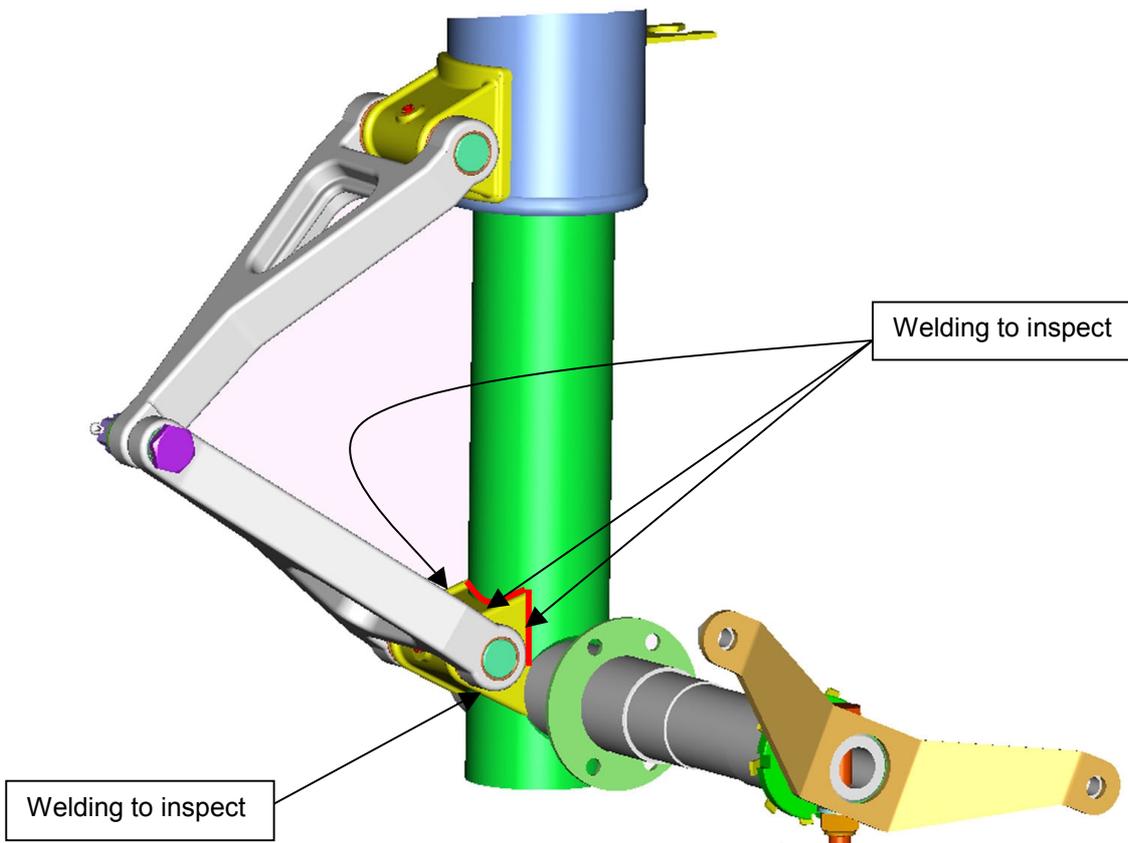
Main landing gears are concerned when the separation zone between the chrome plated area of the moving strut and the torque link attachment is too small.

Inspection described in § 3 following, is to be performed whenever separation zone is less than 1 mm (0.04 in).

Landing gear is not concerned when the separation zone is at least 1 mm (0.04 in).



3. Inspection



Do a dye penetrant check of the torque link attachment (4 sides) welding for cracks .

If cracks are found, return gear leg to APEX for repair.

If no crack, refer to §4.



4. Intallation

Install all fairings and return airplane to service.