



Aircraft Parts And Development (CALL AIR)  
A-9 Series - Main Undercarriage Failures.

**AWB** 32-025 **Issue :** 1  
**Date :** 10 March 2016

## 1. Effectivity

Aircraft Parts And Development (CALL AIR) A-9 (IMCO) Series aeroplanes.

## 2. Purpose

Advise operators and maintainers of main undercarriage strut failures and provide a recommendation to prevent re-occurrences.

## 3. Background

The main undercarriage failure (Figure 1) was due to the inside surface of the main compression spring of the oleo assembly sliding on and wearing away the wall of internal tube, to the point of failure.



Figure 1

Previous technical assessments of identical failures came to the conclusion that adverse wear on the internal structural tube could not be detected using the manufacturer's maintenance data, or by the requirements of CASA Schedule 5.

The problem was previously addressed by CASA AD/AC-CLA/5 (now cancelled), which required that the main undercarriage legs be dismantled to inspect for wear every three years.



# AIRWORTHINESS BULLETIN

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The three year inspection frequency was mandated at a time when these aircraft were heavily engaged in agricultural operations and operating from rough airstrips. These aircraft are now usually employed in glider towing and other operations.

## 4. Recommendations

In order to prevent in service failures, CASA recommends that operators consider implementing a landing cycles based inspection interval co-ordinated with the normal periodic inspection in order to detect wear before it becomes critical, by:

1. Dismantling the main undercarriage legs at the next scheduled periodic inspection to measure the wear on the internal structural tube, and
2. Replace the tube if wear is at or below the manufacturer's limit, or if found serviceable;
3. Reinspect the tube at a future scheduled periodic inspection, determined by the amount of wear found on the internal structural tube at the number of landings at the last inspection.

## 5. Reporting

Report all defects discovered as a result of accomplishing these inspections to CASA via the SDR reporting system.

## 6. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link e-mail address:

[AirworthinessBulletin@casa.gov.au](mailto:AirworthinessBulletin@casa.gov.au)

or in writing, to:

Airworthiness and Engineering Standards Branch  
Standards Division  
Civil Aviation Safety Authority  
GPO Box 2005, Canberra, ACT, 2601