



## Aircraft Washing

**AWB** 02-019      **Issue :** 1

**Date :** 22 February 2007

### 1. Applicability

All aircraft undergoing washing

### 2. Purpose

Whilst washing aircraft after flight to remove contaminants such as dirt and salt is commendable and a good practice, failure to re-lubricate bearings, hinges and bushes afterwards can lead to excessive wear and corrosion.

During the washing of aircraft, lubricants can be washed out from bearings, bushes and hinges.

### 3. Background

Several defect reports have been submitted concerning roller bearings and ball bearings on undercarriages, control surfaces etc. Some of the defects reported indicated that after undercarriages were washed the bearings were not re-lubricated and a combination of corrosion and excessive wear led to failures and 'stiffening' of the scissor arms and oleo struts. In other instances, rod end bearings were found to have failed due to a lack of lubrication before they normally would, due to a lack of lubrication after continual washing of the aircraft.

In addition there have been reports of corrosion and failures of hinges in various external positions on aircraft as a result of washed out lubricants and the use of unapproved cleaning agents.

### 4. Recommendation

It is recommended that operators be aware of and maintainers recognise the problems associated with excessive cleaning, or the use of unapproved cleaning agents in areas where the lubricant in bearings, hinges and bushings can be 'washed out' can cause failures of these components unless they are relubricated at the completion of the cleaning process.

The use of non-approved cleaning agents should cease. These agents can damage seals, rubber components and surfaces, leading to corrosion and possible component failures.



# AIRWORTHINESS BULLETIN

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## 5. 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)

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