

Continuing Airworthiness Notice – 73-005



Avstar RSA-10AD1 Fuel Control Units (FCU)

4 May 2021

A Continuing Airworthiness Notice (CAN) is issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety to alert, educate and make recommendations to the aviation community of essential information not considered mandatory. The information in this CAN does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

RSA-10AD1 Fuel Control Units (FCUs) manufactured by Avstar.

Purpose:

The purpose of this Continuing Airworthiness Notice (CAN) is to advise aircraft owners, operators and maintainers of a report received by the CAA of finding broken down material from washer P/N AV367757 in an Avstar FCU model RSA-10AD1. The material from the washer could be ingested through the fuel system, restrict the fuel flow and result in loss of engine power.

Background:

The affected Avstar RSA-10AD1 was sent to a maintenance provider for repair, after the operator experienced a stiff mixture control.

Upon removal of the mixture control valve from the FCU, washer P/N AV367757 was found with broken down material similar to what has been seen on certain FCUs manufactured by Precision Airmotive and predecessors.

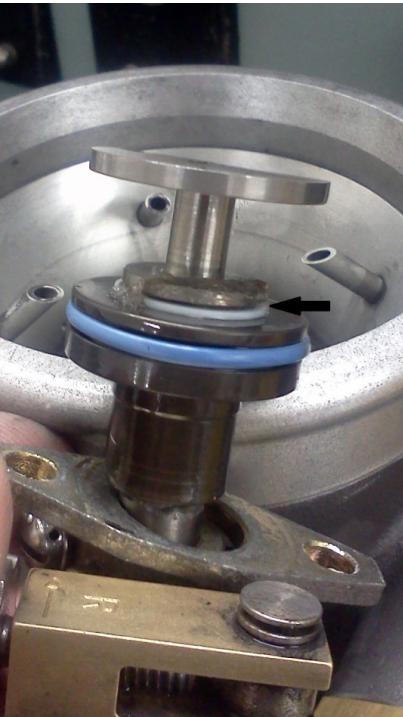
The safety concern with certain Precision Airmotive FCUs prompted a number of New Zealand airworthiness directives. These airworthiness directives are listed in the Carburettors and Injection Systems AD Schedule available on the CAA website at: <https://www.aviation.govt.nz/assets/aircraft/airworthiness-directives/components/ma.pdf>

Recommendation:

Anecdotal information suggests that washer P/N AV367757 may be breaking down if the mixture control is stiff, or if reduced engine performance is experienced. An inspection of washer P/N AV367757 cannot be accomplished in situ, or in the field. Disassembly of the FCU is required, which can only be accomplished by an overhaul facility.

The CAA is concerned that washers with P/N AV367757 installed in Avstar RSA-10AD1 FCUs may be breaking down. To assist the CAA in determining if there is a safety concern with P/N AV367757 washers installed in Avstar model RSA-10AD1A FCUs, please report any incidents, or defects found with these FCUs to the CAA by completing a CA005 Defect Report form. Please provide as much engineering detail as possible. The form can be obtained from https://www.aviation.govt.nz/assets/forms/CA005D_Form.pdf. The completed form can be emailed to the CAA at ca005@caa.govt.nz

Refer to the photo on page 2 below for further information.



Wash P/N AV367757 in situ
on the mixture control valve
shaft.