# **Continuing Airworthiness Notice – 74-002**



## Denso W24EMR-C Spark Plugs - Inspection

10 August 2016

A Continuing Airworthiness Notices (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:

Denso W24EMR-C spark plugs installed on, but not limited to Guimbal Cabri G2 helicopters.

#### **Purpose:**

This Continuing Airworthiness Notice (CAN) is issued to advise operators and maintainers that a Denso W24EMR-C spark plug fitted to a Cabri G2 helicopter may have been defective and contributed to an in-flight fire which subsequently destroyed the aircraft shortly after landing.

#### **Background:**

This CAN is prompted by a TAIC investigation of an in-flight fire on a Guimbal Cabri G2. Examination of the engine found that one of the four upper spark plugs fitted to the engine was missing its insulator which appeared to have been ejected.

The centre spark plug in the attached photograph with missing insulator is the faulty spark plug from the aforementioned aircraft. You will notice that the swaging at the top of the plug <u>has not been crimped</u>, and <u>there is also no bulging of the plug body</u> below the hexagon. To the left in the photograph is another plug removed from the affected engine, and to the right is a new plug.

The investigation is continuing and further action may follow.

#### Recommendation:

The CAA strongly recommends that operators/maintenance providers inspect Denso W24EMR-C spark plugs for defects. If any defects are found, replace affected plugs before further flight.

To assist with this investigation, please report any defects found with Denso W24EMR-C spark plugs to the CAA by completing a CA005 Defect Report form. Please provide as much engineering detail as possible, including the details of the parts supplier and release documentation provided with the parts. The defect report form can be obtained from <a href="http://www.caa.govt.nz/Forms/CA005D\_Form.pdf">http://www.caa.govt.nz/Forms/CA005D\_Form.pdf</a>

The completed form can be emailed to the CAA at CA005@caa.govt.nz

### **Enquiries:**

Enquiries regarding this Continuing Airworthiness Notice should be sent to:

Owen Olls Airworthiness Specialist

Email: owen.olls@caa.govt.nz



- LH spark plug A serviceable plug removed from the affected engine.

  Centre spark plug The defective plug removed from the affected engine (insulator missing).

  RH spark plug A new spark plug included in the photograph for comparison.