

Maintenance Group Chairman Factual Report

Attachment 16 - Turbomeca Service Letter Fuel Coking

WPR10FA371

SERVICE LETTER

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Service Letter No. 2259/04/ARRIEL2/17 – 2nd issue

**Subject : ARRIEL 2 – All variants
Use of '+100' additive to fuel**

Bordes, February 11, 2004

Dear Sir, Madam,

We previously notified you of the determining factors resulting in manifold labyrinths and/or fuel injection wheel coking on Arriel 2 engines.

This occurrence results in increased difficulties during start, permeability decrease, rundown time decrease, gas generator noises and possible seizing of the gas generator.

This occurrence can be reduced by using an additive that enhances fuel thermal stability. The well-known additive, '+100', NATO symbol S-1749, has been approved by Turbomeca.

The '+100' approved additive can be used with JP8 and Jet A1 and mixed with other fuel additives. It is manufactured in the United States by Betz Dearborn where it is known as SPEC AID 8Q462 or Turboline FS100 or Turboline FS 100C and in Europe by Shell Aviation under the name AeroShell Performance Additive (APA 101).

| Product | Concentration | |
|---------------------------------|----------------|----------------|
| | Minimum (mg/l) | Maximum (mg/l) |
| SPEC AID 8Q462 | 256 | 300 |
| Turboline FS 100 (dilute) | 533 | 625 |
| Turboline FS 100C (concentrate) | 256 | 300 |

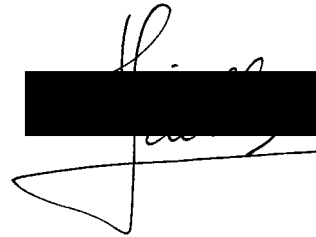
This additive and its conditions of use will soon be incorporated into the applicable Maintenance Manuals.

CAUTION: This additive may adversely effect the coalescing filters that are designed to ensure water/fuel separation during refuelling.

Please contact your fuel suppliers and your aircraft manufacturer for any additional information.

For experience feedback, please also contact your nearest Turbomeca representative to get him informed of the additive use, once you have reached 1,000 operating hours with the '+100' additive.

Please contact us for any additional information or assistance.

A handwritten signature in black ink, which appears to be 'S. Maille', is positioned above a solid black rectangular redaction box. The signature is written in a cursive style.

S. MAILLE
Technical Support Department