

#### FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

## SUBJECT: AIRFRAME FUEL FILTER (P/N 350-600024)

The Airframe Fuel Filter enables operation of the helicopter at low temperatures without the use of anti-ice additives in the fuel. The filter is designed to collect ice particles.

#### APPLICABILITY:

This Flight Manual Supplement must be used when the Airframe Fuel Filter is installed on PRE MOD 4305 AS 350 B3 helicopters with the Arriel 2B or 2B1 engine.

Department of Transport (Canada) Approved

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH
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APPROVED B) David
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## **IMPORTANT NOTE**

THE INFORMATION AND DATA CONTAINED IN THIS DOCUMENT SUPERSEDE OR SUPPLEMENT THAT CONTAINED IN THE BASIC APPROVED FLIGHT MANUAL FOR THE AS 350 B3 HELICOPTER IN THOSE AREAS LISTED HEREIN. FOR LIMITATIONS, PROCEDURES AND PERFORMANCE NOT CONTAINED IN THIS DOCUMENT REFER TO THE APPROVED FLIGHT MANUAL AND OTHER APPLICABLE APPROVED FLIGHT MANUAL SUPPLEMENTS.

SECTIONS 2, 3, 4 AND 5 OF THIS DOCUMENT COMPRISE THE APPROVED FLIGHT MANUAL SUPPLEMENT, COMPLIANCE WITH SECTION 2, LIMITATIONS, IS MANDATORY.

SECTIONS 1 AND 6 ARE UNAPPROVED AND ARE PROVIDED FOR INFORMATION ONLY.

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REV. 8 AGCEPTED (Civil A/W Authority)	STATE C. TLANGES	15 June, 2015	TCCA
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MAGAMMUTAN -			



## FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

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## **RECORD OF REVISIONS**

	1				***	
Rev.	Pages at this Revision	Description, Reason Changed Pages	Prepared (name and date)	Checked (name and date)	App'd/Acc'd (Civil A/W Authority) (name and date)	Released (name and date)
0	1 through 5	Original Issue	H. Paulisch	B. Manson	TCCA Eric Cheung 10 Sept., 1998	B. Manson
1	1 through 5	Pages 4, revised Temperature Limitations	D. Kerr 13 May, 2003	B, Manson	TCCA Eric Cheung 13 May, 2003	B. Manson
2	1 through 7	Pages 1 through 7. Format update, text revisions.	D. Kerr 19 Dec., 2003	T. Czarnecki 19 Dec., 2003	TCCA Eric Cheung 19 Dec., 2003	B. Manson 19 Dec., 2003
3	1 through 7	Pages 1 through 7. Format update, text revisions.	D. Kerr 21 July 2004	C. Timmins 21 July 2004	TCCA E. Cheung 3 Aug. 2004	R. Manson 3 Aug. 2004
4	1 through 9	Revised Preflight Checks and operation of Press to Test button. Placard locations clarifled, (Pages 3 to 7)	D. Kerr 12 June 2006	C. Timmins 13 June 2006	TCCA J. Palmer 13 June 2006	P. Garofalo 14 June 2006
5	1 through 8	Addition of illustration to Section 3. Revised Section 4, Normal Procedures, Before the First Flight of Each Day added before the Pre-Flight Check. Section 6, location of the Weight and Balance information corrected. (Page 6 to 8)	D. Kerr 17 August 2006	C. Timmins 18 August 2006	TCCA J. Palmer 7 December 2006	R. Manson 11 December 2006
6	1 through 8	Replace "boost" pump reference with "fuel" pump in Sec. 4. Addition of placard on Fuel Filter, (Pages 4 to 7)	D. Kerr 28 March 2008	C. Timmins 28 March 2008	TCCA J. Palmer 7 April 2008	R. Manson 9 April 2008
7	1 through 11	Addition of PRE MOD 4305 reference for the Arriel 2B or 2B1 engine. Abbreviations and Definitions added to section 1. Labels not in view of pilot removed from Section 2. (Pages 4 to 8)	D. Kerr 18 September 2012	C. Timmins 18 September 2012	TCCA G. David 19 December 2012	R. Manson 21 December 2012

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## **RECORD OF REVISIONS** (continued)

Rev.	Pages at this Revision	Description, Reason Changed Pages	Prepared (name and date)	Checked (name and date)	App'd/Acc'd (Civil A/W Authority) (name and date)	Released (name and date)
	1 through 10	Company name and logo revised. Figure 2 revised. Abbreviations added to Section 1. Revised Section 2.b. New NOTE limiting maneuvering when A/F F/F light is illuminated added to Section 3. (Pages 4 to 8)	See page 1.	See page 1.	See page 1.	See page 1,
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NOTE: Revisions to this document will be distributed to operators of this equipment by the STC holder.

NOTE: Revised portions of affected pages are identified by a vertical black line in the margin adjacent to the change.

NOTE: Minor changes are released in accordance with TCCA - ACCEPTED CAR 521.154 procedures (ref. DAPM-E-0001).

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## FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

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FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

## 1. GENERAL (unapproved)

The installation of the Airframe Fuel Filter system enables operation of the helicopter at low operating temperatures (below -20°C) without the use of anti-ice additives in the fuel. The filter is designed to collect ice particles.

NOTE

This document is only applicable to PRE MOD 4305 AS 350 B3 helicopters equipped with the Arriel 2B or 2B1 engine. For POST MOD 4305 AS 350 B3 helicopters equipped with the Arriel 2D engine, see Airbus Helicopters Canada Limited FMS-ECL-154.

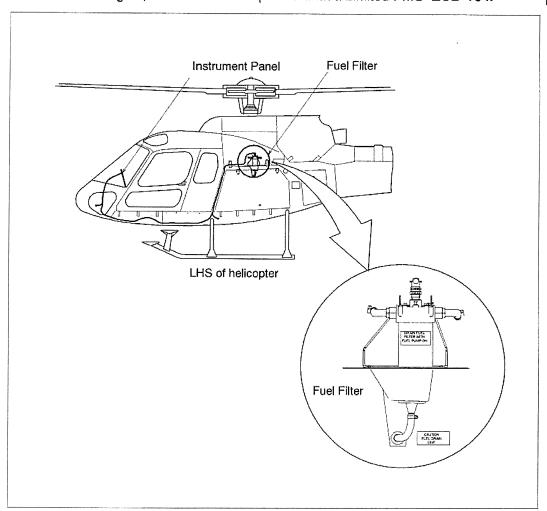


Figure 1 General Layout

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## FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

# 1. GENERAL (unapproved) (continued)

## Abbreviations and Definitions

ABBREVIATION	DEFINITION
A/F	Airframe
AH	Airbus Helicopters (France)
AHCA	Airbus Helicopters Canada Limited
A/W	Airworthiness
Acc'd	Accepted
App'd	Approved
°C	Degrees Celsius
CAR	Canadian Aviation Regulations
DAPM	Design Approval Procedures Manual
F/F	Fuel Filter
FILT	Filter
FMS	Flight Manual Supplement
ft	feet
Нр	Pressure Altitude
ISA	International Standard Atmosphere
LHS	Left Hand Side
MOD	Modification
Ng	Engine Generator Speed
PAHI	Transport Canada Civil Aviation, Ontario Region, Engineering (Aircraft Certification)
P/N	Part Number
ref,	reference
Rev.	Revision
RHS	Right Hand Side
RPM	Revolutions Per Minute
STC	Supplemental Type Certificate
TCCA	Transport Canada Civil Aviation



FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

### 2. LIMITATIONS

### a. Operation

Maximum Operating Altitude in Flight

Jet A -

Hp = 21,000 ft.

Jet B

Hp = 15,000 ft.

Temperature Limitations

i. Minimum Temperature

No change

ii. Maximum Temperature

Jet A

No change

Jet B

- ISA + 30° C

Limited to + 43° C

Fuel Additives

Anti-ice additives are not required when operating with the standard fuel system.

When a Ferry Flight Fuel Tank is installed, anti-ice additives must be used at temperatures below -20°C.

### b. Annunciator Light

An annunciator light is located on the instrument panel in clear view of the pilot, adjacent to other caution or warning lights. The position may vary depending on other optional equipment installed. Refer to Figure 2.

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FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

#### 3. EMERGENCY PROCEDURES

FUEL FILT LIGHT ON

<u>OR</u>

A/F FUEL FILTER LIGHT ON

**FUEL FILT LIGHT ON** 

AND

A/F FUEL FILTER LIGHT ON

 Follow basic Flight Manual procedures for FUEL FILT LIGHT ON.

- Land as soon as possible

 Monitor Ng; if oscillations occur, land immediately apply autorotation procedure.

NOTE If the A/F Fuel Filter annunciator light illuminates during

flight it may indicate an impending bypass of the filter.

NOTE Limit maneuvering when the A/F Fuel Filter annunciator

light is illuminated.

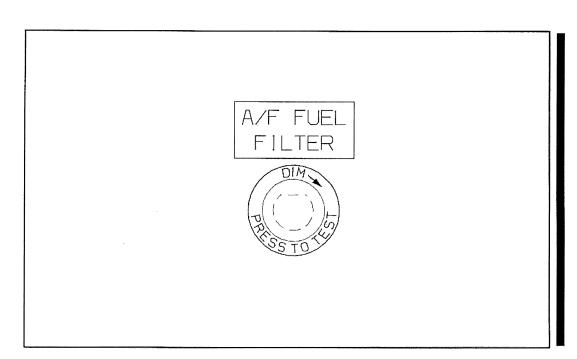


Figure 2 Press to Test / Annunciator Light

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### FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

### 4. NORMAL PROCEDURES

## a. Before the first flight of each day

Battery

- ON

Fuel pump

- ON

Fuel filter and lines

 Open drain valve, purge any air or water from the system. Close drain

valve.

Drain valve and fuel filter

- Check for leaks

Fuel Pump

OFF

Battery

OFF

Fuel drain and transmission deck

- No debris on fuel drain and/or

transmission deck

### b. Pre-Flight Check

Battery

- ON

Press A/F FUEL FILTER by-pass "press to test" caution light

- Caution light illuminates

### 5. PERFORMANCE DATA

No Change.

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### FLIGHT MANUAL SUPPLEMENT AIRFRAME FUEL FILTER AS 350 B3 (with Arriel 2B or 2B1 Engine)

# 6. WEIGHT AND BALANCE (UNAPPROVED)

Total changes to weight and balance resulting from this modification are covered in the applicable instructions for continued airworthiness.

Items that are removed between routine operations: Not applicable