SUBJECT:

Required maintenance for the Airframe Mounted Fuel Filter Installation (P/N 130- 600204).

APPLICABILITY :

Aircraft with the subject modification embodied in accordance with TCCA STC No. SH20- 44 or any relevant foreign approvals.

	NAME AND SIGNATURE	DATE	COMPANY DEPARTMENT
PREPARED BY:	Deborah Kerr Digitally signed by Deborah Kerr Date: 2020.10.19 12:03:20 -04'00'		AHCA ENGINEERING
PREPARED BY:			
CHECKED BY:	Peter Sharpe Digitally signed by Peter Sharpe Date: 2020.10.19 12:12:55 -04'00'		AHCA ENGINEERING
CHECKED BY:	Dan Kapuscinsky Digitally signed by Dan Kapuscinsky Date: 2020.10.20 13:26:52 -04'00'		AHCA QUALITY ASSURANCE
REV. 1 ACCEPTED (Civil A/W Authority)	(As per ICA Compliance Check Sheet)		TCCA
REV. 1 RELEASED BY:	Peter Sharpe Digitally signed by Peter Sharpe Date: 2020.10.28 09:08:34 -04'00'		AHCA ENGINEERING

RECORD OF REVISIONS

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 36	Original Issue	D. Kerr 20 August 2015	C. Timmins 20 August 2015	N/A	P. Sharpe 24 September 2015
1	1 through 36 A1- A4	General description revised. Hardware part numbers added to Figures. Addition of new overlay mask on the Caution and Warning Panel (Pages 5 to 11, 13 to 15, 17 to 36)	See page 1.	See page 1.	See page 1.	See page 1.

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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CONTENTS

FIGURES

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CONTENTS (continued)

TABLES

1. GENERAL

A. The installation of the Airframe- Mounted Fuel Filter provides additional fuel filtering capability upstream of the existing engine mounted fuel filter. The unit has a finer filtration rating than the existing engine mounted fuel filter. Refer to Figure 1 for General Layout.

An “AF F FILT” annunciator warning light will illuminate on the Caution and Warning Panel during flight indicating an impending bypass of the airframe- mounted fuel filter. Refer to Figure 1, VIEW Y.

The fuel filter unit is mounted on the transmission deck. A containment box surrounds the filter which has a removable maintenance cover. The fuel lines are of the same double walled construction as the other fuel lines on the aircraft.

The Airframe- Mounted Fuel Filter consists of the following main components:

Fixed Provisions

- Filter Support Assembly
- Bottom Plate
- Drain Pan Assembly
- Harness Assembly

Detachable Provisions

- Fuel Filter
- Fuel Filter Cover Assembly
- Hose Assemblies

The Airframe- Mounted Fuel Filter is installed in accordance with Installation Procedure IP- AHCA- 139.

B. These Instructions for Continued Airworthiness are applicable to aircraft with the subject modification embodied.

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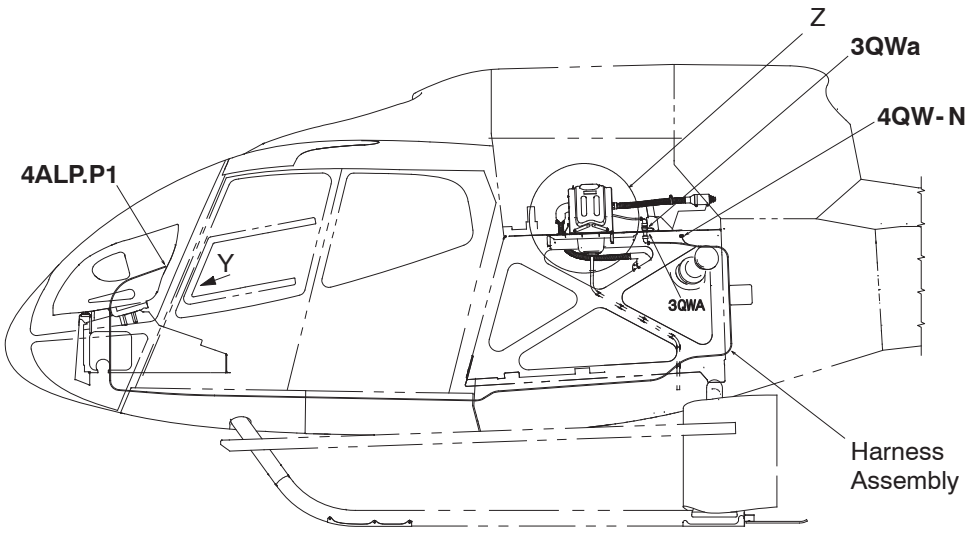
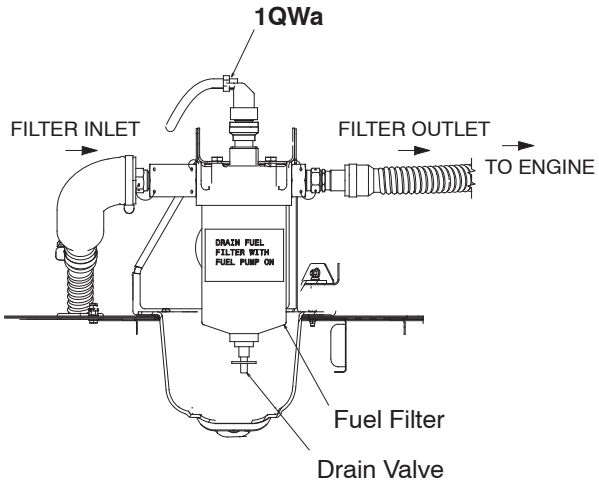
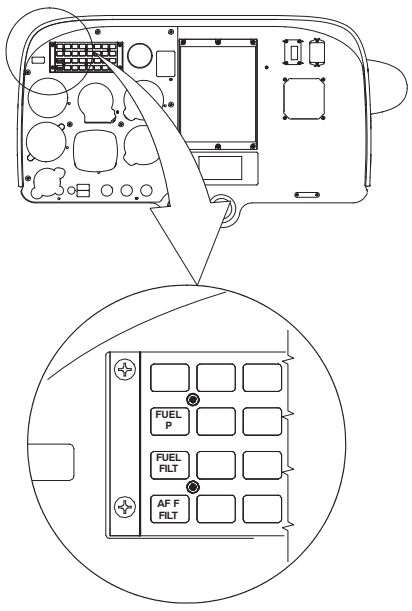


View showing Airframe- Mounted Fuel Filter
(Cargo Door not shown)



DETAIL Z
Fuel Filter with cover assembly removed



VIEW Y
Fuel Filter “AF F FILT” annunciator location on the Caution and Warning Panel

Figure 1 General Layout

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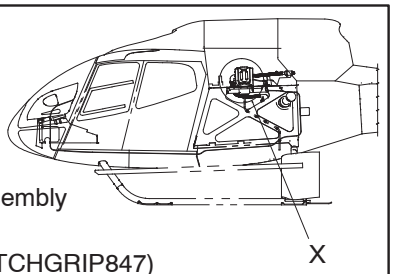
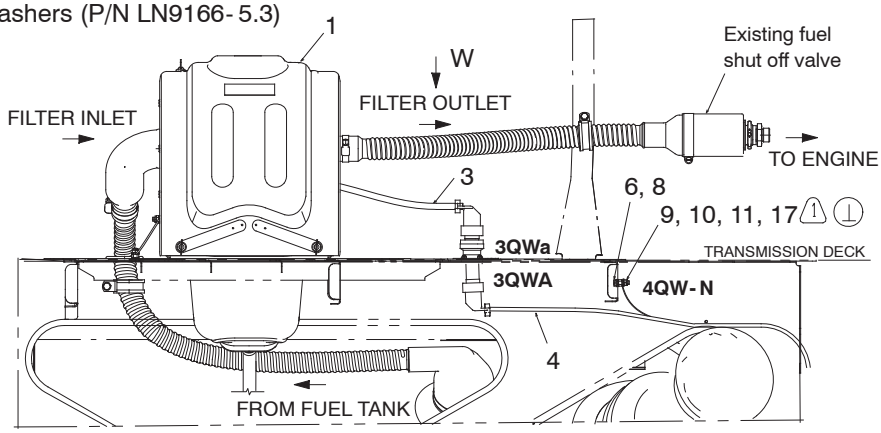
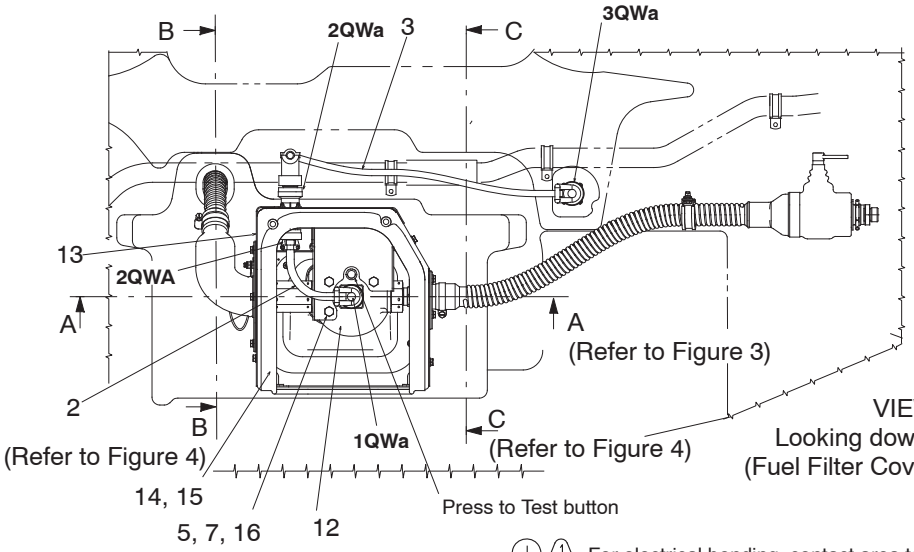
Legend (for Figure 2)

Item	Description
1.	Fuel Filter Cover Assembly
2.	Harness (P/N 130- 901614- 01)
3.	Harness (P/N 130- 901614- 02)
4.	Harness (P/N 130- 901614- 03)
5.	Screw (P/N AN4H4A)
6.	Screw (P/N LN9038- 05020
7.	Washer (P/N AN960- 416)
8.	Washers (P/N LN9016- 05K)
9.	Washers (P/N LN9166- 5.3)
10.	Nut (P/N LN9343- 05)
11.	Nut (P/N LN9348.05)
12.	Fuel Filter
13.	Fuel Filter Enclosure Assembly
14.	P. Seal (P/N 1290)
15.	Adhesive (P/N 3M- SCOTCHGRIP847)
16.	Lockwire
17.	Protective Coating (Nycote 7- 11 or ECS2228- 10)





DETAIL X



VIEW W
Looking down on fuel filter
(Fuel Filter Cover (1) not shown)

⏚1 For electrical bonding, contact area to be cleaned of all non- conductive coating 2- 4mm beyond contact area. Cover electrical bondings with protective coating (17) to overlap screw, washers, nuts and bonding jumper by approximately 3mm.

NOTES:

Figure 2 Fuel Filter Installation

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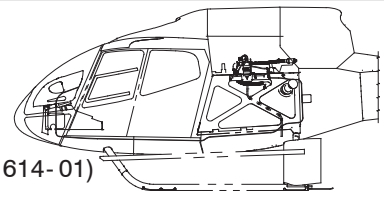
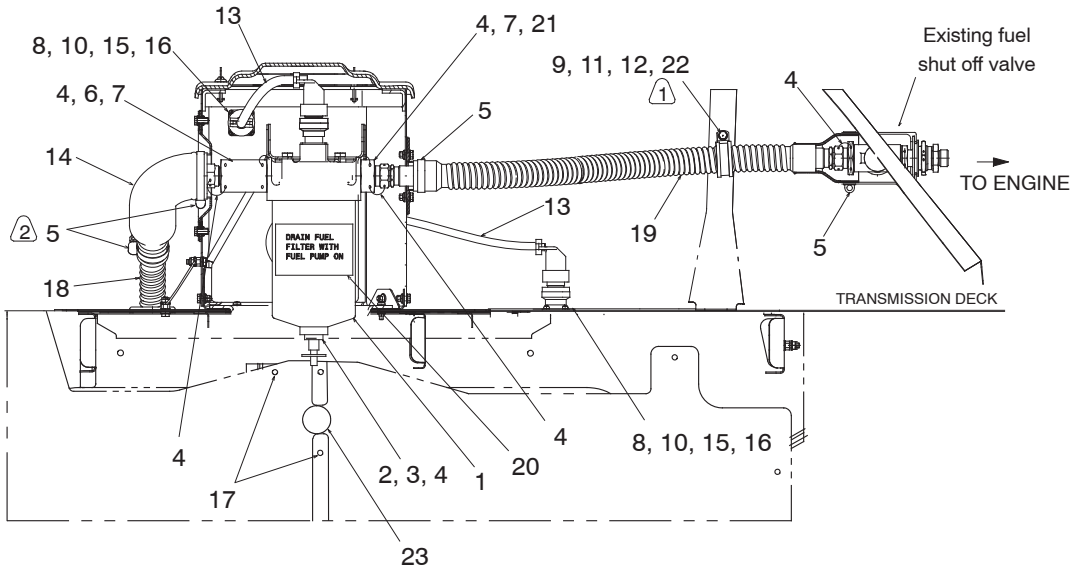


Legend (for Figure 3)

Item	Description	Item	Description
1.	Fuel Filter	13.	Harness (P/N 130- 901614- 01)
2.	Drain Valve	14.	Elbow
3.	Packing (P/N MS29513- 012)	15.	Nut Plate
4.	Lockwire	16.	Gasket
5.	Hose Clamp	17.	Clip (P/N 133800B)
6.	Inlet Adapter Fitting	18.	Inlet Hose Assembly (P/N 9993190)
7.	Packing (P/N M83248/2- 012)	19.	Outlet Hose Assembly (P/N 9993191)
8.	Screw (P/N MS35206- 215)	20.	Label (P/N 130- 600004.27)
9.	Screw (P/N 22208BC0500126)	21.	Outlet Adapter Fitting
10.	Washer (P/N AN960- 4)	22.	Clamp
11.	Washer (P/N 23111AG050L2)	23.	Edge Protection (P/N Rayrim NR. 8)
12.	Nut (P/N ASN5230BH050N)		



SECTION A - A (Refer to Figure 2)

Airframe Fuel Filter Installation
(Drain Sump Assembly not shown)

2 Orient hose ends and install hose clamp (5) to ensure constant upward slope from fuel tank to fuel filter (1).

1 Install clamp (22) to ensure constant upward slope from fuel filter (1) to fuel shut off valve.

NOTES:

Figure 3 Airframe- Mounted Fuel Filter Installation - detachable provisions

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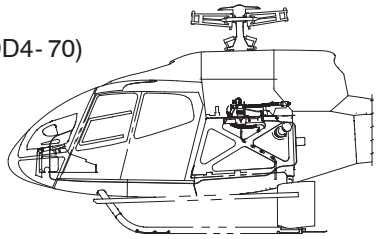
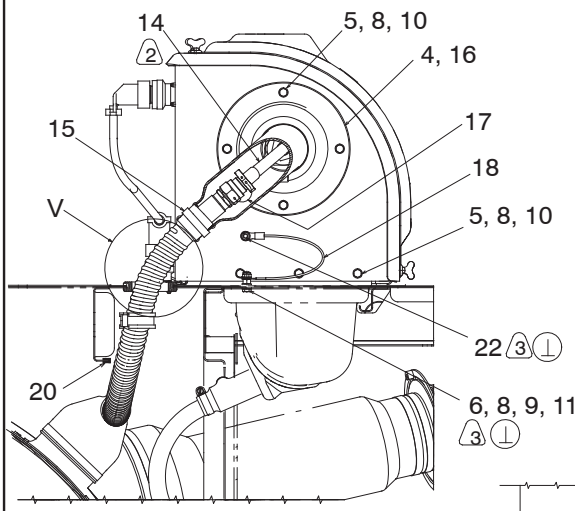
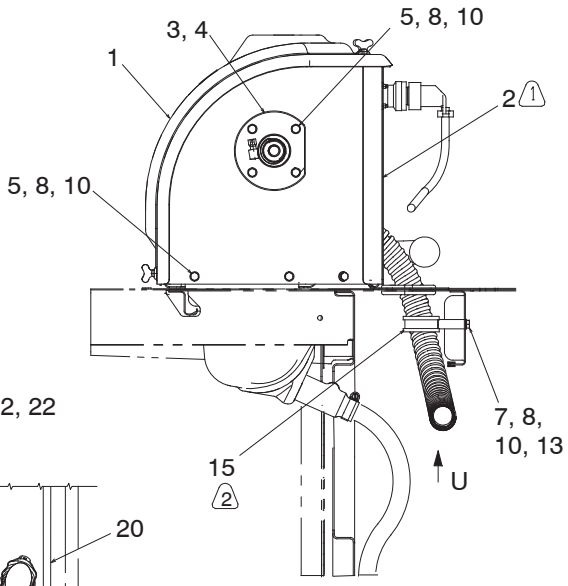
Legend (for Figure 4)

Item	Description
1.	Fuel Filter Cover Assembly
2.	Fuel Filter Enclosure Assembly
3.	Outlet Hose Adapter
4.	Gasket
5.	Screw (P/N 22208BC050012L)
6.	Screw (P/N LN9038- 05020)
7.	Screw (P/N 22201BC050032L)
8.	Washer (P/N 23111AG050LE)
9.	Washer (P/N LN9166- 5- 3)
10.	Nut (P/N ASN5230BH050N)
11.	Nut (P/N LN9343- 05)
12.	Nut (P/N LN9348- 05)
13.	Spacer (P/N NAS43DD4- 70)
14.	Tube Assembly
15.	Clamp
16.	Inlet Hose Adapter
17.	Lockwire
18.	Bonding Jumper
19.	Grommet
20.	Edge Protection (P/N MBBN3406- 7 - 180mm long)
21.	Sealant (P/N PR1422 B2)
22.	Protective Coating (P/N Nycote 7- 11 or ECS2228.10)

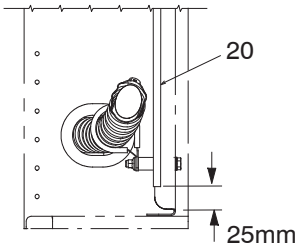




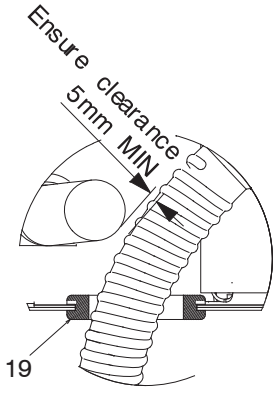
SECTION B - B
Filter Inlet side (Refer to Figure 2)



SECTION C - C
Filter Outlet side
(Refer to Figure 2)



DETAIL U
Showing Inlet Hose Assembly
and Edge Protection



DETAIL V
Showing Inlet Hose Assembly and
Grommet in Transmission Deck

⊥ 3 For electrical bonding, contact area to be cleaned of all non- conductive coating 2- 4mm beyond contact area. Cover electrical bondings with protective coating (22) to overlap screw, washers, nuts and bonding jumper by approximately3mm.

2 Orient hose ends and install clamp (15) to ensure constant upward slope from fuel tank to fuel filter

1 Fill gaps around edges of fuel filter enclosure assembly (2) with sealant (21).

NOTES:

Figure 4 Airframe- Mounted Fuel Filter Installation

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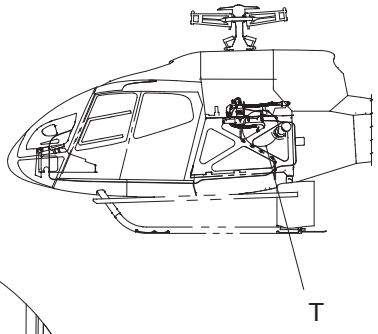
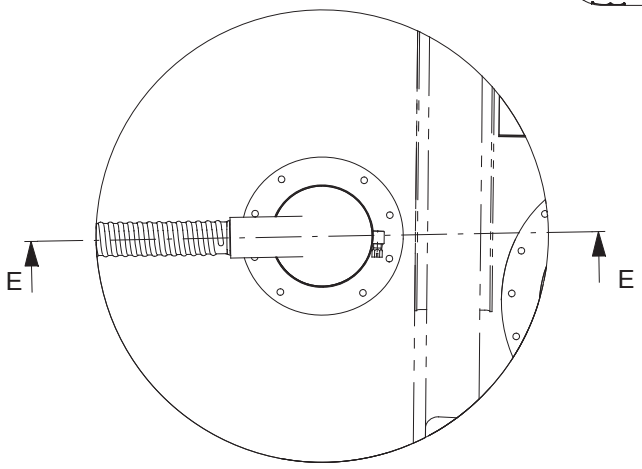
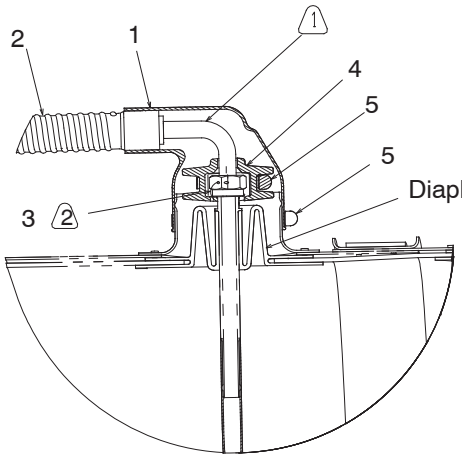
Legend (for Figure 5)

Item	Description
1.	Rubber Elbow
2.	Inlet Hose Assembly
3.	Lockwire
4.	Collar
5.	Hose Clamp





DETAIL T



SECTION E - E

(2) Ensure lockwire (3) does not touch the inside of collar (4).

(1) Orient hose ends and install clamp (15, refer to Figure 4) to ensure constant upward slope from fuel tank to fuel filter

NOTES:

Figure 5 Fuel Tank Outlet

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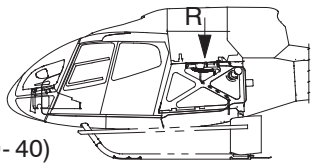
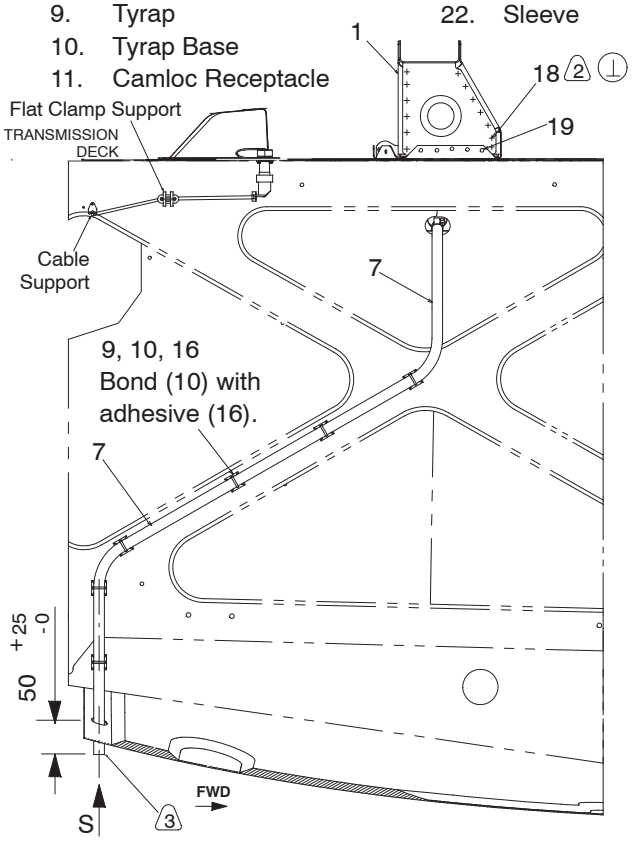
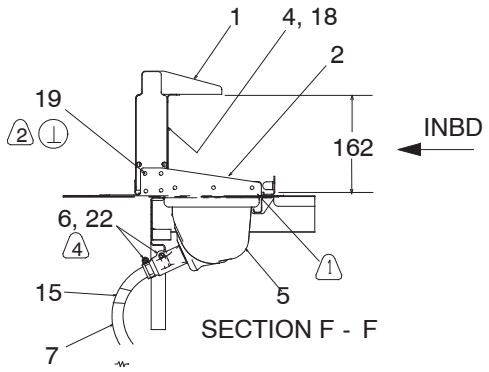
Legend (for Figure 6)

Item	Description
1.	Filter Support Assembly
2.	Bottom Plate
3.	Clip
4.	Plate
5.	Drain Sump Assembly
6.	Clamp
7.	Drain Hose (P/N 2556- 8)
8.	Grommet
9.	Tyrap
10.	Tyrap Base
11.	Camloc Receptacle
12.	Screw (P/N LN9439MX14)
13.	Washer (LN9016- 04K)
14.	Nut (LN 9338- 04)
15.	Tag (P/N 350- 600004.15)
16.	Clickbond Adhesive (P/N CB200- 40)
17.	Sealant (P/N PR 1422 B2)
18.	Rivets (P/N CR 3213- 4- 5)
19.	Rivets (P/N MS20426AD)
20.	Rivets (P/N MS20427AD)
21.	Protective Coating (P/N Nycote 7- 11 or ECS2228.10)
22.	Sleeve

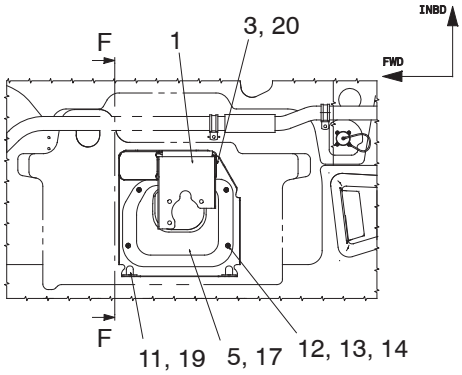




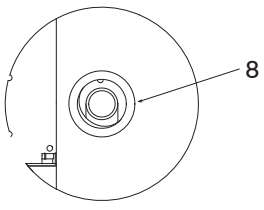
VIEW LOOKING OUTBOARD FROM FUEL TANK SIDE



SECTION F - F



VIEW R
Looking down on transmission deck



VIEW S

4 Sleeve (22) must contact sump assembly (5), secure with clamp (60).

⊥ 3 Trim to desired length.

2 For electrical bonding, contact area to be cleaned of all non- conductive coating 2- 4 mm beyond contact area. Cover rivet with protective coating (21) to overlap rivet by 3mm.

1 Seal faying surface of drain sump assembly (5) with sealant (17).

NOTES:

Figure 6 Airframe- Mounted Fuel Filter Installation - fixed provisions

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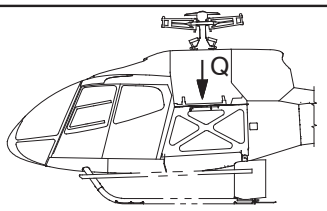
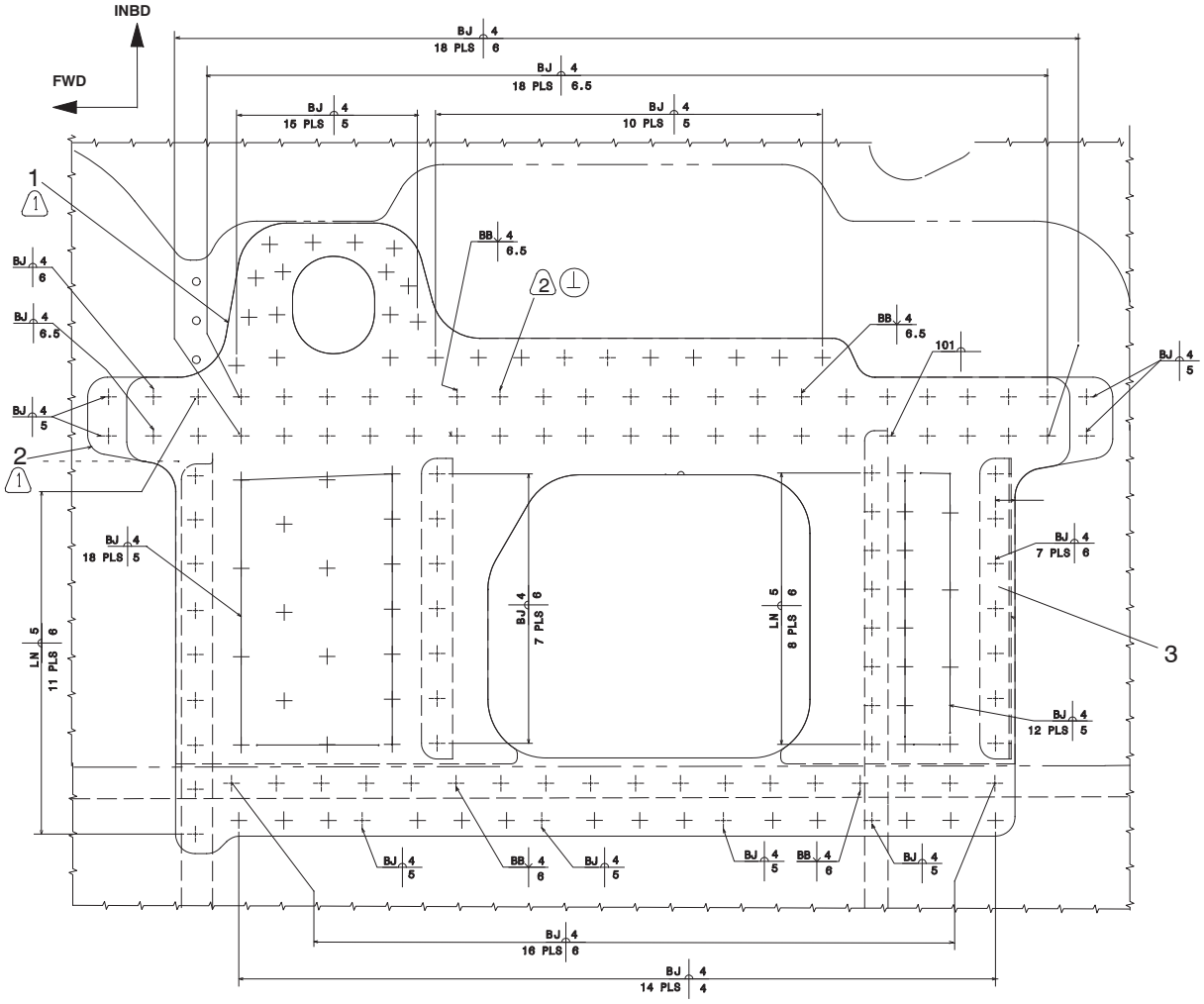
Legend (for Figure 7)

Item	Description
1.	Top Doubler
2.	Bottom Doubler
3.	Floor Stiffener
4.	Sealant (P/N PR 1422 B2)





VIEW Q
View looking down on Transmission Deck

Rivet Code

Code	Type
BB	MS20426AD
BJ	MS20470AD
LN	MS20615- ()M

(1) (2) For electrical bonding, contact area to be cleaned of all non- conductive coating 2- 4 mm beyond contact area.

(1) Seal faying surfaces and fillet edges of both doublers (1 & 2) to transmission deck using sealant (4).

NOTES:

Figure 7 Installation of Doublers on Transmission Deck

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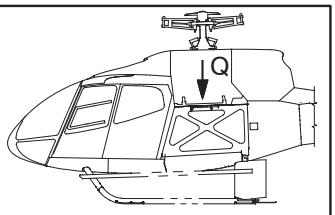
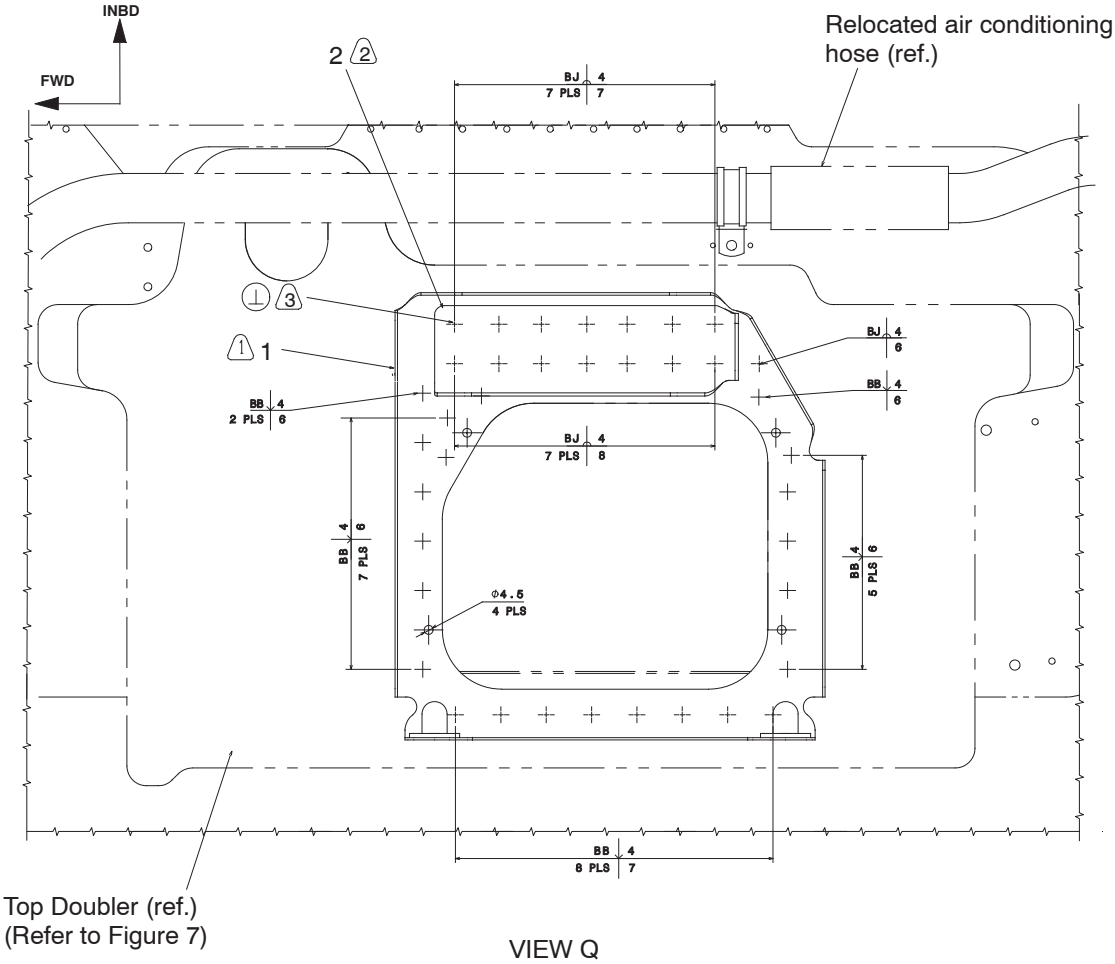
Legend (for Figure 8)

Item	Description
1.	Bottom Plate
2.	Clip
3.	Sealant (P/N PR 1422 B2)
4.	Protective Coating (P/N Nycote or ECS2228.10)





VIEW Q

View looking down on Clip and Bottom plate

Rivet Code

Code	Type
BB	MS20426AD
BJ	MS20470AD

(1) (3) For electrical bonding, contact area to be cleaned of all non- conductive coating 2- 4 mm beyond contact area. Cover rivet with protective coating (4).

(2) Seal faying surfaces and fillet edges of clip (2) to bottom plate (1) using sealant (3).

(1) Seal faying surfaces and fillet edges of bottom plate (1) to top doubler using sealant (3).

NOTES:

Figure 8 Bottom plate and clip on Transmission Deck

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C. **REFERENCES**

DOCUMENT	DOCUMENT TITLE
AC- 43.13 - 1B	Advisory Circular, Acceptable Methods Techniques and Practices- Aircraft Inspection and Repair
AMM	Aircraft Maintenance Manual
IP- AHCA- 139	Installation Procedure
Manual Number- 1743640- 01	“Operating and Design Specifications”, Fuel Filter Assembly, Purolator Products Company
MTC	Standard Practices Manual

D. **ABBREVIATIONS & DEFINITIONS**

ABBREVIATION	DEFINITION
AF F FILT	Airframe Fuel Filter
AHCA	Airbus Helicopters Canada Limited
Acc’d	Accepted
App’d	Approved
App	Appendix
A/W	Airworthiness
CAR	Canadian Aviation Regulations
D	Days
Nm	Newton Meter
DAPM	Design Approval Procedure Manual
FAA	Federal Aviation Administration
FH	Flight Hours
FILT	Filter
FUEL P	Fuel Pressure
FWD	Forward
hrs	hours
ICA	Instructions for Continued Airworthiness
INBD	Inboard
LH	Left- Hand
LHS	Left- Hand Side
LSTC	Limited Supplemental Type Certificate
M	Months
max.	maximum
MDL	Master Drawing List
MGB	Main Gear Box
min.	minimum
P/N	Part Number
PSI	Pounds Per Square inch
ref.	reference
Rev.	Revision
STC	Supplemental Type Certificate
TCCA	Transport Canada Civil Aviation
§§	Sections

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E. UNITS OF MEASUREMENT

ABBREVIATION / SYMBOL	UNIT OF MEASUREMENT
in	inch
kg	kilogram
lb	pound
mm	millimeters
mbar	millibar

2. AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §§43.16 and 91.403 of Federal Aviation Regulations unless an alternative program has been FAA approved.

The airworthiness limitations section is approved and variations must also be approved.

No airworthiness limitations associated with this installation.

3. CONTROL AND OPERATION

Apart from the following, control and operation of the aircraft remains unchanged:

The Airframe - Mounted Fuel Filter is an additional filter forward of the existing engine mounted fuel filter. The “AF F FILT” annunciator lamp on the Caution and Warning Panel will illuminate signaling an impending by- pass. Refer to Figure 1. A partially blocked filter element will cause the differential pressure switch in the head assembly to close and the “AF F FILT” annunciator to illuminate. If the filter element becomes fully blocked, a differential pressure activated valve will permit fuel to bypass the filter.

For information on operating the “Purolator” Fuel Filter, refer to the “Purolator” Operating and Design Specifications, Fuel Filter Assembly Manual, Document Number 1743640- 01 (Appendix A).

4. INSPECTION SCHEDULE AND MAINTENANCE ACTION

NOTE: Filter Element can be replaced more frequently if operational requirements dictate.

NOTE: Should the AF F FILT annunciator light illuminate, the fuel filter element must be replaced.

Refer to Section 8 if removing or replacing any parts.

Refer to the “Purolator” Operating and Design Specifications, Fuel Filter Assembly Manual, Document Number 1743640- 01, dated February 6, 2020 (or latest version). Refer to Appendix A of this document.

NOTE: Use torque per MTC, Chapter 20.02.05.404, unless otherwise specified.

NOTE: Remove Fuel Filter Cover Assembly to gain access to filter assembly and re- install after inspection/maintenance.

4.1. INSPECTION SCHEDULE

4.1.1. Before the first flight of each day:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Turn on fuel pump and check Fuel Filter (1), shown in Figure 3 for:	
	a. water in fuel (if OAT >0°C)	a. Open drain valve (2), purge any water from the system.
	b. leaks and security	b. Close drain valve (2) and check for leaks and security. Check valve seating, replace packing (3, P/N MS29513- 012) as necessary.
B	- Turn off fuel pump and check Fuel Filter (1), shown in Figure 3 for:	
	a. debris in drain sump assembly (5), below the filter and/or on the transmission deck. (Refer to Figure 6).	a. Remove debris and clean as necessary.
	b. secure mounting and connection of fuel filter (1) and inlet hose (18) and outlet hose (19).	b. Secure as required.

Table 1 Inspection Schedule and Maintenance Action
Before the first flight of each day
(continued on following page)

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4. **INSPECTION SCHEDULE AND MAINTENANCE ACTION** (continued)

4.1.1. Before the first flight of each day:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
C	- Push the Press to Test button located on the inboard side of the Fuel Filter, shown in Figure 2:	
	a. The AF F FILT annunciator - lamp must illuminate.	a. If lamp fails to illuminate, refer to Chapter 6, Troubleshooting, item 1, in this document.
	b. Ensure light goes out when Press to Test Button is released.	b. If lamp fails to go out, do the fault isolation procedure for the Caution and Warning Panel. Refer to EC 130 T2 AMM, Chapter 31-51-00, 1-1.

Table 1 Inspection Schedule and Maintenance Action
Before the first flight of each day

NOTE: The “Before the first flight of each day” task can be carried out by a suitably trained pilot or maintenance personnel.

4.1.2. Every 150 FH or 12 M (Margin: 15 FH or 36 D) to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Push the Press to Test Button located on the inboard side of the Fuel Filter, shown in Figure 2:	
	a. The “AF F FILT” annunciator - lamp must illuminate.	a. If lamp fails to illuminate, refer to Chapter 6, Troubleshooting, item 1, in this document.
	b. Ensure light goes out when Press to Test Button is released.	b. If lamp fails to go out, do the fault isolation procedure for the Caution and Warning Panel. Refer to EC 130 T2 AMM, Chapter 31-51-00, 1-1.
B	- Visually inspect Harness Assemblies (2, 3 & 4), shown in Figure 2 for:	
	a. cracks, fraying, burns and chaffing	a. Contact AHCA for replacement harness.
	b. security	b. Secure as required.
C	- Check P-Seal (14), shown in Figure 2 for:	
	a. security	a. Secure P-Seal using adhesive (15) (P/N 3M-Scotchgrip847).
	b. cracking	b. No cracking is allowed. If cracking is found, contact AHCA for replacement parts.
D	- Check hardware at ground location (4QW-N) shown in Figure 2 for:	
	a. security	a. Secure as required.

Table 2 Inspection Schedule and Maintenance Action
Every 150 FH or 12 M, to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first
(continued on following page)

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4. **INSPECTION SCHEDULE AND MAINTENANCE ACTION** (continued)

4.1.2. Every 150 FH or 12 M (Margin: 15 FH or 36 D) to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
E	- Check mounting hardware (8 & 10) for harness item 13, shown in Figure 3 for:	
	a. security	a. Secure as required.
F	- Check inlet hose (18) and outlet hose (19), shown in Figure 3 for:	
	a. leaks	a. If leaks are found, contact AHCA for replacement hose. Refer to Figure 3 for part numbers.
	b. cracking	b. No cracking is allowed. If cracking is found, contact AHCA for replacement parts.
G	- Check edge protection (23) on FWD and AFT panel in cargo compartment, shown in Figure 3 for:	
	a. wear	a. Replace edge protection if signs of deterioration or damage is present.
H	- Check fuel filter cover assembly (1) and fuel filter enclosure assembly (2), shown in Figure 4 for:	
	a. cracking	a. No cracking allowed. If cracks are found contact AHCA for replacement parts.
	b. loose hardware at attachment locations	b. Secure as required.
I	- Check bonding jumper (18), shown in Figure 4 for:	
	a. security	a. Secure as required.
	b. cracking	b. No cracking is allowed. Contact AHCA for replacement part if cracking found.
	c. kinking	c. If kinking found, adjust as required.
J	- Check edge protection (20) on aircraft frame in cargo compartment, shown in Figure 4 for:	
	a. wear	a. Replace edge protection if signs of deterioration or damage is present.
K	- Check drain sump assembly (5), shown in Figure 6 for:	
	a. cracks or deformation	a. No cracks or deformation are allowed. If cracks or deformation are found, contact AHCA for replacement parts.

Table 2 Inspection Schedule and Maintenance Action
Every 150 FH or 12 M, to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first
(continued on following page)

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4. **INSPECTION SCHEDULE AND MAINTENANCE ACTION** (continued)

4.1.2. Every 150 FH or 12 M (Margin: 15 FH or 36 D) to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
L	- Check drain hose (7), shown in Figure 6 for: a. leaks b. cracking c. Check clamp (6) for security	 a. If leaks are found, contact AHCA for replacement hose. Refer to Figure 6 for Part Number. b. No cracking is allowed. If cracking is found, contact AHCA for replacement parts. c. Secure as required.
M	- Check sleeve (22), shown in Figure 6 for: a. security	 a. Ensure sleeve has not dislocated. Sleeve must contact drain sump assembly (5).
N	- Check top doubler (1) and bottom doubler (2), shown in Figure 7 for: a. cracks or corrosion	 a. No cracks or corrosion are allowed. If cracks or deformation are found, contact AHCA for replacement parts.
O	- Check bottom plate (1), clip (2), shown in Figure 8 and filter support assembly (1), shown in Figure 6 for: a. cracks or corrosion	 a. No cracks or corrosion are allowed. If cracks or corrosion are found, contact AHCA for replacement parts.
P	- Check placards and markings shown in Figures 10, 11, 12, 13 & 14 (Section 10) for: a. legibility b. secure mounting	 a. If placards and markings have become illegible, contact AHCA for replacement parts. b. Secure, reattach placards as required.

Table 2 Inspection Schedule and Maintenance Action
Every 150 FH or 12 M, to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first

4.1.3. Every 600 FH or 24 M (Margin: 60 FH or 73 D) to coincide with the 600 FH or 24 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	Perform Operational Test - Fuel Filter Switch and Bypass Valve	See Operational Test Instructions in Section 4.1.4. of this document.
B	Replace Fuel Filter Element	See Replacement Instructions in Section 4.1.5. of this document.

Table 3 Inspection Schedule and Maintenance Action
Every 600 FH or 24 M, to coincide with the 600 FH or 24 M helicopter inspection, whichever occurs first

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4. **INSPECTION SCHEDULE AND MAINTENANCE ACTION** (continued)

4.1.4. Operational Test - Fuel Filter Switch and Bypass Valve

NOTE: This test simulates a clogged filter test.

a. Observe FUEL SYSTEM General Safety Instructions. Refer to AMM, Chapter 28- 00- 00, 3- 1.

b. Remove cover from enclosure.

c. Apply power to annunciator panel. Press the differential pressure switch Test Button on the top of the fuel filter, AF F FILT annunciator must illuminate.

d. Drain filter bowl into a container.

e. Replace filter element with clean dummy element (P/N 1741185) and re- install filter bowl.

f. Turn on fuel pump and start engine. Failure to start engine may indicate improper bypass valve functioning.

g. The AF F FILT annunciator should illuminate.

h. When test is successfully completed, shut down engine, turn off fuel pump and drain filter bowl into a container. Remove dummy element and install filter element. Follow instructions given in Section 4, 4.1.5. Replacement - Fuel Filter Element.

i. Open fuel filter bowl drain valve and operate fuel pump until all air is purged. Close fuel filter drain valve and ensure there are no leaks.

j. Replace cover of enclosure.

k. Reconnect the existing engine mounted fuel filter connector.

4.1.5. Replacement - Fuel Filter Element

a. Observe FUEL SYSTEM General Safety Instructions. Refer to AMM, Chapter 28- 00- 00, 3- 1.

b. Remove cover from enclosure.

c. Drain fuel from filter bowl into a container.

d. Refer to Appendix A “Operating Instructions” Purolator Products Company for Fuel Filter Element Change.

e. Once fuel filter is installed, operate fuel pump and open fuel filter bowl drain valve until all air is purged.

NOTE: The Purolator Filter Assembly (Part No. 1743640- 01) Replacement Element Kit is also available, Purolator Products Company Part No. 1743645.02. This kit consists of a seal, an O- ring and an element assembly.

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5. REPLACEMENT COMPONENTS AND REPAIR/OVERHAUL INFORMATION

Contact AHCA for replacement parts. No overhaul information required for this installation.

For replacement components or repair information:

Airbus Helicopters Canada Limited
1100 Gilmore Road, P.O. Box 250
Fort Erie, Ontario L2A 5M4 Canada
Telephone: (905) 871- 7772
Telefax: (905) 871- 3599

Website: www.airbushelicopters.ca

6. TROUBLESHOOTING

For electrical system troubleshooting, refer to Figure 9, Airframe- Mounted Fuel Filter, Wiring Diagram. Remove cover to gain access to fuel filter and re- install after maintenance.

ITEM	TROUBLE SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1	AF F FILT lamp does not illuminate during either the “Before the first flight of each day Inspection”, “150 flight hours check” or the “Operational Test (600 flight hours check)”.	Break or short in annunciator circuit	Do the fault isolation procedure for the Caution and Warning Panel. Refer to EC 130 T2 AMM, Chapter 31- 51- 00, 1- 1.
		Caution and Warning Panel	Do the fault isolation procedure for the Caution and Warning Panel. Refer to EC 130 T2 AMM, Chapter 31- 51- 00, 1- 1.
		Fuel Filter Head Assembly defective	Replace Head Assembly, refer to the Purolator Documentation
2	AF F FILT lamp illuminates during operations.	Excessive contamination in fuel supply.	Check quality of fuel supply.
		Filter is blocked.	Replace filter element.
		Short in annunciator circuit.	Perform circuit continuity check and repair/replace wiring as applicable in accordance with AC 43.13- 1B, Chapter 11, Section 1.

Table 4 Troubleshooting Guide

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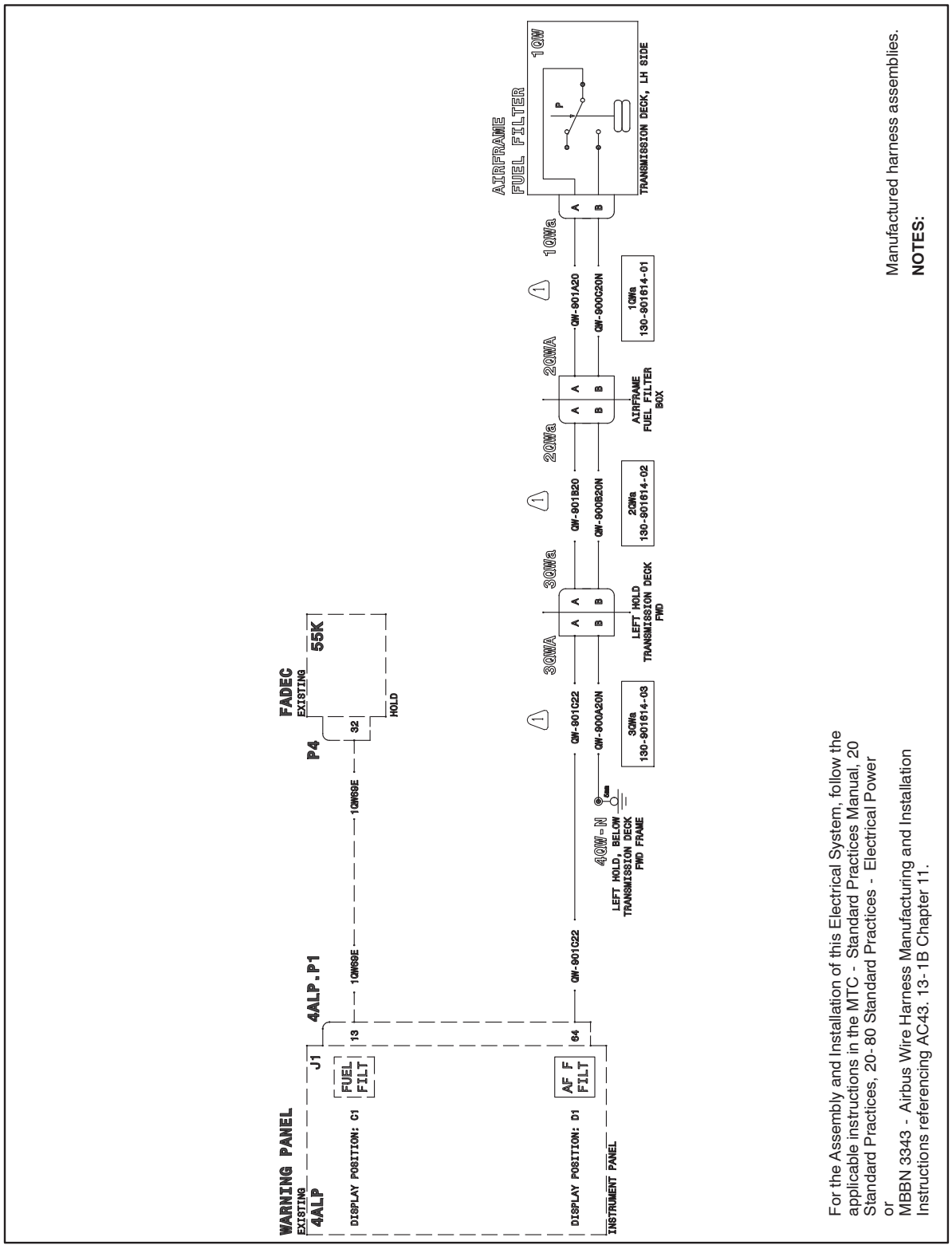

Figure 9 Airframe- Mounted Fuel Filter, Wiring Diagram

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7. SPECIAL TOOLING

No special test equipment or tools are required. Standard tools are adequate.

8. REMOVAL AND REPLACEMENT

- Comply with General Safety Instructions for the Fuel System in accordance with EC 130 T2, AMM, Chapter 28- 00- 00, 3- 1.
- Defuel the helicopter in accordance with Filling/Draining- Servicing EC 130 T2, Chapter 12- 10- 00, 3- 2.
- Comply with General Safety Instructions for the Mechanical assemblies in accordance with EC 130 T2 AMM Chapter 60- 00- 00, 3- 1.
- Read General Safety Instruction - Electrical Power Supply System, EC 130 T2, AMM, Chapter 24- 00- 00, 3- 1.

  Observe General Repair Instructions Unriveting Principle - MTC, Chapter 20- 30- 01- 102
- Disconnect the external power in accordance with EC 130 T2, AMM, Chapter 24- 00- 00, 2- 1.
- Disconnect the battery in accordance with EC 130 T2, AMM, Chapter 24- 33- 00, 4- 1.
- Open the LH MGB cowling and the lateral cargo hold door.
- Remove the FWD and AFT panels in the LH cargo compartment.
- Disconnect harness (131Δ1 and 23Δ1) on transmission deck from support (2 DMCMD) and move out of working area.
- Remove fuel filter Cover Assembly (1) to gain access to the fuel filter. Refer to Figure 2.

A. REMOVAL

1) FUEL FILTER HARNESSES (Refer to Figures 2 & 3 and Figure 9 Airframe- Mounted Fuel Filter, Wiring Diagram)

   a) If removing harness assembly (1QWA) (2), disconnect harness assembly (2Qwa) (3) connection located behind the fuel filter enclosure assembly (13). Refer to VIEW W in Figure 2.

   b) Remove screws (8, 4 places), washers (10, 4 places), gasket (16) and nut plate (15) securing harness assembly (1QWA) (2) to fuel filter enclosure assembly (13). Disconnect opposite end of harness from connector located on top of fuel filter (1). Refer to Figure 3.

   c) If removing harness assembly (2QWa) (3), disconnect harness from behind fuel filter enclosure (13) and at transmission deck location. Refer to Figure 2.

   d) If removing harness assembly (3QWA) (4) disconnect harness assembly (2Qwa) (3) from connection located on the transmission deck. Refer to DETAIL X in Figure 2.

   e) Remove screws (8, 4 places), washers (10, 4 places), gasket (16) and nut plate (15) to disconnect harness assembly (4) from underneath the transmission deck. Refer to SECTION A - A in Figure 3.

   f) Disconnect ground wire (4QW- N) and retain hardware. Refer to DETAIL X in Figure 2.

   g) Follow harness under the cabin floor along the LHS of the aircraft to 4ALP.P1 pin 64 in the Caution and Warning Panel and disconnect existing wire QW- 901C22. Refer to DETAIL X in Figure 2 and refer to Figure 9.

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8. **REMOVAL AND REPLACEMENT** (continued)

A. REMOVAL (continued)

2) HOSES

OUTLET HOSE ASSEMBLY (Refer to Figure 3)

a) On the outlet side of fuel filter (1) disconnect hose clamp (5). Refer to SECTION A - A in Figure 3.

b) Cut and remove lockwire (4) between outlet hose assembly (19) and outlet adapter fitting (21) and disconnect hose.

NOTE If outlet hose assembly (19) is not being replaced, position hose out of work area and cap end.

If hose is being replaced:

c) Remove screw (9), washers (11, 2 places) and nut (12) that secure clamp (22) to the aircraft frame. Retain for reinstallation. Remove hose clamp (5), cut and remove lockwire (4) from existing fuel shut- off valve and remove outlet hose assembly (19).

d) Retain hardware for reinstallation.

INLET HOSE ASSEMBLY (Refer to Figures 3, 4 & 5)

a) On the inlet side of fuel filter (1) disconnect both hose clamps (5) from elbow (14). Refer to SECTION A - A in Figure 3.

b) Remove screws (5, 4 places), washers (8, 4 places) and nuts (10, 4 places) and remove gasket (4) and inlet hose adapter (16) to gain access to tube assembly (14). Refer to SECTION B - B in Figure 4.

c) Cut and remove lockwire (4) between tube assembly (14, shown in Figure 4) and inlet hose assembly (18) and disconnect hose. Refer to Figure 3.

d) Cut and remove lockwire (4) between tube assembly (14, shown in Figure 4) and inlet adapter fitting (6) and disconnect tube assembly. Refer to Figure 3.

NOTE If inlet hose assembly (18) is not being replaced, position hose out of work area and cap end.

If hose is being replaced:

e) Disconnect clamp (15) located under the transmission deck. Retain hardware for reinstallation. Refer to SECTION C - C in Figure 4.

f) Remove hose clamp (5) securing rubber elbow (1) to fuel tank outlet flange and pull diaphragm extension out of fuel tank to enable access to fuel tank connection. Refer to Figure 5.

g) Carefully pull back rubber elbow (1) and remove hose clamp (5) from collar (4) and remove lockwire (3). Remove collar (4). Disconnect hose fitting.

h) Retain hardware for reinstallation.

8. **REMOVAL AND REPLACEMENT** (continued)

A. REMOVAL (continued)

3) FUEL FILTER (Refer to Figures 2 & 3)

NOTE: Fuel Filter Hoses and Harness Assemblies must be disconnected.

a) Cut and remove lockwire between outlet adapter fitting (21) and fuel filter (1). Refer to Figure 3.

b) Remove outlet adapter fitting (21). Remove packing (7) from adapter fitting and discard.

c) Cut and remove lockwire (4) between inlet adapter fitting (6) and fuel filter (1) and remove inlet adapter fitting (6). Remove packing (7) from inlet adapter fitting (6) and discard.

d) Remove screws (5, 3 places), washers (7, 3 places) and lockwire (16) securing fuel filter (12). Remove the fuel filter and retain hardware. Refer to VIEW W and Figure 2.

4) FUEL FILTER ENCLOSURE ASSEMBLY (Refer to Figures 4)

NOTE: Ensure Harness Assemblies on inboard side of enclosure and hoses are disconnected.

a) Remove nut (12) and washer (9) securing bonding jumper (18) to the transmission deck. Retain hardware for reinstallation. Refer to SECTION B - B.

b) Remove screws (5, 6 places), washers (8, 12 places) and nuts (10, 6 places) securing fuel filter enclosure assembly (2) to bottom plate (2, shown in Figure 6). Refer to SECTION B - B and SECTION C - C.

5) DRAIN SUMP ASSEMBLY (Refer to Figures 3 & 6)

NOTE: Remove fuel filter and fuel filter enclosure.

a) Remove FWD and aft panels in cargo compartment and remove both panels. Refer to SECTION A - A in Figure 3.

b) Disconnect clamp (6) from sleeve (22) and pull sleeve back exposing clamp. Disconnect clamp from drain sump funnel and remove drain hose and sleeve. Retain both clamps and sleeve for reinstallation. Refer to VIEW LOOKING OUTBOARD and SECTION F - F in Figure 6.

c) Remove screws (12, 4 places), washers (13, 8 places) and nuts (14, 4 places) from the drain sump assembly (5) and remove. Retain hardware for reinstallation. Refer to VIEW R in Figure 6.

d) If drain hose is being replaced, cut tyraps (9) securing drain hose (7) behind X member. Remove drain hose (7) and discard. Refer to VIEW LOOKING OUTBOARD in Figure 6.

6) FILTER SUPPORT ASSEMBLY, BOTTOM PLATE, CLIP (Refer to Figure 6)

NOTE: Remove drain sump assembly.

a) Drill out rivets securing filter support assembly (1) to clip (3) and bottom plate (2).

b) Drill out rivets securing clip (3) and bottom plate (2) to the transmission deck.

c) If replacing either the filter support assembly (1) the clip (3) or the bottom plate (2), discard damaged part. Refer to SECTION F - F and VIEW R.

d) Retain camloc receptacles (11, 2 places) if replacing bottom plate (2). Refer to VIEW R.

7) TOP AND BOTTOM DECK DOUBLERS (Refer to Figure 7)

NOTE: Remove filter support assembly, bottom plate and clip.

a) Drill out rivets securing top doubler (1) and bottom doubler (2) to the transmission deck and discard damaged part.

b) Retain existing floor stiffeners for reinstallation.

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8. **REMOVAL AND REPLACEMENT** (continued)

B. REPLACEMENT

NOTE Use torque per MTC, Chapter 20.02.05.404, unless otherwise specified.

Comply with general safety instructions for mechanical assemblies - AMM, Chapter 60- 00- 00, 3- 1

General sealing procedures - MTC, Chapter 20- 05- 01- 101

General methods of applying sealing compounds - MTC, Chapter 20- 05- 01- 102

General rules for bonding with adhesives - MTC, Chapter 20- 06- 01- 101

Application of PR 1422 Class B sealant - MTC, Chapter 20- 05- 01- 206

Electrical Bonding - MTC, Chapter 20.02.07.101

Safetying with cotter pin - MTC, Chapter 20- 02- 06- 404

Safetying with lockwire - MTC, Chapter 20- 02- 06- 402

1) TOP AND BOTTOM FLOOR DOUBLERS, FILTER SUPPORT ASSEMBLY, BOTTOM PLATE, CLIP (Refer to Figures 2, 3, 6, 7 & 8)

a) Reposition bottom doubler (2) onto transmission deck. If replacing bottom doubler (2), position new bottom doubler (2) onto transmission deck. Align opening and existing pilot hole. Back drill holes from transmission deck into bottom doubler (2). Refer to VIEW Q in Figure 7.

b) Reposition top doubler (1) onto bottom doubler (2). If replacing top doubler (1), position new top doubler (1) onto transmission deck. Align opening and existing rivet holes. Back drill rivet holes from the transmission deck into top doubler (1). Refer to VIEW Q in Figure 7.

c) Reposition bottom plate (1) and clip (2) onto top doubler (1) using the filter support (1) to locate clip (2). If replacing bottom plate (1) or clip (2) back drill holes from transmission deck through bottom plate and clip and temporarily secure. Refer to VIEW Q, Figure 8.

d) Reposition fuel filter support assembly (1) inside bottom plate. If replacing fuel filter support assembly (1) match drill holes from bottom plate (1) and clip (2) and temporarily secure. Refer to Figure 8.

NOTE Ensure filter support asssembly (1) is correct height (162mm) from bottom plate. Refer to SECTION F - F, Figure 6.

e) Reposition existing plate (4) and match drill holes into filter support assembly (1) and temporarily secure. Refer to Figure 6.

f) Remove plate (4), filter support assembly (1), clip (2), bottom plate (1), and top and bottom deck doublers (1 and 2). Deburr all holes. Refer to Figures 6, 7 and 8.

g) Clean debris from transmission deck.

h) Apply fay sealant (4) and wet install top doubler (1) and bottom doubler (2) to the transmission deck. Secure doublers using rivets. Secure existing stiffener FWD of transmission deck cut- out and floor stiffener (3) aft of the transmission deck cut out using rivets. Refer to Figure 7.

NOTE Electrical bonding on top doubler (1), contact area to be cleaned of all non- conductive coating 2- 4 mm beyond contact area. Refer to NOTE 2 in Figure 7.

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8. **REMOVAL AND REPLACEMENT** (continued)

B. REPLACEMENT

i) Apply sealant (3) and wet install bottom plate (1) onto top doubler (1, show in Figure 7) already on transmission deck and secure using rivets. Refer to Figure 8.

j) If replacing bottom plate, reinstall camloc receptacles (11, 2 places) using rivets (19, 4 places). Refer to VIEW R in Figure 6.

NOTE For electrical bonding of rivet located top left of bottom plate (1) and clip (2). Contact area to be cleaned of all non- conductive coating 2- 4mm beyond contact area. Cover rivet with protective coating (4). Refer to NOTE 3 in Figure 8.

k) Apply fay sealant (3) and wet install clip (2) on bottom plate (1) and secure using rivets. Apply fillet seal to outer edges of clip to bottom plate (1) using sealant (3). Refer to NOTE 1 in Figure 8.

l) Secure inboard side of filter support assembly (1) to bottom plate (2) using rivets (19, 5 places). Refer to VIEW LOOKING OUTBOARD in Figure 6.

m) Secure clip (3) to bottom plate (2) using rivets (20, 4 places). Refer to VIEW R in Figure 6.

n) Secure filter support assembly (1) to bottom plate (2) using rivets (20, 4 places). Refer to SECTION F - F in Figure 6.

NOTE For electrical bonding of rivet (19), contact area to be cleaned of all non- conductive coating 2- 4mm beyond contact area. Cover rivet with protective coating (21). Refer to NOTE 2 in Figure 6.

o) Reposition plate (4) onto filter support assembly (1) and clip (3) and secure using rivets (19, 18 places). Refer to SECTION F - F in Figure 6.

p) Apply fay sealant (17) and wet install drain sump assembly (5) and secure using screws (12, 4 places), washers (13, 8 places) and nuts (14, 4 places). Refer to VIEW R in Figure 6.

q) If fuel filter is being replaced place on work bench and install new packing (3). Install drain valve (2) to the base of the fuel filter. Safety using lockwire (4). Refer to SECTION A - A in Figure 3.

r) Repack both adapter fittings (6 and 21) with new packing (7). Reconnect shorter adapter fitting to filter outlet side and longer adapter fitting to filter inlet side of the fuel filter. Safety using lockwire (4). Refer to SECTION A - A in Figure 3.

s) Position the fuel filter into the channel of the filter support assembly and secure using screws (5, 3 places) and washers (7, 3 places). Safety using lockwire (16). Refer to VIEW W in Figure 2.

t) Attach label (20) facing outboard on new fuel filter (1). Refer to SECTION A - A in Figure 3.

u) Reposition fuel filter enclosure assembly (2) and secure using screws (5, 6 places), washers (8, 12 places) and nuts (10, 6 places). Refer to SECTION C - C in Figure 4.

v) Fill gaps around edge of fuel filter enclosure assembly (2) with sealant (21). Refer to SECTION C - C and NOTE 1 in Figure 4.

w) If replacing P. Seal (14) around fuel filter enclosure (13) opening. Remove old P. Seal and clean surface. Install new P. Seal (14) along the edges of the fuel filter opening using adhesive (15). Refer to VIEW W in Figure 2.

x) Reconnect existing tube assembly (14) to the inlet side of the fuel filter. Refer to SECTION B - B in Figure 4.

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8. **REMOVAL AND REPLACEMENT** (continued)

B. REPLACEMENT

2) HOSES (Refer to Figures 3, 4, 5 and 6)

a) If inlet hose is being replaced, connect hose fitting to fuel tank connection. Refer to SECTION E - E in Figure 5.

b) Route inlet hose assembly (18) from the fuel tank through the existing grommet in the transmission deck and temporarily connect to tube assembly (14, shown in Figure 4). Refer to SECTION A - A in Figure 3.

c) Orient hose ends to ensure an upward slope from fuel tank to fuel filter. Ensure inlet hose distance from air conditioning line is 5 mm MIN. Refer to DETAIL V and NOTE 2 in Figure 4.

d) Once hose is adjusted secure hose to aircraft frame under the transmission deck using clamp (15), screw (7), washers (8, 2 places), spacer (13) and nut (10). Refer to NOTE 2 and SECTION C - C in Figure 4.

e) Pull diaphragm extension out of fuel tank and torque nuts of inlet hose assembly (2). Safety inlet hose asssembly (2) to fuel tank connection with lockwire (3). Position the two pieces of collar (4) to center the pipe and secure with hose clamp (5) on groove of collar (4). Refer to Section E - E and NOTE 2 in Figure 5.

NOTE: Ensure lockwire (3) does not touch collar (4).
Refer to NOTE 2 in Figure 5.

f) Reposition diaphragm extension into the fuel tank and secure rubber elbow (1) to fuel tank flange using hose clamp (5). Refer to SECTION E - E in Figure 5.

g) Disconnect inlet hose assembly (18) from tube assembly (14, shown in Figure 4). Safety tube assembly to inlet adapter fitting (6) with lockwire (4). Refer to SECTION A - A in Figure 3.

h) Slide inlet hose adapter (16) and gasket (4) over tube assembly (14) and secure to fuel filter enclosure (2) using screws (5, 4 places), washers (8, 4 places) and nuts (10, 4 places). Refer to SECTION B - B in Figure 4.

i) Slide elbow (14) over tube assembly (8) and secure to inlet hose adapter (10, shown in Figure 4) and secure using clamp (5). Refer to SECTION A - A in Figure 3.

j) Reconnect inlet hose to tube assembly (14). Safety using lockwire (17). Refer to SECTION B - B in Figure 4.

k) Pull elbow (14, shown in Figure 3) over tube assembly (14) and secure to inlet hose using clamp (15). Refer to SECTION B - B in Figure 4.

l) Reconnect outlet hose assembly (19) to outlet adapter fitting (21) and safety using lockwire (4). Refer to Figure 3.

m) Connect opposite end of outlet hose assembly (19) to the existing fuel shut off valve and safety using lockwire (4). Secure rubber hose end to to fuel shut off using hose clamp (5).

n) Once hose is adjusted ensuring a constant upward slope from fuel filter (1) to the fuel shut off valve, secure using clamp (22), washers (11, 2 places), screw (9)and nut (12). Refer to NOTE 1 and SECTION A - A in Figure 3.

o) Secure bonding jumper (18) to deck using screw (6), washers (8, 2 places), washer (9) and nut (11) and nut (12). Tightening torque min. 3.0 to max. 4.0 Nm. Refer to SECTION B - B in Figure 4.

NOTE For electrical bonding of bonding jumper (18), contact area to be cleaned of all non- conductive coating 2- 4mm beyond contact area. Cover electrical bondings with protective coating (22) to overlap screw, washers, nuts and bonding jumper by approximately 3mm. Refer to NOTE 3 and SECTION B - B in Figure 4.

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8. **REMOVAL AND REPLACEMENT** (continued)

B. REPLACEMENT

p) If replacing drain hose (7), connect drain hose to drain sump assembly (5) and secure using clamp (6). Wrap sleeve (22) around drain sump funnel and secure with clamp (6). Refer to NOTE 4 and SECTION F - F in Figure 6.

q) Route drain hose behind X frame and secure to existing tyrap bases (10) using tyrap (9). Refer to VIEW LOOKING OUTBOARD and SECTION F - F in Figure 6.

r) Run drain hose (7) through existing grommet (8) in belly panel and trim hose as required. Refer to VIEW S in Figure 6.

s) Attach new tag (15) on replaced drain hose (7) and reposition the FWD and aft panel in the cargo compartment and secure using clips (15 places). Refer to SECTION A - A in Figure 6.

3) FUEL FILTER HARNESSES
(Refer to Figures 2, 3 and Figure 9 Airframe- Mounted Fuel Filter, Wiring Diagram)

a) Refer to Airframe- Mounted Fuel Filter, Wiring Diagram in this document to replace damaged components or wiring. Refer to Figure 9.

b) Install in accordance with AC43.13- 13- 1B, Chapter 11.

c) If connecting harness assembly (1QWA) (13) attach connector to the top of fuel filter (1). Refer to Figure 3.

d) Secure opposite end of harness assembly (1QWa) (13) to inboard side of fuel filter enclosure assembly (13, Figure 2) and secure using nut plate (15), gasket (16), screws (8, 4 places) and washers (10, 4 places). Refer to Figure 3

e) Reconnect harness assembly (3) to back side of the fuel filter enclosure assembly. Refer to VIEW W in Figure 2.

f) If installing harness assembly (2Qwa) (3) connect to back of fuel filter enclosure (13) and at transmission deck location. Refer to Figure 3.

g) If installing harness assembly (3QWA) (4), secure harness underneath the transmission deck using nut plate (15), gasket (16) screws (8, 4 places) and washers (10, 4 places). Reconnect harness assembly (2Qwa) (3) to the transmission deck.

h) Run harness assembly (3QWA) (4) under transmission deck and secure to existing flat clamp support and cable support using tyrap (9). Refer VIEW LOOKING OUTBOARD FROM FUEL TANK SIDE in Figure 6.

i) Run harness assembly (4) along LHS cargo compartment under the transmission deck, then under the cabin floor following existing harness along the LHS of the helicopter. Refer to Figure 2.

j) Locate ground wire (4QW- N) picking up on existing hole in aft frame and secure using screw (6), washers (8, 2 places), washer (9), nut (10) and nut (11). Refer to DETAIL X and NOTE 1 in Figure 2.

NOTE For electrical bonding of ground wire (4QW- N) to the transmission deck, contact area to be cleaned of all non- conductive coating 2- 4 mm beyond contact area. Cover electrical bondings with protective coating (17) to overlap screw, washers, and nuts by approximately 3mm. Refer to NOTE 1 in Figure 2.

k) Locate 4ALP.P1 in the Caution and Warning Panel and connect wire (QW- 901C22) from harness (3QWA) into 4ALP.P1 pin 64.

l) Use an ohm meter, point to point check all connections to ensure correct installation.

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8. **REMOVAL AND REPLACEMENT** (continued)

B. REPLACEMENT

1) Refuel the helicopter in accordance with Filling/Draining- Servicing, EC 130 T2, AMM, Chapter 12- 10- 00, 3- 2.

2) Check After Maintenance Work - Fuel System, Inspection/Check in accordance with EC 130 T2, AMM, Chapter 28- 00- 01, 6- 2.

3) Comply with General Safety Instructions - Electrical Power Supply, EC 130 T2, AMM, Chapter 24- 00- 00, 3- 1.

4) Close all areas opened for service in the PRELIMINARIES paragraph of this section.

5) Re- connect battery, EC 130 T2, AMM, Chapter 24- 33- 00, 4- 1.

6) Re- connect external power unit, EC 130 T2, AMM, Chapter 24- 00- 00, 2- 1.

7) Reference functional test - DC Power Supply System in accordance with EC 130 T2, AMM, Chapter 24- 30- 00, 5- 1.

8) Press the “Press to Test Button” located on the inboard side of the Fuel Filter. The “AF F FILT” annunciator lamp must illuminate.

9) As per Section 4.1.4. Operational Test - Fuel Filter Switch and Bypass Valve of this document, check for the correct operation of the fuel filter bypass function.

10) Install the fuel filter element (P/N 1743645- 01) and perform a leak check on runup.

11) Perform operational check of all systems that were serviced in accordance with the EC 130 T2 procedures and the system’s installation/operation manual.

12) Secure the fuel filter cover assembly over the enclosure and lock into place.

13) Close the LHS MGB engine cowling.

9. **WEIGHT AND BALANCE DATA**

A. Removed Items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Transmission Deck Cut- outs	- 0.08	- 0.2	3.42	135.0	- 0.27	- 27.0
Total	- 0.08	- 0.2	3.42	135.0	- 0.27	- 27.0

D. Added Items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Detachable Provisions	1.73	3.8	3.43	135.0	5.93	513.0
Fixed Provisions	3.62	8.0	3.44	135.4	12.45	1083.2
Total	5.35	11.8	3.44	135.3	18.39	1596.2

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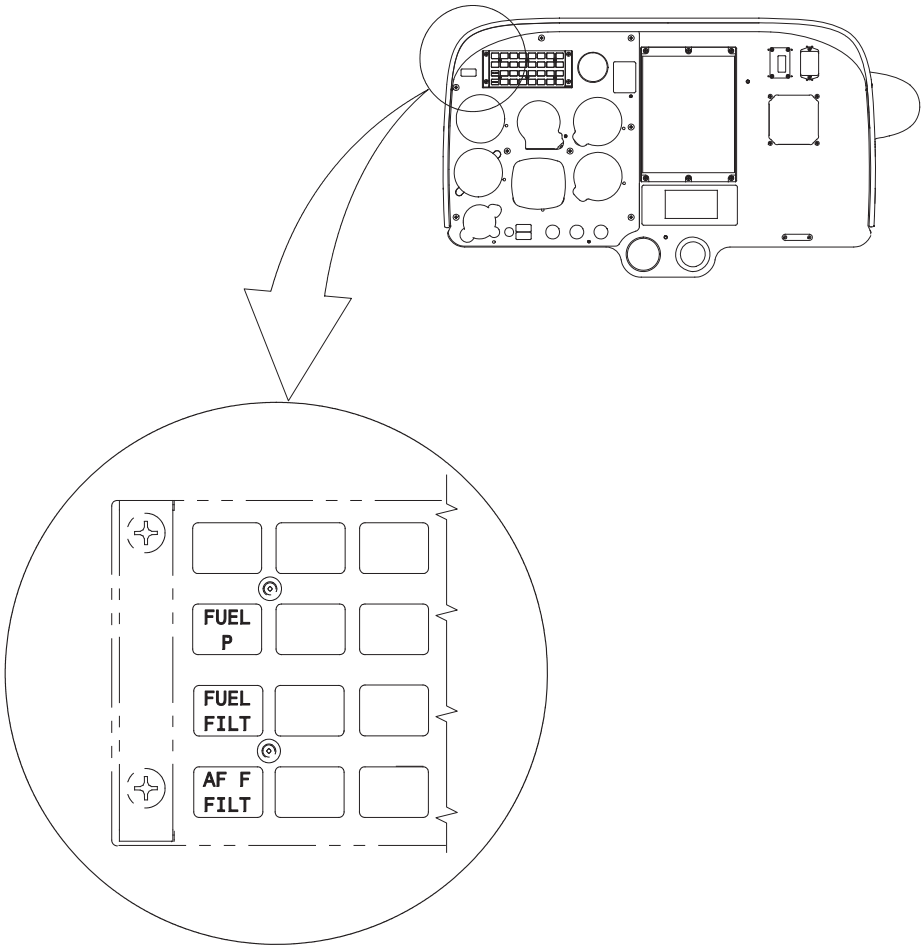
10. **PLACARDS AND MARKINGS**



Typical Caution and Warning Panel Mask

Figure 10 Overlay Mask on Caution and Warning Panel

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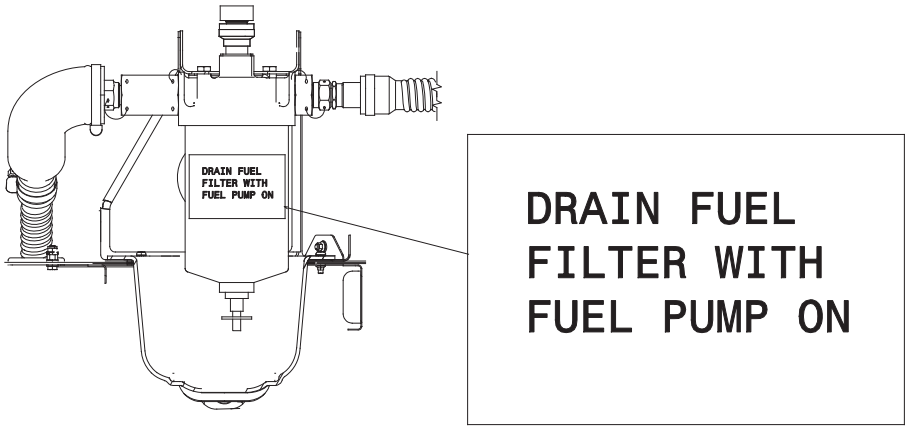
10. **PLACARDS AND MARKINGS**



Attached to the Fuel Filter
facing outboard

Figure 11 Typical label location on the Fuel Filter

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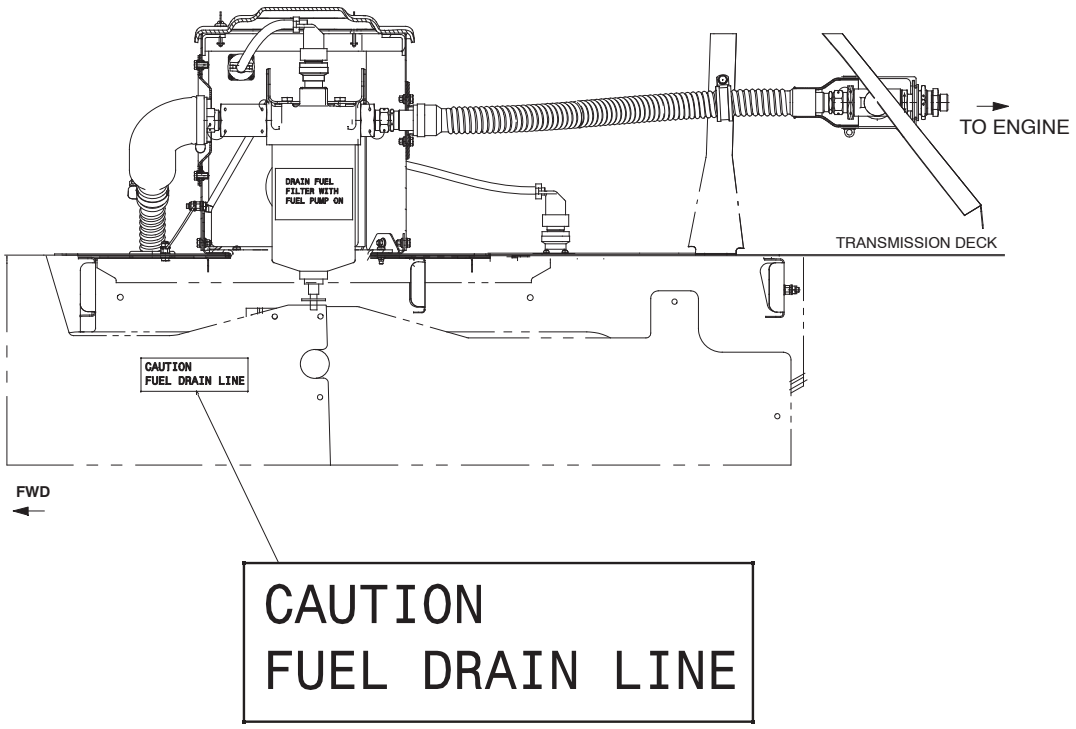
10. **PLACARDS AND MARKINGS**



CAUTION
FUEL DRAIN LINE

Attached to the FWD Panel inside
the cargo compartment

Figure 12 Typical label location inside cargo compartment

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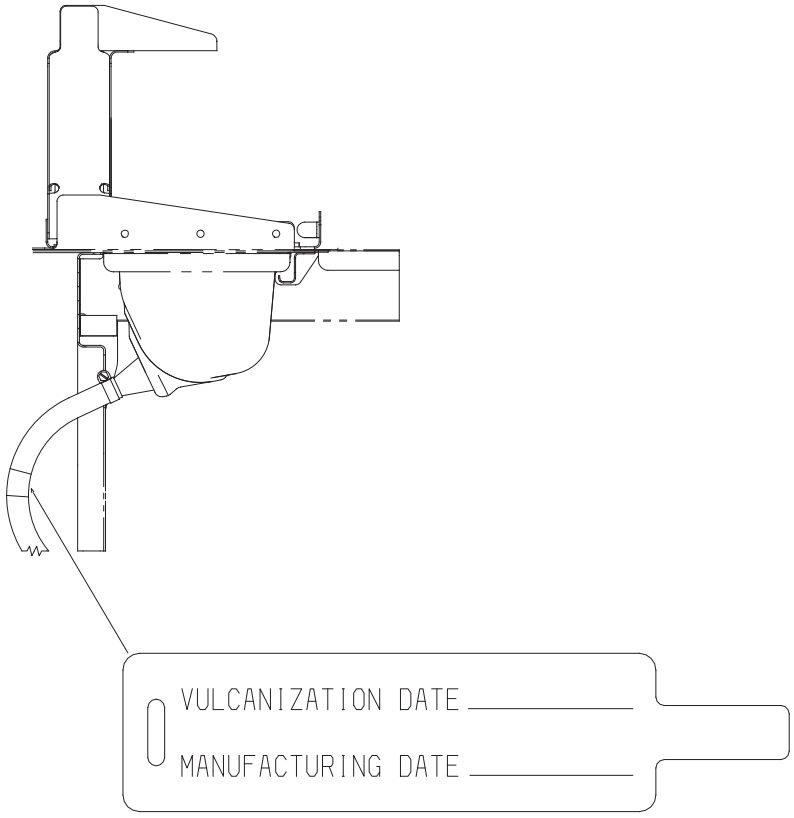
10. **PLACARDS AND MARKINGS**



Attached to drain hose

Figure 13 Typical location for identification tag on hose

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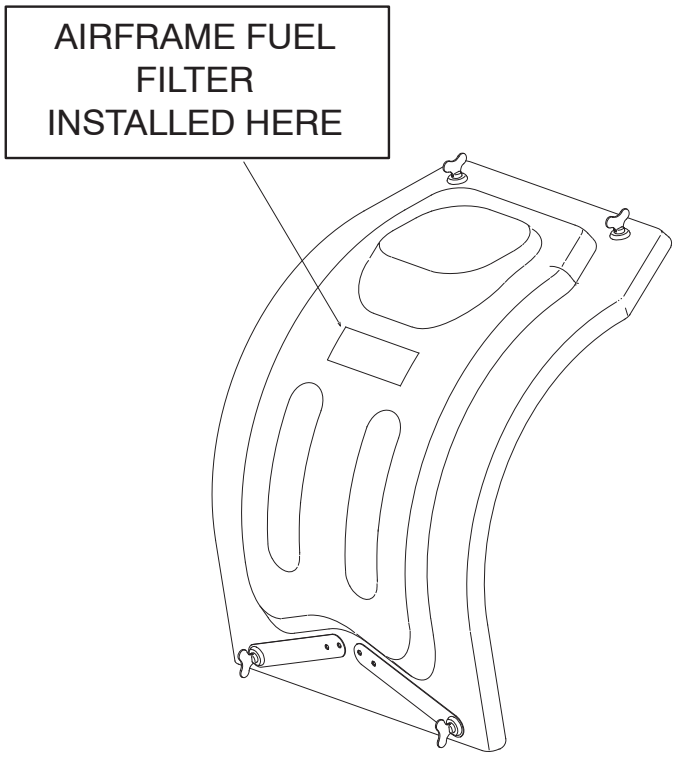
10. **PLACARDS AND MARKINGS**



Attached to outside of Fuel Filter
Cover Assembly

Figure 14 Typical label location on fuel filter cover

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Operating Instructions
Fuel Filter Assembly
Part Number: 1743640-01

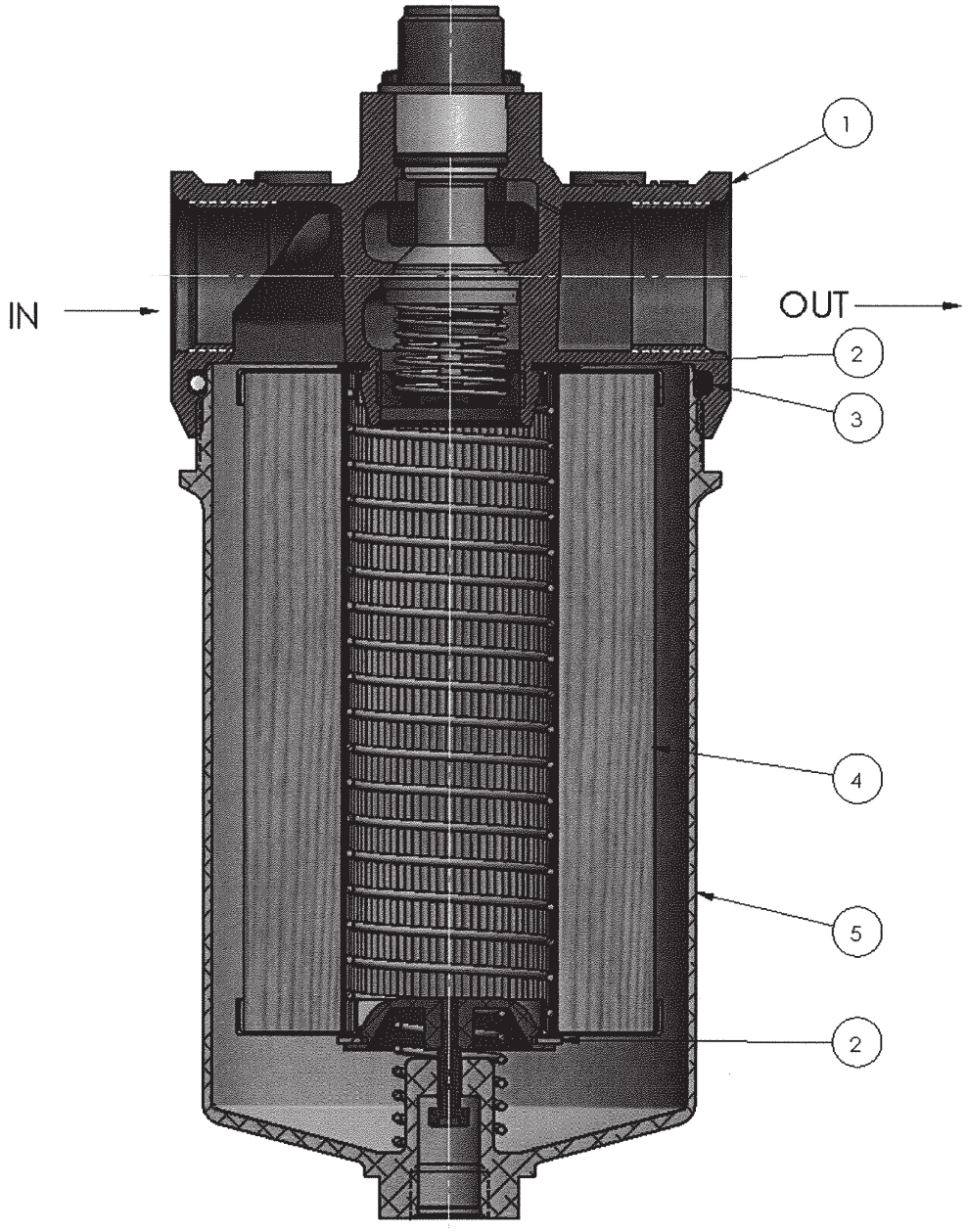
Contents:

Operating & Design Specifications:

Parker Aerospace Filtration Div.
Purolator Facet Inc.
8439 Triad Drive
Greensboro, NC 27409-9621
(336) 668-4444, Fax (336) 668-4452

February 6, 2020

Fuel Filter Assembly
Part No. 1743640-01



Replacement Parts for Filter Assembly Part No. 1743640-01

Item No.	Qty. Req.	Part No.	Description:
1.	1	2177100-30	Head Assembly
2.	2	1743629-01	Seal
3.	1	034921-01	O-Ring
4.	1	1743645-01	Element Assembly
5.	1	1745011	Bowl Assembly

NOTE: Purolator replacement element kit part no. 1743645-02 consists of items 2, 3 & 4

Operating Instructions:

Preflight Inspection Procedure Change:

1. Follow aircraft manufacturers recommended preflight instructions.

Scheduled Maintenance:

1. Fuel Filter Element Change:

   A. Replace element at the intervals specified by the aircraft manufacturer.

   B. Remove lockwire and unscrew filter bowl.

   C. Remove used element.

   D. Remove O-Ring and flat seals from filter head and inside of bottom of filter bowl.

   E. Install new seals P/N: 1743629-01 on the nipple of the filter head and retainer in the filter bowl.

   F. Install new filter element p/n: 1743645-01.

   G. Install new O-Ring P/N: 034921-01 in the filter head.

   H. Re-install filter bowl and torque to 130 ±20 inch pounds.

   I. Secure filter head to filter bowl with lock wire.

Purolator Fuel Filter Assembly
Part Number 1743640-01

Design Specifications:

1. Filtration Rating: 10 Micometres Nominal
2. Fluid: Mil-T 5624 Gr. JP-4, JP-5, ASTM-D-1655 Type A, A1or B.
3. Temperature Range: -65°F to +160°F.
4. Bypass valve cracking Pressure: 3.75 PSID.
5. Microdelta® Differential Pressure Switch actuates at 0.875 PSID
6. Pressures:

Operating:	60 PSI
Proof:	90 PSI
Burst:	180 PSI

7. Rated Flow: 0.5 GPM
8. Weight: 1.75 lbs. Max.