



INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Replacement Fuel Cap Kits

407-701-001 (SN 53000—54152 and 54300—54479)

407-700-002 (SN 54153—54299 and 54480—Subsequent)

Locking Fuel Cap Kits

407-701-002 (SN 53000—54152 and 54300—54479)

407-700-001 (SN 54153—54299 and 54480—Subsequent)

Bell Helicopter Textron Canada Limited Model 407 Helicopters

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LOG OF REVISIONS

Revision	Date	Description	Page	Reviewed	Accepted
NR	05-14-2015	Original Release	All		FAA 6/30/15 LA

1.0 **INTRODUCTION**

These instructions contain the information necessary for inspection and maintenance of **Aeronautical Accessories Replacement or Locking Fuel Cap Kits** installed on Bell Helicopter Textron Canada Limited model 407 helicopters in accordance with STC No SR01489AT.

1.1 **DISTRIBUTION**

These instructions are provided with each Replacement or Locking Fuel Cap Kit. Any airworthiness or flight safety revisions will be immediately made available to all affected Kit owners.

The latest approved revision of this document can be accessed on the Aeronautical Accessories website.

1.2 **REVISION**

A Revision Log is included in these instructions and is used to document all changes. Change recommendations should be submitted to Aeronautical Accessories Technical Support.

1.3 **CONTACT INFORMATION**

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2.0 **DESCRIPTION**

The Replacement Fuel Cap Kits (407-700-002 / 407-701-001) offer a standard replacement for the OEM fuel cap and is installed using the existing hardware.

The Locking Fuel Cap Kits (407-700-001 / 407-701-002) provide a replacement fuel cap with the added benefit of security. The Locking Fuel Cap Kits contain three keys and are installed using the existing hardware.

Kit applicability is based on serial numbers as follows:

54153 — 54299 and 54480 — Subsequent

Locking Fuel Cap Kit 407-700-001

Replacement Fuel Cap Kit 407-700-002

53000 — 54152 and 54300 — 54479

Locking Fuel Cap Kit 407-701-002

Replacement Fuel Cap Kit 407-701-001

2.1 **ABBREVIATIONS AND ACRONYMS**

BHT	Bell Helicopter Textron
BHTCL	Bell Helicopter Textron Canada Limited
OEM	Original Equipment Manufacturer
SN	Serial Number
STC	Supplemental Type Certificate

2.2 **REFERENCE DOCUMENTS**

Company	Document Title	Document Number
Bell Helicopter	Structural Repair Manual	BHT-ALL-SRM
Bell Helicopter	Standard Practices Manual	BHT-ALL-SPM
Bell Helicopter	Electrical Standard Practices Manual	BHT-ELEC-SPM
Bell Helicopter	407 Maintenance Manual	BHT-407-MM
Bell Helicopter	Corrosion Control Guide	CSSD-PSE-87-001
Bell Helicopter	Alert Service Bulletin	ASB 407-01-41

3.0 INSPECTIONS

3.1 ANNUAL INSPECTION

Incorporate the following into the scheduled Annual Inspection program; use the Inspection Record in Appendix A to document completion.

NOTE

If any defects are found which might compromise the Fuel Cap sealing and locking function, rectify per BHT-407-MM before further flight.

1. Visually inspect the fuel cap surface for excessive wear, corrosion, and damage.
2. Visually inspect the latch mechanism for security and condition. Verify the latch operates properly.
3. Visually inspect the attaching hardware for security and condition. Verify screws attaching Fuel Cap to adapter (see Figure 2) are properly sealed.
4. Open and close the fuel cap; ensure proper operation and alignment. Ensure a proper and tight seal in the closed / locked position.
5. Examine the fuel cap hinge for excessive wear, corrosion, and damage.
6. If the Fuel Cap has a lock, ensure the lock mechanism operates properly.

3.2 SPECIAL AND CONDITIONAL INSPECTIONS

A special inspection is temporary or of a special time interval that is not consistent with the scheduled inspection.

A conditional inspection does not occur at a specific time. It is caused by known or suspected unusual events, malfunctions, or defects.

Perform the Annual Inspection in cases of known or suspected rotor strike, lightning strike, flight through hail, or hard landing.

4.0 MAINTENANCE**4.1 REPAIR**

No repair is allowed; contact Aeronautical Accessories for a replacement. To determine the specific part number required, refer to Section 10.0: Part Breakdown.

4.2 CLEANING

1. Clean the outside of the fuel cap with isopropyl alcohol and a clean cheesecloth.
2. Dry with clean filtered air.

5.0 **REMOVAL**

General Instructions

- Items removed from the helicopter should be tagged for identification and protected from damage until reinstalled. Save all hardware of removed parts for reinstallation, unless otherwise noted.
- The helicopter must be defueled before installing the fuel cap. Understand and follow all Fuel System instructions, cautions, and warning statements in BHT-407-MM, Chapters 12 and 28.

5.1 **LOCKING AND REPLACEMENT FUEL CAP KITS**

(Refer to Figures 1 – 6)

NOTE

Removal procedures are the same for the Replacement Fuel Cap Kits (407-700-002 / 407-701-001) and the Locking Fuel Cap Kits (407-700-001 / 407-701-002).

1. Defuel the helicopter per BHT-407-MM, Chapter 12.
2. Using a plastic scraper, remove the Sealant from the 2 Screws (MS27039-4-15) securing the Fuel Cap Assembly to the adapter (Figure 2).

CAUTION

Do not remove the screws that secure the cap to the hinge or permanent damage may occur.

3. Remove and retain the 2 Screws and Washers (NAS1149D0416J).
4. Remove the Fuel Cap.
5. Removal complete.

6.0 **INSTALLATION**

General Instructions

- Items removed from the helicopter should be tagged for identification and protected from damage until reinstalled. Save all hardware of removed parts for reinstallation, unless otherwise noted.
- The helicopter must be defueled before installing the fuel cap. Understand and follow all Fuel System instructions, cautions, and warning statements in BHT-407-MM, Chapters 12 and 28.
- When installing the Locking Fuel Cap, the key must be removed from the lock in order for the handle to operate properly.

6.1 **LOCKING AND REPLACEMENT FUEL CAP KITS**

(Refer to Figures 1 – 6)

NOTE

Installation procedures are the same for the Replacement Fuel Cap Kits (407-700-002 / 407-701-001) and the Locking Fuel Cap Kits (407-700-001 / 407-701-002).

1. Defuel the helicopter per BHT-407-MM, Chapter 12.
2. For helicopters with Serial Numbers 53000 —54152 and 54300—54479, ensure electrical bonding requirements are met per ASB 407-01-41 and BHT-407-MM, Chapter 28.
3. Attach the Fuel Cap Assembly to the adapter using retained 2 Screws (MS27039-4-15) and Washers (NAS1149D0416J). Torque Screws 50 – 70 in-lbs. and overcoat with Sealant (AMS-S-8802). Refer to Figure 2.
4. Fillet seal the interface between the Fuel Cap and the adapter with Sealant (AMS-S-8802).
5. Perform a Fuel System Operational Check per BHT-407-MM, Chapter 28.
6. Installation complete.

7.0 TROUBLESHOOTING

Problem	Probable Cause	Remedy
Fuel Cap is loose or vibrates.	Fasteners loose.	Verify Screws (MS27039-4-15) securing Fuel Cap Assembly to the adapter are properly tightened and sealed. Refer to Figure 2.
Fuel System loses or has low pressure.	Fuel Cap may not be creating a tight seal.	Verify fasteners are properly tightened and sealed. Verify Fuel Cap alignment and operation. Perform a Fuel System Pressure Test per BHT-407-MM.

8.0 AIRWORTHINESS LIMITATIONS

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

No airworthiness limitations are associated with this type design change.

9.0 WEIGHT AND BALANCE

No change.

10.0 PART BREAKDOWN

Tables 1–5 contain Part Breakdown data for the Replacement or Locking Fuel Cap Kits.

The column Availability Code (AV Code) specifies the procurement status for each part. The codes to identify if a part is procurable, procedure details to get an assembly or local manufacture code are as follows:

AV Code	Details
0	Non-procurable part
1	Procurable part
2	Procure as detail parts only
3	Procurable as Next Higher Assembly
4	Local manufacture. Contact AA Product Support Engineering (PSE).
5	Part replacement requires a fixture or special equipment. Contact AA PSE.
6	Non-stock procurable part

SERIAL NUMBERS 54153—54299 AND 54480—SUBSEQUENT

Table 1. Locking Fuel Cap Kit (407-700-001)

Qty.	Part Number	Description	AV Code
1	407-700-101	Fuel Cap, Locking with Hinge	1
3	206-701-009	Key	1

Table 2. Replacement Fuel Cap Kit (407-700-002)

Qty.	Part Number	Description	AV Code
1	407-700-121	Fuel Cap, with Hinge	1

Table 3. Fuel Cap, Locking with Hinge (407-700-101)

Qty.	Part Number	Description	AV Code
1	407-700-121	Fuel Cap, with Hinge	3
1	407-700-125	Lock	3
1	407-700-127	Nut	3
1	407-700-129	Sealing Adaptor	3
1	M19X1.00MM	O-Ring	3
1	M22X1.00MM	O-Ring	3
AR	LOCTITE 243	Adhesive	3

SERIAL NUMBERS 53000—54152 AND 54300—54479

Table 4. Replacement Fuel Cap Kit (407-701-001)

Qty.	Part Number	Description	AV Code
1	407-701-121	Fuel Cap with Hinge	1

Table 5. Locking Fuel Cap Kit (407-701-002)

Qty.	Part Number	Description	AV Code
1	407-701-101	Fuel Cap, Locking with Hinge	1
3	206-701-009	Key	1
4	407-704-011-115	Electrical Bonding Tape	1
1	206-062-652-001	Foam Sealing Tape	1
1	MS29513-243	Packing	1

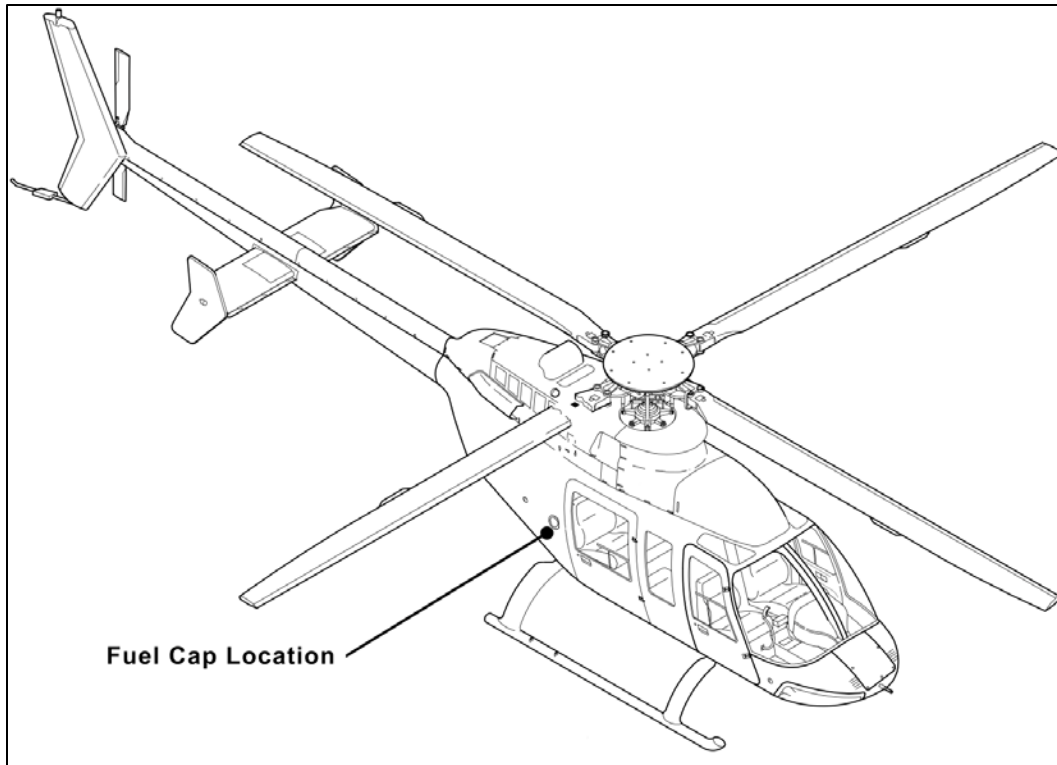


Figure 1. Fuel Cap Location

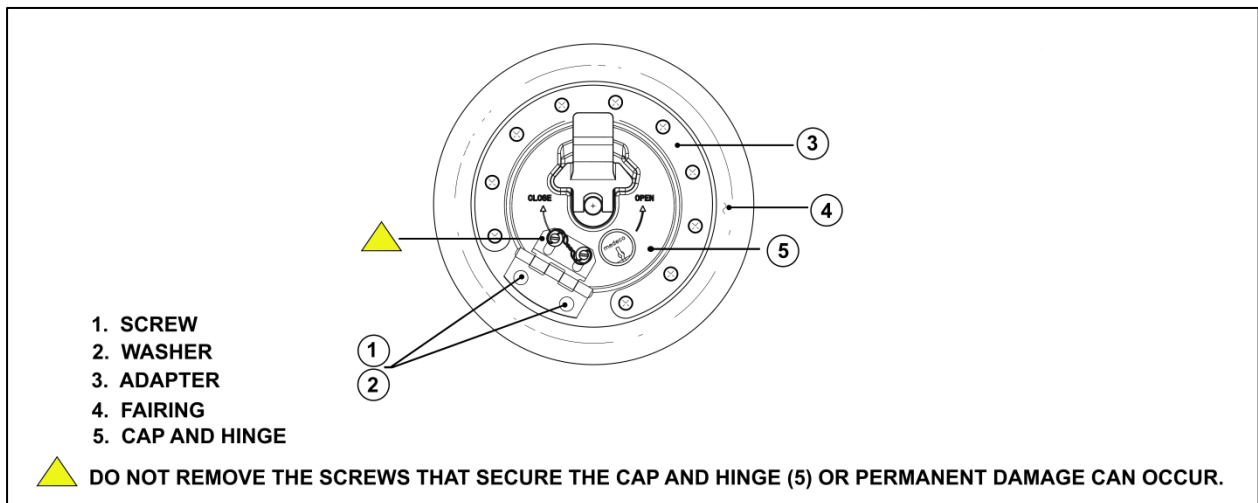


Figure 2. Fuel Cap Attachment Hardware

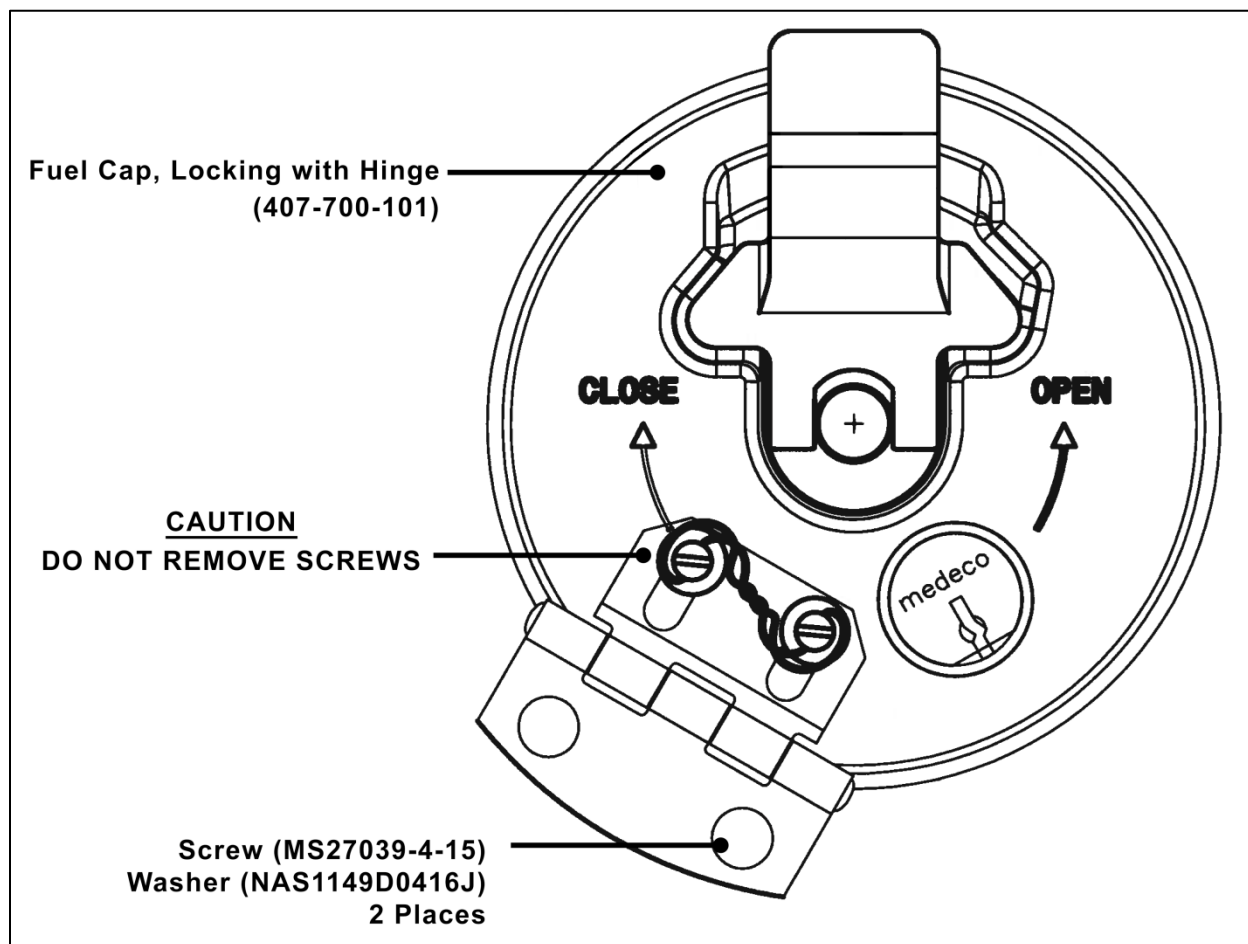


Figure 3. Locking Fuel Cap Kit (407-700-001)

NOTE

Figure 3 depicts the Fuel Cap (407-700-101) contained in Locking Fuel Cap Kit 407-700-001. This kit is applicable to model 407 helicopters with serial numbers 54153—54299 and 54480—Subsequent.

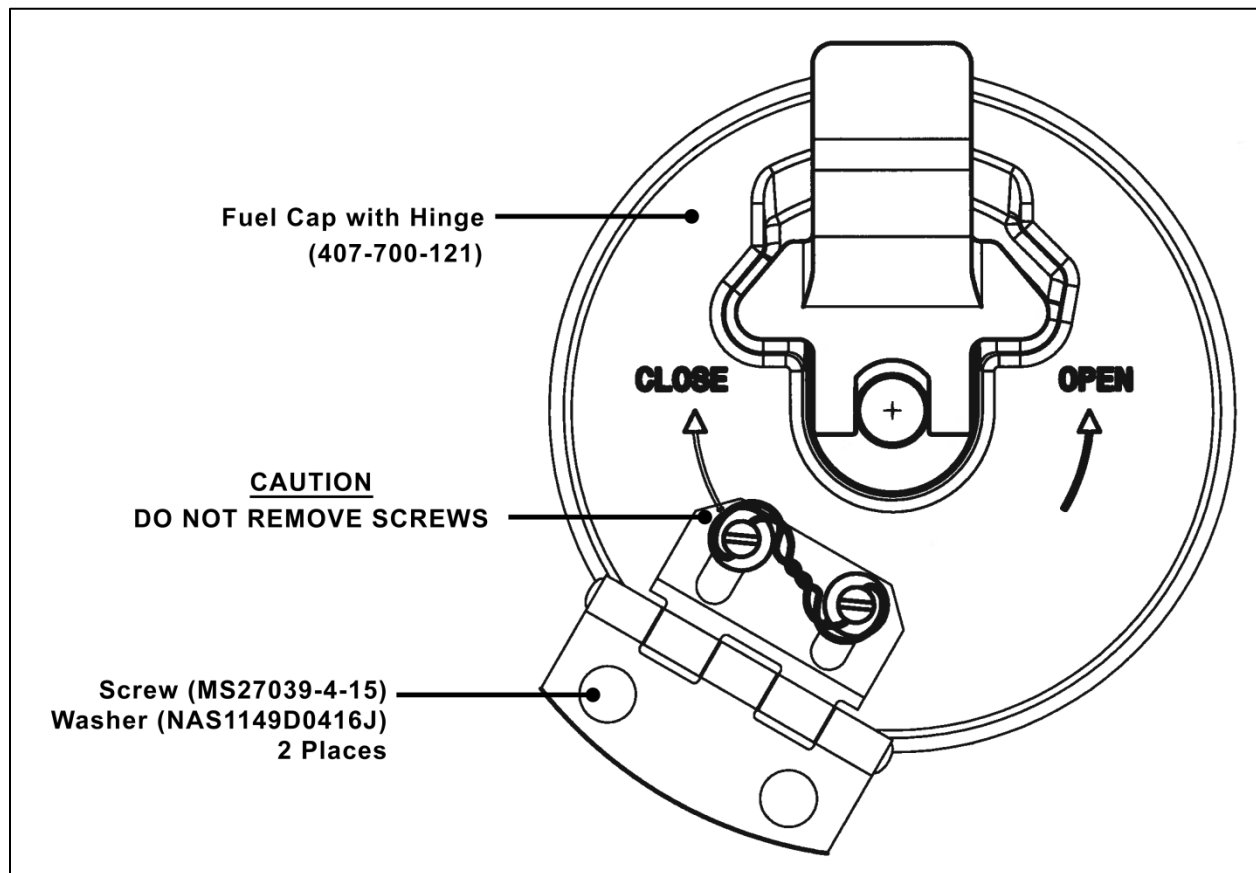


Figure 4. Replacement Fuel Cap Kit (407-700-002)

NOTE

Figure 4 depicts the Fuel Cap (407-700-121) contained in Replacement Fuel Cap Kit 407-700-002. This kit is applicable to model 407 helicopters with serial numbers 54153—54299 and 54480—Subsequent.

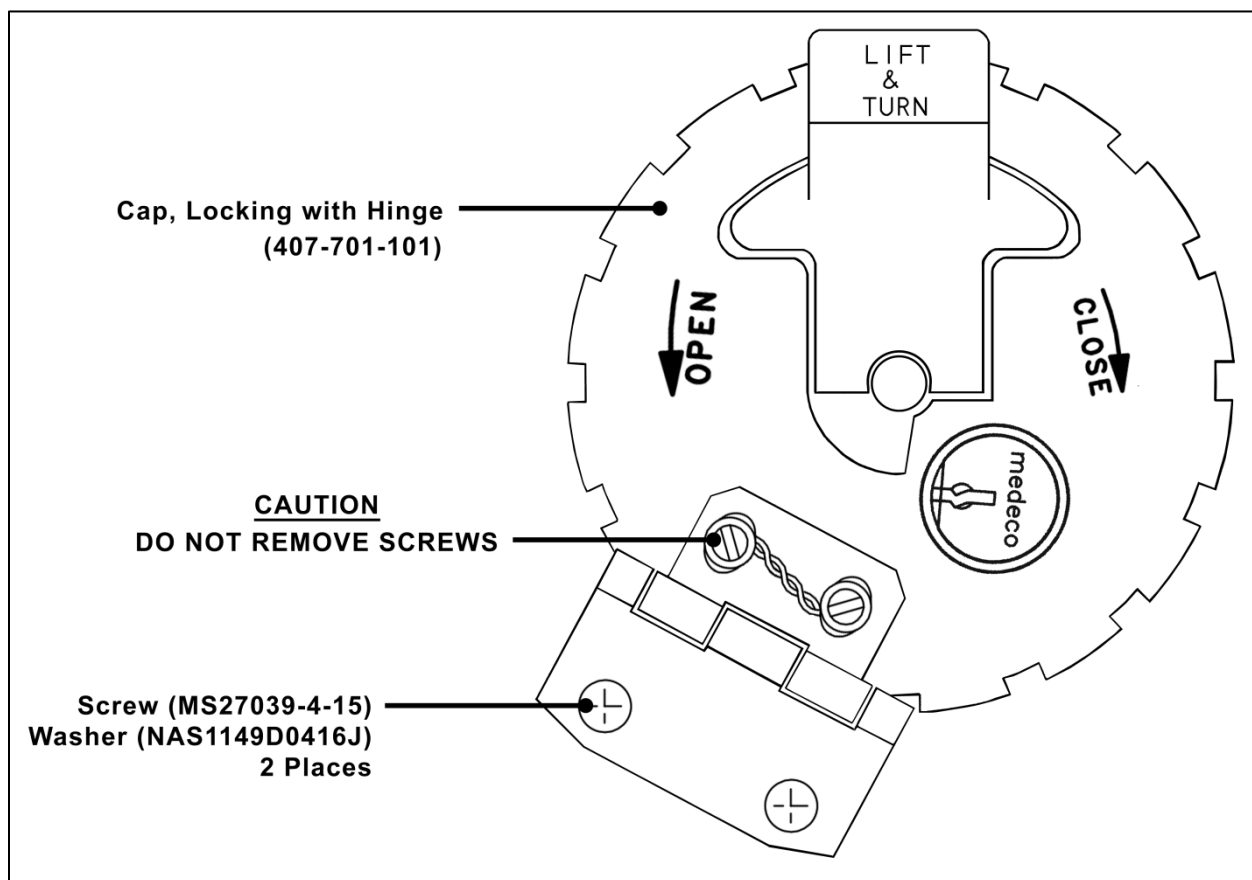


Figure 5. Locking Fuel Cap Kit (407-701-002)

NOTE

Figure 5 depicts the Fuel Cap (407-701-101) contained in Locking Fuel Cap Kit 407-701-002. This kit is applicable to model 407 helicopters with serial numbers 53000—54152 and 54300—54479.

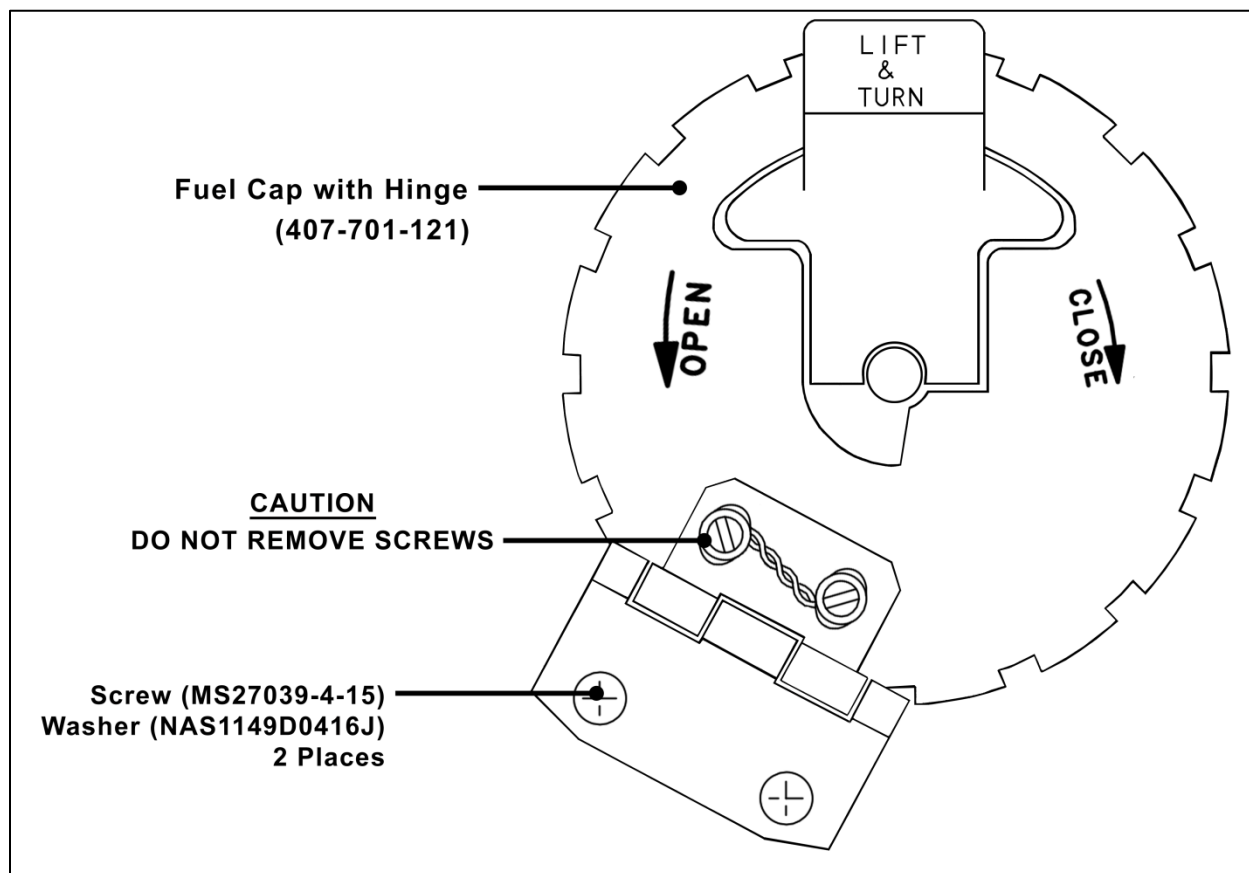


Figure 6. Replacement Fuel Cap Kit (407-701-001)

NOTE

Figure 6 depicts the Fuel Cap (407-701-121) contained in Replacement Fuel Cap Kit 407-701-001. This kit is applicable to model 407 helicopters with serial numbers 53000—54152 and 54300—54479.

APPENDIX A: ANNUAL INSPECTION RECORD

ANNUAL INSPECTION RECORD

Kit Name: _____

Kit number: _____

Work order number: _____

Serial number: _____

Total time: _____

Date: _____

Incorporate the following into the scheduled Annual Inspection:

1. Visually inspect the fuel cap surface for excessive wear, corrosion, and damage. _____
2. Visually inspect the latch mechanism for security and condition. Verify the latch operates properly. _____
3. Visually inspect the attaching hardware for security and condition. Verify Screws (MS27039-4-15) attaching Fuel Cap to adapter are properly sealed. Refer to Figure 2. _____
4. Open and close the fuel cap; ensure proper operation and alignment. Ensure a proper and tight seal in the closed / locked position. _____
5. Examine the fuel cap hinge for excessive wear, corrosion, and damage. _____
6. If the Fuel Cap has a lock, ensure the lock mechanism operates properly. _____

NOTE

If any defects are found which might compromise the Fuel Cap sealing and locking function, rectify per BHT-407-MM before further flight.

Signature: _____

A & P No.: _____

Signature: _____

Inspector: _____