TECHNICAL INSTRUCTION HAC12-002

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

429-001DEC Locking Fuel Cap

INSTALLED ON

Bell Helicopter Textron Canada Limited Model 429

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TECHNICAL INSTRUCTION HAC12-002

RECORD OF REVISIONS

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0	**04/10/13**						

TECHNICAL INSTRUCTION HAC12-002

These instructions contain the necessary information to remove the existing Fuel Cap and install **DEC Technologies, Inc. Locking Fuel Cap (429-001DEC)**, a customer requested option, for the Bell Helicopter Model 429 aircraft.

1.0 INTRODUCTION

This document describes the process by which the Bell 429 Helicopter Fuel Cap Assembly will be removed in order to be modified into a Keyed locking Fuel Cap.

2.0 DESCRIPTION

The Bell Model 429 Helicopter standard equipment includes a lever release, rotate to remove, self-sealing Fuel Cap Assembly. This standard cap has no anti-theft mechanism as part of its design. A number of Bell customers have requested a key locking Fuel Cap as an option to the standard design and which Bell offers on other model aircraft. DEC Technologies, Inc. has designed a modification to the existing Fuel Cap assembly to add the requested locking feature.

3.0 OPERATION

Under normal fueling conditions the operator would lift the Fuel Cap Assembly lever and rotate the Cap counterclockwise to remove the cap from the fueling port. The cap is affixed to the aircraft by means of a lanyard attached to both the Cap assembly and the Mounting Ring.

With the Locking Fuel Cap Assembly in place, keyed access is required. The operator must use a key to unlock the fuel cap before it can be removed from the fuel port, thus preventing theft of fuel from the aircraft.

4.0 REPLACEMENT PROCEDURE

Note

Defueling of the aircraft not required for this service.

4.1 REMOVING THE FUEL CAP ASSEMBLY

Pull the release lever on the Fuel Cap and rotate to remove. (See Figure 1 below.) Once the Cap is free from the aircraft, remove the cotter pin which attaches the lanyard to the Fuel Cap assembly. (See Figure 2 below.) Remove this end of the lanyard from the Cap assembly.

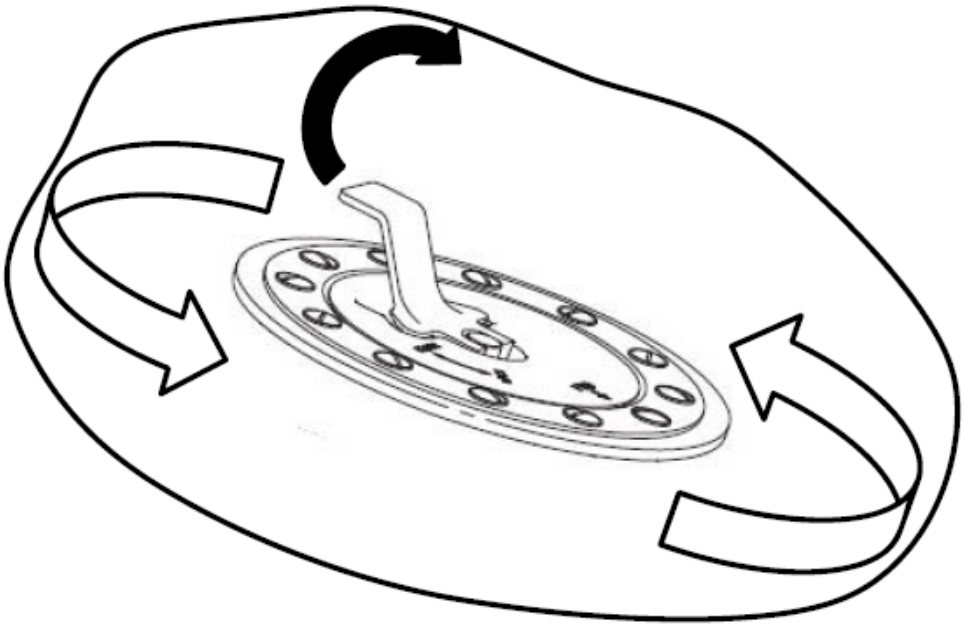


Figure 1
Cap Removal

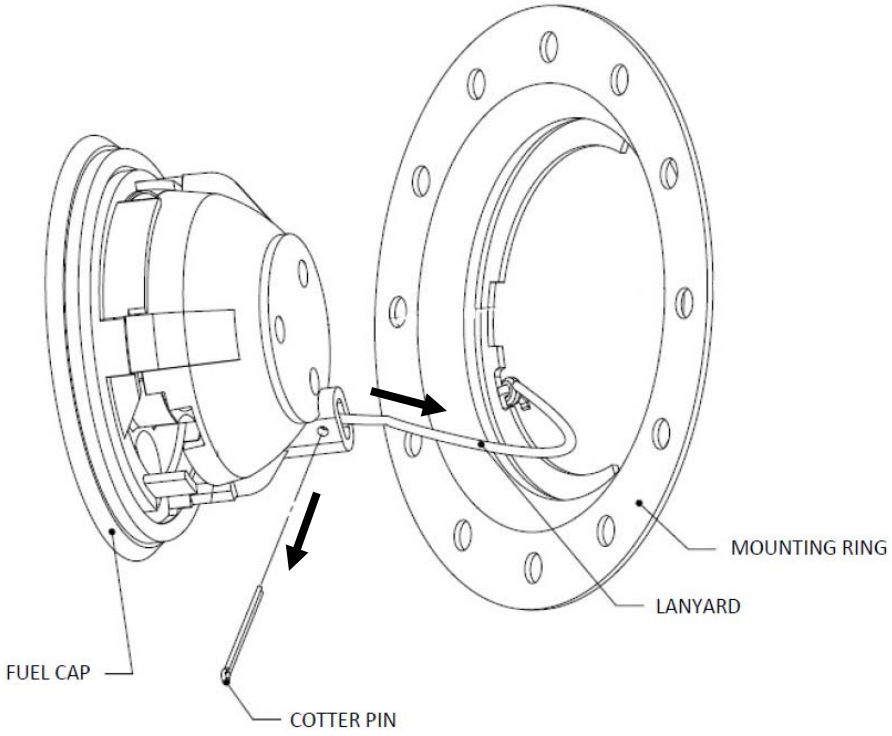


Figure 2
Lanyard Removal

Note

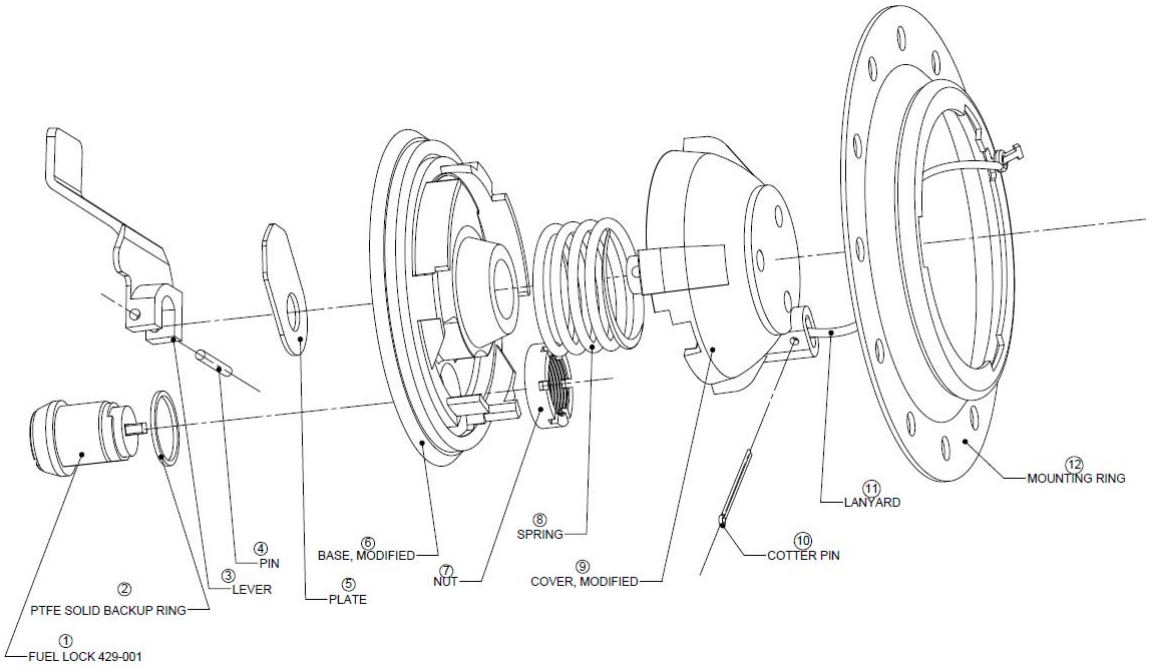
BE CAREFUL NOT TO DROP ANY FOREIGN MATERIAL INTO THE FUEL PORT. IF THE FUEL CAP ASSEMBLY IS NOT BEING REPLACED IMMEDIATELY, SECURELY COVER THE FUEL PORT TO PREVENT ENTRY OF ANY FOREIGN MATERIAL.

4.2 FILLER INSTALLATION

Attach the 429-001DEC Locking Fuel cap assembly to the aircraft by placing the end of the lanyard into the slot on the back of the Cap then place the cotter pin through the hole within and bend over the end of the pin to retain.

The installation instructions for 429-366-506-101 Filler Cap & Adapter Assy presently acceptable to the FAA in the Bell Helicopter documents BHT-429-IPB and BHT-429-CMM are also valid for use on DEC Technologies P/N 429-001DEC. (See Appendix A for a copies of these documents.)

5.0 INSPECTION OF THE 429-001DEC LOCKING FUEL CAP



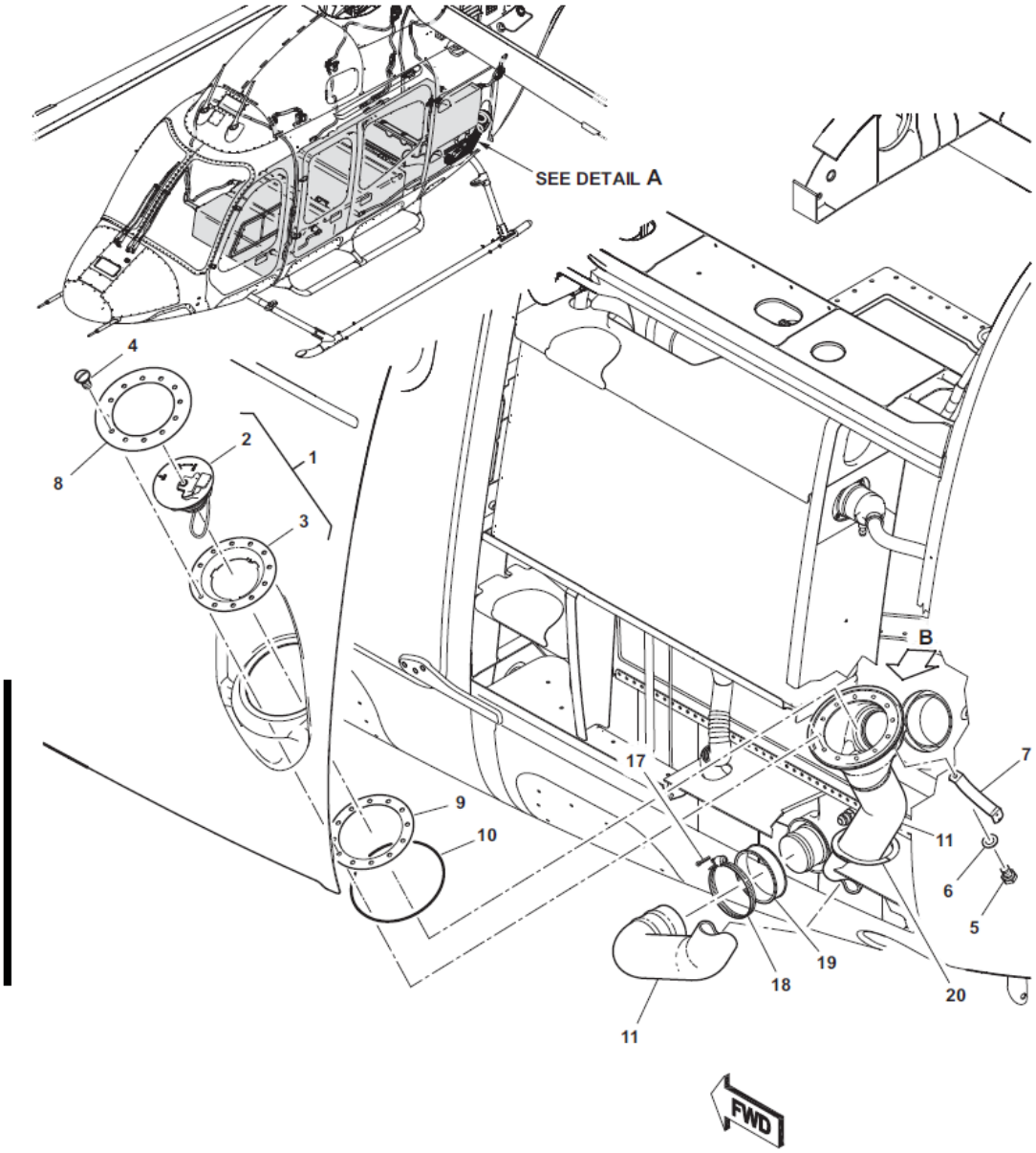
No.	Characteristic	Inspection Method	Limit
1	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
2	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
3	Mechanical/corrosion damage	Visual	Remove raised burrs
4	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
5	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
6	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
7	Not accessible to customer		
8	Not accessible to customer		
9	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
10	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
11	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap
12	Mechanical/corrosion damage	Visual	None permitted/ replace Fuel Cap

6.0 INFORMATION ACCESS

This document will be maintained and the latest approved revision posted on the HEICO web site at http://ipc.heico.com .

APPENDIX A
BELL 429 DOCUMENTS

BHT-429-IBP



DETAIL A

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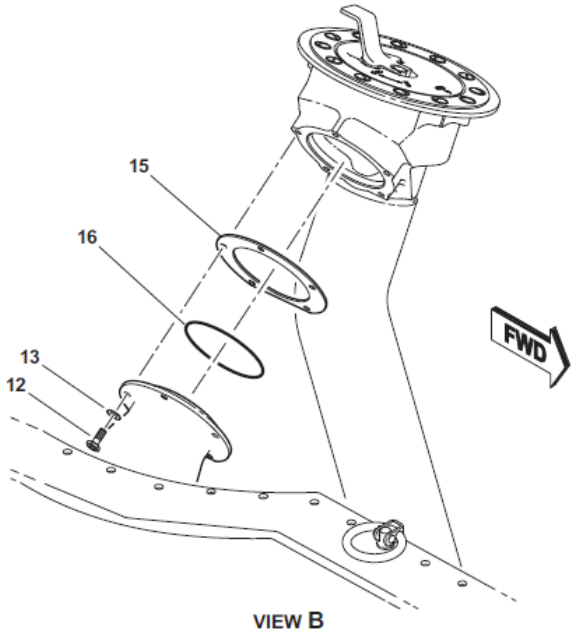
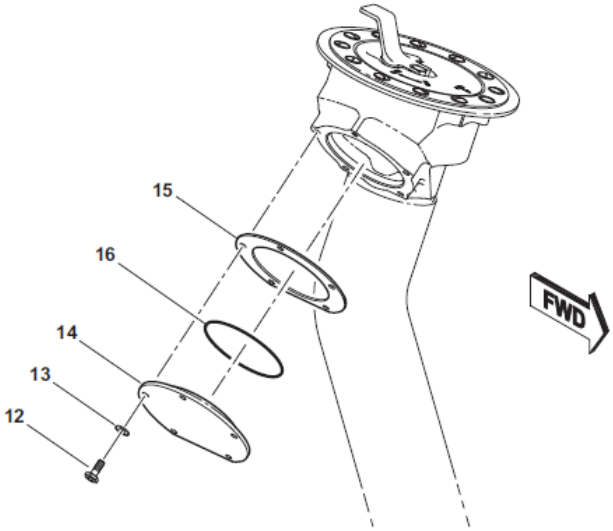
Figure 28-2. Filler Installation (Sheet 1 of 2)



VIEW B
WITH AUXILIARY FUEL TANK



VIEW B
WITHOUT AUXILIARY FUEL TANK

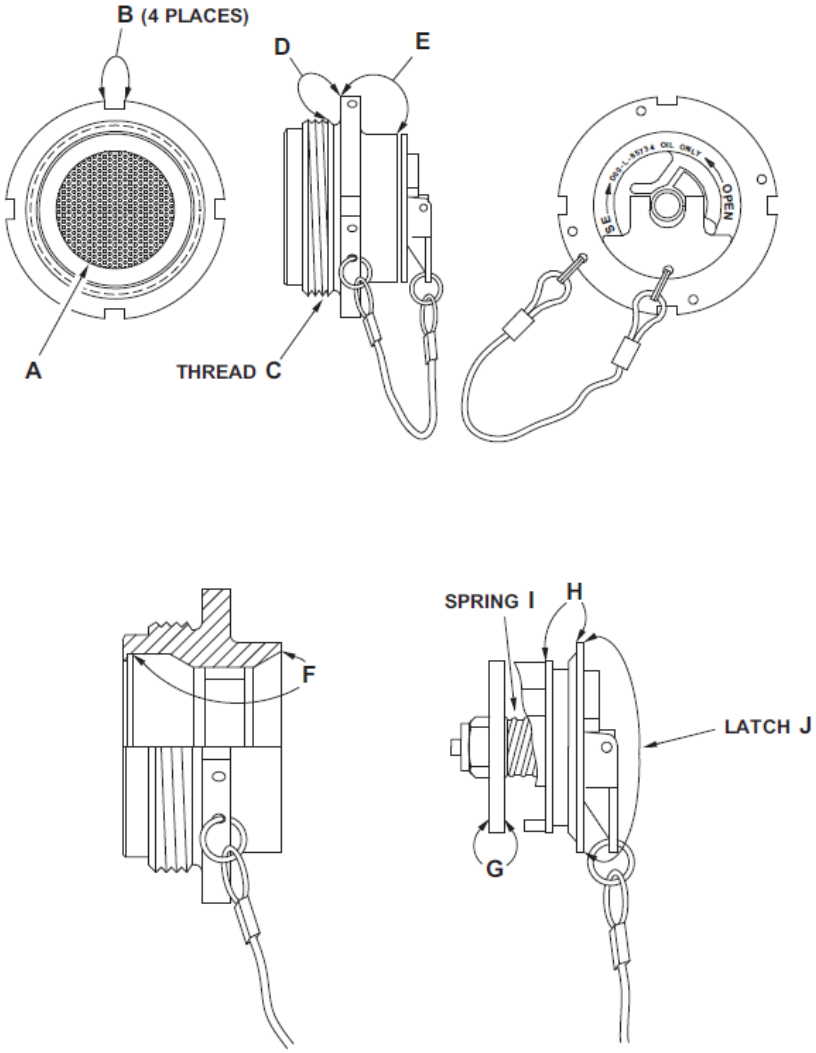
429_IPB_28_0002b

Figure 28-2. Filler Installation (Sheet 2 of 2)

(1) INDEX NUMBER	(2) PART NUMBER	(3) ITEM NAME	(4) UNIT PER ASSY	(5) AVAIL	(6) UOC
		Figure 28-2. Filler Installation			
	429-066-500-141	FILLER INSTL (S/N 57001 THRU 57034) (SEE FIG. 28-1 FOR NHA)	REF	NP	
	429-066-500-147	FILLER INSTL (S/N 57035 THRU SUB) (SEE FIG. 28-1 FOR NHA)	REF	NP	
1	429-366-506-101	. FILLER CAP & ADAPTER ASSY	1	SP	
2	508207-1	. . CAP, FUEL	1	P	
3	508209	. . ADAPTER, FUEL CAP	1	P	
4	AN525-416R8	. SCREW	12	SP	
5	NAS1801-3-5	. SCREW, HEX HEAD	1	SP	
6	NAS620A10L	. WASHER	1	SP	
7	120-055-5-9	. BONDING STRIP	1	P	
8	508337-1	. FRANGIBLE RING	1	SP	
9	509181-1	. GASKET	1	SP	
10	MS29513-162	. PACKING	1	SP	
11	508171-2	. GRAVITY LINE (S/N 57001 THRU 57034, 57038, 57051) (REPLACED BY 508171-3)	1	NP	
11	508171-3	. GRAVITY LINE (S/N 57035 THRU 57037, 57039 THRU 57050, 57052 THRU SUB) (REPLACES 508171-2)	1	SP	
12	NAS1303-3	. BOLT (REPLACED BY NAS6603-3)	5	NP	
12	NAS6603-3	. BOLT (REPLACES NAS1303-3)	5	SP	
13	NAS1149D0316J	. WASHER	5	SP	
14	508335-1	. PLUG	1	SP	
15	509072-1	. GASKET	1	SP	
16	MS29513-037	. PACKING, PREFORMED	1	SP	
17	MS24665-90	. PIN, COTTER	1	SP	
18	NAS1922-0275-1H	. CLAMP	1	SP	
19	1500-441-57	. COLLAR PROTECTION	1	SP	
20	429-066-500-159	. GROMMET	1	P	

AVAIL CODE	DEFINITION
P	Procurable
NP	Non Procurable
SP	Normal Stock/Procurable

Please see Chapter 1 for additional information on availability codes as well as general use of the Illustrated Parts Breakdown Manual.



FILLER CAP AND ADAPTER ASSEMBLY (417-1474-1/-3)

429_CMM_63_0016a

Figure 63-68. Filler Cap and Adapter Assembly — Wear, Damage, and Repair Limits (Sheet 1 of 2)

NO.	REF LTR	CHARACTERISTIC	INSPECTION METHOD	LIMIT
1.	A	Mechanical/ corrosion damage	Visual	None permitted.
2.	B	Mechanical damage	Visual	Remove raised burrs.
3.	B	Mechanical edge chamfer to repair damage	Visual/measure	0.040 inch (1.02 mm) × 45° maximum.
4.	C	Thread damage	Visual	One thread pitch.
5.	D	Mechanical/ corrosion damage	Visual	None permitted.
6.	E	Mechanical/ corrosion damage	Visual/measure	0.010 inch (0.25 mm) maximum depth.
7.	F	Mechanical/ corrosion damage	Visual	None permitted.
8.	G	Mechanical/ corrosion damage	Visual	None permitted.
9.	H	Mechanical/ corrosion damage	Visual	None permitted.
10.	I	Mechanical/ corrosion damage	Visual	None permitted.
11.	J	Mechanical/ corrosion damage	Visual	Remove raised burrs.

429_CMM_63_0016b

Figure 63-68. Filler Cap and Adapter Assembly — Wear, Damage, and Repair Limits (Sheet 2 of 2)