



McFarlane Aviation Products

Instructions for Continued Airworthiness

McFarlane Aviation Inc. FAA-PMA Part Number MCB100142-1 Fuel Cap Gasket, MCB100143-1 Fuel Cap Slip Ring, MC0426015-4 Fuel Cap Slip Ring, MC0426015-5 Fuel Cap Gasket and MC0426015-8 Fuel Cap Shim
FAA PMA Number: PQ3732CE

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Approved By:

Quality Assurance Manager

Engineering Manager

Production Manager

Revisions

Revision	Date	Summary
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List of Effective Pages

Page	Rev/Date
ALL	Original/1/18/2017

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INTRODUCTION

This document is intended to provide for the continued airworthiness of McFarlane Aviation, Inc. PMA replacement fuel cap gaskets and slip ring eligible for installation on various Cessna aircraft. The part numbers are MCB100142-1 Fuel Cap Gasket, MCB100143-1 Fuel Cap Slip Ring, MCB0426015-4 Fuel Cap Slip Ring, MC0426015-5 Fuel Cap Gasket and MC0426015-8 Fuel Cap Shim. (For all items not related to the installation of the McFarlane Aviation, Inc., Fuel Cap Gaskets, Slip Rings and Shims refer to the basic airplane model service and parts manuals.)

SYSTEM DESCRIPTION

Cessna Model Series 120, 140, 150, 152, 170, 172, 177, 180, 182, 185, 188, 205, 206, 207, 210, 336 and 337 aircraft are equipped with Fuel Cap Assemblies P/N C156003-0101, C156004-0101 and 0426015-1 which facilitate the refueling of the aircraft fuel tanks/cells. McFarlane Aviation, Inc. Fuel Cap Gaskets P/N MCB100142-1 is a PMA replacement for Cessna P/N's B100142-1, B100142, AC39A4241, 0311360-5 and 4969. McFarlane Aviation, Inc. Fuel Cap Slip Ring P/N MCB100143-1 is a PMA replacement for Cessna P/N's B100143-1, B100143 and 4970. McFarlane Aviation, Inc. Fuel Cap Slip Ring P/N MC0426015-4 is a PMA replacement for Cessna P/N 0426015-4. McFarlane Aviation, Inc. Fuel Cap Gasket P/N MC0426015-5 is a PMA replacement for Cessna P/N 0426015-5. McFarlane Aviation, Inc. Fuel Cap Shim P/N MC0426015-8 is a PMA replacement for Cessna P/N 0426015-8.

Note: McFarlane Aviation, Inc. part numbers are derived from the corresponding OEM part number by adding a "MC" prefix.

FUEL CAP ASSEMBLY P/N	ORIGINAL GASKET	ORIGINAL SLIP RING	McFARLANE GASKET*	McFARLANE SLIP RING*
C156003-0101	4969, B100142, B100142-1	4970, B100143, B100143-1	(2) MCB100142-1	MCB100143-1
C156004-0101	4969, B100142, B100142-1	4970, B100143, B100143-1	(2) MCB100142-1	MCB100143-1
0426015-1	0426015-5	0426015-4	(2) MC0426015-5	MC0426015-4

*McFarlane Aviation, Inc. FAA-PMA Fuel Cap Gaskets and Slip Ring differ from the corresponding OEM part in that they are to be installed as a set.

SPECIAL OPERATING INFORMATION

The operation of the Cessna Fuel Cap Assemblies does not change with the installation of the McFarlane Aviation, Inc. Fuel Cap Gaskets, Slip Rings and Shims. See applicable Cessna Service Manual for the operational information.

The operational torque to connect/disconnect the Fuel Cap Assembly to the Fuel Filler Neck Adapter may be affected with the installation of the new gaskets and slip ring due to the service condition of the existing fuel cap and fuel filler neck adapter. See Replacement Instructions below.

PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION

Refer to the applicable Cessna Service Manual for installation/maintenance instructions and the applicable Cessna Illustrated Parts Catalog for component Part Numbers.

1. Cessna Fuel Cap Assembly P/N 0426015-1

When installing McFarlane Aviation, Inc. Fuel Cap Gaskets and Slip Ring, the following procedure is recommended: (See Figure 1)

- Remove Fuel Cap Assembly from aircraft. Cover the Fuel Filler Neck Adapter to keep potential contaminants from entering tank.
- Remove (2) screws P/N AN530-10R12 from Fuel Cap Assembly
- Separate fuel cap parts, taking careful note of how parts are arranged
- Discard Fuel Cap Gasket P/N 0426015-5 and Fuel Cap Slip Ring P/N 0426015-4
- Assemble McFarlane Replacement Gaskets (Qty 2) and Slip Ring (Qty 1) in the arrangement shown in Figure 2
- Replace the (2) screws previously removed to hold parts in place
- Install Fuel Cap Assembly to Fuel Filler Neck on aircraft
- Operate multiple times to determine if connect/disconnect torque is acceptable
- If operation torque is not acceptable, remove or add Shims P/N 0426015-8 or McFarlane P/N MC0426015-8 to achieve acceptable connect/disconnect torque (Refer to applicable Cessna Service Manual – Example: Model 172 Series Service Manual D972-4-13 Section 12)
- After first flight, check area around fuel fill for fuel staining or leakage. (Refer to applicable Cessna Service Manual – Example: Model 172 Series Service Manual D2065-3-13 Section 12)

2. Cessna Fuel Cap Assembly P/N C156003-0101 and C156004-0101

When installing McFarlane Aviation, Inc. Fuel Cap Gaskets and Slip Ring, the following procedure is recommended: (See Figure 1)

- Remove Fuel Cap Assembly from aircraft. Cover the Fuel Filler Neck Adapter to keep potential contaminants from entering tank.
- Remove Fuel Cap Gasket P/N B100142-1 and Fuel Cap Slip Ring P/N B100143-1 by cutting parts with appropriate tool. Do not remove flat head socket head screw as this could disturb seals in check valve. Ensure screw is tight.
- Discard Fuel Cap Gasket and Slip Ring
- Assemble McFarlane Replacement Gaskets (Qty 2) and Slip Ring (Qty 1) in the arrangement shown in Figure 3
(Note: The slots on the inside diameter of the slip ring to be positioned as to slide over spring tabs.)

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- e) Install Fuel Cap Assembly to Fuel Filler Neck on aircraft
- f) Operate multiple times to determine if connect/disconnect torque is acceptable
- g) If operation torque is not acceptable, a slight bending of spring may be necessary. (This can be accomplished using a small needle nosed pliers or adjustable wrench being careful to not affect the check valve. See Figure 4)
- h) After first flight, check area around fuel fill for fuel staining or leakage. (Refer to applicable Cessna Service Manual – Example: Model 172 Series Maintenance Manual 172RMM20 Section 28-21-00)

NOTE: PRE-FLIGHT CHECK LIST AND 100 HOUR AIRCRAFT INSPECTION ARE NOT ALTERED AS A RESULT OF THIS INSTALLATION.

TROUBLESHOOTING

Refer to the applicable Cessna Service Manual for troubleshooting instructions and the applicable Cessna Illustrated Parts Catalog for component part numbers. Installation of the Cessna Fuel Cap Assemblies equipped with McFarlane Aviation, Inc. Fuel Cap Gaskets and Slip Ring does not alter the existing troubleshooting information.

PLACARDS

None applicable

DATA

All information to support the continued airworthiness of this replacement part is as defined herein and contained in:

- Applicable Cessna Service Manuals.
- Applicable Cessna Illustrated Parts Catalog.

INSPECTION

Installation of the McFarlane Aviation, Inc. P/N MCB100142-1 Fuel Cap Gasket, MCB100143-1 Fuel Cap Slip Ring, MC0426015-4 Fuel Cap Slip Ring, MC0426015-5 Fuel Cap Gasket or MC0426015-8 Fuel Cap Shim on Cessna Fuel Cap Assemblies does not alter the existing inspection requirements.

RECOMMENDED OVERHAUL PERIODS

No additional overhaul time limitations exist with the use of these parts.

AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sec. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved. No additional airworthiness limitations exist.

ASSISTANCE & REVISIONS

ICA revisions shall be made available on the McFarlane website, www.mcfarlaneaviation.com/ICA. For questions or assistance regarding these Instructions for Continued Airworthiness (ICA), contact McFarlane Aviation, Inc via email or phone. Email: engineering@mcfarlaneaviation.com Phone: 1-800-544-8594 (within the US) or 1-785-594-2741.

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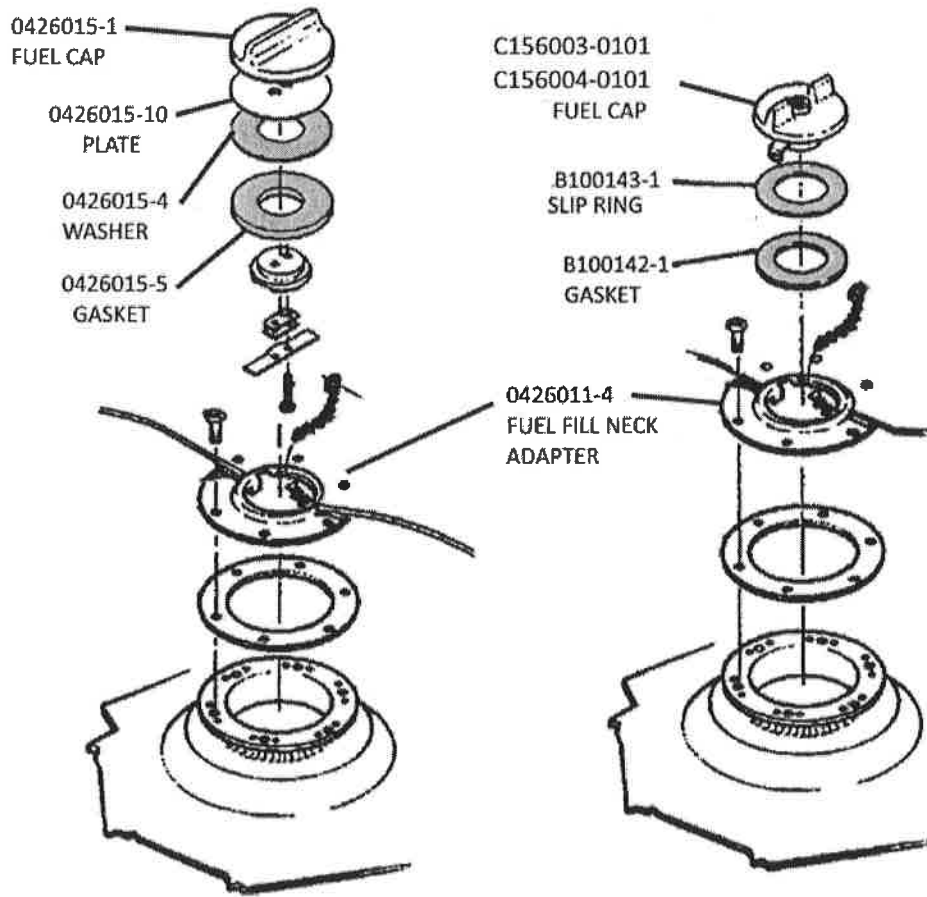


FIGURE 1 – Cessna Fuel Cap Assemblies

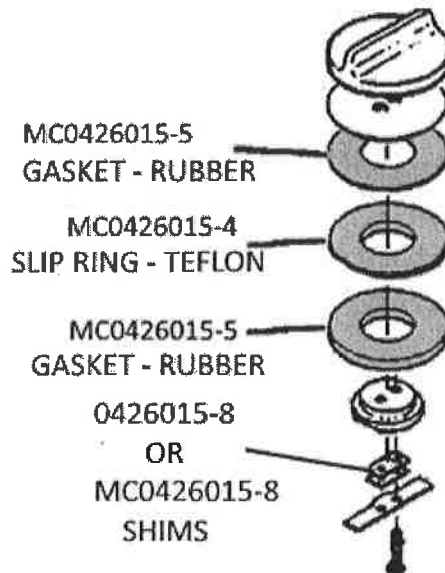


FIGURE 2 – Exploded View of Cessna Fuel Cap Assembly P/N 0426015-1 w/ McFarlane Gaskets, Slip Ring & Shims

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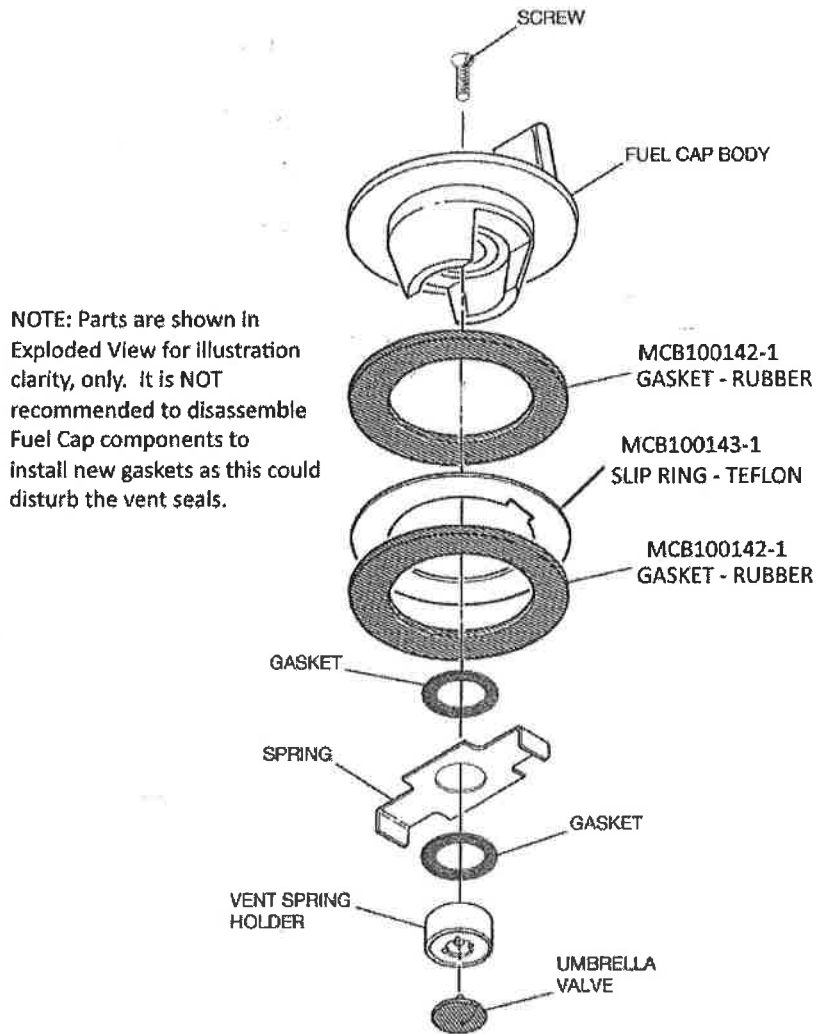


FIGURE 3 – Exploded View of Cessna Fuel Cap Assembly P/N C156003-0101 w/McFarlane Gaskets and Slip Ring

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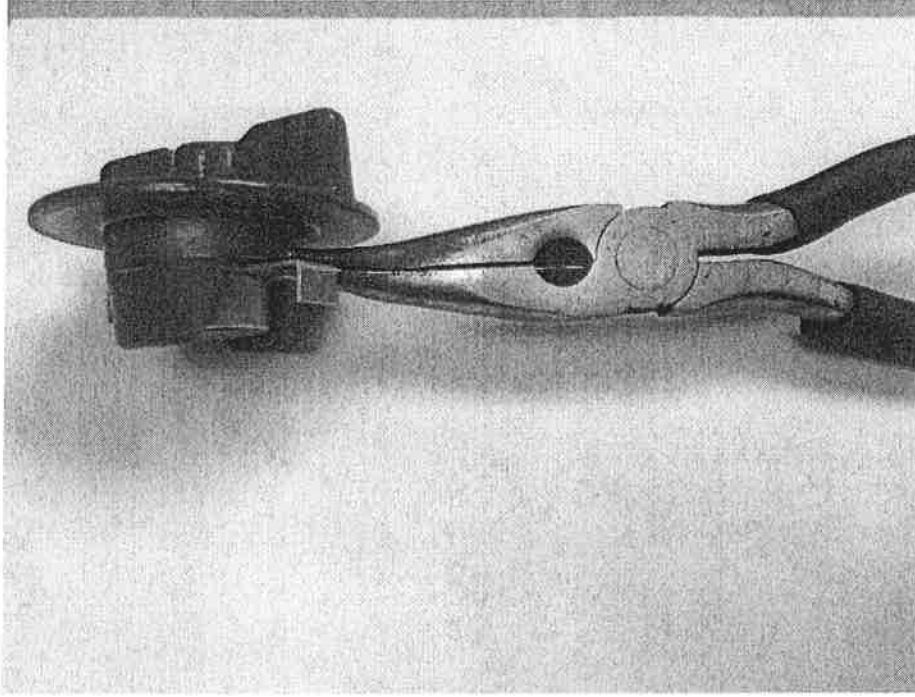


FIGURE 4 – Fuel Cap Spring Adjustment