

Instructions for Continued Airworthiness McFarlane Aviation, LLC. FAA-PMA Door Springs

OEM Cessna Part Number	McFarlane Part Number	
1217062-1	MC1217062-1	
1217062-2	MC1217062-2	
1411207-1	MC1411207-1	
1411207-2	MC1411207-2	

FAA PMA Number: PQ3732CE

Notice: Verify that this document is the latest approved revision before use! Current version can be found at: www.McFarlaneAviation.com/ICA

Approved By:

Quality Assurance Manager

Engineering Manager

Production Manager



Revisions

Revision	Author	Date	Summary
Original	DKB	02/09/2022	Original release
A	CAL	03/06/2023	Screw specified to install the springs into the door was changed to a screw without a cross drilled head

Notice: Verify that this document is the latest approved revision before use! Current version can be found at: www.McFarlaneAviation.com/ICA

INTRODUCTION

This document is intended to provide for the continued airworthiness of the McFarlane Aviation, LLC. PMA replacement Door Springs eligible for installation on various Cessna aircraft. The part numbers are MC1217062-1, MC1217062-2, MC1411207-1, and MC1411207-2 (refer to Figure 1 and Figure 2 below for spring stack-up). MC1217062-2 is comprised of P/N's 7756 & 7757, and MC1411207-2 is comprised of P/N's 7758 & 7759. P/N's 7757 & 7759 are spring supports designed by McFarlane to provide added strength to the door spring assembly. This is in response to some customer reports about door springs failing early in their life. Table 1 has been provided below for a breakdown of the contents of each assembly. For all items not related to the installation of the McFarlane Aviation, LLC. Door Springs, refer to the basic airplane model service and parts manuals.

Table 1 Spring Assembly Contents

OEM Cessna Part Number	McFarlane Part Number
1217062-1	MC1217062-1
1217062-2	MC1217062-2
1411207-1	MC1411207-1
1411207-2	MC1411207-2

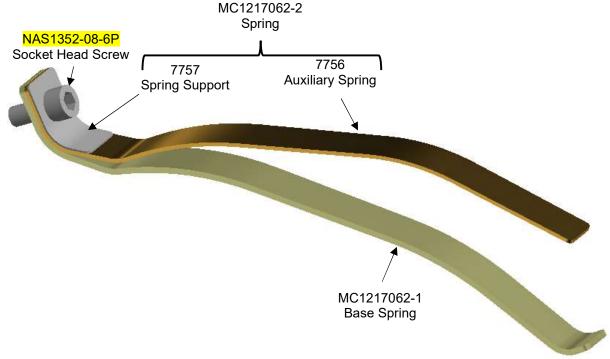


Figure 1: MC1217062 Series Spring Stack-up

Page 2 of 5 McFarlane Drawing: 7754

Notice: Verify that this document is the latest approved revision before use! Current version can be found at: www.McFarlaneAviation.com/ICA



Figure 2: MC1411207 Series Spring Stack-up

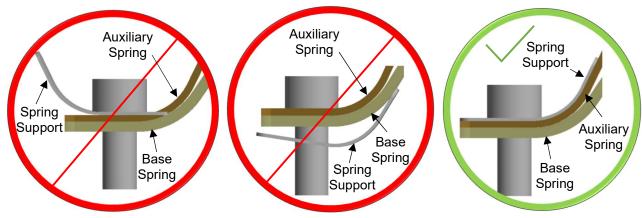


Figure 3 Proper Installation of Spring Supports

Page 3 of 5 McFarlane Drawing: 7754

Notice: Verify that this document is the latest approved revision before use! Current version can be found at: www.McFarlaneAviation.com/ICA

SYSTEM DESCRIPTION

The door spring assemblies' function is to hold the cabin doors of applicable aircraft in one or two open positions, depending on which door bracket part number is installed. The original door spring assembly consisted of two door springs, 1217062-1 and 1217062-2, or 1411207-1 and 1411207-2, depending on which applicable aircraft they were being installed on. For a better, longer lasting product, McFarlane has broken up the -2 springs into two part numbers: 7756 & 7757 for 1217062-2, and 7758 & 7759 for 1411207-2. These pairs belong to part number MC1217062-2 and MC1411207-2. The reason for P/N's 7757 and 7759 is to bolster the door spring assembly in response to reports of the door springs failing at the base of the door springs. The original door spring assembly was fastened together with an AN525-832R7 screw, and McFarlane has proposed using an NAS1352-08-6P screw, which provides a better contact area than the AN525-832R7 which means the NAS1352-08-6P screw can carry more force. For the McFarlane door spring assemblies, the spring support is stacked onto its related auxiliary spring, which is then stacked onto its related base spring (see Figure 1 and Figure 2). As an example, door spring 7756 is stacked on top of the MC1217062-1 door spring and 7757 is stacked on top of 7756 as shown in Figure 1 above. To improve the strength of the spring series, McFarlane designed spring support 7757, as part of P/N MC1217062-2. Spring support P/N 7759 is a part of P/N MC1411207-2.

SPECIAL OPERATING INFORMATION

The door springs will operate longer with the introduction of P/N 7757 & 7759. They provide more strength for the base of the spring assembly and lead to a longer life for the springs. See applicable Cessna Aircraft Service Manual for the operational control of this system.

PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION

- 1. Remove the inner door panel of the cabin door that needs the springs replaced.
- 2. Once the inner door panel is removed, unscrew the existing screw and remove the old springs.
- 3. Stack springs up as shown in Figure 1 and Figure 3 for the 1217062 series of springs and Figure 2 and Figure 3 for the 1411207 series of springs.
- 4. Hand tighten the socket head screw provided, NAS1352-08-6P, to the springs.
- 5. Reattach the inner door panel of the cabin door.

Refer to the applicable Cessna Model Service Manual for installation/maintenance instructions and the applicable Cessna Illustrated Parts Catalog for component part numbers.

TROUBLESHOOTING

If door springs don't properly hold the cabin door in the open position, make sure that the correct springs were purchased for your specific aircraft model. Part eligibility for aircraft is listed on McFarlane's website at the link below: https://www.mcfarlaneaviation.com/reference/documents/Eligibility%20Charts/

If the eligibility is correct, check to make sure that the door springs themselves aren't broken and are properly secured. If the door springs are broken, new ones will have to be purchased.

PLACARDS

None applicable.

DATA

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

- Relevant Cessna Model Service Manuals.
- Relevant Cessna Model Illustrated Parts Catalogs.

INSPECTION

No regular interval inspecting of the door springs is required, however if cabin door doesn't hold in the open position, inspect the door springs for corrosion or failure. If such a failure condition exists, replace the door springs per the relevant Cessna Service Manual.

RECOMMENDED OVERHAUL PERIODS

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

Page 4 of 5 McFarlane Drawing: 7754

Notice: Verify that this document is the latest approved revision before use! Current version can be found at: www.McFarlaneAviation.com/ICA

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.

Page 5 of 5 McFarlane Drawing: 7754