



McFarlane Aviation Products

Instructions for Continued Airworthiness

McFarlane Aviation Inc. FAA-PMA Part Number MC2622187-L & MC2622187-R Selective Fit Spoiler Hinges
FAA PMA Number: PQ3732CE

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www.mcfarlaneaviation.com/ica

Approved By:


Quality Assurance Manager


Engineering Manager


Production Manager

Revisions

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List of Effective Pages

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INTRODUCTION

This document is intended to provide instructions for the continued airworthiness of the McFarlane Aviation, Inc. PMA Selective Fit Spoiler hinges eligible for installation on Cessna 208 and 208B Caravan aircraft. These two unique hinge assemblies are designed to provide longer service life as compared to the Cessna provided hinge. Each assembly is comprised of two hinge halves and a selective fit pin. As both assemblies, use identical hinge halves the orientation, or the hinge location, is dictated by the installed hinge pin. Left hand assemblies, P/N: MC2622187-L have a left-handed hinge pin (MC262226-1), the right handed hinge assembly, P/N: MC2622187-R utilize a right-handed hinge pin (MC262226-2).

SYSTEM DESCRIPTION

Cessna Model 208 and 208B aircraft utilize six spoiler hinges (three on the left spoiler and three on the right spoiler) to attach the slot lip spoilers to the trailing edge structure of the wing. The spoiler hinge assemblies provide a means to anchor the control surfaces and allow them to rotate as they are commanded by the pilots.

The McFarlane FAA-PMA spoiler hinge assembly is designed to replace a set of three Cessna components (two hinge halves and one hinge pin) with a selective fit hinge. The applicable McFarlane FAA-PMA hinge assemblies are the left hand hinge, P/N: MC2622187-L and the right hand hinge, P/N: MC2622187-R. Selection and use of the McFarlane hinge assembly is dictated by the Cessna hinge pin that is to be replaced. If a given spoiler hinge uses a Left hand pin (Cessna P/N: 262226-1) then the McFarlane left hand hinge assembly, P/N: MC2622187-L must be used; for right hand pin (Cessna P/N: 262226-2) use the McFarlane right hand hinge assembly, P/N: MC2622187-R.

All McFarlane Aviation, Inc. individual spoiler hinge components are direct FAA-PMA replacements for Cessna hinge components, which include Cessna P/Ns 2622187-7 (Hinge Half), 262226-1 (LH Hinge Pin), and 262226-2 (RH Hinge Pin).

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

SPECIAL OPERATING INFORMATION

The control and operation of the slot lip spoiler does not change with the installation of the selective fit spoiler hinge; see the applicable Cessna Caravan Service Manual for the operational control of this system.

PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION

Remove the old spoiler hinge and install the McFarlane selective fit spoiler hinge per the applicable Cessna Model 208 Service Manual.

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

There are no exceptions to the Cessna instructions when installing the McFarlane hinge assemblies.

Supplemental Instructions – Eligible Selective Fit Hinge Assemblies (P/N: MC2622187-L & MC2622187-R)

As noted prior, the McFarlane Aviation selective fit spoiler hinge assemblies replace a set of three Cessna components; two hinge halves and one hinge pin. To identify the correct McFarlane spoiler hinge assembly for your application, use the Cessna hinge pin part number to select the correct McFarlane hinge assembly as given in the table below:

Cessna Hinge Pin	Eligible McFarlane Spoiler Hinge ASSY
(P/N)	(P/N)
262226-1 (LH)	MC2622187-L
262226-2 (RH)	MC2622187-R

Supplemental Instructions – Installation Practices for Selective Fit Hinge Assemblies (P/N: MC2622187-L & MC2622187-R)

Use the Cessna Installation instructions when installing the McFarlane spoiler hinge assemblies. Add these additional instructions:

1. Prior to separating the hinge assembly for installation, clearly mark the two hinge halves with indelible marker and attach a tag to the tab of the hinge pin to identify the three components as part of a matched set.
2. After installation of all hinge halves, test fit the hinge pin to its two hinge halves. Hinge pin should insert with minimal force and hinge should rotate without drag. This is accomplished by slowly rotating the spoiler surface by hand to verify that no additional drag has been added to its operation. Verify that parts fit properly and that the spoiler is functional. Correct any detected problems. *Note: All three hinge pins must be inserted into the hinge prior to moving the slot lip spoiler.*
3. Remove all identifying tags from hinge pins before installing locking hardware through pin tabs.

Supplemental Instructions – Maintenance Practices for Selective Fit Hinge Assemblies (P/N: MC2622187-L & MC2622187-R)

Use the Cessna Installation instructions when removing or installing a spoiler equipped with the McFarlane spoiler hinge assemblies. Add these supplemental practices as required:

1. Prior to separating the hinge assembly for maintenance, clearly mark the two hinge halves with indelible marker and attach an identification tag to the tab of the hinge pin. This is to preserve the correct fit conditions of the hinge pin after it is re-installed.
2. After re-inserting the hinge pins, always verify that the hinge parts fit properly and that the spoiler is functional. This is accomplished by slowly rotating the spoiler surface by hand. No additional drag should be noticed when rotating. Correct any detected problems. *Note: All three hinge pins must be inserted into the hinge prior to moving the slot lip spoiler.*
3. Remove ALL identification tags before securing pin tabs to the spoiler assembly.

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TROUBLESHOOTING

Refer to the applicable Cessna Caravan Service Manuals for troubleshooting instructions and the applicable Cessna Caravan Illustrated Parts Catalogs for component part numbers.

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 208 & 208B Service Manual.
- Relevant Cessna Model 208 & 208B Illustrated Parts Catalog.

INSPECTION

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.