

## **McFarlane Aviation Products**

### **Instructions for Continued Airworthiness**

McFarlane Aviation, Inc. FAA-PMA Part Numbers MC640257-017, MC660190-003, MC660190-005, MC660226-001, MC660226-013, MC660226-015, MC660226-019, MCVA660190-003, MCVA660190-005, MCVA660226-001, MCVA660226-007, MCVA660226-013, MCVA660226-015, MCVA660226-019.

FAA PMA Number: PQ3732CE

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Approved By:

Quality Assurance Manager

Engineering Manager

Production Manager

### Revisions

	Revision	Date	Summary
I	Original	11/03/2020	Original release

## **List of Effective Pages**

Page	Rev/Date
ALL	Original / 11/03/2020

## Instructions for Continued Airworthiness McFarlane Aviation, Inc. FAA-PMA Part Number 7710 DUST BOOT ASSEMBLY. FAA PMA Number: PQ3732CE

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#### INTRODUCTION

This document is intended to provide for the continued airworthiness of McFarlane Aviation, Inc. PMA Dust Boot Installation eligible for installation on Mooney M20C, M20D, M20E, M20F, M20G, M20J, M20K, and M20M Aircraft. The part number is 7710 and is comprised of a fire-retardant octagonal fabric with Velcro sewn around the edge.

### SYSTEM DESCRIPTION

The function of the microswitch, mounted on the guide tube of the ram air and throttle controls as shown in Figure 1, is to alert the pilot when the control is engaged. The switch works by a roller that sits in contact with the push rod through a notch cutout of the guide tube. When the push rod is retracted, the switch is allowed to return to neutral. On the ram air control, a neutral microswitch position illuminates an indicator light to alert the pilot when the ram air is open. On the throttle control, when the microswitch is in the neutral position an audible horn is sound to alert the pilot that the throttle is closed. The microswitch is directly behind the main panel and is mounted directly to the guide tube as seen by the highlighted sections of Figure 1. The cutout for the microswitch is open to the cabin environment and could allow foreign material to enter the control. Any foreign material entering the cut-out for the microswitch could jam the control. In order to protect the control from foreign material intrusion, McFarlane has added a protective dust boot to be installed around the microswitch and notch.

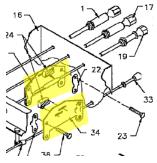


Figure 1: Microswitch Location

## **SPECIAL OPERATING INFORMATION**

The control and operation of the ram air and throttle control or microswitch does not change with the installation of the Dust Boot.

## PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION

After the throttle or ram air control and microswitch are installed and adjusted per the service manual, reach under the microswitch and fold the Dust Boot around the switch. Before securing the Velcro, align the wires so they will pass through where the Velcro will meet as seen in Figure 2. Secure the hook side of the Velcro to the loop side and compress tightly all along entire outer edge. Pinch Velcro tightly around the guide tube to ensure as little gap as possible is exposed. Attempt to slide the boot forward and aft to ensure dust boot is secured. See Figure 2 for illustrated instructions. After dust boot is secured, verify that the control is free to move through a full forward and aft cycle and the warning system works correctly.

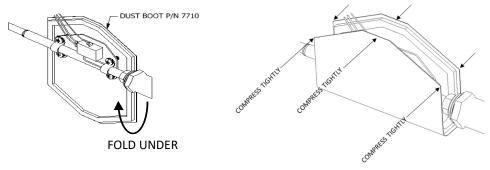


Figure 2: Installation of Dust Boot

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### **TROUBLESHOOTING**

None Applicable

### **PLACARDS**

None applicable

#### **DATA**

None applicable

### **INSPECTION**

No additional inspections exist with the use of these parts.

### RECOMMENDED OVERHAUL PERIODS

None

### **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 <a href="www.mcfarlaneaviation.com/ICA">www.mcfarlaneaviation.com/ICA</a>. Assure that the latest revision of this ICA is being used. For questions or assistance regarding these Instructions for Continued Airworthiness (ICA), contact McFarlane Aviation, Inc via email or phone.

Email: engineering@mcfarlaneaviation.com

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