

Instructions for Continued Airworthiness

McFarlane Aviation Inc. FAA-PMA Part Number MC68101-02, Fuel Quantity Transmitter

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

INTRODUCTION

This document provides instructions for initial and recurrent installation, and the continued airworthiness of McFarlane Aviation, Inc. fuel quantity transmitter p/n: MC68101-02. Instructions not found in the Piper service manual but applicable to the McFarlane transmitter are provided. Installation and maintenance instructions as listed in the aircraft service manual are applicable except as noted in this instruction sheet.

SYSTEM DESCRIPTION

Piper PA-28 and PA-32 model series aircraft are equipped with fuel gauging systems for each fuel tank (wing and tip). Fuel gauge system elements include a fuel level transmitter, installed in the aft side of the tank(s), an instrument panel gauge for each tank, and the necessary wiring and circuit breakers. The McFarlane FAA-PMA Part Number MC68101-02 fuel level transmitter, eligible for installation on most Piper PA-28 and PA-32 model series aircraft, is directly interchangeable with the factory installed Stewart Warner type transmitter, and requires no electrical wiring changes or other modifications to the aircraft.

SPECIAL OPERATING INFORMATION

Installation of the McFarlane transmitter does not require additional or special operating information to be added to the Pilots Operating Handbook.

PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION

CAUTION:

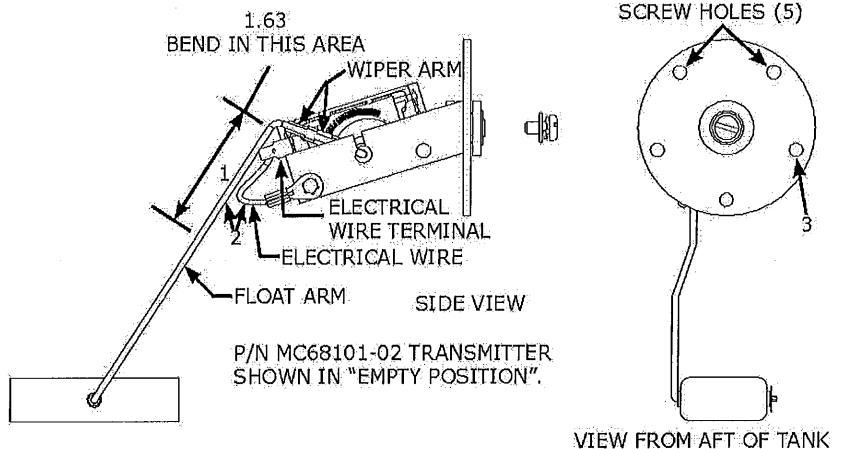
Do not replace a Rochester manufactured fuel quantity transmitter with a McFarlane Aviation, Inc. transmitter. They are electrically incompatible. Use of one type of transmitter with a gauge designed for the other will result in incorrect fuel level readings.

Some Piper Aircraft, showing eligible by serial number for the McFarlane transmitter, may have been modified with a Piper service kit to use a Rochester type fuel gauge system (transmitter and gauge). **Do not install the McFarlane fuel transmitter in these aircraft.**

Except for the following three items, refer to the applicable PA-28 or PA-32 model series Service Manual for installation/maintenance instructions, and the applicable PA-28 or PA-32 model series Illustrated Parts Catalog for component part numbers.

Installation and instructions for continued airworthiness for initial and recurring installation of transmitter:

1. The MC68101-02 transmitter has been factory set for correct float travel and resistance. The transmitter float travel stops are not adjustable. If it becomes necessary to adjust float position; bend arm in small increments in bend area shown in illustration. Confine bending effort to the bend area of float arm wire.
2. The electrical wire and the electrical wire terminal must not limit float arm travel. Ensure electrical wire and terminal have 3/16 inch minimum clearance from float arm when float arm is contacting empty float arm stop. A 3/16 diameter drill bit can be used to gauge clearance between electrical wire and float arm.
3. Abrade plating around at least one mounting screw hole with sandpaper to ensure electrical continuity of ground circuit.



A	10/4/2010	Updated change notice procedures
~	8/25/2009	ORIGINAL
"X": Bold letter Indicates Revision.		REVISION

McFarlane
McFarlane Aviation, Inc.
696 E 1700 Rd, Baldwin City, KS 66006
Title: MC68101-02 Instructions for Continued Airworthiness

Project Engineer: *[Signature]*
Engineering Mgr: *[Signature]*
Quality Mgr: *[Signature]*
Manufacturing Mgr: *[Signature]*
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TROUBLESHOOTING

Refer to the applicable Piper Service Manual for troubleshooting information.

PLACARDS

The McFarlane fuel quantity transmitter is a direct replacement for the factory installed fuel quantity transmitter. Installation of the McFarlane fuel quantity transmitter does not require installation of any placards.

DATA

All information to support the continued airworthiness of the transmitter are defined herein and contained in the applicable:

- PA-28 or PA-32 model series Service Manual
- PA-28 or PA-32 model series Illustrated Parts Catalog

INSPECTION

Installation of the McFarlane Aviation, Inc. p/n MC68101-02 does not alter the existing inspection requirements.

RECOMMENDED OVERHAUL PERIODS

The p/n MC68101-02 transmitter is not a serviceable part.

Installation of the p/n MC68101-02 does not change recommended service or overhaul intervals for any other installed part or system on the aircraft.

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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