

Precision Airmotive Carburettors - Floats **AWB** 73-005 **Issue :** 1
Date : 10 June 2008

1. Applicability

All aircraft fitted with Precision Airmotive/Facet/Marvel-Schebler Float Carburettors.

2. Purpose

This AWB discusses problems associated with Precision Airmotive brass and polymer type floats; and recommends compliance with Precision Airmotive Mandatory Service Bulletin (MSB) MSA-13.

3. Background

CASA has received service difficulty reports relating to the failure of brass and the advanced polymer floats used on Precision Airmotive (previously known as Facet/Marvel-Schebler) carburettors.

The failure of the brass and polymer floats may lead to reduced buoyancy of the float and in some cases lead to flooding or poor idle performance (and possible engine stoppage at idle).

Several modes of float failure have been noted where fuel is able to enter the float and reduce its buoyancy, for example:

- Excessive wear of the brass float hinge point to the point where the float pontoons move to one side and rub on the walls of the float bowl. This eventually wears a hole in the float.
- Brass floats can also develop leaks through the pontoon seams.
- Polymer floats developing leaks through the welded seam.

Whilst, in the majority of incidents, defective floats were identified by flooding or poor idle performance on the ground, there have been cases where the float was found to be partially filled, but no operational difficulties had been experienced.

The manufacturer has issued Service Bulletin MSA-13 announcing availability of a new foam float. The new foam float is likely to provide better in-service reliability.

4. Recommendation

CASA recommends compliance with the latest revision of Precision Airmotive MSB MSA-13 which requires installation of a new foam type float.

Copies of the MSA-13 can be obtained from the manufacturer.



AIRWORTHINESS BULLETIN

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5. Enquiries

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