
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/FSM/29 Amdt 3 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

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AD/FSM/29 Precision Airmotive Corporation Carburetors 10/2005 Amdt 4

Applicability: Precision Airmotive Corporation (PAC, formerly Facet Aerospace Products Corporation and Marvel-Schebler Corporation) Model MA-3, MA-3A, MA-3PA, MA-3SPA, MA-4SPA carburetors installed on but not limited to Textron Lycoming O-235, O-290, and O-320 series engines, and Teledyne Continental Motors (TCM) A-65, A-75, C-75, C-85, C-90, C-115, C-125, C-145, O-200, and O-300 series engines.

Requirement: **Model MA-3A, MA-3PA, MA-3SPA, and MA4-SPA carburetors:**

1. Inspect the carburettor to determine if a two-piece venturi is installed. If a two-piece venturi is installed, inspect the carburettor to determine if the primary venturi is loose or missing.
2. If a two-piece venturi is installed and the primary venturi is found loose or missing, repair the carburettor by installing a serviceable two-piece venturi or by installing a one-piece venturi as per provisions of Precision Airmotive Service Bulletin (SB) No. MSA-2, Revision 1, 2, 3 or later FAA approved revision.

Note 1: Carburetors that have the letter "V" stamped or etched on the lower portion of the data plate, or that have a black, yellow, or blue data plate showing the Precision Airmotive Corporation (PAC) name and logo, or that have a black Facet Aerospace Products data plate with a serial number beginning with 750, are already equipped with a one-piece venturi and no further action is necessary provided the engine does not subsequently run rough or experience power loss.

3. **IF** the carburettor is fitted with a one-piece venturi **AND** the engine runs rough or experiences power loss **AND** providing the rough running engine or power loss can be traced to the carburettor venturi or fuel nozzle **THEN** accomplish either of the following:
 - 3A Install a carburettor containing a two-piece venturi and resume the inspections as per requirement 1 and 2 of this AD; OR

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- 3B Modify the carburettor in accordance with paragraphs 3B-(a), 3B-(b), or 3B-(c) of this Directive, as applicable:
- (a) For PAC Model MA-3SPA series carburettors with part numbers (P/N) 10-4894 or 10-4115-1, installed on TCM Model O-200A series engines modified by installing a one-piece venturi, install a new fuel nozzle in accordance with PAC SB MSA-7, dated 30 September 1994.
 - (b) For PAC Model MA-3SPA series carburettors with P/Ns 10-4895, 10-4439, or 10-3237, installed on TCM Model O-300 or C-145 series engines modified by installing a one-piece venturi, install a new fuel nozzle in accordance with PAC SB No. MSA-8, dated 10 July 1995.
 - (c) For PAC Model MA-3SPA series carburettors with P/Ns 10-4240, 10-4252, 10-4252-1, or 10-4457, installed on TCM Model C-75, C-85, or C-90 series engines modified by installing a one-piece venturi, install a new fuel nozzle in accordance with PAC SB No. MSA-9, dated 10 October 1995.

Note 2: Model MA-3A, MA-3PA, and MA4-SPA carburettors already utilize the type of nozzles referred to, in the modification requirement 3B hence no further mandatory modifications are available at present.

Note 3: Installing a one-piece venturi constitutes terminating action for the repetitive inspection as per requirement 1 of this AD.

Model MA-3 series carburettors:

- 4. Inspect the carburettor to determine if the primary venturi is loose or missing.
- 5. If the primary venturi is found loose or missing, repair the carburettor by installing a serviceable two-piece venturi, or replace the entire carburettor with a serviceable carburettor.

Note 4: FAA AD 98-01-06 Amendment 39-10270 refers.

- Compliance:
- 1. Unless accomplished earlier, within 50 flight hours or 30 days from the effective date of this Directive, whichever comes first and repetitively thereafter, at each annual or 100-hourly inspection, whichever comes first.
 - 2. Before further flight, following inspection per requirement 1 of this Directive.
 - 3. Before further flight.

Note 5: If necessary, an entry into the Maintenance Release may be made to facilitate compliance to the Requirement 3.

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4. Unless accomplished earlier, within 50 flight hours or 30 days from the effective date of this Directive, whichever comes first and repetitively thereafter, at each annual or 100-hourly inspection, whichever comes first.
5. Before further flight, following inspection per requirement 4 of this Directive.

This Amendment becomes effective on 29 September 2005.

Background: Disruption of fuel flow to the engine may result in the failure to attain rated power, power loss in flight, and forced landings. This AD addresses the identified unsafe condition associated with the power loss in flight.

The current Amendment provides further explanation on the AD Requirements.

Amendment 3 of this Directive clarified the issue of fuel nozzle modifications for the Model MA-3A, MA-3PA, and MA4-SPA carburettors and became effective on 14 April 2005.

Amendment 2 of this AD became effective on 17 February 2005 and reflected requirements of FAA AD 98-01-06.

Amendment 1 of this AD became effective on 1 January 1998 and made reference to now superseded FAA AD 93-18-03.

The original issue of this AD became effective on 6 January 1994.



James Coyne
Delegate of the Civil Aviation Safety Authority

15 August 2005