SUBJECT: USE OF FAA/PMA APPROVED REPLACEMENT PARTS IN PRECISION AIRMOTIVE FUEL INJECTION SYSTEMS.

A. EFFECTIVITY:
This Service Bulletin is applicable to all aviation fuel injection systems (RS and RSA series) manufactured by Precision Airmotive or its predecessor, Bendix.

B. REASON:
This Service Bulletin is re-issued to advise owners, operators, overhaulers, and repairers of RS and RSA fuel injection systems of the potential for adverse consequences resulting from the use in RS/RSA fuel injection systems of FAA/PMA parts not manufactured by Precision Airmotive.

C. BACKGROUND INFORMATION:
The FAA has issued numerous PMAs for replacement parts for RS/RSA fuel injection systems to manufacturers that are not associated with or licensed through Precision Airmotive. These PMAs provide FAA authorization for those manufacturers to manufacture and sell PMA parts. Based on inquiries Precision Airmotive has received, some operators and repair facilities do not understand how and on what basis the FAA issues those PMAs. PMAs are typically approved based on test and analysis, which means that the approvals are based on design and performance criteria proposed by the PMA manufacturer and accepted by the FAA. Such criteria are often different from the design and performance criteria established by Precision Airmotive and its predecessor Bendix, and do not incorporate the knowledge and experience obtained by Precision Airmotive and Bendix from hundreds of thousands of hours of service experience. Many of the PMA parts have significant differences from genuine Precision Airmotive parts. When the FAA issues a PMA, it does not consult Precision Airmotive about the validity of the PMA holder’s testing or analysis, nor does it have the original engineering specifications to check conformity of the PMA parts with those specifications. The agency therefore is often not in a position to evaluate whether the PMA parts deviate in potentially significant ways from the original design. All service publications published by Precision Airmotive for the RS/RSA fuel injection system are written specifically and only for parts manufactured by Precision Airmotive.

D. DESCRIPTION:
A Genuine Precision Airmotive Part is a part that has been manufactured by, or on behalf of, Precision Airmotive or the previous manufacturer, Bendix, in accordance with the detailed engineering specifications and drawings, and inspection requirements. Parts manufactured by others are not authorized by Precision Airmotive for use in the RS/RSA fuel injection system, even if such parts have FAA/PMA approval because those parts are not subject to the strict tolerances, manufacturing processes and inspections called for in Precision Airmotive's engineering specifications, drawings and inspection requirements. Accordingly, Precision Airmotive considers those parts to be UNAUTHORIZED parts with regard to the RS/RSA systems.
E. **WARRANTY AND LIABILITY INFORMATION:**

   The use of UNAUTHORIZED parts in a RS or RSA fuel injection system constitutes a substantial alteration and modification of that fuel injection system. As a result, the use of such UNAUTHORIZED parts voids any and all Precision Airmotive warranties that may exist for the system. Precision Airmotive disclaims any and all liability arising from the malfunction of a fuel injection system in which UNAUTHORIZED parts have been installed.

F. **PUBLICATIONS AFFECTED:**

   The current warning in the RS and RSA overhaul manuals will be revised as follows:

   **WARNING:** This Manual Has Been Written and Updated To Address The Overhaul, Rework, and Repair of Precision Airmotive (or Bendix) Fuel Injection Components. This Precision Airmotive Manual May ONLY Be Used With Parts Manufactured By Precision Airmotive. The Procedures, Specifications, And Tolerances Contained Within This Manual DO NOT Apply To Parts Manufactured By Other Replacement Parts Manufacturers under a separate FAA/PMA. Such Non-Precision Airmotive Parts are not authorized by Precision Airmotive for Installation in the RS and RSA fuel injection systems, and May NOT Be Installed Per This Manual, And Such Parts May NOT Be Used in Conjunction With Replacement Parts Manufactured By Precision Airmotive. ALWAYS Refer To Service Publications Published By The Manufacturer Of The FAA/PMA Approved Replacement Parts When Using Those Parts.