SUBJECT: 2576540-4 and 2576540-5 Throttle Friction

PURPOSE: To provide instructions for RSA-5AD2 fuel injection servos installed on Piper Seneca V aircraft.

Revision 1 changes the description in paragraph B.

Revision 2 changes the 2576540-6 to 2576540-7 (see SIL RS-60)

A. EFFECTIVITY: This service information letter is applicable to the RSA-5AD2 fuel injection servos, parts list 2576540-4, and 2576540-5 used on Continental L/TSI0-360-RB engines in Piper PA34-220T Seneca V aircraft.

B. DESCRIPTION: This document supercedes SIL RS-46 and SIL RS-56. This letter addresses corrective action for high throttle friction on the 2576540-4 and 2576540-5 fuel injection servos. All suspect units must be removed from the aircraft and sent to Precision Airmotive for update or replacement.

C. INSPECTION PROCEDURE: If your aircraft has a 2576540-4 or 2576540-5 fuel injection servo and if the throttle movement is excessively stiff or rough (with the throttle friction off), inspect the idle lever assembly on the RSA-5AD2 fuel control servo for excessive friction. Disconnect the idle mixture linkage at the idle lever arm and throttle arm by removing the cotter pins; be sure to save the flat washers and spring washers for reassembly (see Figure 1). Rotate the idle lever by hand; if the lever action catches, grabs or the force measured directly on the linkage using a linear scale exceeds 4 lbs the servo should be reworked. Insure that measurements are taken perpendicular to the arm of the lever to obtain an accurate reading. The servo should be removed and replaced with a 2576540-7 fuel injection servo.

NOTE: Many servos which exhibit high throttle friction will also exhibit unstable idle mixture and/or pressure sensitivity. If you are experiencing idle instability or excessive pressure sensitivity with the idle mixture set per specification, perform the inspection procedure in paragraph C.

REPLACEMENT OPTIONS:
Several options are available for replacement of 2576540-4 and 2576540-5 units:

- Precision Airmotive will update your servo, at no cost, to a 2576540-7. Remove the servo(s) and call Precision Airmotive Corporation at (360) 651-8282 for a Return Material Authorization (RMA) number. Your servo will be updated and returned as a time-continued unit with a priority turn around.
• If you need to minimize down time or would like a zero time unit, we have arranged a discounted price for zero-time factory remanufactured units. Please call Precision Airmotive Sales for pricing and lead times.

**NOTE:** Servos that are replaced per the above instructions require installation and setup in accordance with applicable TCM and Piper Maintenance and Overhaul manuals. All updated, overhauled, or new servos installed may exhibit a gradual richening at idle during operation. This is normal for RSA fuel injection servos, and may require periodic readjustment of idle mixture to maintain desirable idle performance.

**D. ADDITIONAL INFORMATION:** Contact Precision Airmotive Corporation Product Support at (360) 651-8282 for information.