

ARLLINGTON, WASHINGTON 98223 FAA-PMA FACILITY #PQ111NM



 Bulletin No.:
 PRS-110

 Date:
 11-5-15

SUBJECT: Availability of idle and mixture control valve kits for RSA-5 and RSA-10 fuel injection servos.

A. <u>APPLICABILITY:</u>

This service bulletin applies to the fuel injection servo part number 2576536-2 model RSA-5AD1®, fuel servo part number 2576562-4 model RSA-10ED1®, and fuel servo part number 2576630-4 model RSA-10AD1® manufactured by Precision Airmotive LLC or its predecessor in interest Bendix Energy Controls.

NOTE: WHILE OTHER SERVOS MAY APPEAR EXTERNALLY SIMILAR TO PRECISION AIRMOTIVE MANUFACTURED UNITS, THE PARTS REFERENCED HEREIN ARE ONLY APPLICABLE TO SERVOS MANUFACTURED BY PRECISION AIRMOTIVE OR ITS PREDECESSOR IN INTEREST BENDIX. THIS BULLETIN DOES NOT APPLY TO ANY FUEL INJECTION SERVO MADE BY ANY OTHER MANUFACTURER.

B. <u>COMPLIANCE:</u>

During overhaul or at any time early style idle or mixture valves are removed from a servo, install valve Kit P/N 2576659 in accordance with the following instructions and the current applicable Precision Airmotive component maintenance manual (CMM).



Early Style Parts, Idle Valve



New Parts, Idle Valve

Early Style Idle Valve Parts		New Idle Valve Parts	
Part Number	Description	Part Number	Description
367757	Thrust Washer	2577321	Ball Race (2ea)
		2577319	Roller Assembly
2526408	Bushing	2577316	Bushing



Early Style Mixture Valve



New Parts, Mixture Valve

Early Style Mixture Valve Parts		New M	New Mixture Valve Parts	
Part Number	Description	Part Number	Description	
2538330	Thrust Washer	2577319	Roller Assembly	
367694		2577322	Inner Spring Seat/Race	
	Spring Retainer	2577323	Outer Spring Seat/Race	
2523757	Spring (7 coils)	2577315	Spring (5 coils)	

C. INSTALLATION:

1. Remove the lever from the mixture valve. Remove the screws, washers, and spacer retaining mixture valve and pull it from the servo.

2. Disassemble the mixture valve.

3. Measure the length of the idle mixture link from center of pin to center of pin and make note of this dimension. Remove the spring, if installed, from behind the thumb-wheel on the idle valve linkage. Remove the link from between the throttle and the idle valve.

4. Remove the screws and washers retaining idle valve and pull it from the servo.

5. Disassemble the idle valve.

6. Clean all the parts to be reused.

7. Install new O-rings on the valve shafts and a new seal in the mixture valve bushing.

8. Apply a thin coating of Krytox or Braycote grease to the valve shafts and inside surface of the bushings using a Q-Tip swab. Slide the shafts into the bushings, then withdraw them part way. Wipe away any grease that extruded from between the shafts and bushings. The only grease that is inside the bushing should be left in the assembly. Wipe away excess grease in the bearing cavity (idle bushing) and above the spring seat (mixture bushing). Lubricate the bearing assembly with a drop or two of light oil. Complete assembly of the valves as shown in Figures 1, 2 and 3.

Precision Airmotive Service Bulletin PRS-110

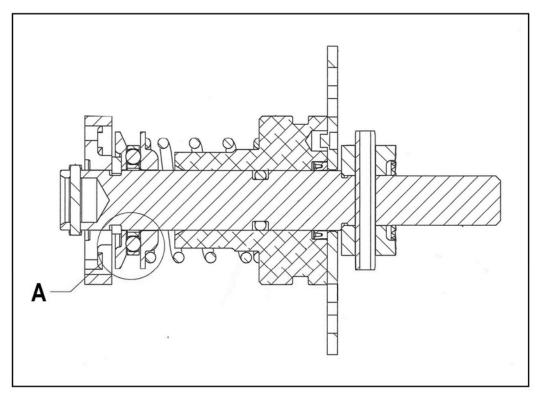


Figure 1, Mixture Valve

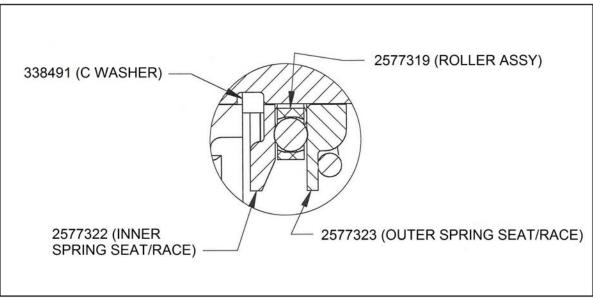


Figure 2, Detail A

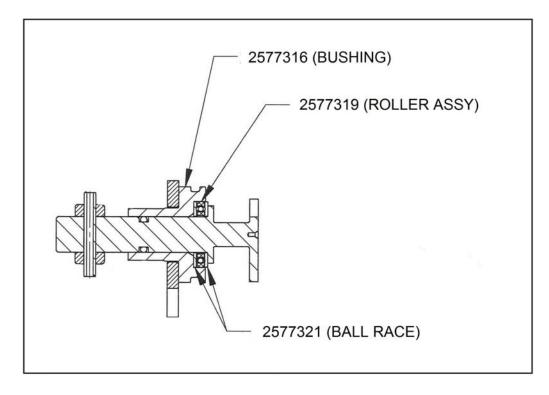


Figure 3, Idle Valve

7. Install O-rings P/Ns 951400 (idle valve) and 951401 (mixture valve) on the bushings and apply a few drops of light oil to them and to the faces of the valve plates. Install the valve assemblies into the servo per the CMM. Safety wire the screws.

8. Re-install the idle mixture link and thumbwheel spring (if used).

9. After installation of BOTH the idle and mixture valves with current versions as described in this service bulletin, the repetitive inspections required by Service Bulletin PRS-109 are no longer required.

10. Upon installing the valve kit in the field, the servo data tag must be marked in the upper right quadrant with the letter "B" as shown in the red circle in Figure 4.



Figure 4

Precision Airmotive Service Bulletin PRS-110

When the installation is accomplished by the manufacturer, Precision Airmotive, the "IC" number, shown on the data tag, in table A or higher number indicates compliance with this bulletin.

Parts list number	Model number	New I.C. number
2576536-2	RSA-5AD1	49
2576562-4	RSA-10ED1	10
2576630-4	RSA-10AD1	9

Table A

11. Patents: This configuration and its component parts are patent pending protected.

Contact Information:	Precision Airmotive LLC
	Product Support Department
	(360) 651-8282
	www.precisionairmotive.com