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# **SERVICE**INSTRUCTION

DATE: November 19, 2008 Service Instruction No. 1522

Engineering Aspects are FAA DER Approved

SUBJECT: Reprint of Precision Service Information Letter No. SIL RS-62 Revision 2

MODELS AFFECTED: All Lycoming new, overhauled, rebuilt, or repaired (L)IO, AIO, HIO, IGO,

IVO, (L)TIO, AEIO series engine with either a Precision Airmotive RSA-5AB1, RSA-5AD1, RSA-10AD1, RSA-10ED1, RSA-10ED2, RSA-10DB1 or

RSA-10DB2 series fuel injection servo.

TIME OF COMPLIANCE: Same as required for Precision Airmotive Service Information Letter No. SIL

RS-62, Revision 2.

Precision Service Information Letter No. SIL RS-62 Revision 2 is reprinted in its entirety as follows.

This reprint is current at the time Lycoming Service Instruction No. 1522 is issued. However, when complying with this Service Instruction, insure that compliance is in accordance with the latest revision of Precision Service Information Letter No. SIL RS-62



ISSUED			REVISED			PAGE NO.	REVISION
MO	DAY	YEAR	MO	DAY	YEAR	1 of 4	
11	19	08				1 01 4	



# Service Information **Letter - Fuel Systems**

#### SIL RS-62 REVISION 2

SMALL RECIPROCATING ENGINES RSA-5 and RSA-10 Issued 7/16/08

Page 1 of 3

SUBJECT: Overhaul kits for RSA-5 and RSA-10 Fuel Injection Servo's.

PURPOSE:

To provide repair shops with overhaul kits for the following Servo's as recommended by Precision Airmotive.

Revision 1: Supplement Single Kit# 2576576 was incorrectly titled 2576676 Revision 2: Replaced Gasket 365533 with 2577258 in all Single Kit listings Single Kit# 2576574: Packing Preformed 951789 qty 1ea was 2ea Single Kit# 2576574: Added Packing Preformed 951392 qty 1ea

DESCRIPTION: Precision Airmotive has created overhaul kits for RSA-5 and RSA-10 series fuel injection servos. These kits are offered in single kits containing enough parts to overhaul 1 servo, and also in bulk kits containing enough parts to overhaul 10 servos. The table below lists the part numbers required for each servo model.

SERVO MODEL	SINGLE KIT	SUPPLEMENT KIT	BULK KIT	BULK SUPPLEMENT KIT
RSA-5AD1	2576573	None Required	2576578	None Required
RSA-5AB1	2576573	2576576	2576578	2576581
RSA-10AD1	2576574	None Required	2576579	None Required
RSA-10ED1	2576575	None Required	2576580	None Required
RSA-10ED2	2576575	2576577	2576580	2576582
RSA-10DB1	2576575	2576577	2576580	2576582
RSA-10DB2	2576575	2576577	2576580	2576582

NOTE: For Servo Models which supplement kits, both are required for overhaul. For example, an RSA-5AB1 requires the 2576573 single kit (which contains the majority of the parts) and the 2576576 supplement kit (which contains additional parts only required for RSA-5AB1 servos).

These kits contain the parts necessary for overhaul of most servos, but in some cases, parts contained in the kits will not be applicable to the specific servo parts list, and additional parts may be required. All parts must be installed in accordance with the latest approved component maintenance manual (see Index of Manuals: 15-895).

	ISSUED			REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	2 of 4		S.I. 1522
11	19	08				2 01 4		

# KIT PARTS LISTINGS

## Single Kit P/N 2576573 Bulk Kit P/N 2576578 RSA-5

Part #	Description	Qty.	
177718	Washer, Spring	1	
187313	Nut, Elastic Stop	1	
2525165	Spring, Idle Linkage	1	
2525318	Spacer	1	
2525494	Packing, Preformed	1	
2526413	Stop Assy, Throttle	1	
2537608	Strainer Assy, Fuel Inlet	1	
2538283	Seat Assy	1	
2538295	Diaphragm Assy	1	
2538298	Bushing	1	
2538330	Washer, Nonmetallic	1	
2539449	Nut, Self Locking	2	
2539560	Spring, Helical Comp.	1	
2539561	Seal, Servo Stem	1	
2539738	Pin, Spring	2	
2540537	Bellows Assy, Center Body	1	
2540542	Bushing	1	
2540577	Seal, Mixt. Control	1	
2541801	Diaphragm Assy, Fuel	1	
2542391	Name Plate, Service	1	
328617	Seal, Aluminum	1	
2577258	Gasket	1	
367725	Bearing	2	
367726	Washer, Shim	1	
367757	Washer	1	
901045K12	Washer, Split Lock	2	
901200	Cotter Pin	2	
901209K1	Cotter Pin	1	
909290	Pin, Spring	1	
909311	Pin, Spring	1	
951400	Packing, Preformed	2	
951401	Packing, Preformed	1	
951437	Packing, Preformed	3	
951787	Packing, Preformed	3	
951789			
953516-10	Packing, Preformed	2	
953541-10	Packing, Preformed	1	
P19821	Washer, Spring	1	
P4235	Screw, Fill Head	2	

<sup>\*</sup> Bulk kits contain 10 times the quantity of parts shown.

### Single Kit # 2576574 Bulk Kit # 2576579 RSA-10AD1

Part #	Description	Qty
177718	Washer, Spring	1
187313	Nut, Elastic Stop	1
2521918	Bushing, Throttle Stop	2
2525165	Spring, Idle Linkage	1
2525318	Spacer	1
2525494	Packing, Preformed	1
2526413	Stop Assy, Throttle	1
2526429	Packing, Preformed	3
2537610	Strainer Assy, Fuel Inlet	1
2538283	Seat Assy	1
2538295	Diaphragm Assy	1
2538298	Bushing	1
2538330	Washer, Nonmetallic	1
2539449	Nut, Self Locking	2
2539560	Spring, Helical Comp.	1
2539561	Seal, Seryo Stem	1
2539738	Pin, Spring	2
2540537	Bellows Assy, Center Body	1
2540542	Bushing	1
2540577	Seal, Mixt. Control	1
2541801	Diaphragm Assy, Fuel	1.
2542391	Name Plate, Service	1
328617	Seal, Aluminum	1
2577258	Gasket	1
367726	Washer, Shim	1
367757	Washer	1.
393849	Screw, Fill Head	2
901045K12	Washer, Split Lock	2
901200	Cotter Pin	2
901209K1	Cotter Pin	1
909290	Pin, Spring	1
909311	Pin, Spring	1
951392	Packing, Preformed	1
951400	Packing, Preformed	2
951401		
951787		
951789	Packing, Preformed	1
951790	Packing, Preformed	2
953516-10	Packing, Preformed	2
P19821	Washer, Spring	1

<sup>\*</sup> Bulk kits contain 10 times the quantity of parts shown.

I	ISSUED			REVISED			PAGE NO.	REVISION	
	MO	DAY	YEAR	MO	DAY	YEAR	2 of 4		S.I. 1522
	11	19	08				3 of 4		

### Single Kit # 2576575 Bulk Kit # 2576580 RSA-10

Part #	Description	Qty.
177718	Washer, Spring	1
187313	Nut, Elastic Stop	1
2521918	Bushing, Throttle Shaft	2
2525165	Spring, Idle Linkage	1
2525318	Spacer	1
2525494	Packing, Preformed	1
2526413	Stop Assy, Throttle	1
2537610	Strainer Assy, Fuel Inlet	1
2538283	Seat Assy	1
2538298	Bushing	1
2538330	Washer, Nonmetallic	1
2538420	Diaphragm Assy	1
2538783	Screw, Cap Socket Head	1
2539115	Washer, Shim	1
2539449	Nut, Self Locking	2
2539560	Spring, Helical Comp.	1
2539561	Seal, Servo Stem	1
2539738	Pin, Spring	2
2540538	Bellows Assy, Center	1
	Body	2
2540542	Bushing	1
2540577	Seal, Mixt. Control	1
2541803	Diaphragm Assy, Fuel	1
2542391	Name Plate, Service	1
328617	Seal, Aluminum	1
2577258	Gasket	1
367757	Washer	1
393849	Screw, Fill Head	2
901045K12	Washer, Split Lock	2
901200	Pin, Cotter	2
901209K1	Pin, Cotter	1
907577	Ring, Retaining	1
909290	Pin, Spring	1
909311	Pin, Spring	1
951392	Packing, Preformed	2
951394	Packing, Preformed	1
951400	Packing, Preformed	2
951401	Packing, Preformed	1
951787	Packing, Preformed	3
951789	Packing, Preformed	2
951790	Packing, Preformed	2
953516-10	Packing, Preformed	4
P19821	Washer, Spring	1

<sup>\*</sup> Bulk kits contain 10 times the quantity of parts shown.

#### Supplemental Single Kit # 2576576 Supplemental Bulk Kit # 2576581 RSA-5AB1

Note: To overhaul the above fuel injection servo, the above kits must be used in conjunction with single kit 2576573 or bulk kit # 2576578.

Part #	Description	Qty.	
2522268	Bushing, Throttle Shaft	2	
2523326	Gasket	1	
2523555	Gasket	1	
2525360	Washer	1	
328617	Seal, Aluminum	1	
909277K35	Pin, Spring	1	
P3779	Gasket	1	

<sup>\*</sup> Bulk kits contain 10 times the quantity of parts shown.

#### Supplemental Single Kit # 2576577 Supplemental Bulk Kit # 2576582 RSA-10DB1, RSA-10DB2, RSA-10ED2

<u>Note:</u> To overhaul the above fuel injection servos, the above kits must be used in conjunction with single kit # 2576575 or bulk kit # 2576580.

Part #	Description	Qty.
2525360	Washer	1
328617	Seal, Aluminum	1
909277K35	Pin, Spring	1
953516-10	Packing, Preformed	1
953541-8	Packing, Preformed	3

<sup>\*</sup> Bulk kits contain 10 times the quantity of parts shown.

ISSUED				REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	4 of 4		S.I. 1522
11	19	08				4 01 4		