



SCHWEIZER SERVICE BULLETIN

MANDATORY

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SUBJECT: PRECISION AIRMOTIVE CORPORATION BULLETINS PRS-97 AND PRS-98

MODELS AFFECTED: All Fuel Injected Model 269A, TH55A, 269A-1, 269B and 269C Helicopters

TIME OF COMPLIANCE: Refer to Precision Airmotive Corporation Service Bulletins PRS-97 and PRS-98.

REFERENCES: ● Precision Airmotive Corporation Service Bulletin PRS-97, dated 10-22-90, revised 11-11-91

● Precision Airmotive Corporation Service Bulletin PRS-98, dated 11-18-91

PREFACE: ● Refer to Precision Airmotive Corporation Service Bulletins PRS-97 and PRS-98.

● Failure to comply with this Service Bulletin may lead to loss of control of the helicopter and subsequent serious injury, death and/or property damage.

a. Record compliance with this Service Bulletin in the aircraft records.

WEIGHT AND BALANCE

Weight and balance are not affected.

PRECISION
AIRMOTIVE CORPORATION

3220 100TH ST. SW BLDG E
EVERETT, WASHINGTON 98204
FAA-PMA FACILITY #PQ111NM

Service Bulletin Fuel Systems

Bulletin No.: PRS-97
Revision No.: 1
Date: 10/22/90
Revised: 11/11/91

SUBJECT: OVERHAUL PERIODS FOR RS/RSA FUEL INJECTION SYSTEM COMPONENTS.

NOTE: This service bulletin restates overhaul requirements as previously established in Bendix Service Bulletin SB-318.

REASON FOR REVISION: Revision 1 clarifies overhaul requirements and adds a calendar time requirement for TBO in **ACCOMPLISHMENT INSTRUCTIONS**

1. **PLANNING INFORMATION:**

A. **EFFECTIVITY:**

All Precision Airmotive/Bendix RS/RSA fuel injection system components utilized on general aviation aircraft.

B. **REASON:**

To establish overhaul periods for items in 1.A.

C. **DESCRIPTION:**

D. **COMPLIANCE:**

E. **APPROVAL:**

F. **MANPOWER:**

G. **MATERIAL AVAILABILITY:**

H. **TOOLING:**

I. **REFERENCES:**

J. **WEIGHT AND BALANCE:**

K. **PUBLICATIONS AFFECTED:**

2. **ACCOMPLISHMENT INSTRUCTIONS:**

- A. The time between overhaul (TBO) for all fuel system components designated in 1.A. of this service bulletin is the same as the TBO specified by the engine manufacturer for the engine on which the fuel injection system is installed or ten (10) years since placed in service or last overhauled, whichever occurs first.

2. ACCOMPLISHMENT INSTRUCTIONS: (cont)

- B. At overhaul, the fuel servo must be calibrated and tested on a factory approved, certified flow bench.
- C. Air bleed nozzles are to be cleaned and inspected at overhaul. Reuse is permissible after satisfactory flow test.
- D. A complete overhaul is mandatory regardless of any FAR operational category when the injector or fuel system component has been subjected to a severe environment such as but not limited to:
 - (1) Engine fire, external or prolonged air intake manifold fire.
 - (2) Contaminated fuel such as water, rust, sand, etc.

Fuel that does not meet engine manufacturer's requirements may be detrimental to engine operation. If non-specified fuel is inadvertently pumped into the aircraft fuel system, contact Precision Airmotive's Product Support Department to determine if overhaul is necessary.

- (3) If any uncertainty exists regarding the need for overhaul, contact Precision Airmotive's Product Support Department, 3220 100TH ST. S.W. #E, Everett, Washington 98204, (206) 353-8181 for consultation.

NOTE: Vertical black bands in the left hand margin denote changes from previous release.



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 FAA-PMA FACILITY #PQ111NM

MANDATORY Service Bulletin Fuel Systems

Bulletin No.: PRS-98

Date: 11/18/91

SUBJECT: MANDATORY INSPECTION AND REPLACEMENT OF RUBBER CENTER BODY SEALS USED ON RSA INJECTORS

NOTE: THIS BULLETIN SUPERSEDES AND CANCELS BENDIX SERVICE BULLETIN RS-20 REV 2 DATED 8-17-71.

I. PLANNING INFORMATION:

A. EFFECTIVITY:

All RSA injectors manufactured prior to 1978 which have not been updated with a metal center body seal are affected. The following list contains injectors having issue numbers which indicate that they contain a rubber center body seal and must comply with this bulletin. Injectors with issue numbers higher than the listed numbers incorporate a metal bellows seal and are not affected by this bulletin.

<u>MODEL</u>	<u>PARTS LIST NUMBER</u>	<u>EFFECTIVE ISSUES</u>
RSA-5AB1 *(RS-55) *(RS-60)	2524199	1 THRU 6
	2524216	1 THRU 5
	2524254	1 THRU 4
	2524262	1 THRU 3
	2524378	1 THRU 4
	2524712	1
RSA-5AD1 *(RS-61)	2524054	1 THRU 4
	2524119	1 THRU 4
	2524145	1 THRU 5
	2524147	1 THRU 6
	2524171	1 THRU 4
	2524189	1 THRU 4
	2524213	1 THRU 4
	2524242	1 THRU 3
	2524243	1 THRU 4
	2524291	1 THRU 4
	2524297	1 THRU 3
	2524307	1 THRU 3
	2524328	1 THRU 3
	2524335	1 THRU 3
	2524341	1 THRU 3
	2524348	1 THRU 4
	2524359	1 THRU 3
2524450	1 AND 2	

MANDATORY

A. EFFECTIVITY: (CONTINUED)

<u>MODEL</u>	<u>PARTS LIST NUMBER</u>	<u>EFFECTIVE ISSUES</u>
RSA-5AD1 (CONTINUED)	2524459	1 AND 2
	2524475	1
	2524550	1
	2524575	1
	2524590	1
	2524592	1
	2524263	1
	2524634	1
	2524640	1
	2524673	1
	2524682	1
	2524688	1
	2524723	1
RSA-7AA1 *(RS-59)	2524347	1 THRU 3
RSA-10AD1 *(RS-46)	2524030	1 THRU 4
	2524152	1 THRU 3
	2524163	1 THRU 7
	2524175	1 THRU 3
	2524255	1 THRU 3
	2524256	1 THRU 5
	2524311	1 THRU 3
	2524318	1 THRU 3
RSA-10DB1 *(RS-58)	2524267	1 THRU 3
	2524275	1 THRU 8
	2524423	1 THRU 4
	2524593	1
RSA-10DB2 *(RS-58)	2524501	1 AND 2
RSA-10ED1 *(RS-58)	2524273	1 THRU 5
	2524298	1 THRU 5
	2524366	1 THRU 3
	2524420	1 THRU 4
	2524422	1 AND 2
	2524477	1 THRU 4
	2524491	1 AND 2
	2524492	1
	2524500	1 AND 2
	2524556	1 AND 2
	2524582	1
	2524601	1
2524693	1	

* - Denotes service bulletins previously released by Bendix which address replacement of rubber center body seals with metal bellows seals..

B. REASON FOR BULLETIN:

To provide instructions for checking older fuel injectors for internal fuel leakage , and to mandate replacement of rubber center body seals with metal bellows seals.

C. DESCRIPTION:

1. Inspect fuel injector as directed in section II, ACCOMPLISHMENT INSTRUCTIONS.
2. If leakage is found, injector must be updated immediately with the metal bellows seal.

D. COMPLIANCE:

- Operating Activities
- 1) Comply with this bulletin immediately and thereafter at every 25 hours of engine operation.
 - 2) If the mixture becomes gradually richer over a period of time , or idle cutoff characteristics are undesirable, inspection as described in section II should be performed immediately.
 - 3) Injector shall be updated with metal bellows seal on or before June 30, 1992

Overhaul Activities: All injectors noted in section I.A. must be updated with the metal bellows seal.

E. APPROVAL:

None.

F. MANPOWER:

Approximately 1.0 hour at each engine inspection. No additional time required for injector overhaul/update.

G. MATERIAL AVAILABILITY:

None required.

H. TOOLING:

Not affected.

I. REFERENCES:

Bendix Service Bulletins RS-20, RS-46, RS-55, RS-58, RS-59, RS-60, and RS-61.

J. WEIGHT AND BALANCE:

Not affected.

K. PUBLICATIONS AFFECTED:

None Affected.

II. ACCOMPLISHMENT INSTRUCTIONS:

If it is necessary to periodically reset the idle adjustment leaner or the idle cutoff characteristics are undesirable, there is a possibility that the seal between the fuel and air chamber is leaking. To confirm if the seal is leaking, proceed as follows:

1. Remove the air inlet duct from the injector.
2. Disconnect the outlet fuel line from the injector to the flow divider at the injector.
3. Cap the injector outlet fitting at the injector. Plug the fuel outlet line to prevent contamination from entering the system.
4. Place the throttle in the wide open position.
5. Place the mixture control lever in Full Rich.
6. Turn on boost pump for a period of three (3) minutes.
7. Observe the air inlet to the injector at the venturi and impact tubes for the presence of fuel.
8. If no fuel is present in the venturi at the end of three (3) minutes, shut off boost pump, return throttle and mixture control to the off position, remove cap from injector outlet fitting and line. Reconnect flow divider line per requirements of applicable engine/airframe maintenance manual. Install the inlet duct per the requirements of the applicable engine/airframe maintenance manual.
9. If fuel leakage appears in the venturi section, the injector must be removed and sent to a qualified repair facility immediately for installation of a metal center body seal.
10. Make an appropriate log book entry upon completion of each inspection.