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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.

MODEL	PARTS LIST NUMBER	EFFECTIVE ISSUES
MODEL	TANTO LIST NOWIDER	ETTEOTIVE 1886ES
RSA-5AB1 *(RS-55) *(RS-60)	2524199 2524216 2524254 2524262 2524378 2524712	1 THRU 6 1 THRU 5 1 THRU 4 1 THRU 3 1 THRU 4
RSA-5AD1 *(RS-61)	2524054 2524119 2524145 2524147 2524189 2524213 2524242 2524243 2524243 2524291 2524297 2524307 2524307 2524328 2524335 2524341 2524348 2524348	1 THRU 4 1 THRU 4 1 THRU 5 1 THRU 6 1 THRU 4 1 THRU 4 1 THRU 3 1 THRU 4 1 THRU 3 1 THRU 3
	2524450	1 AND 2

A. **EFFECTIVITY**: (CONTINUED)

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

^{* -} 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:

14.00 m

- 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 1) Comply with this bulletin immediately and thereafter at Activities every 25 hours of engine operation.

 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.

R 5 1 W

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.