

This Revision cancels and supersedes RS Service Bulletin No. 20, Rev. 1.

**SUBJECT:** BENDIX FUEL INJECTION SYSTEM, RSA SERIES, TROUBLE SHOOTING TECHNIQUE FOR IDENTIFYING FUEL TO AIR SEAL LEAK, WHICH COULD AFFECT ENGINE IDLE.

**REFERENCE:** None.

**PUBLICATIONS AFFECTED:**

Bendix Form 15-338C

Operation and Service Manual

1 November 1968

**REASON FOR BULLETIN:** To provide instructions for checking fuel injector for internal fuel leakage.

**REASON FOR REVISION:**

- A. Change 9 of Detailed Instructions from referencing Bulletin No. 18, Rev. 4 to Bulletin No. 27 or No. 28.
- B. Identify controls not incorporating provisions of RS Bulletin No. 27 or No. 28.
- C. Identify controls incorporating provisions of RS Bulletin No. 27 or No. 28.

**COMPLIANCE:**

**Operating Activities:**

Comply with provisions of this bulletin at each engine inspection. If the engine develops symptoms of overrich idle mixture, this inspection must be performed immediately.

**Overhaul Activities:**

(1) For information. (2) Can be used as part of flow bench test. (3) Comply with RS Bulletin No. 27 or No. 28 on units failing leak test.

**NOTE**

A listing of controls (by Model and P/L No.) is furnished under Identification to identify controls which incorporate RS Bulletin No. 27 or No. 28; also listed are controls which do not incorporate RS Bulletin No. 27 or No. 28. The fact that a control has been reworked to Bulletin No. 27 or No. 28 does not exempt that control from the leakage test.

**DETAILED INSTRUCTIONS:** If it is necessary to periodically reset the idle adjustment leaner and 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 four (4) cap screws holding the air inlet duct to the injector.
2. Disconnect the outlet fuel line from the injector to the flow divider at the injector.



**Energy Controls  
Division**

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**DETAILED INSTRUCTIONS:** (Continued)

3. Cap the injector outlet fitting at the injector.
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 reconnect flow divider line. Replace the four (4) inlet duct cap screws and wire.
9. If fuel leakage appears in the venturi section, the injector must be removed for repair in accordance with RS Bulletin No. 27 or No. 28 before further flight.

**IDENTIFICATION:**

- A. Log book entry required upon completion of injector leak inspection (mechanics signature).
- B. The following P L numbered controls do not incorporate the Bulletin No. 27 change which covers Models RSA-5AD1, RSA-5AB1 and RSA-10AD1:

<u>P L and Issue No.</u>	<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>
2524054-1-2	2524335-1	2524030-2-3
2524119-1-2-3	2524340-1	2524152-1
2524145-1-2-3	2524341-1	2524163-3
2524147-1-2-3	2524348-1	2524175-1
2524171-1-2	2524359-1	2524193-2-3
2524189-1-2	2524378-1	2524249-1
2524213-1-2	2524450-1	2524254-1-2
2524242-1-2	2524458-1	2524255-1
2524243-1-2	2524459-1	2524256-1-2
2524283-1-2	2524199-1-2-3	2524262-1-2
2524297-1	2524216-1-2-3	2524311-1
2524307-1	2524254-1	2524318-2
2524326-1-2	2524262-1	2524424-1
2524328-1	2524291-1	2524390-1
	2524378-1	2524458-1
	2524393-1	

- C. The following P/L numbered controls incorporate the Bulletin No. 27 change which covers Models RSA-5AD1, RSA-5AB1 and RSA-10AD1:

<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>
2524054-4	2524335-3	2524030-4
2524119-4	2524340-2	2524152-3
2524145-5	2524341-3	2524163-5
2524147-5	2524348-3	2524175-3
2524171-4	2524359-3	2524193-4
2524189-4	2524378-2	2524249-2
2524213-4	2524450-2	2524254-3
2524242-3	2524458-2	2524255-3
2524243-4	2524459-2	2524256-4
2524283-3	2524199-4	2524262-3
2524297-3	2524216-4	2524311-3
2524307-3	2524254-3	2524318-3

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**IDENTIFICATION:** (Continued)

<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>
2524326-3	2524262-3	2524424-2
2524328-3	2524291-2	2524390-2
	2524378-3	2524458-2
	2524393-2	

- D. The following P/L numbered controls do not incorporate the Bulletin No. 28 change which covers Models RSA-10DB1 and RSA-10ED1:

<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>
2524267-2	2524271-2	2524377-1
2524274-2	2524273-2	2524420-1
2524275-2	2524298-2	2524423-2
2524276-2	2524366-1	2524477-1

- E. The following P/L numbered controls incorporate the Bulletin No. 28 change which covers Models RSA-10DB1 and RSA-10ED1:

<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>	<u>P/L and Issue No.</u>
2524267-3	2524271-3	2524377-2
2524274-4	2524273-4	2524420-3
2524275-4	2524298-4	2524423-3
2524276-4	2524366-3	2524477-2

PARTS REQUIRED: None.

PARTS REMOVED: None.

MAN-HOURS REQUIRED: Undetermined.

WEIGHT AND BALANCE: No effect.

