

Service Bulletin

Fuel Systems

Bulletin No.: RS-90
Date: 6-18-85
Revised: _____

Subject: BENDIX FUEL INJECTOR SYSTEM, MODEL RSA-10DB2, P/L 2524896, REMOVAL OF CONSTANT EFFORT SPRING.

1. PLANNING INFORMATION:

A. EFFECTIVITY:

<u>Model No.</u>	<u>Parts List Number</u>
RSA-10DB2	2524896-2

B. REASON:

To inform overhaul personnel that the constant effort spring has been removed from P/L 2524896.

C. DESCRIPTION:

Removal of the constant effort spring was required to eliminate "off idle" richness during acceleration from idle to full power.

D. COMPLIANCE:

Recommended at the next repair or overhaul if not previously accomplished.

E. APPROVAL:

F. MANPOWER:

Not affected when accomplished during repair or overhaul.

G. MATERIAL:

Not applicable.

H. TOOLING:

Not applicable.

I. WEIGHT AND BALANCE:

Not affected.

1. PLANNING INFORMATION: (Continued)

J. ELECTRICAL LOAD DATA:

Not applicable.

K. REFERENCES:

Not applicable.

L. PUBLICATIONS AFFECTED:

Bendix RSA-10DB2 Overhaul Manual and Illustrated Parts List Form 15-542A, Change 2 dated 31 March 1978.

2. ACCOMPLISHMENT INSTRUCTIONS:

- A. During assembly at overhaul, do not install the constant effort spring P/N 2537968 or P/N 2523688.
- B. Before final calibration, ensure the constant effort spring has not been installed. Final calibration to be performed per Test Specification 11295 (Figure 1).
- C. Change the identification plate to read P/L 2524896-3. The serial number remains the same.

3. MATERIAL INFORMATION:

<u>New P/N</u>	<u>Qty.</u>	<u>Nomenclature</u>	<u>Old P/N</u>	<u>Disposition</u>
N/A	AR	Constant Effort Spring	2537968	A
N/A	AR	Constant Effort Spring	2523688	A

NOTE: A If serviceable, retain for use elsewhere.



K. R. Dettweiler
 Manager, Product Support

3. MATERIAL INFORMATION: (Continued)

THE ALLIED/BENDIX CORPORATION, ENERGY CONTROLS DIVISION, SOUTH BEND, INDIANA, U. S. A. TEST SPECIFICATION DATE: 18-APR-85

OPERATOR MODEL RSA-10DB2 SERIAL NO. 114-1911-11295-01 (20-2511) (32-371)PAGE CODE

PARTS LIST DATE 11-13-1984 RELEASED: PAGE 1 OF 1

ELOW BENCH LIMITS

BASIC PARTS LIST 2524H95 INSTALLATION PARTS LIST 2524896

ENGINE MFR: LYCOMING

FUEL INLET PRESSURE: 26-28 PSI

NOZZLE PRESSURE: 0

LIMITS BASED ON NAPHTHA .734 SPECIFIC GRAVITY AT 75 DEG F

TEST POINT NO.	1	2	3	4	NOTE:
METERING SUCTION					
INCHES OF WATER	0	0	6.0	20.0	
CORRESPONDING					
AIR FLOW LBS/HR.	0	0	1100	2100	
MIXTURE CONTROL	R	I.C.O.	R	R	
LEVER POSITION	W.O.	W.O.	W.O.	W.O.	
THROTTLE POSITION	500	850	2000		
THROTTLE VOLUME					
TIME					
LIMITS	MIN. 65.2	39.5	51.2		
IN	MAX. 71.3	42.3	53.1		
SECONDS	OBS.				
FLOWMETER					
LIMITS	MIN. 55.0	0	117.0	218.0	
IN	MAX. 60.0	500	125.0	225.0	
LBS/HR	OBS.				
METERING					
HEAD					
INCHES OF FUEL OBS.					

FOR CALIBRATION ENRICH ADJUSTMENT CLOSED.

AFTER CALIBRATION ADJUST TO INCREASE FUEL FLOW 5 PPH ABOVE RICH LIMIT.

- PROCEDURE FOR SPLIT HEAD CHECK
- CLOSE THRO. TO .006" SHIM IN HOPE.
 - ADJUST IDLE FUEL FLOW TO 9-11 PPH. ENERGIZE BOOST PUMP WHICH WILL INCREASE FUEL INLET PRESS. TO 35-40 P.S.I. AFTER STABILIZING, FUEL FLOW MUST BE WITHIN ± .5 LBS/HR OF VALUE SET AT SPEC. FUEL INLET PRESS. TURN BOOST PUMP OFF.
 - REMOVE .006" SHIM.
 - CLOSE THRO. TO 7-R PPH FUEL FLOW. METERING HEAD INCREASE FROM (2) 5.0" FUEL MAX.

Calibration Test Sheet
Figure 1

