TITLE

PNEUMATIC - BLEED AIR FLOW CONTROL VALVE INSPECTION

EFFECTIVITY

MODEL	SERIAL NUMBERS
B200GT	BY-427 thru BY-457
B200CGT	BZ-5 thru BZ-9
B300	FL-1290, FL-1292 thru FL-1319
B300C	FM-106 thru FM-110

REASON

The bleed air flow control valve may be defective, resulting in failure of the valve to open.

DESCRIPTION

This service document provides parts and instructions to inspect the bleed air flow control valve and replace it as necessary.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

1) The mechanic must complete all of the instructions in the service document, including the intent therein.
2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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TOOLING

No specialized tooling is required to complete this service document.

REFERENCES

Beechcraft Super King Air B200GT/B200CGT Fusion Maintenance Manual (P/N 434-590168-0009)

King Air 250/250C (Model B200GT/B200CGT) Fusion Pilots Operating Handbook (P/N 434-590168-0003)

Beechcraft Super King Air B300/B300C Fusion Maintenance Manual (P/N 434-590169-0009)

King Air 350/350C (Model B300/B300C) Fusion Pilots Operating Handbook (P/N 434-590169-0003)

King Air 350, 350ER, 350C, 350CER (with or without Extended Fuel Capability) Fusion Pilots Operating Handbook (P/N 434-590170-0003)

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Check the operation of the 101-380025-21 Flow Control Valve as follows:
   A. If the airplane is below 3000 feet Mean Sea Level (MSL), go to Step 2.

      NOTE: Airplanes below 3000 feet Mean Seal Level (MSL) that are unable or do not want to perform an engine run may follow step 1.B.

   B. If the airplane is above 3000 feet MSL, do as follows:
      (1) Connect ground power unit.
      (2) Put the Master Avionics switch to the ON position.
      (3) Make sure the Temp Control Circuit Breaker is engaged.
      (4) Connect a digital manometer to the test ports.
      (5) Depending upon the customer's airplane, connect the nitrogen cart as follows:

         NOTE: If the facilities shop air pressure can be maintained between 120 to 150 PSI for thirty seconds, then shop air can be used instead of a nitrogen cart.

         (a) For all Model B200 Airplanes, connect the nitrogen cart and cap the lines as shown within Figure 1, Sheet 1.
         (b) For all Model B300 Airplanes, connect the nitrogen cart and cap the lines as shown within Figure 2, Sheet 1.

      (6) Put the left and right BLEED AIR VALVES to OPEN position.
      (7) Make sure that the left and right firewall valve make an audible click.
      (8) Put the left and right BLEED AIR VALVES Switches to the ENVIR OFF position.
      (9) Supply a steady pressure of 120 to 150 PSI of nitrogen to the left firewall valve.
      (10) Put the ENVIR BLEED AIR Switch to the NORMAL position.
      (11) Put the left BLEED AIR VALVES Switch to the OPEN position for 30 seconds.
      (12) Put the left BLEED AIR VALVES Switch to the ENVIR OFF position.
      (13) Repeat steps (10) and (11) three additional times.
      (14) With pressure still applied, put the left BLEED AIR VALVES switch to the OPEN position. Verify that the shutoff valve opens and air flows through the flow pack and record the manometer readings.
      (15) Repeat steps (8) thru (13) for the right hand side.

C. (Refer to Figure 1 and 2, Sheet 1) Remove the nitrogen test cart as follows:

(1) Depending upon the customer's airplane, use Figure 1 or 2, Sheet 1 to remove all caps and the nitrogen testing equipment from the engine bay.

(2) Reconnect all disconnected bleed air lines.

(3) Go to Step 9.

(4) Depending upon the operation of the left or right 101-380025-21 Flow Control Valves, go to the steps as follows:

(a) If the left and/or right 101-380025-21 Flow Control Valve failed, go to Step 5.

(b) If the left and right 101-380025-21 Flow Control Valve did not fail, go to Step 9.

2. Check the operation of the 101-380025-21 Flow Control Valve as follows:

- For engine startup and shutdown procedures, refer to the applicable Pilots Operating Handbook, Section 4 - Normal Procedures.

A. Connect a digital manometer to the test ports.

B. With the left and right engines running, put the ENVIR BLEED AIR Switch to the NORMAL position.

C. Put the left and right BLEED AIR VALVES Switches to the ENVIR OFF position.

D. Move the left engine throttle lever to the full forward or full power position.

E. Put the left BLEED AIR VALVES Switch to the OPEN position for 30 seconds.

F. Put the left BLEED AIR VALVES Switch to the ENVIR OFF position.

G. Repeat Steps 2. D. through 2. E. three additional times.

H. Move the left engine throttle lever to the idle position.

I. Repeat Steps 2. A. through 2. G. for the right engine and BLEED AIR VALVES Switch.

J. Put the left BLEED AIR VALVES Switch into the OPEN position.

K. Put the ENVIRONMENTAL MODE knob into the AUTO position, and put the COCKPIT TEMP and CABIN TEMP knob into the full INCR position.

L. Depending upon which type of environmental control system is installed, do as follows:

(1) For electric compressor airplanes, make sure the heat is felt from the cockpit warm air floor ducts.

(2) For engine driven compressor airplanes, make sure the heat is felt from the cockpit warm air ducts, cabin warm air ducts, or the baggage warm air ducts.

NOTE: It is up to the technician's discretion, that a manometer check may be used instead of feeling for warm air from the cockpit air ducts. This check can only be completed on a Keith mechanical compressor system.

M. Put the left BLEED AIR VALVES Switch to the ENVIR OFF position.

N. Depending upon which type of environmental control system is installed, do as follows:

(1) For electric compressor airplanes, make sure the heat is not felt from the cockpit warm air floor ducts.

(2) For engine driven compressor airplanes, make sure the heat is not felt from the cockpit warm air ducts, cabin warm air ducts, or the baggage warm air ducts.

O. Put the right BLEED AIR VALVES Switch into the OPEN position.

P. Put the ENVIRONMENTAL MODE knob into the AUTO position, and put the COCKPIT TEMP and CABIN TEMP knob into the full INCR position.

Q. Depending upon which type of environmental control system is installed, do as follows:

(1) For electric compressor airplanes, make sure the heat is felt from the aft cabin warm air floor ducts.

(2) For engine driven compressor airplanes, make sure the heat is felt from the cockpit warm air ducts, cabin warm air ducts, or the baggage warm air ducts.

R. Put the right BLEED AIR VALVES Switch to the ENVIR OFF position.

S. Depending upon which type of environmental control system is installed, do as follows:

(1) For electric compressor airplanes, make sure the heat is not felt from the aft cabin warm air floor ducts.

(2) For engine driven compressor airplanes, make sure the heat is not felt from the cockpit warm air ducts, cabin warm air ducts, or the baggage warm air ducts.

T. Shutdown the engines.

3. Depending upon the left or right 101-380025-21 Flow Control Valve operation, do as follows:

A. If the airflow did not shut off when operating the left or right BLEED AIR VALVES Switches, go to Step 4.

B. If the airflow did shut off when operating the left and right BLEED AIR VALVES Switches, go to Step 9.

4. Prepare the airplane for maintenance.

A. Make sure that the airplane is electrically grounded.

B. Make sure that all switches are in the OFF/NORM position.

C. Disconnect electrical power from the airplane.

(1) Disconnect external electrical power.

(2) Disconnect the main airplane battery.

D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.

5. Remove the left and/or right 101-380025-21 Flow Control Valve. (Refer to the applicable Maintenance Manual, Chapter 21, Flow Control Valve - Removal/Installation.)

6. Install the new left and/or right 101-380025-21 Flow Control Valve. (Refer to the applicable Maintenance Manual, Chapter 21, Flow Control Valve - Removal/Installation.)

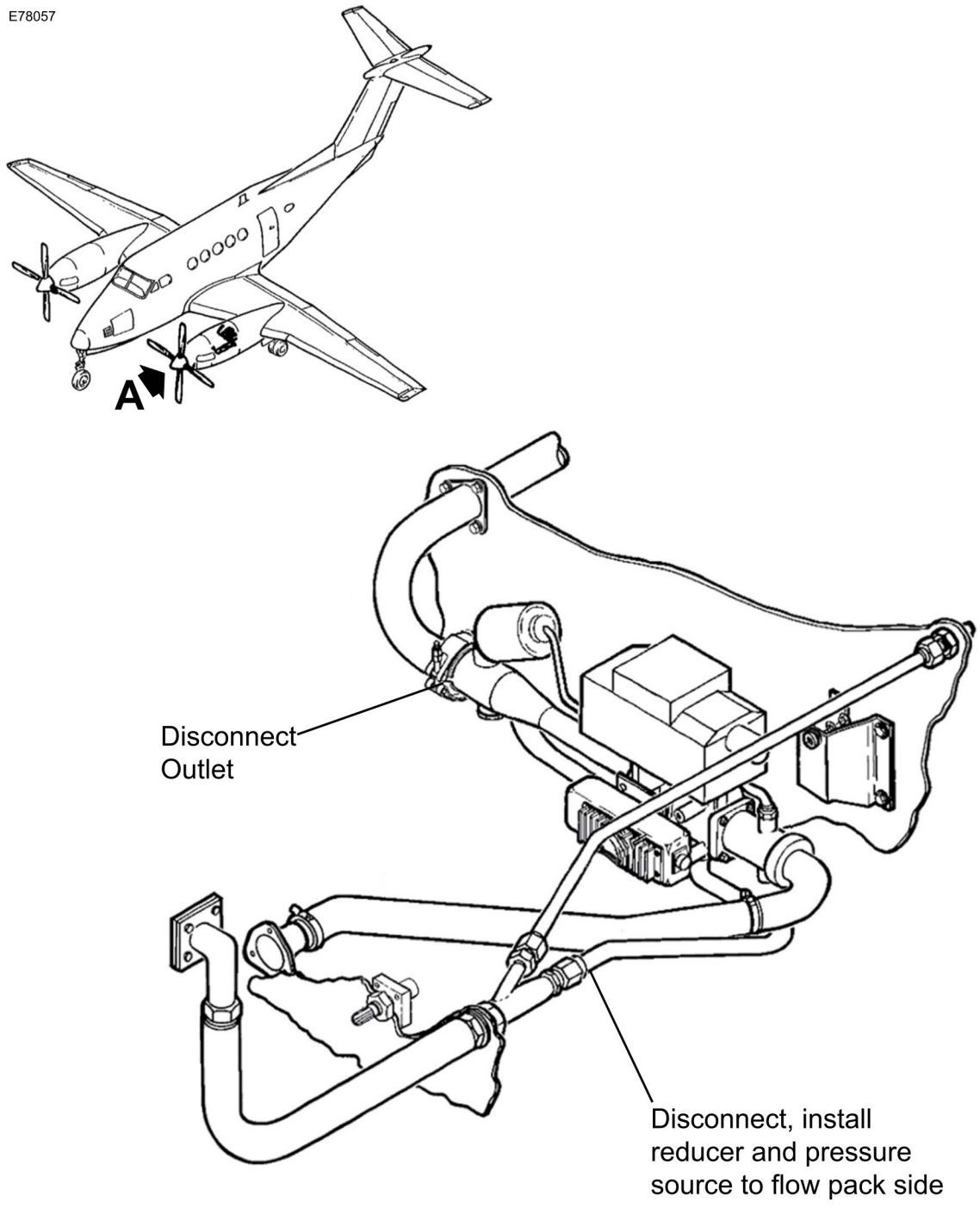
7. Remove the maintenance warning tags and connect the airplane battery.

8. Do the Before Takeoff (Runup) procedure to operate the left and/or right 101-380025-21 Flow Control Valve. (Refer to the applicable Pilots Operating Handbook, Section 4 - Normal Procedures.)

9. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.



DETAIL A
(Left Shown, Right Opposite)

Figure 1. B200 Nitrogen Cart Connection (Sheet 1)

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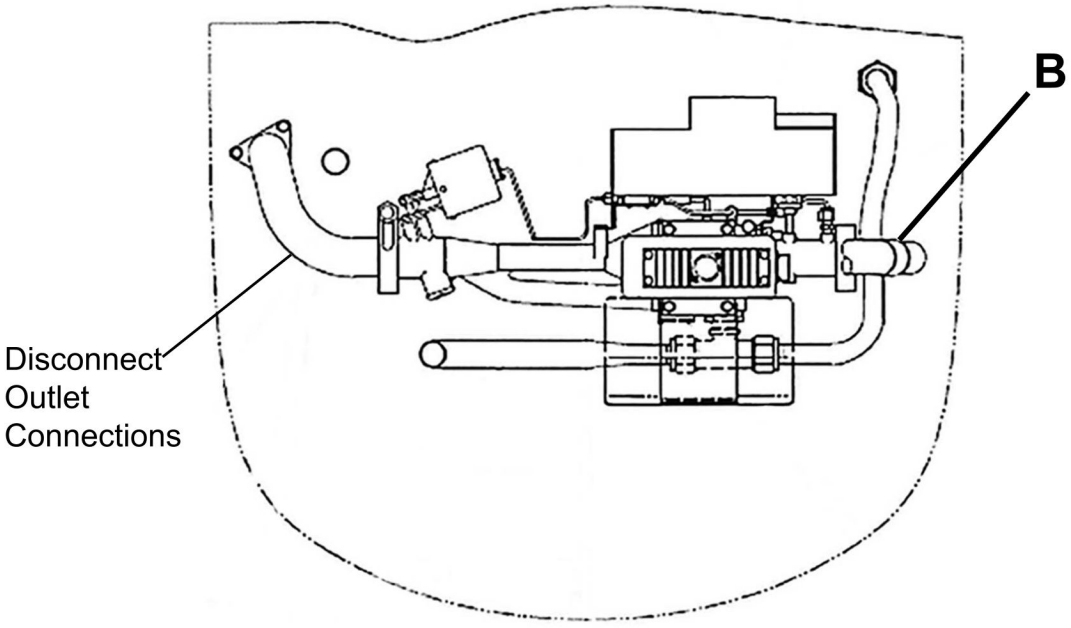
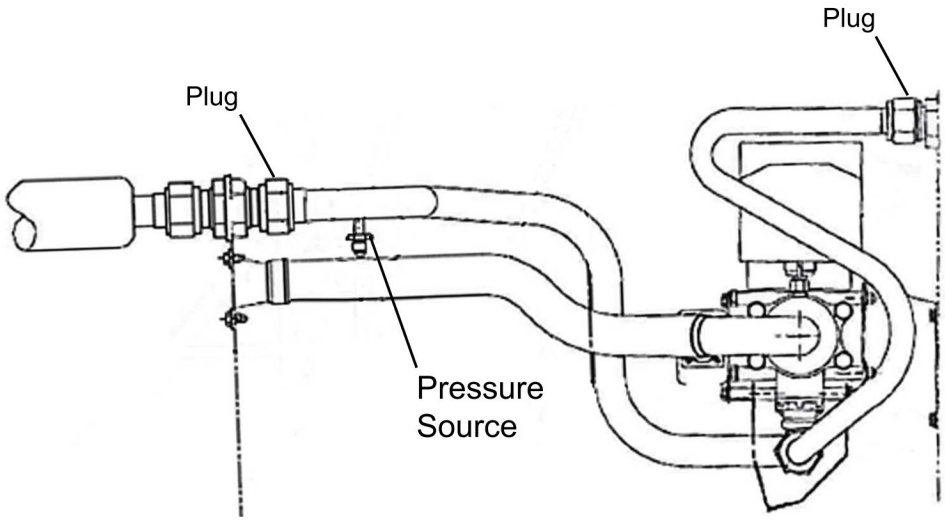


DETAIL A
(Left Shown, Right Opposite)



DETAIL B
(Left Shown, Right Opposite)

Figure 2. B300 Nitrogen Cart Connection (Sheet 1)

MATERIAL INFORMATION

The part below may be required to complete this service letter.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
101-380025-21	As Required	Flow Control Valve	101-380025-21	Install new. Return old to TAPD.

The existing 101-380025-21 core may be returned to Textron Aviation Inc., Core Returns, Bldg. P43 Dock R5, 7123 SW Blvd, Wichita, KS 67215 and exchanged for an upgraded unit. Due to limited availability, advance scheduling is required, please expedite the return of the removed part.

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at https://ww2.txtav.com/Parts/Promos/TAPD.

Based on availability and lead times, parts may require advanced scheduling.

In cases where the required part(s) are approved as exchange, order the exchange part and, upon completion, expedite the return of the removed part to avoid return penalties. Contact the Textron Aviation Parts Distribution Sales Desk for availability of exchange parts.

TITLE

PNEUMATIC - BLEED AIR FLOW CONTROL VALVE INSPECTION

TO:

Beechcraft Model B200GT, B200CGT, B300, and B300C Aircraft Owner

REASON

The bleed air flow control valve may be defective.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	3 hours per side
Test and Inspection	1

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
101-380025-21EX	*	*

The existing 101-380025-21 core may be returned to Textron Aviation Inc., Core Returns, Bldg. P43 Dock R5, 7123 SW Blvd, Wichita, KS 67215 and exchanged for an upgraded unit. Due to limited availability, advance scheduling is required, please expedite the return of the removed part.

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WARRANTY

This service document is *recommended* . Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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Eligibility: Airplanes identified within the serial number effectivity of this service document must have active Airframe warranty coverage on the original issue date of this document and the coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Beechcraft Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.
Please submit your claim form online at *ww2.txtav.com/Parts* or email the completed Textron Aviation Claim Form to *warranty@txtav.com*. If submitted on-line, a Return Authorization will be provided. If a paper claim is submitted, your claim will be entered into the system and a Return Authorization will be sent to you.
The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.
Parts to be returned to Textron Aviation should be forwarded to:

TEXTRON AVIATION PARTS DISTRIBUTION
CORE RETURNS
BLDG P43 DOCK R5
7123 SW BLVD
Wichita, KS 67215

Expiration: June 11, 2026 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at support.txtav.com to register.