



# CLASS I SERVICE INSTRUCTIONS

76

No. 1105  
ATA Code 36-10

**SUBJECT:** PNEUMATIC - INSTALLATION OF IMPROVED INSTRUMENT AIR LINES

**EFFECTIVITY:** BEEHCRAFT Duchess 76, serials ME-1 through ME-154.

**REASON:** To install improved instrument air lines between the pressure regulators and the fuselage.

**COMPLIANCE:** Beech Aircraft Corporation considers this to be a mandatory modification and it should be accomplished as soon as possible after receipt of these Service Instructions, but no later than the next 50 service hours.

**APPROVAL:** FAA Approved - DOA CE-2.

**MANPOWER:** The following information is for planning purposes only:  
Estimated man-hours: 8 hours.  
Suggested number of men: 1 man.

**MATERIAL:** The following parts required for this modification may be ordered through BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers.

PART NUMBER	DESCRIPTION	QUANTITY PER AIRPLANE
105-320011-13	Tube (aluminum)	2
102-540020-207	Tube (plastic)	2
U8	Clamp	4
AN743-12	Bracket	2
MS21104D10	Clamp	2
MS35206-244	Screw	2
MS21042L08	Nut	4
AN960-8L	Washer	4

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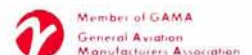
Beech Aircraft Corporation issues service information for the benefit of owners and fixed base operators in the form of three classes of Service Instructions. CLASS I (Red Border) are changes, inspections, and modifications that could affect safety. The factory considers compliance mandatory. CLASS II (Green Border) covers changes, modifications, improvements or inspections the factory feels will benefit the owner and although highly recommended, they are not considered mandatory compliance, unless specified at the time of issuance. Class I and II are mailed to:

- (a) BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- (b) Owners of record on the FAA Registration list and the

BEEHCRAFT International Owner Notification Service List.  
(c) Those having a publications subscription.

CLASS III (No Border) covers changes which are optional, maintenance aids, product improvement kits and miscellaneous service information. Compliance is at the owner or operator's prerogative. Copies of Class III are distributed per a and c above. Information on Owner Notification Service or Subscriptions can be obtained through any BEEHCRAFT Aero or Aviation Center, International Distributor and Dealer, or the Factory. As Service Instructions are issued, temporary notation in the index should be made until the index is revised. Warranty will be allowed only when specifically defined in the Service Instructions and in accordance with Beech Warranty Policy.

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CLASS I

## Service Instructions No. 1105

PART NUMBER	DESCRIPTION	QUANTITY PER AIRPLANE
MS35206-246	Screw	2
AN3-10A /M/	Bolt	4
NAS43DD3-32	Spacer	4
AN960-10	Washer	4
MS21042L3	Nut	4

### WARRANTY:

Warranty credit for parts and labor to the extent noted under MATERIAL and MANPOWER will be allowed for all claims submitted prior to March 31, 1980.

All warranty reimbursements are handled through franchised BEEHCRAFT outlets. Owners and operators may arrange with these outlets to perform the work and submit the standard Beech Aircraft Corporation warranty claim form to the Commercial Service Department, Beech Aircraft Corporation, Wichita, Kansas 67201.

### SPECIAL TOOLS:

None.

### WEIGHT AND BALANCE:

None.

### REFERENCES:

None.

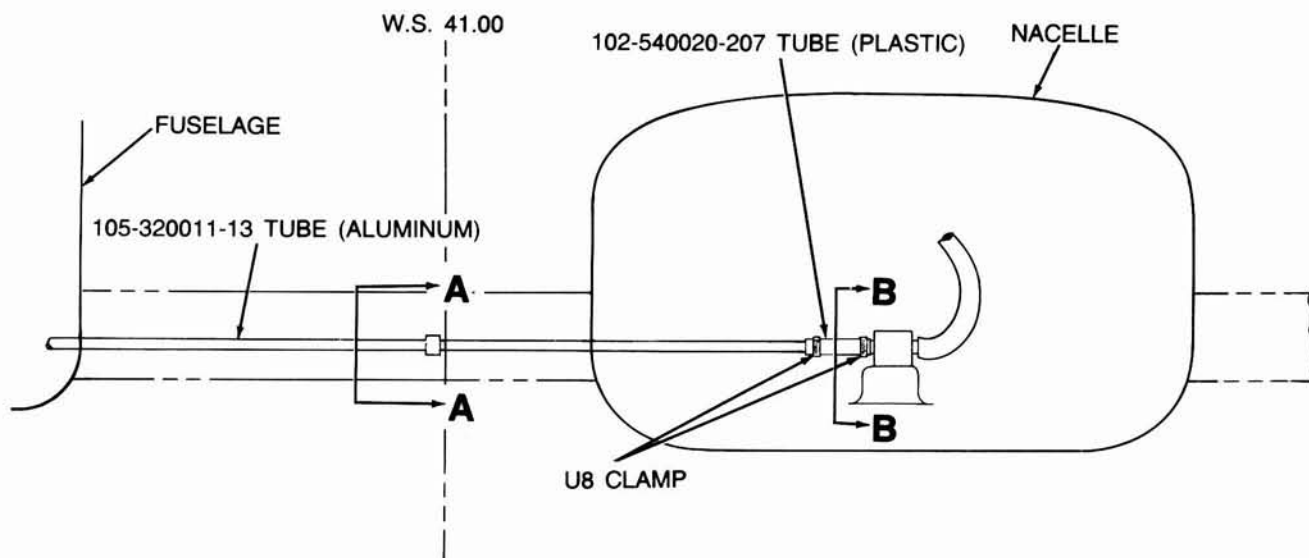
### PUBLICATIONS AFFECTED:

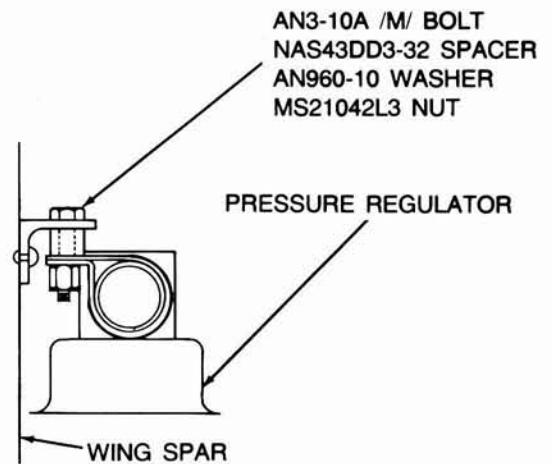
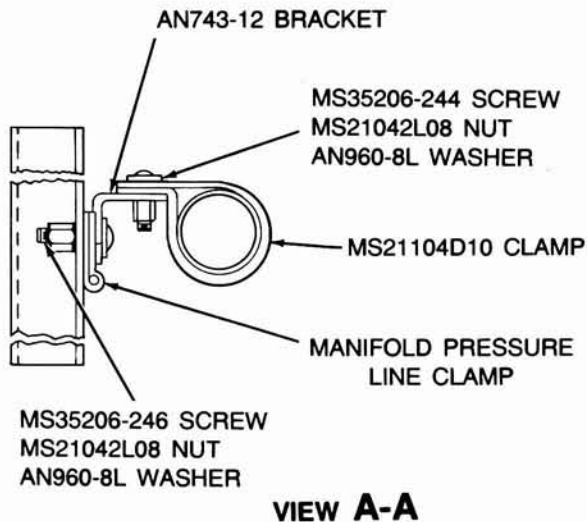
It is recommended that a note to "See Service Instructions No. 1105" be made in all BEEHCRAFT Duchess 76 Parts Catalog copies, P/N 105-590000-9B or subsequent, Chapter 36-10.

### ACCOMPLISHMENT INSTRUCTIONS:

These Service Instructions may be accomplished on both sides of the airplane as follows:

1. Remove the nacelle access plate from the top of the nacelle.
2. Remove the leading edge fairing from between the engine nacelle and the fuselage.





3. Remove the upholstery panel forward of the cabin door.
4. Remove and discard the plastic instrument air tube between the pressure regulator and the aluminum tube which enters the fuselage.
5. Remove and discard the aluminum tube which enters the fuselage. Retain the clamp which connects the aluminum tube to the plastic tube inside the fuselage.
6. Place the new P/N 105-320011-13 aluminum tube in position as shown in the illustration. Connect the inboard end of the P/N 105-320011-13 aluminum tube to the plastic tube inside the fuselage using the clamp which was removed in step 5.
7. Locate the clamp which attaches the manifold pressure line to the front spar (W.S. 41.00) and remove the screw, nut and washer.
8. Install a P/N AN743-12 bracket and a P/N MS21104D10 clamp to hold the P/N 105-320011-13 aluminum tube. Locate the bracket and clamp using the hardware as shown in the illustration, view A-A.
9. Remove the two bolts which attach the pressure regulator to the two brackets on the spar.
10. Reinstall the pressure regulator to the brackets using the spacers and other hardware as shown in the illustration, view B-B.
11. Connect the outboard end of the P/N 105-320011-13 aluminum tube to the pressure regulator using a P/N 102-540020-207 plastic tube and the hardware as shown in the illustration.
12. Repeat steps 1 through 11 on the other side of the airplane.
13. Perform an operational check of the instrument air system to check for proper pressure and leaks in the system.
14. Reinstall the upholstery panels, leading edge fairings, nacelle access plates and any other equipment or panels which were removed to accomplish these Service Instructions.

**RECORD COMPLIANCE:**

Upon completion of these Service Instructions, make an appropriate maintenance record entry.