DCA17FR003
SEPTA
Collision of Trolley Car 9085 and 9101
38th Street and Lancaster Avenue
Philadelphia, PA
January 4, 2017

Attachment 4

WABTEC D Pilotair Valve Assembly
Service Bulletin

Wabtec
PASSENGER TRANSIT
P.O. Box 11, Spartanburg, S.C. 29304-0011

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Service Bulletin

Answering today's needs ... and anticipating tomorrow's.

"D" PILOTAIR Valve with Electrical Switch

This Service Bulletin is issued for the "D" PILOTAIR Valve, Part Number 0584566 as supplied to Southeastern Pennsylvania Transportation Authority.

The "D" PILOTAIR Valve is a two way, manually operated push button, spool type pneumatic valve with an electrical switch. Recently there has been an incident reported of the electrical switch not operating as intended. In order to avoid these incidents, the "D" PILOTAIR Valve must be inspected for proper switch installation and operation. If the switch is installed too close to the valve body, potential damage from the plunger could result to the switch. If the switch is installed too far from the body, the switch may not actuate from no contact with the plunger. Wabtec recommends that all "D" PILOTAIR Valves be inspected.

The supplier of this valve to Wabtec is Aventics Corporation. Inquiries can be made to Aventics Corporation 1953 Mercer Road, Lexington, KY 40511. The assembly and function verification of the "D" PILOTAIR may be found in their product literature.

As partially stated in the product literature, the following is information for just assembling the switch to the valve body. Complete assembly information if needed should be obtained from Aventics Corporation.

Refer to Figure 1 - "D" PILOTAIR Valve Assembly View

The complete pneumatic valve must be assembled before attaching the switch. Move the handle to position 2 in preparation of the switch adjustment. Insure that the jam nut is completely threaded onto the switch to allow the switch to be threaded into the switch adapter.

Slowly thread the switch into the valve's switch adapter until the switch is activated as indicated by the resistance between terminals "COMM" and "NORMALLY OPEN" changing to less than 5 ohms. Continue to turn the switch until the alignment is as given in Figure 1. For compensation of normal wear, continue to turn switch one complete revolution for alignment as noted in previous step. Tighten the jam nut to 4-6 in-lbs to secure assembly. Wabtec recommends that a torque seal be placed on the jam nut for verification.

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Verification of the switch operation can be validated with the use of an ohmmeter. Position the valve's handle and verify the results of the ohmmeter indications from the switch contacts per table 1.

Handle Position	Ohmmeter Indication "COMM to NORMALLY OPEN"	Ohmmeter Indication "COMM to NORMALLY CLOSED"
Position 1 (Up)	Infinity	Less than 5 ohms
Position 2 (Down)	Less than 5 ohms	Infinity

Table 1 – Handle Position Switch Contact Indications

If the "D" PILOTAIR Valve has been removed from the car, before re-installation the "D" PILOTAIR Valve must be tested for proper operation. Upon on-car installation, the valve must be verified for proper operation as intended.

Contact your local Wabtec representative for any questions.

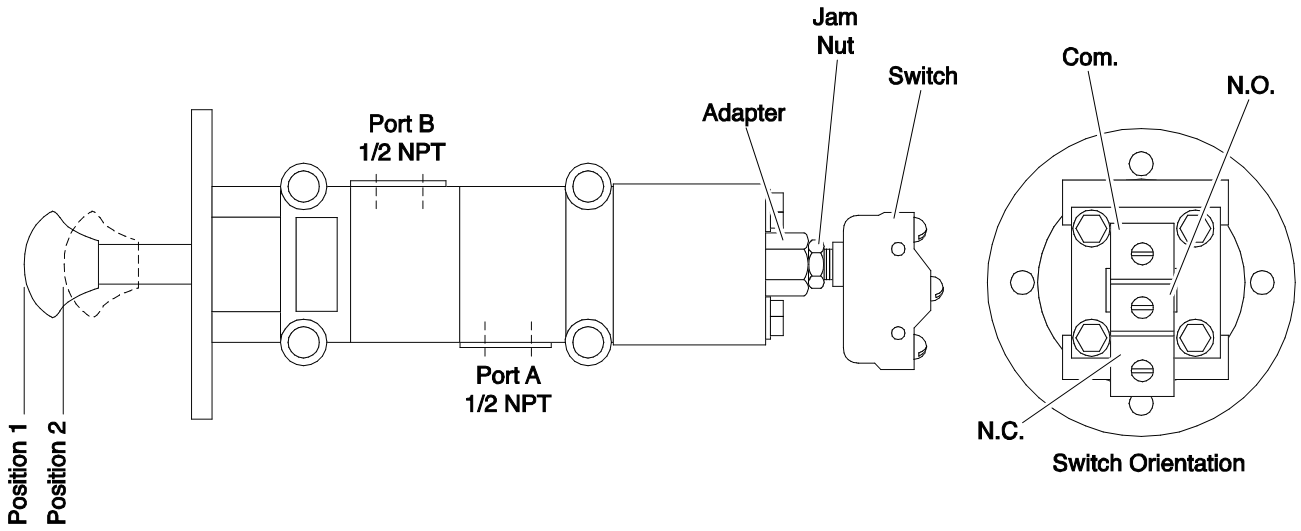

Figure 1 - "D" PILOTAIR Valve Assembly View