YORK®	SB0071 (Supersedes SB0071 [806])	1106
	File In: N/A	
ES SERVICE BULLETIN	Affected Equipment: All YPAL MOD "D" & "E" Packaged Rooftop Units	

Subject: Transducer Operation

Issue Date: 11/14/06 **Withdrawal Date: 12/31/06** **Data Control Level: C**
Materials Needed: N/A
Tools Required: VOM Meter
Est. Time Required: 1 Hour plus Travel Time
Warranty: Yes
Revision Notes: N/A

GENERAL

We recently discovered a problem with the operation of the duct static, building static, and return fan pressure transducers on the MOD D and E YPAL rooftop units. The problem has been identified as a drift in the calibration of the above transducer. This results in the output DC voltage not representing the actual pressure input.

The Mamac transducers can be powered by 12 to 40 VDC or 12 to 35 VAC. We are currently using a 12 VDC input, which is the bottom of the specified Mamac operating range. In some cases the power supply in the unit allows the 12 VDC output to drop to 11.6 to 11.8 VDC. When this occurs the output volt verses input pressure relationship will drift.

SOLUTION

The solution is to change the voltage input to the transducer from 12-VDC to 24-VAC.

We recommend that the following modification be made to all YPAL MOD D and E units.

1. For the Duct Static Transducer remove wire 307 of the harness identified as “DUCT STATIC” from terminal block CTB4 and reconnect the wire to terminal block CTB3.
2. Check for 24-VAC between terminal + and – at the Duct Static Transducer.
3. For the Building Static Transducer remove wire 307 of the harness identified as “BUILDING STATIC” from terminal block CTB4 and reconnect the wire to terminal block CTB3.
4. Check for 24-VAC between terminal + and – at the Building Static Transducer.

Work on this equipment should only be done by properly trained personnel who are qualified to work on this type of equipment. Failure to comply with this requirement could expose the worker, the equipment and the building and its inhabitants to the risk of injury or property damage.

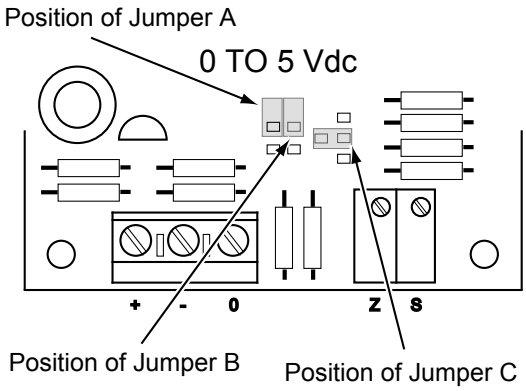
The instructions on this service bulletin are written assuming the individual who will perform this work is a fully trained HVAC & R journeyman or equivalent, certified in refrigerant handling and recovery techniques, and knowledgeable with regard to electrical lock out/tag out procedures. The individual performing this work should be aware of and comply with all national, state and local safety and environmental regulations while carrying out this work. Before attempting to work on any equipment, the individual should be thoroughly familiar with the equipment by reading and understanding the associated service literature applicable to the equipment. If you do not have this literature, you may obtain it by contacting a York Service Office.

Should there be any question concerning any aspect of the tasks outlined in this bulletin, please consult a York Service Office prior to attempting the work. Please be aware that this information may be time sensitive and that York reserves the right to revise this information at any time. Be certain you are working with the latest information. The York Service office nearest you may be found on the Internet at www.york.com.

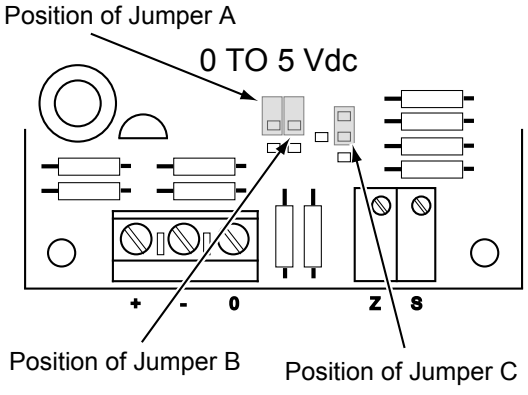
5. For the Return Static Transducer remove wire 307 of the harness identified as “RETURN STATIC” from terminal block CTB4 and reconnect the wire to terminal block CTB3.
6. Check for 24-VAC between terminal + and – at the Return Static Transducer.
7. Verify the proper calibration of the transducer as follows:
   a. For the duct static transducer remove all the tubing from the transducer. Identify which tube was on the High and Low connections of the transducer. The voltage output between terminals O and – at the transducer should be 12 to 14 millivolts DC. If this is not the case replace the transducer with part number 025-35808-002. When the new transducer is installed it must be configured based on the application, see the figure below:

DUCT STATIC TRANSDUCER CONFIGURATION

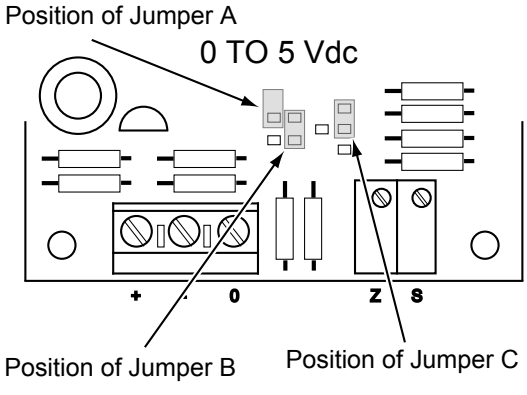
SETTINGS FOR “DUCT STATIC SNS SPAN OF 0 TO 2.5” WC



SETTINGS FOR “DUCT STATIC SNS SPAN OF 0 TO 5” WC

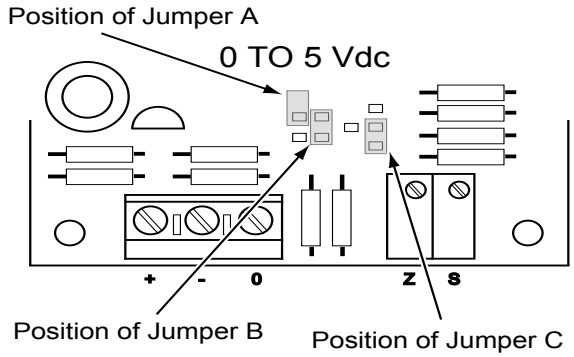


SETTINGS FOR “DUCT STATIC SNS SPAN OF 0 TO 1.25” WC

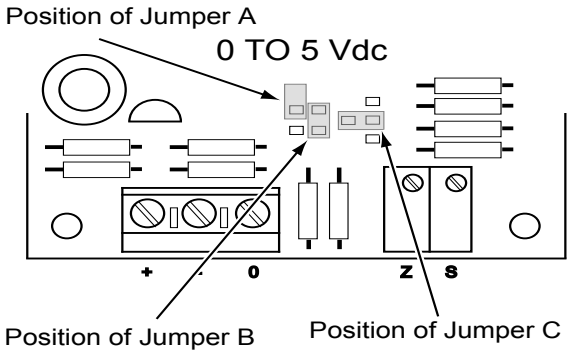


b. For the building pressure and return fan transducer remove all the tubing from the transducer. Identify which tube was on the High and Low connections of the transducer. The voltage output between terminals O and – at the transducer should be 2.5 volts DC. If this is not the case replace the transducer with part number 025-35808-002. When the new transducer is installed it must be configured based on the application, see the figure below:

BUILDING PRESSURE TRANSDUCER CONFIGURATION
(- 0.625 TO + 0.625 w.c.)



RETURN FAN TRANSDUCER CONFIGURATION
(- 1.25 TO + 1.25" w.c.)



c. Replace the tubing to the High and Low connections on each of the transducers.

SUBMITTING THE WARRANTY

Claims for repairs must be made using the standard procedures. Time allowance is 1 hour plus travel. The "Problem Description" section of the warranty claim must contain a reference to Service Bulletin SB0071