



GRAHAM-WHITE MFG. CO.
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DRYER TEST

For 975 & 994 Series Air Dryers

Using No. 5666-150 Power Analyzer

BULLETIN: TP 5666-150

EFFECTIVE: 07-06-92

REVISION: A; 05-18-07

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PURPOSE:

The Salem No. 5666-150 Power Analyzer Assembly is designed to verify correct voltage supply to Graham White 994 and 975 series air dryers as well as cycle the dryers. The analyzer will detect and identify the correct constant supply voltage (74 VDC nominal), intermittent (74 VDC Signal) voltage and incorrect reverse polarity for both constant and signal voltages. Additionally, correct cycling and time cycle of the 975 dryer (60 seconds each side) and the 994 dryer (1 minute 5 seconds each side) can be verified using the Power Analyzer test switch without the compressor cycling.

WARNING:

Hazardous Voltage - DO NOT CONNECT or DISCONNECT this device while equipment is energized. DO NOT REMOVE the cover of this device while energized.

OPERATION:

1.0 Supply and Intermittent Voltage Test

1.1 Place the Locomotives Breaker for the Air Dryer in "OFF" position. Make Power Analyzer hook-up at Air Dryer. Return Air Dryer Breaker to "ON". The Power Analyzer DOES NOT need to be connected to the Air Dryer unless you need to test the Dryer Cycle Time with Power Analyzer Test Switch.

1.2 With the Power Analyzer's Test Switch in "OFF" position, the following should be evident:

- "Supply Voltage Normal" L.E.D. is illuminated.
- "Intermittent Voltage On" L.E.D. is illuminated ONLY when compressor is pumping.

1.3 **NOTE:** The Power Analyzer is for indicating Power Supply Problems ONLY. An indication of supply voltage or intermittent voltage too high or too low requires electrical service. Any adjustments to the voltage should be performed using the Locomotive Manufacturer's recommended test equipment and procedures. (Disconnect Power Analyzer During Any Adjustment).

2.0 Polarity Check

2.1 If either L.E.D. for Incorrect Polarity Voltage is illuminated, electrical service is required.

3.0 Dryer Cycle Test

3.1 With Power Analyzer connected to Air Dryer, switch Test Switch to "ON" position, the following should occur:

- Dryer should start to cycle with discharges from a drain valve every (60± seconds 975 dryers and 65± seconds 994 dryers). **Note:** Main reservoir pressure must be 100 PSI or greater for the 975 dryer to be functioning.

3.2 The Memory feature (if applicable) of the Air Dryer can also be tested. By moving the Test Switch to "OFF" position during the dryer cycle, the Dryer should stop where it is in the cycle and then return to the same Tower to complete the cycle when the test switch is returned to the "ON" position. Note: It is difficult to know which tower is cycling with the 994 so timing only can be observed with 17 seconds repressurization and 48 seconds purge.

3.3 If Dryer cycling problem is observed, refer to Dryer Repair & Maintenance for troubleshooting.