REPLACING PAGE ADDENDUM
Filing Instructions:
1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
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KS-16523 L1 AIR DRYER

REQUIREMENTS AND ADJUSTING PROCEDURES

1. GENERAL

1.001 This addendum supplements section 161-307-701, Issue 3. The attached pages must be inserted in accordance with the filing instructions above.

1.002 This addendum is issued to revise the method of checking the operation of the humidity alarm.

Attached:
Page 19 dated August 1969, revised
Page 20 dated August 1969, revised
Page 20.1 dated August 1969, added

4. REQUIREMENTS AND ADJUSTING PROCEDURES

The following changes apply to Part 4 of the section:

(a) 4.25, A.—revised

(b) 4.25, B.—revised

(d) Turn the right adjustment screw on top of the housing using the 1-1/4 inch screwdriver until the contacts make, as observed on the test set. The right adjustment screw designated No. 2 or "L" controls the setting of the low pressure alarm. Turn the screw clockwise to raise and counterclockwise to lower the operation point.

(e) After adjusting, recheck the requirements of 4.19 through 4.21. If alarm operation is satisfactory adjust the regulator to the required outlet pressure, tighten the handwheel locknut, remove the test set and replace the alarm circuit plug in the receptacle.

HUMIDITY SENSING ELEMENT

4.24 The sensing element (Fig. 2) shall be inspected for the presence of oil at 3-month intervals and shall be replaced annually. Inspect and replace the element as follows:

(1) Remove the alarm circuit plug from the alarm receptacle in the cabinet to prevent operation of the office alarm.

(2) Shut off the air supply to the cable system.

(3) Loosen the locknut under the handwheel of the pressure regulator using the 8-inch adjustable wrench (R-2512). Shut off the regulator by turning the handwheel fully counterclockwise.

(4) Remove the retaining nut from the end of the manifold containing the sensing element (Fig. 1 and 3) using the 9-inch monkey wrench (R-2652) if it is a hexagonal nut and the spanner wrench (American Instrument Co., No. 4-4896A) if it is a ring nut. Remove the retaining ring, socket, shield, and element from the manifold by pulling gently on the cable, taking care not to lose the O-ring used to seal the manifold.

Caution: Avoid excessive flexing of the cable since this might damage the leads. Extreme care should be taken in removing and handling the sensing element.

(5) Clean the outer surfaces of the sensing element shield by wiping with a clean dry cloth. Also clean the interior of the manifold, using different sections of the cloth until the appearance of the cloth indicates the inner surface of the manifold is clean and dry.

(6) If there is an indication of oil on the sensing element it will be necessary to flush out the dryer as described in Part 5, Flushing Procedures.

(7) On annual inspections, remove and discard the element and install a new one. To do this, remove the mounting screw at the bottom of the axial hole through the element, using the 3-inch screwdriver. Unplug and discard the element and insert a new one.

(8) Check for humidity alarm operation as covered in 4.25.

(9) Make sure the sensing element mounting screw is securely tightened and the O-ring is positioned on the retaining ring. Carefully insert the sensing element into the manifold, seat the retaining ring in the manifold, and finger tighten the retaining nut.

(10) Open the air line to the cable system. If the KS-16648 Dual Pressure Kit is provided, open the low pressure line from the kit to the cable system. Adjust the output pressure regulator to furnish the required pressure and tighten the locknut under the handwheel. Replace the office alarm circuit connector.

HUMIDITY ALARM

4.25 The humidity alarm (Fig. 8), designed to operate if the relative humidity of the air passing through the manifold exceeds 10 percent at 70°F, shall be checked at 3-month intervals, as follows:

A. With Sensing Element Removed From Manifold:

(1) Remove the alarm circuit plug from the alarm receptacle in the cabinet.

(2) Move the disconnect switch in the branch circuit to the air dryer, to the OFF position.

(3) Remove the humidity alarm cover using 1-1/4 inch screwdriver (Stanley 2012).

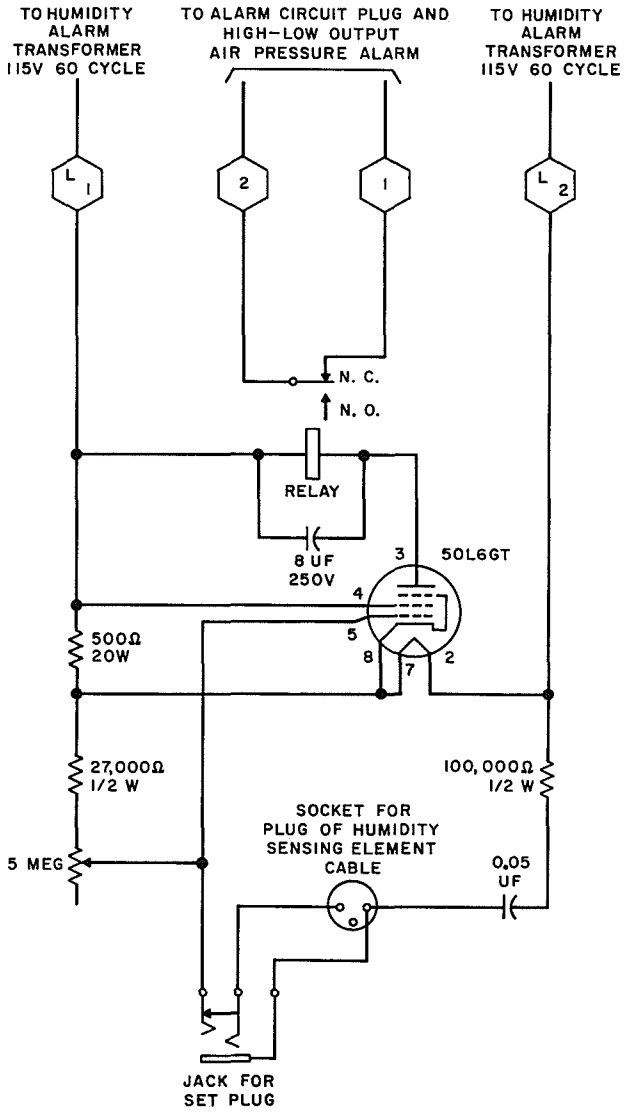

Fig. 8—Humidity Alarm Relay Assembly—Schematic Diagram

(4) Using the 3-inch screwdriver, disconnect the lead to the pressure alarm from terminal 1; take care not to remove the lead to the alarm plug.

(5) Connect the 81A Test Set to the alarm receptacle; the test set buzzer should operate indicating operation of the alarm.

(6) Move the disconnect switch in the branch circuit to the air dryer to the ON position.

(7) After about 15 seconds, alarm condition should clear.

(8) Remove sensing element from manifold; operation of the test set buzzer indicates operation of the alarm.

(9) If the buzzer does not operate, breathe on the sensing element. If the buzzer still does not operate, make sure the cable from the sensing element is securely plugged into the receptacle in the alarm case. Examine the cable for a broken conductor and replace the cable, if necessary. If the cable is satisfactory, replace the sensing element and repeat the check.

(10) If the buzzer operates, remove the test set from the alarm plug.

(11) Move the disconnect switch, in the branch circuit to the air dryer, to the OFF position.

(12) Reconnect the air pressure alarm lead to terminal 1 in the humidity alarm and mount the cover. Mount the sensing element in the manifold as covered in 4.24 (9).

Caution: Do not use an ohmmeter to measure the resistance of the sensing element or in any manner apply a voltage to the sensing element as this will render it inoperative.

(13) Move the disconnect switch, in the branch circuit to the air dryer, to the ON position.

(14) Reconnect the alarm circuit plug to the alarm receptacle.

B. ***With Sensing Element in Manifold:***

(1) Remove the alarm circuit plug from the alarm receptacle in the cabinet.

(2) Move the disconnect switch in the branch circuit to the air dryer, to the OFF position.

(3) Remove the humidity alarm cover using the 1-1/4 inch screwdriver (Stanley 2012).

(4) Using the 3-inch screwdriver, disconnect the lead to the pressure alarm from terminal 1; take care not to remove the lead to the alarm plug.

(5) Connect the 81A Test Set to the alarm receptacle; test set buzzer should operate.

(6) Move the disconnect switch, in the branch circuit of the air dryer, to the ON position.

(7) After approximately 15 seconds, alarm condition should clear.

(8) Connect the B Pressure Testing Pump, or similar tire pump to the test valve on the manifold (Fig. 3).

(9) Observing the output pressure gauge, use the pump to force undried room air into the manifold; if the test set buzzer does not operate, make sure that the cable from the sensing element is securely plugged into the receptacle in the alarm case. Examine the cable for a broken conductor and replace the cable if necessary. If the buzzer still does not operate, remove the element as in 4.25, A, and retest. Replace the element if necessary.

(10) Remove the test set.

(11) Move the disconnect switch, in the branch circuit to the air dryer, to the OFF position.

(12) Reconnect the pressure alarm lead to terminal 1, and mount the cover.

(13) Move the disconnect switch, in the branch circuit of the air dryer, to the ON position.

(14) Reconnect the alarm circuit plug.◀

C. Humidity Alarm Setting