

# ICAS Junction Box Upgrade

## Replacing an ICAS Junction Box in a 6995 Mk IA Dehydrator

This procedure explains the replacement of the original P/N 7006-G501 ICAS junction box with an upgraded P/N 7006-G503 junction box in an existing 6995 Mk IA membrane air dehydrator.

### I. Requirements.

1. NAVSEA Technical Manual S9514-C7-MMA-010, "Technical Manual: Maintenance Manual for Dehydrator, Membrane, Low-Pressure Air, Models 6995 Mk I, IA, & II."
2. (1) P/N 7006-G503 ICAS junction box.
3. (1) P/N 3905-G501 dew point sensor, including sensor lead.
4. External dew point monitor.
5. Screwdriver, flat-blade, medium-size for terminals.
6. Wrench, box, 7/16" for box mounting screws.
7. Wrench, open-end, 7/16" for box mounting screws.
8. Wrench, open-end, 1-1/8" for sensor.

### II. Turn off Electricity and Secure.

- a. Disconnect the electrical power source from the Model 6995 dehydrator and secure and tag it out in accordance with shipboard procedure. Leave the air on and running. This will prevent the need to dry out the unit before beginning sensor calibration.

### III. Remove Old Components (Figure 1).

- a. Open the junction box. Disconnect the incoming power leads from terminals 11 and 12 and withdraw the leads from the box.
- b. Disconnect the remote relay leads from terminals 19 and 20 and withdraw the leads from the box.
- c. Disconnect the 4-20 mA leads from terminals 25 and 26 and withdraw the leads from the box.
- d. Unplug the sensor lead at the sensor connector.
- e. Remove the four screws securing the box to the frame and remove the box.
- f. Disconnect the sensor lead from the dew point sensor behind the control panel and remove the lead.
- g. Unscrew the sensor from the sensor housing and remove the sensor.

### IV. Install New Components (Figure 2).

#### CAUTION

Be very careful to install electrical leads exactly as described. Otherwise, the unit will not work right.

- a. Install the new junction box from the upgrade kit, using the four screws and related hardware.
- b. Ensure the new dew point sensor includes an O-ring on its threads. Install the new dew point sensor from the kit into the sensor housing behind the control panel.
- c. Install the new sensor lead between the sensor and the box.
- d. Insert the remote relay leads (removed in step 5.2c) and connect them to terminals 19 and 20 (they are interchangeable).
- e. Insert the 4-20 mA leads from the ICAS interface box (disconnected in step 5.2b) and connect the red lead to terminal 25 and the black lead to terminal 26.
- f. Connect the incoming power leads: L1 to terminal 11; L2 to terminal 12.

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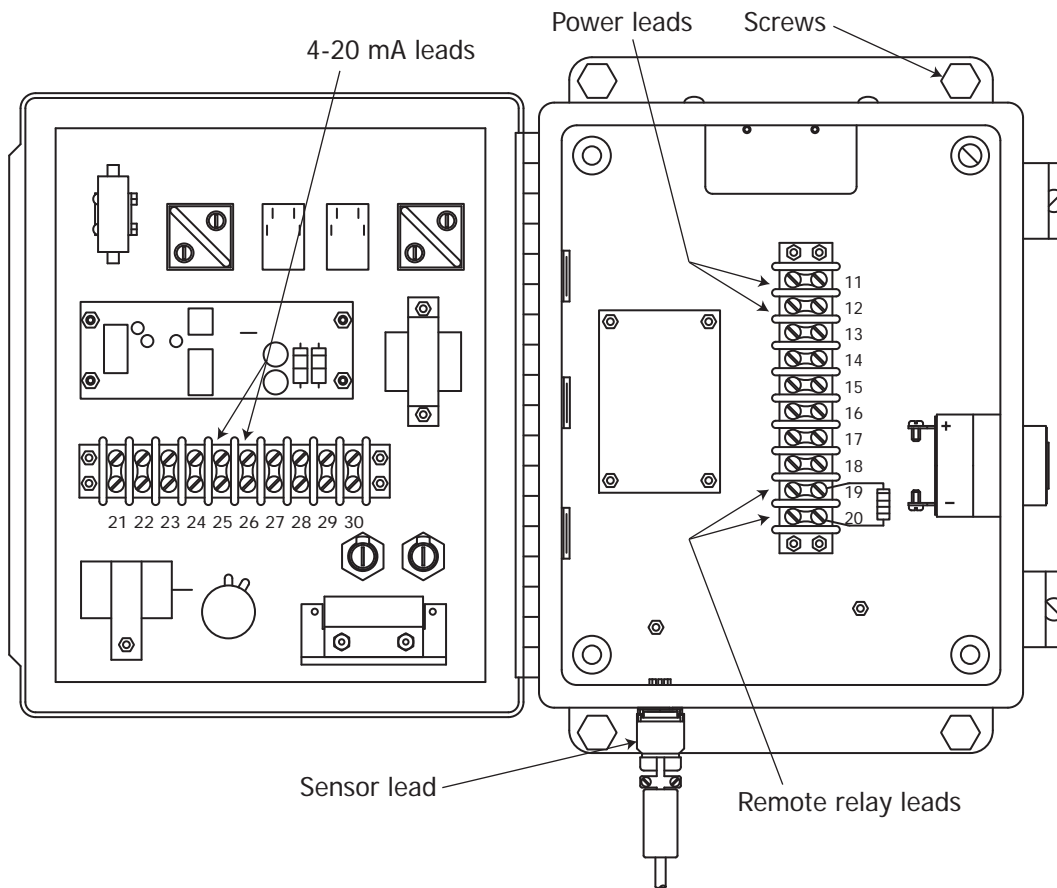
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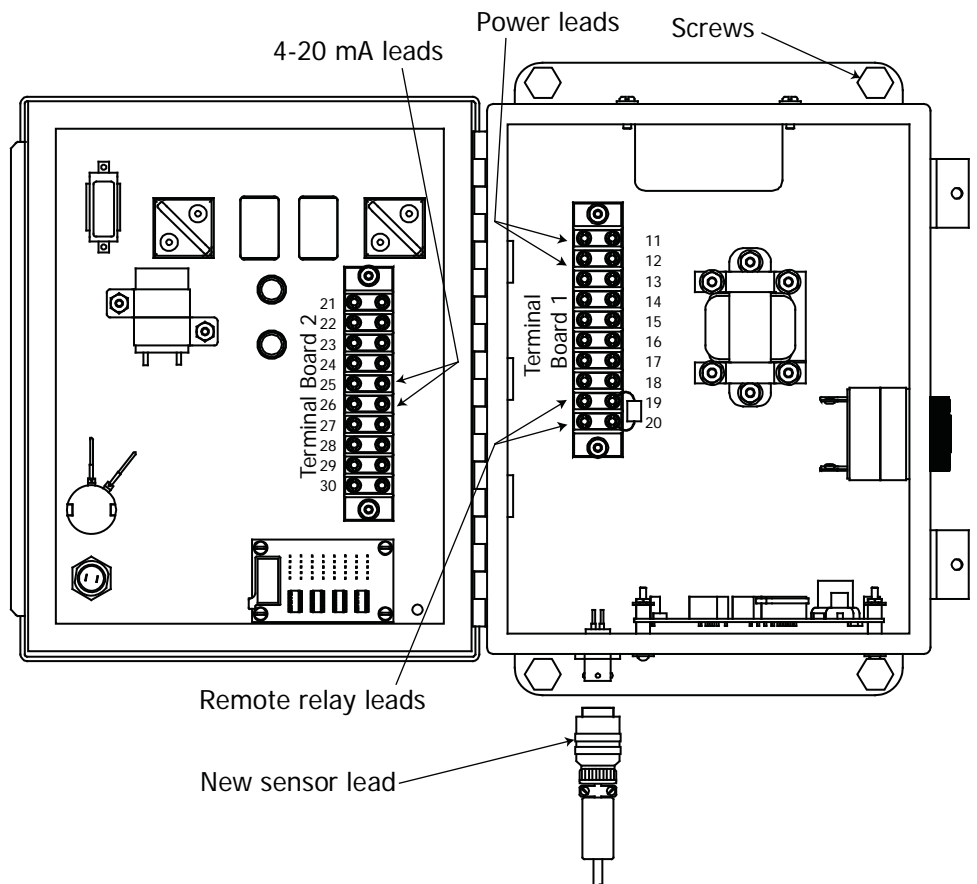
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**Figure 1. Existing ICAS Junction Box**



**Figure 2. New 7006-G503 ICAS Junction Box**