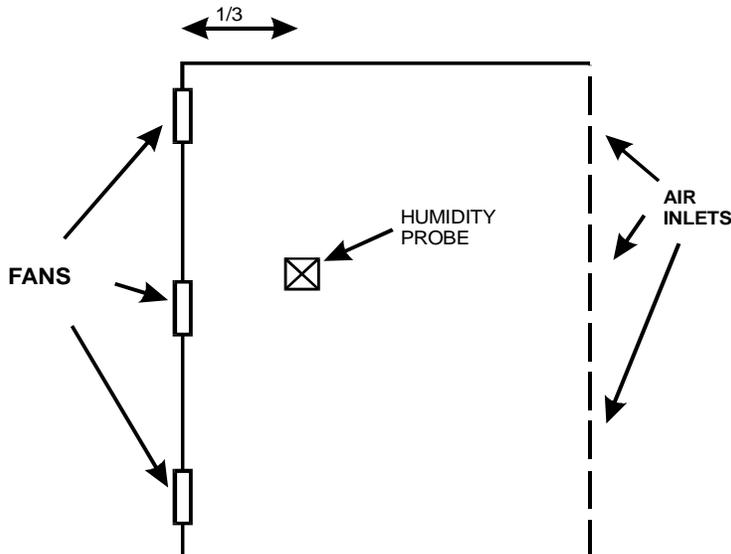
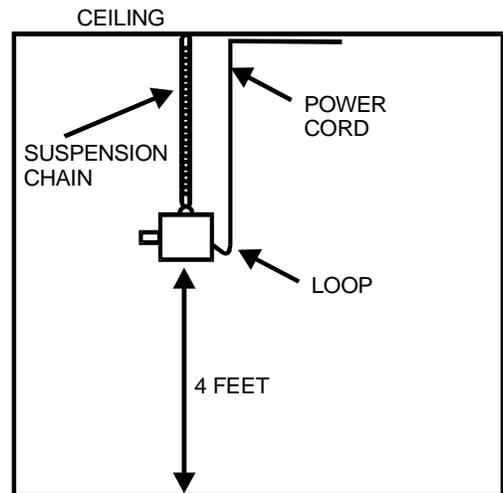


HS-100 Humidity Probe

INSTALLATION

- The probe should be suspended from the ceiling, four feet from the floor. The power cord should not enter the probe from the top end. Make a loop in the power cord to prevent moisture from entering the enclosure.
- Install the probe in the middle of the room at a distance from the fans of one third the width of the room as shown below.



- Open the cover of the TC5 controller to make the connections (see wiring diagram at the end of the manual)

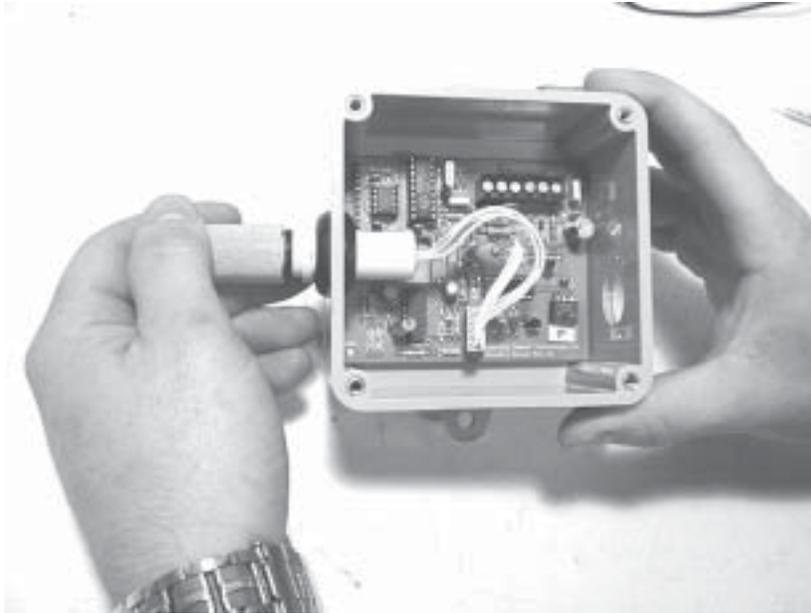
MAINTENANCE

The HS-100 humidity probe is an important part of humidity control management for livestock. Best results are obtained if the following maintenance program is carried out. Every six months, the bronze filter should be replaced and the sensing element cleaned gently with a clean, damp cloth. Press the cleaning button inside the enclosure after each replacement. The flashing red light indicates that it's time to replace the filter. Every two years, the sensing element must be replaced along with a memory chip. Remove the probe from the room when cleaning the floors.

- 1- **AFTER 6 MONTHS OF OPERATION:** Replace the filter (replacement part # 51-80070).
- 2- **AFTER 12 MONTHS OF OPERATION:** Replace the filter (replacement part # 51-80070).
- 3- **AFTER 18 MONTHS OF OPERATION:** Replace the filter (replacement part # 51-80070).
- 4- **AFTER 24 MONTHS OF OPERATION:** Replace the filter, the probe and the microchip (replacement part # 51-10003).

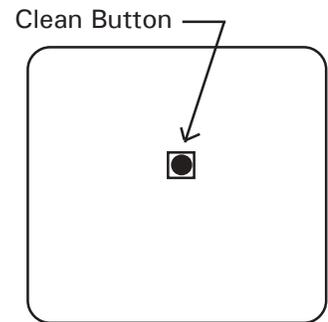
1. FILTER REPLACEMENT

- Remove the 4 screws securing the top cover
- Remove the top cover and gasket
- Twist and pull the metal filter much the same way as you would remove the cork from a bottle. The filter should come off.



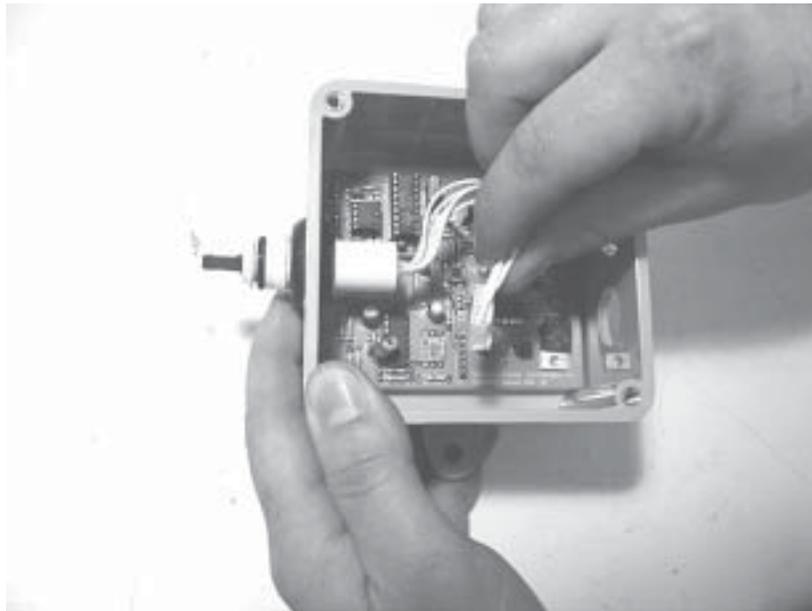
- Inspect the grommet on the plastic probe. If damaged, replace it.
- Clean the sensing element carefully using a clean, damp cloth. **Do not use water or other solvents.**
- Push the replacement filter over the sensing element until firmly seated against the ridge on the probe body.
- Locate the cleaning button between the two lights

- Carefully press the cleaning button until the red light starts to flash. Once it does so, release the button.
- Wait until the red light stops flashing (about 5 seconds), then replace the top cover
- Replace the 4 screws and tighten.

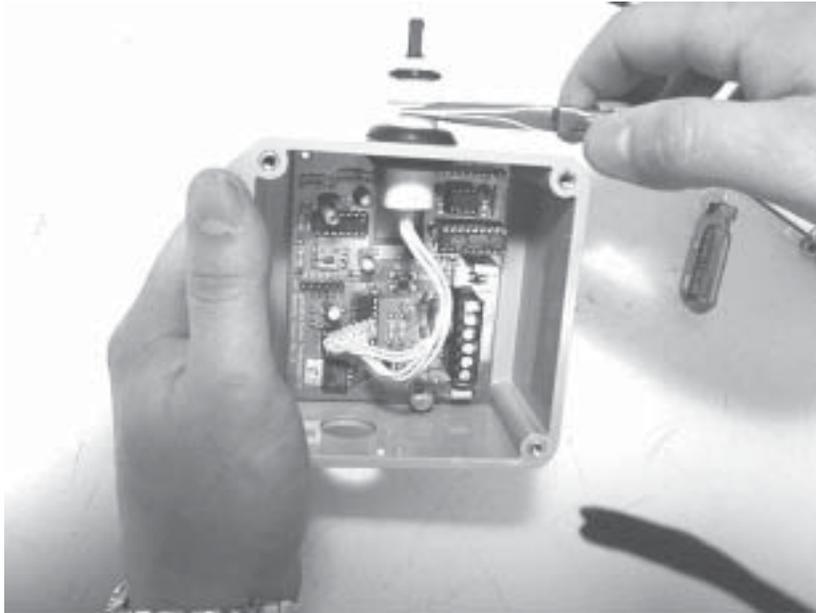


2. PROBE REPLACEMENT

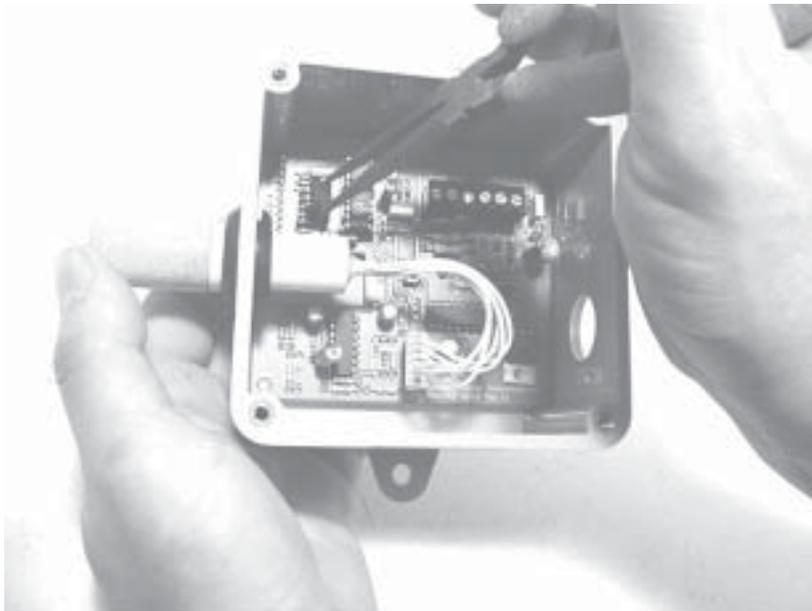
- Remove the 4 screws securing the top cover
- Remove the top cover and gasket
- Twist and pull the metal filter much the same way as you would remove the cork from a bottle. The filter should come off.
- Inspect the grommet on the plastic probe. If damaged, replace it.
- Disconnect the probe cable.



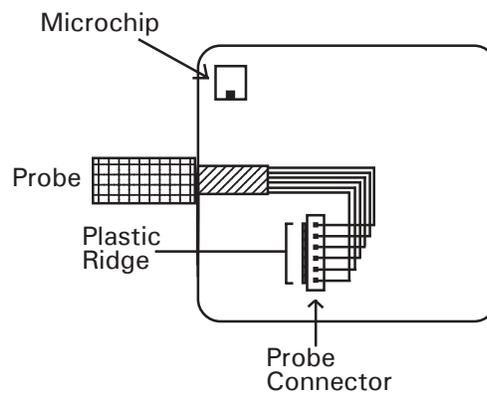
- Carefully twist and pull the probe through the grommet.



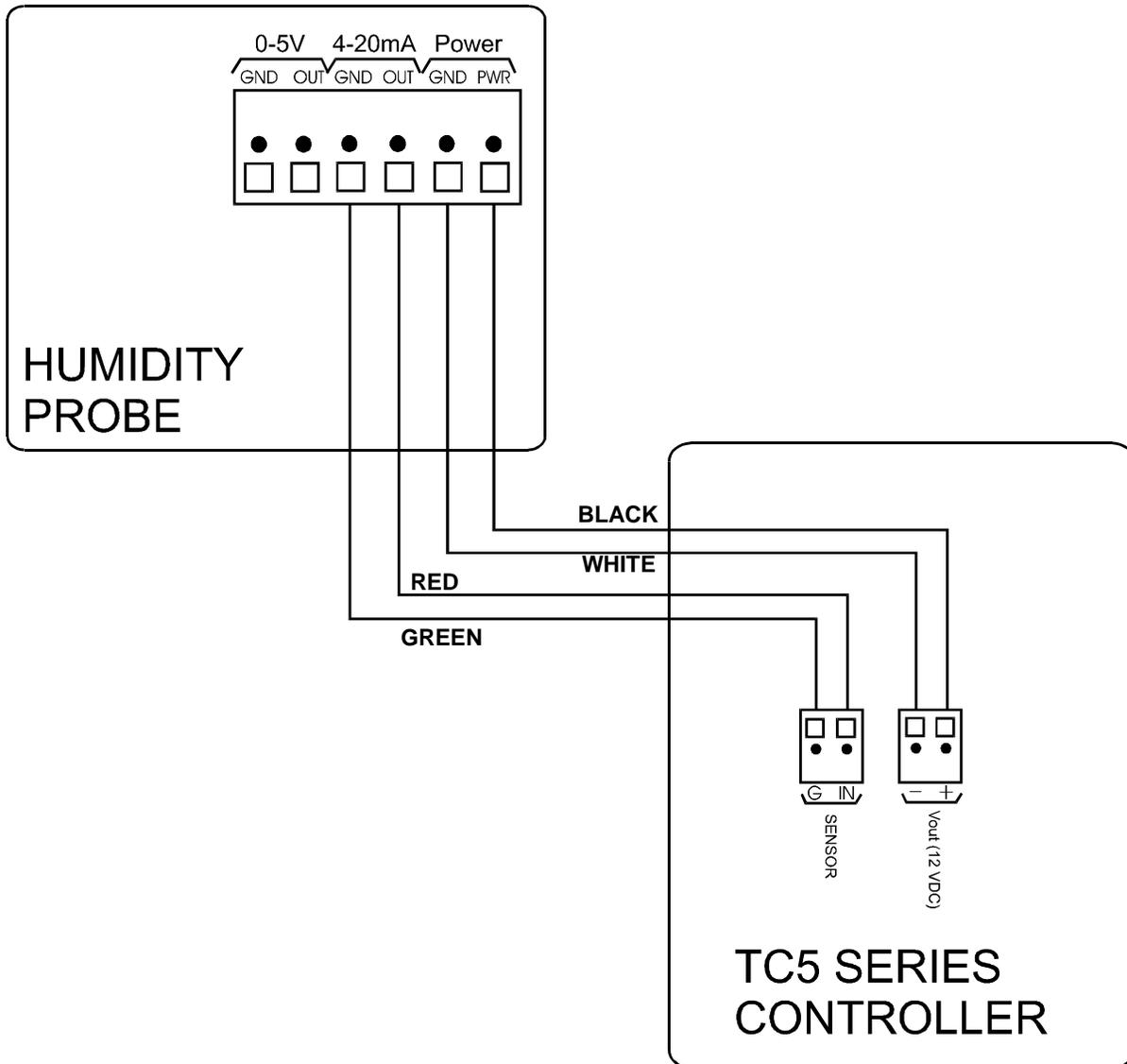
- Carefully remove the microchip in the top left hand corner using pliers.



- Make sure the pins on the new microchip are straight; insert the chip into the socket until it is firmly in place. **The small notch on the chip should be facing down.**
- Insert the replacement probe through the grommet.
- Connect the probe to the connector on the electronic card (JP6). **The plastic ridge on the connector should face the probe.**
- Carefully press the cleaning button until the red light starts to flash. Once it does so, release the button.
- Wait until the red light stops flashing (about 5 seconds), then replace the top cover and gasket
- Replace the 4 screws and tighten.



CONNECTIONS



SPECIFICATIONS

Nominal operating voltage: 12 volts DC

Nominal operating current: 35mA, excluding current loop output

Range: 35% to 95% RH

Accuracy: 3% from 40% to 90%, 5% otherwise

Operating Temperature: 10 to +40°C (50-104°F)

Response time for 10% change in RH: 4 minutes or less, depending on air flow

Response time for 80% change in RH: 9 minutes or less, depending on air flow

Output: 4 to 20mA current loop (50% = 12mA)

Maximum terminating impedance: 350 Ohms, one side connected to ground

Filter: sintered bronze, 20-micron aperture, replaceable

Indicator lights: one for power (green), one to indicate cleaning required (red)