

INSTRUCTION MANUAL



CA27 Sonic Anemometer and Fine Wire Thermocouple

Revision: 9/92

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CA27 SONIC ANEMOMETER AND FINE WIRE THERMOCOUPLE

1. CONNECTIONS (FOR SN 1208 AND HIGHER):

Power Cable

- Red - +7 - 12 volts unregulated power supply
- Black - power supply ground

Signal Cable

- Green - wind signal
- White - temperature signal
- Black - signal ground
- Clear - shield

Grounding

Power ground and signal ground leads are tied together on the electronics board. The CA27 head (frame) is connected to circuit ground on sonics built after October 1985.

2. CURRENT DRAIN

7 - 10mA

3. WIND SIGNAL

21X/CR7X

- a. Calibration - 1V/m/s
- b. Range - $\pm 4.0V$

4. TEMPERATURE SIGNAL

21X/CR7X

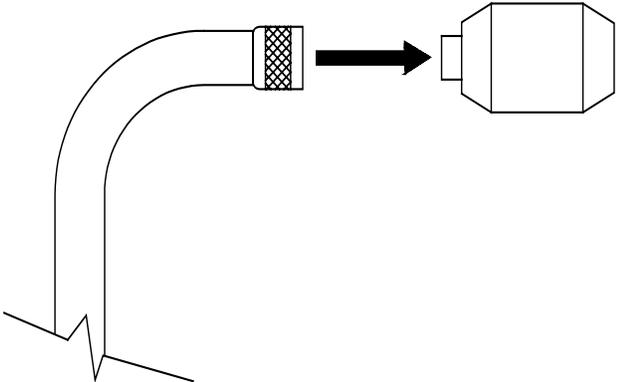
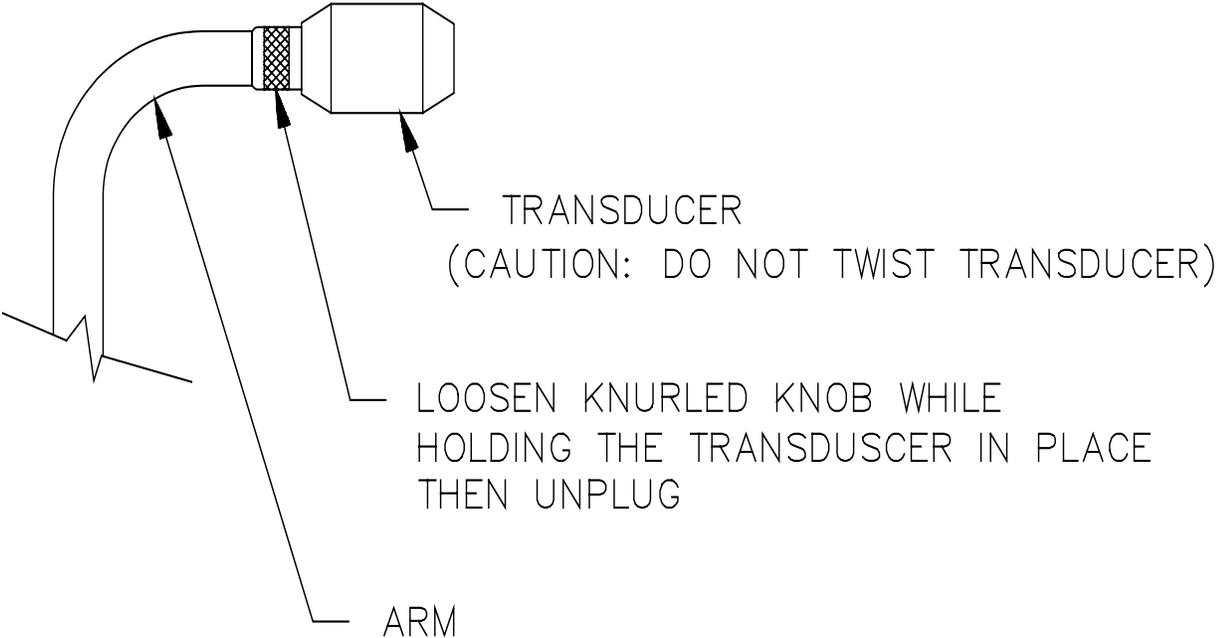
- a. Calibration - $0.25V/^{\circ}C$
- b. Range - $\pm 4.0V$
- c. **NOTE:** Temperature signal is referenced to case body temperature, it is not proportional to absolute temperature.

5. CAUTION

- a. The 0.0005 inch chromel constantan TC junction is extremely fragile.
- b. Care should be taken to avoid any deformation of the silver dish on the acoustical sensors as this can introduce large offsets in the wind signal.
- c. The transducers used in CA27's are damaged by water!

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TO REMOVE TRANSDUCER:



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