

## A. Wind Direction Calibrator

The Model 1249-A Wind Direction Calibrator is a mechanical device used to calibrate systems which include Micro Response or Low Threshold wind vanes (Model 2020 or 2005). It mounts directly on the vane and has three possible uses. First, it can be used to position the vane at four points, exactly 90° apart, to check the readings of output devices. Second, it can be used in sigma system calibration to give a direction change of exactly 90°. And third, it can be used to hold the vane tail in place during orientation to north. A similar device, the Model 1247, is available to assist in wind direction calibration of the Skyvane sensor.



**A**

## B. Surveying Compass

Wind direction sensors must be oriented to true north to provide accurate data. This is easily accomplished using the Model 8297 surveying compass with telescope. In use, the compass is positioned directly north or south of the sensor and used to sight the vane tail or scribe lines on the sensor base. The sensor mounting position is then adjusted until alignment is established.

The Model 8297 is a precision surveying compass. A telescope with precision optics and 10X magnification gives an erect image of distant objects to aid in orientation of lines of distant objects to aid in orientation of lines of sight where there are distant reference points. Full vertical and horizontal control is provided by fine adjustment knobs. The Model 8298 adjustable aluminum tripod is recommended for use with the 8297. The tripod's legs extend from 21 to 52 inches.



**B**

## C. Wind Speed Calibration

The purpose of the wind speed calibrator is to simulate a known wind speed condition in order to calibrate or evaluate the anemometer for its proper output. The calibrator attaches to the shaft of the anemometer through the use of neoprene tubing. The calibrator rotates the shaft at a constant RPM which corresponds to a known wind speed value that has been determined through wind tunnel testing.

The calibrators employ constant speed synchronous motors whose rotation rate changes as a function of the AC line frequency.



**C**

*Note: Use only Model 1232 for calibration of Models 2101 and 2106 Skyvane sensors.*

## Ordering Information

### Wind Direction

1247	Wind Direction Calibrator, for use with Skyvane
1249-A	Wind Direction Calibrator, for use with 2005 or 2020 vane
8297	Surveying Compass with telescope
8298	Tripod for Model 8297

### Wind Speed

1230	Hand-Held Wind Speed Calibrator, 300 RMP (250 RPM at 50 Hz)
1231	Hand-Held Wind Speed Calibrator, same as 1230 except 1800 RMP (1500 RPM at 50 Hz)
1230	Hand-Held Wind Speed Calibrator, same as 1230 except 1200 RMP (1000 RPM at 50 Hz)
1230	Hand-Held Wind Speed Calibrator, same as 1230 except 600 RMP (500 RPM at 50 Hz)



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