# Installing the *Cape Cod®* Wind Speed Indicator

*PLEASE READ CAREFULLY BEFORE STARTING INSTALLATION.* Anyone with a ladder and a few hand tools can easily do the job in an hour or two. If you prefer not to install the instrument yourself, a handyman or electrician can do it for you. Regardless of who does the installation, ***the owner should become familiar with these instructions***. Incorrect installation or misuse will shorten the life of the product, impair its performance, and void the warranty.

The ***Cape Cod®*** **Wind Speed Indicator** consists of a wind-driven electrical generator outdoors, connected by wire to an indicator dial indoors. The cup-type anemometer generates power varying with the speed of the wind, and the dial electrically measures this power. Free wind energy operates this uniquely simple system.

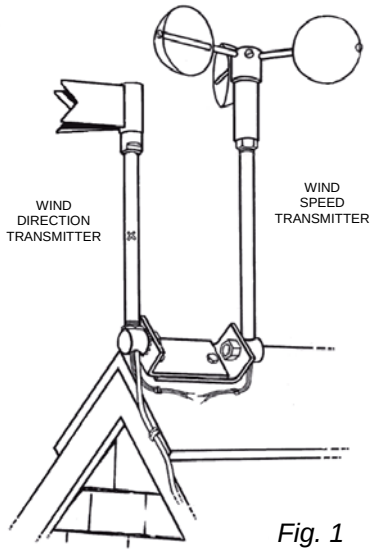


*Fig. 1*

Install this instrument and the ***Cape Cod®*** Wind Direction Indicator at the same time, if you have both, to take advantage of several simplifications in the combined installation (Fig. 1).

1. Place the cupwheel on the generator shaft with care, and ***securely*** tighten the set-screw. When tightening the set-screw, turn the unit upside down and ***grasp the cupwheel hub, not the generator housing***, to avoid overloading the shaft and the self-aligning bearings. After assembling the cupwheel and generator, thread the mounting pipe into the bottom of the generator.

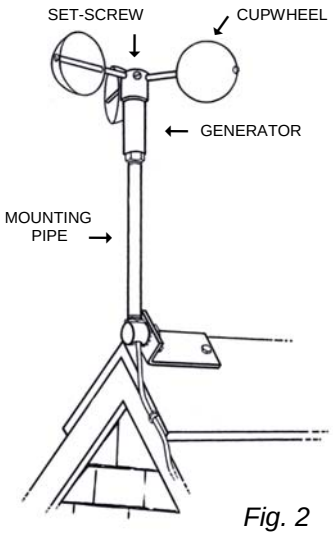
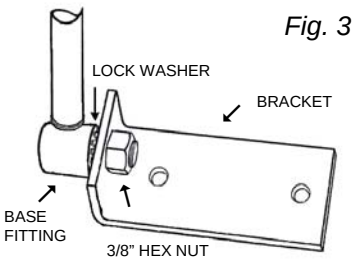


*Fig. 2*

Mount the transmitter with the lag screws provided, a couple of inches in from the end of the ridge on ***top*** of the highest roof peak (Fig. 2), where a free flow of wind will be obtained from all directions. The mounting bracket can be adjusted to accommodate any roof pitch. The 1" lag screws provided are for wooden ridge boards; longer 2"x¼" lag screws are needed for asphalt shingle ridge caps, or for roofs with a ridge vent. (*The mounting bracket can be super-imposed over that of the wind* ***direction*** *indicator, aligning the two lag screw holes, for a simpler and more compact roof installation; Fig. 1.*) The transmitter also can be mounted on a chimney, using lead screw anchors, or it can be attached to a TV antenna mast (send $6 to the address below for a "V"-bolt and bent pipe support for offset mounting on your TV mast).

*Fig. 3*



***Always keep the transmitter upright***, with the cupwheel in place when out in the weather, to prevent water from entering the generator. Be sure the toothed lock washer remains located between the bracket and the mounting fitting (Fig. 3). Note **MAINTENANCE** below.

2. Solder and tape one end of the 50' coil of wire to the wire leads from the generator coming out the bottom of the pipe. (*If installing the wind **direction** indicator at the same time, the spare pair of twisted gray wires in the direction cable can be used instead, thus eliminating the need to run a separate wire.*) ***Carefully stapling the cable every foot or so***, run it down the building trim to the point on the outside wall opposite the indoor location chosen for the dial. Where stapling is not feasible, anchor the cable with silicone rubber adhesive. If more wire is needed, use ordinary plastic-insulated lamp cord (#20 gauge copper) available at any local hardware store.

> ***Anchor the cable well!*** Any continual motion of the wire causes chafing and flexing, which will result in failure of the wire; carefully secured wire will last a lifetime.

3. Drill a small hole in the wall, from indoors out, slanting downward, directly behind the chosen dial location. After running the wire inside through this hole, strip ¼" of insulation from the end of each conductor. Connect the 2 conductors to the terminal clips at the back of the dial, and fasten the dial to the wall with the 3 brass wood screws. For sheet rock or plaster walls, use small wall anchors available from any local hardware store. Staple down the slack in the wire outdoors, making a small drip loop below the hole, and seal the outside opening with a dab of silicone rubber or caulking compound.

**MAINTENANCE:** The generator bearings should be lubricated after every five years or so of continuous operation. Bring the entire roof unit indoors and invert it on its cupwheel. Fill the hollow pipe standard and cupwheel hub with #10-weight motor oil and leave the unit inverted for a few hours at room temperature, to reload the felt oil reservoir at each bearing. When done, turn the unit upright, let any excess oil drain out onto a paper towel or rag, and re-install.

> If repair or replacement parts are ever needed, mail the part of the instrument requiring attention, accompanied by your correspondence, to the manufactory at the address below (do not return to the dealer). Include your street address for prompt return by U.P.S.

335 Lower County Road
P. O. Box 454
Harwich Port, MA 02646

508-432-0970
<capecodwindandweather.com>

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