

# **BARANI**DESIGN

MAINTENANCE OF ANEMOMETERS
• CHANGE OF BEARING, 65 EURO

- CHANGE OF CUPS, 45 EURO
- CHANGE OF ANEMOMETER ELECTRONICS, 155 EURO



## **MeteoWind 2 and MeteoWind Compact Service Instructions**

#### Overview and maintenance context

Anemometer and wind vane service interval is dependent on the operating environment and applicable measurement standards. Since MeteoWind 2 anemometers exceed the highest precision measurement standards, their maintenance free operation can exceed 5 years while still meeting **WMO** standards and 2 years while still meeting strict **MEASNET Class 1** requirements for wind resource assessment.

While the outer anodized aluminum surface can show some signs of surface corrosion in high salty maritime or road weather station environments, the inner bearings, mechanical components and electronics are protected from direct exposure to the outside environment. The oversize bearings offer superb dirt and weather resistance that has been tested to provide long-term measurement stability & reliability in dirty & dusty environments.

#### **Determining service intervals**

Since service interval is dependent on the environment, we recommend using the following systematic approach to determine the service interval.

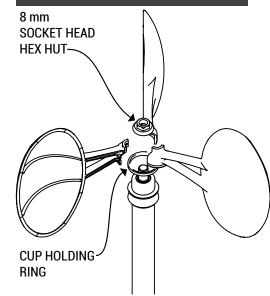
- 1. During field service, look for signs of bearing contamination by observing how smoothly the anemometer comes to a stop. If a quick and abrupt slowdown in rotation is observed before the anemometer comes to a stop, it is a sign of unwanted bearing resistance most likely due to dirt or dust entering the anemometer bearing. Such a situation is a strong sign that a bearing may need replacement. The following videos will guide you.
  - How do I tell if my anemometer bearing needs replacing video

If additional guidance is required, please film the anemometer slowing down in low-wind conditions and email the video to BARANI DESIGN Technologies or your nearest certified service center. Bearing replacement and service should be preformed only by authorized service centers and trained personnel to maintain warranty validity.

#### **Cup removal procedure**

First remove the anemometer from any mount. Disassembly should be performed indoors or at ground level so as to avoid chance of accidental injury. Anemometer cup removal is performed by holding the anemometer rotor & cups with your non-dominant hand and unscrewing the top 8 mm socket head hex nut with the other. The use of a screwdriver type socket wrench will significantly reduce the chance of over-torquing and striping the nut or rotor head threads. After the removal of the 8 mm nut, the cups may be gently removed from behind the cup holding ring. Keep an eye on the ring as it will become detached from the assembly after cup removal.

# **Anemometer cup assembly**



### **Cup assembly procedure**

Recommended tightening torque is 2 Nm / 1.5 lbf\*ft / 18 lbf\*in with a maximum allowed 3 Nm / 2.3 lbf\*ft / 27 lbf\*in.

First place the ring around the rotor head and insert the cups one at a time behind the ring. The fit will be snug and the cups should stay in place while you hand tighten the 8 mm nut on the rotor head threads until snug around the rotor cups. Next, use a screwdriver type socket wrench to tighten the nut if a proper torque-wrench is not available. It will significantly reduce the chance of over-torquing and striping the nut or rotor head threads. The following videos will guide you.

How to Replace the Cups on a MeteoWind 2 Anemometer video

If additional guidance is required, please email BARANI DESIGN Technologies or your nearest certified service center.

Reach your Gold Standard of measurement with BARANI sensors. ISO:9001 quality.