



Instrument Facts

Your boat has been outfitted with instruments manufactured by Faria Beede Instruments, Inc. Each instrument has been manufactured in an ISO:9001 2008 registered facility, built to stringent standards and has passed a comprehensive quality control procedure prior to shipment. Each instrument is backed by a limited lifetime warranty.

The Instrument System:

Your Instrument System consists of individual gauges, wiring harnesses, senders, sensors and transducers. Each of these items has their own tolerances. If these tolerances “stack up” in opposite directions it can lead to what may be perceived as a larger difference in operating readings than actually exists. As long as the readings are within the engine’s specified operating band, the engines are operating properly.

Tachometers:

Most Tachometers have a tolerance $\pm 2\%$ of full scale (± 120 rpm on a 6000-rpm tach). Tachometers will zero when the key is turned on; it doesn’t matter what the tach reads with the key off.

Speedometers:

Paddlewheel driven tournament speedometers are manufactured with a fluid filled pointer bobbin. This fluid aids in the control of bounce and reduces rapid movements of the pointer. Due to the viscosity of this fluid, it is important that the instrument not be placed glass side down on a surface for longer than a few seconds. This face down position may cause leakage of the speedometer bobbin fluid, which can then render the instrument unusable and/or irreparable.

Tach-Hourmeter and Digital Hourmeters:

To ensure accuracy, Tach-Hourmeter Combination Instruments utilize Engine Running Only hourmeters. This instrument does not read engine hours until a certain voltage has been achieved during engine use.

Engine Running Only hourmeters by Faria Beede have an icon in the left hand corner of the display. The icon lets the operator know that hours are being displayed.

During normal operations the icon displays solid when the key is on and the engine has not yet been started. Turning the engine on activates the counting function. The icon will begin to blink indicating that the hourmeter is currently counting hours for the connected engine. This is normal.



Fuel gauges:

Fuel gauges may at some times seem to “bounce”. In most circumstances this is actually caused by the fuel sloshing in the tank and does not necessarily indicate a problem with the gauge or sender.

Instrument Fogging with Standard Glass Lens:

Most marine instruments have small vents in their cases to allow a way out for moisture that finds its way in. It is possible for moist air to be drawn into the vents when the air inside the gauge cools down after the instrument is turned off. The morning sun can draw this moisture up against the lens, causing fogging. Turning on the instrument with the instrument light “on” will speed up moisture removal. Fogging is not abnormal, nor will it harm your instrument, which is built to withstand the harsh marine environment.

Instruments with Fog Resistant Lenses:

These instruments are manufactured with a polycarbonate or glass lens which utilize an anti-fog coating. This coating eliminates fogging in the instrument.

Radio Transmissions:

Some interference (erratic operation) may be noticed on tachometers or synchronizers during radio transmissions. This will neither damage the instrument nor affect its accuracy when not transmitting.

Pointer Jumping (mostly for older instruments):

Occasionally when an engine has been revved up high and then abruptly shut off, the pointer will fall to the incorrect starting pin on the instrument. (For example, on a 6000 Rpm Tachometer – The pointer sits on the numeral six instead of beginning at zero.) There is a quick on-site fix to this problem. Place a magnet against the glass directly on the end of the pointer resting on the increments. You can slowly move the magnet and drag the pointer back to the zero position.



Specifications

4" & 5" Electronic Instruments

Operating Temperature	-4 °F to +158 ° F (-20 °C to +70 °C)
Storage Temperature	-22 °F to +185 ° F (-30 °C to +85 °C)
Lighting	See product line for specific information
Operating Voltage	11.5 to 16 volts
Nominal Voltage	14.2 volts
Current Consumption	< 100 mA, without illumination
Bezel	Stainless Steel or Aluminum - see product line for specific information
Lens	Glass or Polycarbonate - see product line for specific information
Connection	Studs, blade terminals, connectors - see product line for specific information
Mounting Bracket	Plastic mounting clamp. Clamping range 0 -.8" (0-20 mm)
Torque	5 to 7 inch pounds (.57 - .80 Nm)
Mounting Hole	3 3/8" (85 mm) for 4" Instrument – 4 3/8" (112 mm) for 5" Instrument

4" & 5" Mechanical Instruments

Operating Temperature	-22 °F to +185 ° F (-30 °C to +85 °C)
Storage Temperature	-40 °F to +221 ° F (-40 °C to +105 °C)
Lighting	See product line for specific information
Bezel	Stainless Steel or Aluminum - see product line for specific information
Lens	Glass or Polycarbonate - see product line for specific information
Connection	Studs, blade terminals - see product line for specific information
Mounting Bracket	Plastic mounting clamp. Clamping range 0 -.8" (0-20 mm)
Torque	5 to 7 inch pounds (.57 - .80 Nm)
Mounting Hole	3 3/8" (85 mm) for 4" Instrument – 4 3/8" (112 mm) for 5" Instrument

2" Electronic Instruments

Operating Temperature	-4 °F to +158 ° F (-20 °C to +70 °C)
Storage Temperature	-22 °F to +185 ° F (-30 °C to +85 °C)
Lighting	See product line for specific information
Operating Voltage	11.5 to 16 volts
Nominal Voltage	14.2 volts
Current Consumption	< 100 mA, without illumination
Bezel	Stainless Steel or Aluminum - see product line for specific information
Lens	Glass or Polycarbonate - see product line for specific information
Connection	Studs, blade terminals, connectors - see product line for specific information
Mounting Bracket	Plastic mounting clamp. Clamping range 0 -.8" (0-20 mm)
Torque	5 to 7 inch pounds (.57 - .80 Nm)
Mounting Hole	2 1/16" (53 mm) for 2" Instrument

2" Mechanical Instruments

Operating Temperature	-22 °F to +185 ° F (-30 °C to +85 °C)
Storage Temperature	-40 °F to +221 ° F (-40 °C to +105 °C)
Lighting	See product line for specific information
Bezel	Stainless Steel or Aluminum - see product line for specific information
Lens	Glass or Polycarbonate - see product line for specific information
Connection	Studs, blade terminals - see product line for specific information
Mounting Bracket	Plastic clamp, metal on water pressure. Clamping range 0 -.8" (0-20 mm)
Torque	5 to 7 inch pounds (.57 - .80 Nm)
Mounting Hole	2 1/16" (53 mm) for 2" Instrument