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## Knot Meter Troubleshooting

The following troubleshooting tips cover all Signet Marine Knot Meters.

### Instrument Troubleshooting:

1. Low/High Readings:

If your knot meter is reading low or high, it may need to be calibrated or there is a problem with the sensor. Refer to the owner's manual for the calibration procedure. Also check to see that the sensor is "seated" correctly in the thru-hull. Check to make sure that the alignment bumps on the sensor fit into the notches in the thru-hull fitting.

2. No Reading At All:

Check to see that the instrument is getting power by using a voltmeter or test light. The power wiring for all Signet Marine knot meters is as follows:

Red wire:	Power for the instrument.
White wire:	Power for the lights.
Green wire:	Ground for the lights.
Black wire:	Ground for the instrument.

### Paddlewheel Sensor Troubleshooting:

Note: The paddlewheel sensor can be removed while the boat is in the water if you have the "dummy" plug (Part Number M1536)

1. Make sure that the rotor spins freely. If growth is present, clean it off with a toothbrush and water.
2. If the rotor is damaged but the "ears" that support the shaft are intact, replace the rotor assembly with the replacement rotor kit (Part Number M1531). If one or both of the ears are damaged or broken, the sensor must be replaced.
3. Check to see that the sensor is putting out the correct voltage. This test can be done at the connector where the sensor cable plugs into the back of the instrument. All Signet Marine paddlewheel sensors generate an AC voltage of approximately 0.5 volts AC per knot of boat speed. If you spin the sensor rapidly by hand, you should get approximately 5 to 6 knots, or 2.5 to 3 volts AC.
4. There are three wires in the cable: bare (shield), black and red or white. The test should be done on the black and red (or white) wires. Since the voltage is AC, the polarity does not matter.
5. Check the connector at the instrument where the paddlewheel sensor wire plugs into the instrument. If corrosion is found, clean it out with a brush and alcohol.