







**Testing and Batch Control** 



### **SIERRA GAUGES**



- Gauges now sold under the Sierra brand
- Updated packaging
- Sierra lifetime warranty against defects
- Same high quality gauge





#### **SIERRA GAUGE - SELECTION**

- Pro Series Best
  - Black Premier Pro White Premier Pro Lido Pro
- OEM type Better
  - Lido Driftwood Sahara Sterling Black Sterling
- Standard Gauges
  - Amega Arctic Eclipse Heavy Duty





#### **Features**

### Pro Series

- Fog resistant lens
- Enhanced back lighting
- Lighted pointer except Lido Pro

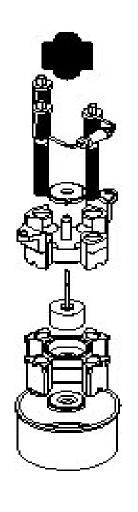
# Standard and OEM Gauges

 Perimeter and thru dial lighting – except Sterling





### **COMMON GAUGE FEATURES**



### Vector Meter Movements For Electric Gauges

- Rugged (shock, vibration)
- Reverse Polarity Protected
- Magnetically Shielded Movements
- Pointer Dampened for Smoothness

#### Gauge Features

- Corrosion Free Materials
- Real Glass Lenses
- Very High Accuracy over Temp
  Range -40F to 180F
- Glass Area Sealed to 6 PSI





### **Tachometers**



### Outboards

- 4, thru 12 pole Alternators
- 98% Adjustable
- Can fine adjust
- Works on Inboards Too
- Unit low profile printed circuit board





### Tachometers – Inboard and I/O



### Inboards & I/O

- 4, 6, 8 Cylinder engines
- Points & Electronic Ignition
- 98% Adjustable
- Unit low profile printed circuit board
- Can fine adjust





# **Fuel Gauges**



For 240 Ohm Empty

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33 ohm Full

### Sender

- Rheostat Open- pointer goes to empty
- Rheostat Shorted- pointer goes to full
- Rheostat Backwards- reads backward





#### Oil Pressure



For 240 Ohm 0 Psi

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33 ohm Full Scale Psi

### Sender

- Rheostat Open- pointer goes to 0
- Rheostat Shorted- pointer goes to 80 or above
- Use NO thread tape or sealer
- USE NO extenders or Tees
- Single sender- 2 gauges- lo reading
- Dual sender- 1 gauge- hi reading
- Metric threads not available





## Water Temperature Inboard I/O



For 240 Ohm 120 Deg.

33 ohm 240 Deg.

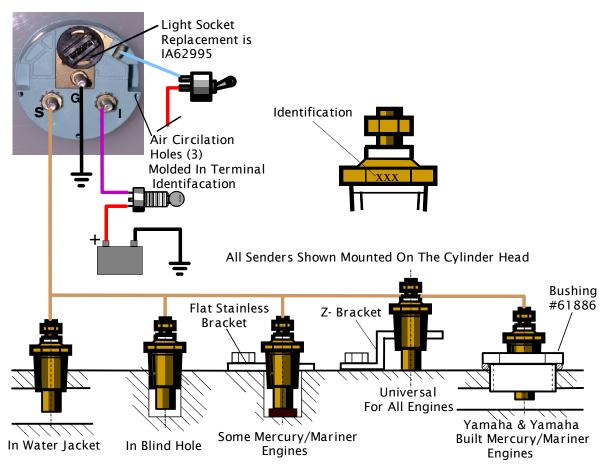
- Sender
- Use NO thread tape or sealer
- USE NO extenders or Tees
- Metric threads not available
- If one gauge fails, the second gauge will read much higher than expected
- Poor connections or sealer on threads will cause lower readings





# **Temperature Gauge Kit - Outboard**



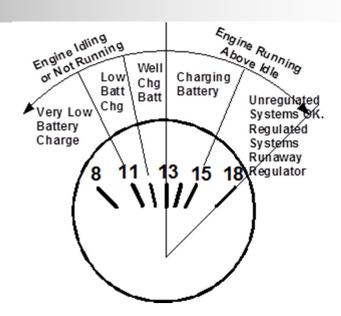






#### Voltmeter





- Voltmeter monitors electrical system, not the voltage of battery specifically.
- No connection is made to "S" terminal.
- The gauge's reading will tell you if it's working or not.
- Voltmeters mounted in dual stations do not effect each other.





# **Speedometer Kit – Pitot Type**



- There must be air in the hose.
  Cannot be all water. No kinks in the hose.
- Make sure pitot is in full down position.
- Pitot to be mounted 6" from propeller.
- Winterizing- remove hose from back of speedometer. Reinstall in the Spring.
- There are no adjustments on the speedometer





## **GPS** Speedometer

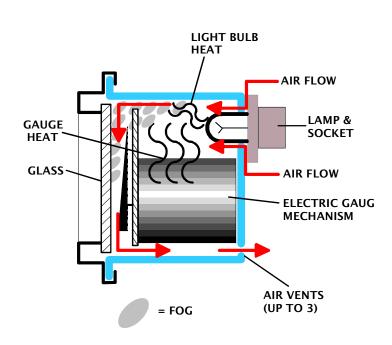


- Speed is accurate +/- 1 mph is shown as speed over ground (SOG) not speed through water once vessel is moving
- Course over ground (COG) is accurate to +/- 1 degree once vessel is moving
- Ideal for slow speed applications like pontoon boats and for high speed performance boats where pitot tubes do not perform well.
- Required external antenna
- NEMA 0183





# For Resistant Pro Series Gauges



Air contains water vapor.

If the water vapor cools enough, it condenses into droplets and causes fogging.

This usually occurs during the night and into the morning

#### **Possible Remedies**

- -Increase the air flow behind the gauges.
- -Change the light wiring so the lights are ON when the key is on. The added heat will increase the convection circulation inside the gauge to speed up drying.

#### A better solution

Use Teleflex Marine Fog Resistant gauges In certain conditions, however, as very humid air, the coating may be overwhelmed and fogging may still occur to some lesser degree.





### **Matrix**



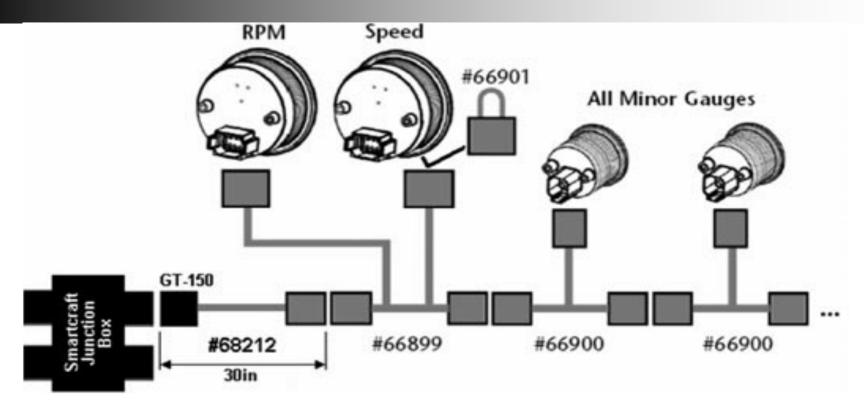




- Available gauges are:
  - Tachometer 7000 RPM
  - Speedometer, 90 MPH
  - Fuel level Primary and Secondary
  - Water Temperature
  - Oil Pressure
  - Trim
  - Volts
  - Water Pressure



### Matrix – NEMA 2000 or Smartcraft



 Master / Slave communications with tach communicating directly to the engine system to drive data to the other gauges





# **Digital Analog Converter**



- P/N 69741P
  - Converts NEMA 200 digital output to analog
  - Eliminates need to replace gauges when repowering
  - Retail \$380





# **Accessories – Don't forget them**





- Hourmeters
- Bezels
- Fuel Senders
- Pitot Tubes











# **Sierra Advantage**

- Combined shipments with all other Sea Star products
- Sierra Warranty
- Competitive prices
- Gauge Kits





