

ELING B0CB15CQLB

ELING 6-Gauge Set Instruction Manual

Model: B0CB15CQLB | Brand: ELING

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ELING 6-Gauge Set. This comprehensive set includes a GPS Speedometer, Tachometer, Fuel Level Gauge, Water Temperature Gauge, Oil Pressure Gauge, and Voltmeter, designed for various automotive, truck, and RV applications. Please read these instructions carefully before installation and use to ensure proper function and safety.

PRODUCT OVERVIEW

The ELING 6-Gauge Set features a combination of essential vehicle monitoring instruments with red and yellow backlight options for enhanced visibility. Each gauge is designed for precision and durability.



Figure 1: The complete ELING 6-Gauge Set, featuring a GPS Speedometer, Tachometer, Fuel Level, Water Temperature, Oil Pressure, and Voltmeter. All gauges have black faces with white markings and stainless steel bezels.

6 gauge set

Backlight: Red, Yellow

Suitable for All Vehicles
and Off-road Vehicles



✓ Long Life

✓ Anti-Fogging

✓ High Precision

✓ Short Start Up Time

✓ Less Power Consumption

✓ Quick Location Confirmation

Figure 2: The 6-Gauge Set demonstrating the red and yellow backlight options, suitable for all vehicles and off-road vehicles. Key features include long life, anti-fogging, high precision, short start-up time, less power consumption, and quick location confirmation.

The set includes:

- **GPS Speedometer:** Range 0-200km/h.
- **Tachometer:** Range 0-8000 RPM.
- **Fuel Level Gauge:** Indicating Range E-1/2-F.
- **Water Temperature Gauge:** Indicating Range 40-120°C.
- **Oil Pressure Gauge:** Indicating Range 0-10Bar / 0-145Psi.
- **Voltmeter:** Indicating Range 8-16V.

INSTALLATION

Proper installation is crucial for the accurate operation and longevity of your gauge set. Please follow these steps carefully.

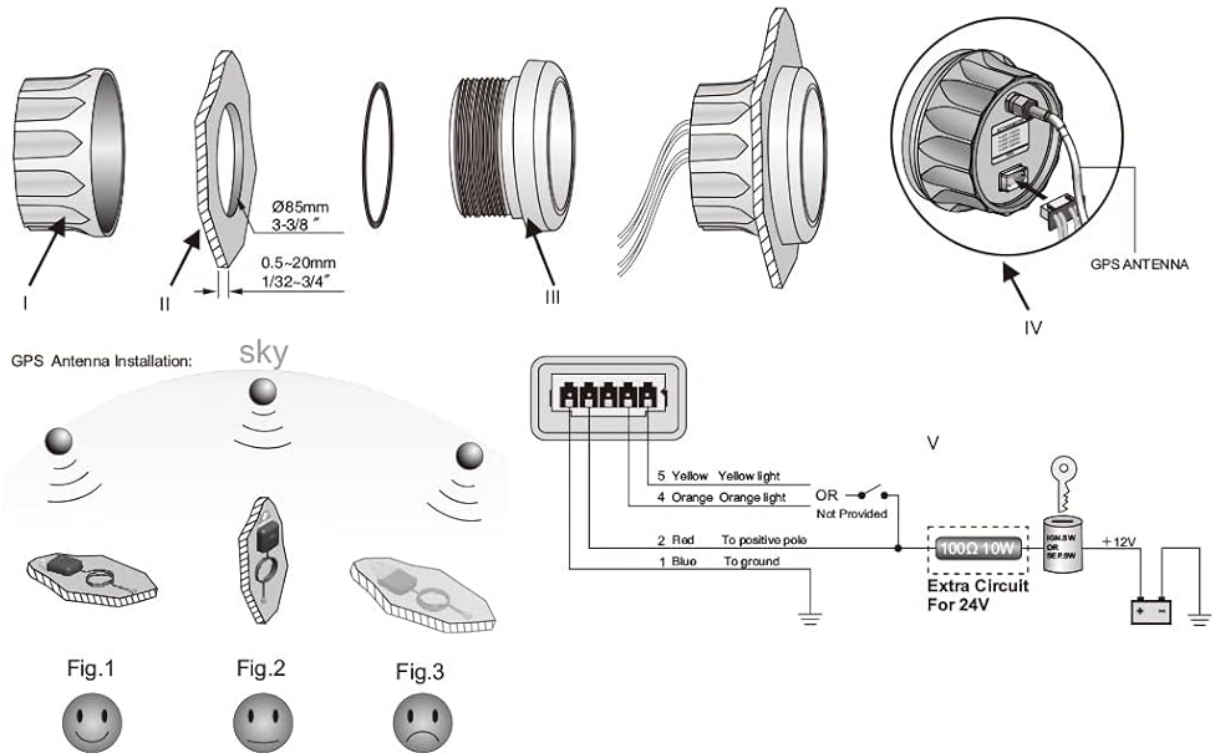
General Installation Notes:

- Ensure the panel surface is clean and dry before cutting.
- Allow sufficient clearance behind the panel for wiring and gauge depth.
- Securely fasten all connections to prevent vibration and ensure reliable readings.

GPS Speedometer and Tachometer Installation:

These gauges require an 85mm (3 3/8") diameter hole in the panel. Ensure a clearance of 55mm (2 3/16") behind the panel to fit the gauge. Insert the gauge into the hole and secure it with the provided fastening ring.

INSTALLATION INSTRUCTIONS



INSTALLATION STEPS

1. Cut an 85mm (3 3/8") hole in the panel (II) allow a clearance of 55mm (2 3/16") behind the panel.
2. Remove fastening ring (I), insert gauge from front. Tighten gauge (III) using fastening ring (I)
3. Insert the wire harness (IV) firmly in the gauge (III)
4. Connect cables according to the diagram. Choose either red or yellow background light.
5. Securely fasten the GPS antenna (V), preferably outdoors (or inside front windscreen) so that it has a clear view of the sky to pick up satellite signals. Connect the antenna cable to socket on the gauge. Do not cut cable.
6. After turning power on, allow the gauge to sample satellite signal for 1 minute. The pointer of the instrument indicates the speed over ground (SOG) when the boat is moving. If the boat does not move, accumulative mileages displayed on the LCD, and the values are saved even the instrument is power down.
When the boat is moving. While boat is lying still all data is frozen, so the compass cannot be used as a reference until the boat is moving, when the signal is recovered.
7. All data is for reference only and should not be trusted as sole navigation source.

安装步骤

- 1、在仪表板(II)上开一个直径为 $\Phi 85\text{mm}$ (3 3/8")的孔，并确保仪表板后面至少要有55mm(2 3/16")的空间来放置仪表。
- 2、去掉固定圈(I)，从前面放入仪表，调整好位置后用固定圈(I)锁紧仪表(III)。
- 3、将线束和GPS天线连接到仪表上(IV)。
- 4、根据接线图将电线连接好，并请选择红色或黄色背光灯。
- 5、将GPS天线安装到户外，并确保固定好的GPS天线接受信号一面面对着天空，如图Fig.1。如果GPS天线安装如图Fig.2，GPS信号的接收将会受到影响。如果GPS天线安装如图Fig.3，则GPS信号将受到非常大的影响，信号较弱时可能完全接收不到信号。
- 6、通电之后，仪表需要1分钟左右的时间去接受卫星信。信号强的时候一般40秒以内即可完成定位(初次定位可能需要1~2分钟的时间)。
当船移动时，仪表指针指示相对地的速度(SOG)，LCD显示累计里程数据，这个数据在仪表掉电情况下不会丢失。
在船停靠期间，所有的数据将不会变化，所以指针不能作为参考使用，要直到船开始移动，仪表上显示的数据才准确。
- 7、所有的数据仅仅作为参考，不应作为唯一的导航指示数据。

Figure 3: Detailed installation diagram for the GPS Speedometer, showing panel cutout dimensions and fastening method.

85mm GPS Speedometer

speed range: 0-200km/h
odometer: 0-99999.9km
working voltage: 9-32V

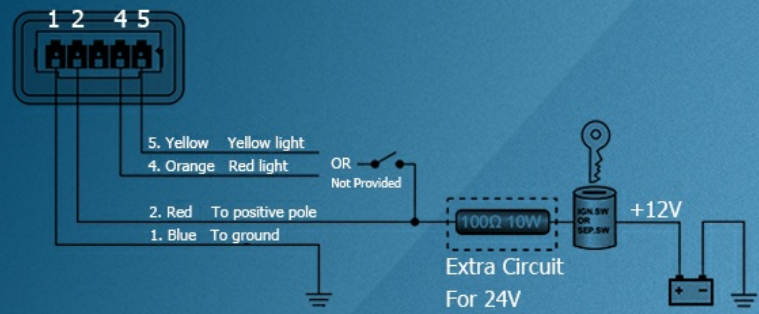


Figure 4: Wiring diagram for the 85mm GPS Speedometer. Connections include Red (+9-32VDC), Blue (Ground -), Orange (Red Backlight +), Yellow (Yellow Backlight +), and GPS antenna connection.

85mm Tachometer

Tachometer range: 0-8000RPM
Speed Ratio: 1.0-10.0
working voltage: 9-32V

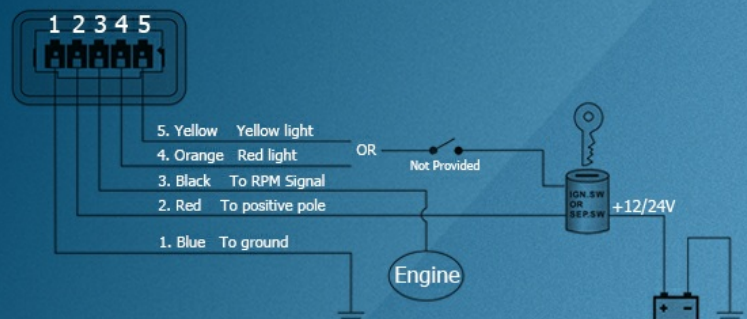
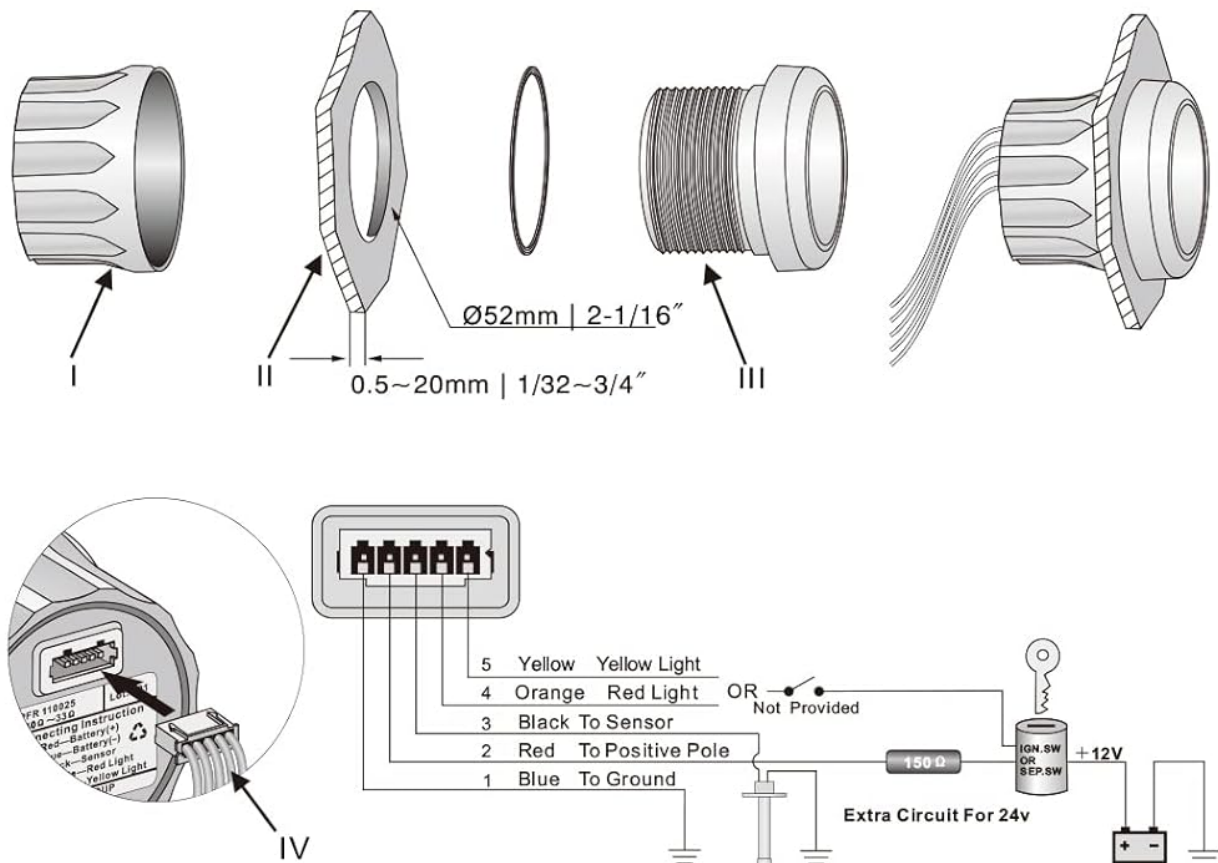


Figure 5: Wiring diagram for the 85mm Tachometer. Connections include Red (+9-32VDC), Blue (Ground -), Black (RPM Signal), Orange (Red Backlight +), and Yellow (Yellow Backlight +).

Fuel Level, Water Temperature, Oil Pressure, and Voltmeter Installation:

These gauges require a 52mm (2 1/16") diameter hole in the panel. Ensure a clearance of 55mm (2 3/16") behind the panel to fit the gauge. Insert the gauge into the hole and secure it with the provided fastening ring.

INSTALLATION INSTRUCTIONS



INSTALLATION STEPS

1. Cut a 52mm (2 1/16") diameter panel hole (II). You will need a minimum clearance of 55mm (2 3/16") behind the panel to fit the gauge.
2. Remove fastening ring (I). There is an alignment tab on the gauge body (III), place the gauge in the panel hole and mark the position of this tab to correctly align the gauge.
3. Insert gauge through panel from the front, fit and tighten fastening ring (I) from the rear.
4. Connect wires according to wiring instruction. Note the use of dropping resistors for 24V circuit. Select either Orange or Yellow wires for backlighting. Wire colour corresponds with backlight colour.
5. Insert wire harness (IV) into port at the back of the gauge.
6. Please note, if the gauge is a voltmeter there is no black wire or resistors in the kit.

安装步骤

1. 在面板(# II)上开一个直径2-1/16"(52 mm)的孔(您的船舱板或仪表板)。将仪表(# III)装入孔中, 在面板对应的仪表凸台位作标记, 并在此位置开一小缺口(如# II所示)。确保仪表板后面至少有2-3/16"(55 mm)的空间来放置仪表。
2. 将主体(# III)装入面板(# II)中, 再将固定圈(# I)旋紧即可。
3. 按接线说明将电线连接好, 并注意12V供电系统和24V供电系统不同的连接方法(24V附加电路)。
4. 可根据喜好选择红色或黄色背景灯。
5. 将线束 (# IV)接入端口中。
6. 如果您购买的是电压表, 无论是12V或24V电源都无需外接电阻, 且线束 (# IV)中没有黑色接线。

Figure 6: Detailed installation diagram for the 52mm gauges (Fuel Level, Water Temperature, Oil Pressure, Voltmeter), showing panel cutout dimensions and fastening method.

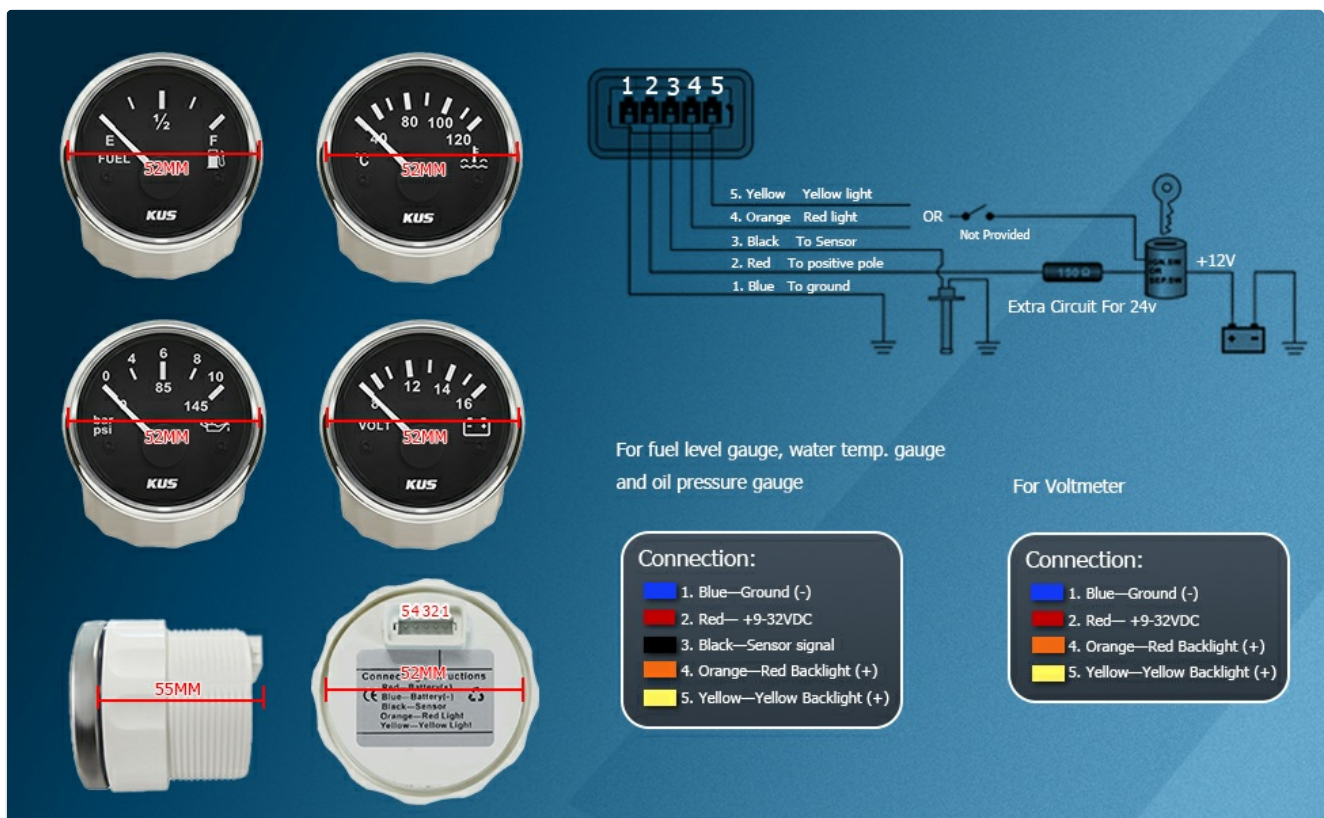


Figure 7: Wiring diagram for the 52mm gauges (Fuel Level, Water Temperature, Oil Pressure, Voltmeter). Connections include Blue (Ground -), Red (+9-32VDC), Black (Sensor Signal), Orange (Red Backlight +), and Yellow (Yellow Backlight +).



Figure 8: Physical dimensions of the gauges, indicating a depth of 55mm for all gauges, and diameters of 85mm for the Speedometer and Tachometer, and 52mm for the smaller gauges.

GPS Antenna Installation:

For optimal signal reception, securely fasten the GPS antenna in a flat position with the black side upwards. Ideally, place it outside or inside the front windscreen to ensure a clear view of the sky. Connect the antenna cable to the designated socket on the back of the GPS Speedometer. Do not cut the antenna cable.

OPERATING INSTRUCTIONS

Once installed and wired correctly, the gauges will power on with the vehicle's ignition. The backlights can be switched between red and yellow depending on your wiring choice (Orange wire for Red backlight, Yellow wire for Yellow backlight).

GPS Speedometer Operation:

Upon initial power-on, the GPS Speedometer will search for a satellite signal. This may take approximately 30 seconds for the first signal acquisition. Subsequent acquisitions will be much faster, typically less than 3 seconds, especially with a clear view of the sky. The odometer will begin to accumulate mileage once a signal is acquired and

the vehicle is moving. If the signal is lost while moving, the last recorded speed will be displayed until the signal is re-acquired.

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Video 1: Demonstration of the KUS 200km/h GPS Speedometer Odometer, showing its functionality and signal acquisition process.

Tachometer Operation:

The Tachometer displays engine RPM. It features an hour meter to track engine operating hours. The speed ratio can be adjusted to match your engine's specifications. To set the speed ratio, long press the black rubber Mode button on the instrument for 3 seconds. The LCD will show the H-value. Continue pressing to adjust the value. Release the button for more than 3 seconds to exit setting mode.

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Video 2: Demonstration of the KUS 85mm Tachometer with Hour Meter, including how to set the speed ratio.

Fuel Level Gauge Operation:

The Fuel Level Gauge displays the liquid level in the fuel tank. It requires a compatible fuel level sensor. The gauge supports two common signal inputs: 0-190 ohms (empty signal is 0 ohms, full signal is 190 ohms) and 240-33 ohms (empty signal is 240 ohms, full signal is 33 ohms). Ensure your sensor matches the gauge's input signal type.

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Video 3: Demonstration of the KUS 52mm Fuel Level Gauge, showing its operation with a fuel level sensor and supported signal inputs.

Water Temperature Gauge Operation:

The Water Temperature Gauge displays the engine coolant temperature. It must be used with a compatible water temperature sensor. The gauge's input signal is 287.4-22.4 ohms. Ensure your sensor provides this signal range for accurate readings.

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Video 4: Demonstration of the KUS 52mm Water Temperature Gauge, highlighting its compatibility with various vehicles and ships, and its signal input requirements.

Oil Pressure Gauge and Voltmeter Operation:

The Oil Pressure Gauge monitors engine oil pressure, while the Voltmeter displays the vehicle's electrical system voltage. Both require appropriate sensors or direct connection to the electrical system as per the wiring diagram (Figure 7).

MAINTENANCE

The ELING Gauge Set is designed for durability and requires minimal maintenance. Keep the gauge faces clean using a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the display or bezel. Periodically check all wiring connections for tightness and ensure they are free from corrosion. If any wiring appears damaged, replace it immediately.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Gauge not powering on.	No power supply; loose wiring; blown fuse.	Check power connections (Red wire to +12V/24V, Blue wire to Ground). Inspect all wiring for secure connections. Check vehicle's fuse box.
GPS Speedometer displays "Err" or no reading.	No GPS signal; GPS antenna improperly placed or disconnected.	Ensure GPS antenna has a clear view of the sky (black side up). Reconnect all wires, especially the GPS antenna cable. Restart the vehicle/power cycle the gauge.
Inaccurate readings (Fuel, Water Temp, Oil Pressure).	Incorrect sensor signal type; faulty sensor; loose sensor wiring.	Verify that the sensor's signal output matches the gauge's input requirements (e.g., 0-190ohm for fuel). Check sensor and wiring connections. Replace sensor if faulty.
Backlight not working or incorrect color.	Incorrect backlight wiring; faulty LED.	Ensure Orange wire is connected for Red backlight and Yellow wire for Yellow backlight. Check connections.

SPECIFICATIONS

Feature	Detail
Product Dimensions	11.02 x 3.15 x 8.46 inches (Packaged)
Item Weight	1.2 Kilograms (2.65 Pounds)
Material	Plastic
Operating Voltage	12V / 24V (8-16V for Voltmeter, 9-32VDC for GPS Speedometer/Tachometer)
GPS Speedometer Range	0-200 km/h
Tachometer Range	0-8000 RPM
Fuel Level Gauge Range	E-1/2-F (Supports 0-190ohm and 240-33ohm sensors)
Water Temperature Gauge Range	40-120°C (Input signal: 287.4-22.4 ohms)
Oil Pressure Gauge Range	0-10 Bar / 0-145 Psi
Voltmeter Range	8-16V
Backlight Colors	Red, Yellow

WHAT'S IN THE BOX

Your ELING 6-Gauge Set package includes:

- GPS Speedometer
- Tachometer
- Fuel Level Gauge
- Water Temperature Gauge

- Oil Pressure Gauge
- Voltmeter
- GPS Antenna (for Speedometer)
- Wiring Harnesses for each gauge
- Installation Manual (this document)
- Fastening Rings for each gauge

Package Includes



Figure 9: Contents of the package, showing the six gauges, GPS antenna, wiring harnesses, and installation instructions.

WARRANTY AND SUPPORT

For specific warranty information and technical support, please refer to the documentation included with your product or contact ELING customer service. Ensure you retain your proof of purchase for any warranty claims.