

3in1 Boost/Vacuum Combination Gauge

For Product Numbers: GS-3G-21, GS-3G-21_BAR, GS-3G-22

1. Disconnect the negative battery cable.

Boost/Vacuum Sensor Installation

1. Cut any boost line and insert the included T-fitting in between the 2 cut pieces of boost line. Insert accordingly so that the intersecting cross piece of the fitting is left to be connected to the boost hose. Route and connect the boost hose to the digital boost sensor, making sure the air filter is installed in line with the sensor.

- **Note:** If a boost line is not available to cut, you may need to purchase a brass barbed fitting to install into the intake manifold to obtain a boost pressure reading. Fittings can be purchased at www.GlowShift.com.

2. Mount the electronic boost sensor in a dry, safe area away from moving engine parts or extreme heat. This may either be inside the cabin or mounted to the firewall.

3. Route the **boost sensor wire harness** from the back of the gauge (**top right port**) through the firewall to the engine bay. Next, couple and secure the **sensor wire harness** to the boost pressure sensor.

- **Note:** When running the wire harness to the sensor, be sure to keep it away from any moving parts or direct heat source by securing it with zip ties. Also, when passing the wires through the firewall be sure to use a grommet to prevent them being cut or damaged.

Temperature Sensor Installation

1. This sensor can be used to monitor your oil temperature, water temperature, as well as your transmission temperature. Confirm the thread size where you are installing the sensor is 1/8th NPT.

- **Oil Temperature Installation:** You can install the sensor to your oil gallery test port, by using a T-fitting to “T” off your stock sensor location, or by using GlowShift’s Oil Filter Sandwich Adapter.
- **Water Temperature Installation:** You can install the sensor to your coolant fluid port, by using a T-fitting to “T” off your stock sensor location, or by using GlowShift’s Water Temperature Sensor Adapter.
- **Transmission Temperature Installation:** You can install the sensor to your transmission temperature port or by using a T-fitting to “T” off your stock sensor location.
- **Note:** Use Teflon tape on the temperature sensor threads before installing it to ensure a tight seal and no pressure leaks.

2. Connect and route the **temperature sensor wire harness** from the back of the gauge (**bottom right port**) through the firewall and to the temperature sensor mounting location. Once the wire harness has been run to the sensor location, simply connect the white wire on the harness to the white wire on the sensor then connect the black wire on the harness to the black wire on the sensor.

- **Note:** When running the wire harness to the sensor, be sure to keep it away from any moving parts or direct heat source by securing it with zip ties. Also, when passing the wires through the firewall be sure to use a grommet to prevent them being cut or damaged.

Pressure Sensor Installation

1. This sensor can be used to monitor your fuel pressure or oil pressure.

- **Fuel Pressure Installation:** Install and connect the 1/8th NPT fuel pressure sensor to your vehicle’s fuel system.
- **Oil Pressure Installation:** You can install the sensor to your oil gallery test port, by using a T-fitting to “T” off your stock sensor location, or by using GlowShift’s Oil Filter Sandwich Adapter.
- **Note:** Use Teflon tape on the pressure sensor threads before installing it to ensure a tight seal and no pressure leaks.
- **Note:** Additional adapters may be required to complete the pressure sensor installation.

2. Connect and route the **pressure sensor wire harness** from the back of the gauge (**bottom left port**) through the firewall and to the pressure sensor mounting location.

- **Note:** When running the wire harness to the sensor, be sure to keep it away from any moving parts or direct heat source by securing it with zip ties. Also, when passing the wires through the firewall be sure to use a grommet to prevent them being cut or damaged.

Connecting the Power Wire Harness

1. Connect the gauge’s wire harness to the **upper left port** on the back of the gauge.

2. Using automotive grade wiring, connect the **red wire** to a positive **12 volt constant ignition** source. It may be connected to the fuse panel, an accessory wire, or any positive 12 volt source that is constantly powered.

- **Note:** If you are connecting the red wire directly to the battery, you **MUST** install a 4 amp fuse within 6-8 inches of the battery connection.

3. Using automotive grade wiring (18 gauge); connect the **white wire** to a positive **12 volt switched ignition** source. It may be connected to the fuse panel, an accessory wire, or any positive 12 volt source that turns on and off with the ignition switch of the vehicle.

4. Using automotive grade wiring (18 gauge); connect the **black wire** from the gauge to any good (unpainted) ground connection. You may also route a wire directly to the negative side of the vehicle’s battery.

5. This gauge features 3 daytime and 3 nighttime dimming modes. Connect the **orange wire** to the 12 volt positive headlamp source. This allows the dimming mode to be activated when the headlights come on. Press and hold the color button until daytime is shown on the digital display. Press the button again to set your brightness level. For the nighttime mode, turn on the switch that you connected the orange wire to and repeat the steps above. **NOTE: Do not connect the orange wire to a dimmer wheel. This will cause the gauge lighting to flicker.**

6. To make the wiring of your gauges easier you can purchase an expandable circuit. This component easily fits into your fuse panel and provides an additional fused power wire for accessories such as gauges. The expandable circuit is available for purchase at www.GlowShift.com.

7. Re-connect the negative side of the battery and test the gauge for full functionality.

Wire Color Code:	
Red: 12v Constant (unswitched) Source (+)	Black: Vehicle Ground (-)
White: 12v (switched) Source (+)	Orange: 12v Dimmer (switched) Source (+) (optional)

