52 mm Gauge Kit – Oil Temp, Oil Pressure & Volts

12V Stepper Motor Gauges · Wiring and Installation

This kit includes three matching gauges: oil temperature, oil pressure and a voltmeter. All three use the same style of wiring harness. Each gauge has two whips: **Whip 1** for power (and the sender signal on the oil gauges), and **Whip 2** for lighting.



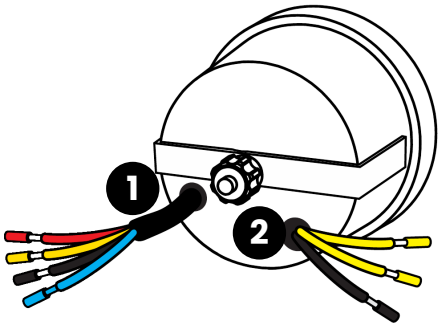
Oil Temperature
Part No. 311018931BKR



Oil Pressure
Part No. 311018915BKR



Voltmeter
Part No. 311018903BKR



Back of gauge (oil gauges shown). The voltmeter's Whip 1 has no blue wire.

1 Whip 1 – Power and signal

Wire	Connect to
Red	Battery +12V (constant power) – all three gauges
Yellow	+12V from ignition (switched; hot only with the key on) – all three gauges
Black	Ground – all three gauges
Blue (oil gauges only)	Oil temp gauge: oil temperature sender · Oil pressure gauge: oil pressure sender

2 Whip 2 – Lighting (all three gauges)

Wire	Connect to
Black	Ground
Yellow or white	Terminal 58 from the headlight switch (instrument lighting)
Yellow or white	Backup LED: leave unconnected until the main LED fails

Wiring All Three Gauges

- Join the three **red** wires and connect them to constant +12V battery power.
- Join the three **yellow** Whip 1 wires and connect them to switched +12V power from the ignition.
- Connect all **black** wires (both whips, all gauges) to a clean ground.
- Join the main Whip 2 lighting wire (yellow or white) from each gauge and connect them to terminal 58 from the headlight switch, so the gauges light up with your headlights. Leave each gauge's backup LED wire unconnected and taped off.
- Connect each oil gauge's **blue** wire to its own sender: the temperature gauge to the oil temperature sender and the pressure gauge to the oil pressure sender. Don't swap them.

Important: on every gauge, the **red** wire must be connected to constant 12V battery power and the **yellow** wire to switched (keyed) 12V power for the gauges to work properly.

Sending units: ISP West sells its oil temperature and oil pressure gauges together with the matching sending units to ensure correct readings. Using a non-compatible sending unit will void the warranty and may cause the gauge to fail.

Reading the voltmeter: with the engine off, a healthy battery reads about 12 to 12.6 volts. With the engine running and the charging system working, expect roughly 13.5 to 14.5 volts. Readings well below or above that range point to a charging system problem.