

Installation Guide

5in. Tachometer with Shift Light

555-41260, 555-41261, 555-41262,
555-41263, 555-41264, 555-41265



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WARNING

READ AND UNDERSTAND
ALL INSTRUCTIONS.

This tachometer uses 12-volt power.

Failure to follow all instructions listed in this user guide may result in property damage, and/or serious injury.

Read Before Installation

Thank you for your purchase of this JEGS 5 in. Tachometer with Shift Light. Please follow the steps below before installation.

- Read instructions completely before installing.
- ALWAYS WEAR SAFETY GLASSES.
- Disconnect negative (-) battery cable before installing the tachometer.

If you have any issues, or if this tachometer is damaged, please contact customer service at: 1.800.345.4545.

Return Information: *Once this tachometer has been modified, it will not be accepted for return.*

General Information

For use with 12-volt DC Negative (-) ground electrical systems. Will not work on Positive (+) ground vehicles.

Wiring

Use 20 AWG stranded or heavier wire for installation. Route wires away from any moving parts and hot engine components. Secure wires firmly along their route. Note: As a safety precaution, the 12V+ connections (**RED** and **BLUE** wires) should be fused. We recommend using a 1 Amp, 3 AG fast acting type cartridge fuse.

- Install gauge only when engine is cool and ignition is off.
- Make sure all necessary tools, materials, and parts are on hand.

Tachometer Signal

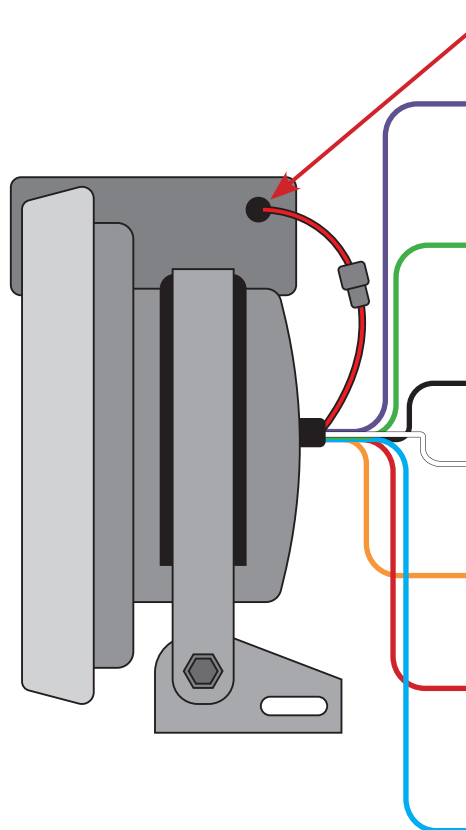
This performance tachometer has two signal input options (**GREEN** and **PURPLE** wires). See Signal Hookup below. Choose the option best suited for your vehicle's ignition system. **Only connect 1 signal input.** If you are unsure which signal input to use, connect your signal source to the **PURPLE** input.

WARNING

NEVER CONNECT THE SIGNAL WIRE TO THE COIL WHEN USING AN MSD OR SIMILAR HIGH OUTPUT CAPACITIVE DISCHARGE STYLE IGNITION SYSTEM.

Incorrect installation will damage the tachometer.

Wiring Diagram



Shift Light

- Connect the 2-pin shift light connector

Signal Input (Purple)

- Use PURPLE wire for the signal input if signal is from a "Clean" tach signal source. See "Signal Hookup".

Signal Input (Green)

- Use Green wire for the signal input if signal is from an Ignition Coil (-). See "Signal Hookup".

Ground (Black)

- Connect to a common ground.

White Lighting (White)

- Connect to 12V (+) dash lighting for white backlight. **OR**

Amber Lighting (Orange)

- Connect to 12V (+) dash lighting for amber backlight.

12V (+) Ignition (Red)

- Connect to your 12V (+) ignition circuit so power is on when the ignition is turned on.

12V (+) Battery (Blue)

- Connect to a 12V (+) source that is always on, even when the ignition is OFF.

Wiring Summary

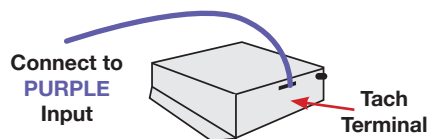
COLOR	COMMENTS
PURPLE	Use PURPLE signal input if signal is a "clean" signal (tach output terminal, ECU, tach adapter etc.).
GREEN	Use GREEN signal input if you are using a signal from an ignition coil (-).
BLACK	Connect to a good common ground.
WHITE	Connect to 12V+ dash lighting for white backlight.
ORANGE	Connect to 12V+ dash lighting for amber backlight.
RED	Connect to 12V+ ignition circuit so power is ON when ignition is turned on.
BLUE	Connect to a 12V+ source that is always on, even when ignition is OFF (i.e. Battery +).
SHIFT LIGHT	Shift Light Connector Connect it to the red/black 2-pin connector.

Signal Hookup

Determine which SIGNAL input to use (**GREEN** or **PURPLE**) **Only connect ONE signal input.** If you are unsure which SIGNAL input to use, connect your signal source to the **PURPLE** input.

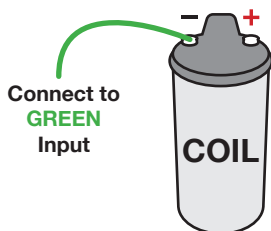
"Clean" Tach Signal

Connect the signal wire from the signal source to the **PURPLE** signal input if you are using a tach signal from any of the following: ignition with tach output terminal, ECU, tach adapter, other "clean" tach signal source.



Ignition Coil (-)

If you are using a signal from an ignition coil (-) connect the signal wire from the coil negative (-) to the **GREEN** signal input.



View & Clear Peak RPM Value

- To view the peak RPM value, press the UP button. The pointer will indicate the previous peak RPM.
- To Exit: press the UP button again.
- To Clear the peak RPM: press and hold the DOWN button for 3 seconds while viewing the peak RPM value. The pointer will move to zero to confirm that the peak RPM value has been cleared.

Shift Light RPM Set Point

- Press the MENU button to access SHIFT mode. The pointer will indicate the current shift light activation set point.
- To change the shift light activation set point, press the UP or DOWN buttons. Hold the UP or DOWN button for rapid increase or decrease of the set point.
- Press MENU to save your changes and exit SHIFT mode.

Through-Dial Lighting Color

For white backlight, connect the **WHITE** wire to your 12V+ dash lighting. For amber backlight, connect the **ORANGE** wire to your 12V+ dash lighting.

Dimmable LED Lighting

This gauge features through-dial, high-definition LED lighting that will not dim when used with standard dash dimmers.

Lens Cleaning

The gauge lens is made of acrylic plastic. Do not use any chemicals or abrasives on the lens. To prevent scratching, caution must be used when cleaning. To clean, wipe lightly with a damp soft cloth.

Lens Protective Film

The gauge comes with a soft protective plastic film on the lens. Remove the protective film when gauge installation is complete.

PPR (Pulse Per Revolution)

PPR (pulses per revolution) relates to how many times the ignition fires per crankshaft revolution. Because tachometer outputs on modern vehicles can range from 1 PPR to 4 PPR for a V8 engine the new standard is to refer to PPR. For standard ignitions PPR is typically half the number of cylinders.

Calibration

To calibrate, hold down the MENU button while turning the ignition on. The pointer will indicate the current PPR setting (0.5-6) as shown in the table below.

PPR Setting	Pointer Position, RPM
0.5 PPR (1 Cyl)	500
1 PPR (2 Cyl)	1000
2 PPR (4 Cyl)	2000
3 PPR (6 Cyl)	3000
4 PPR (8 Cyl)	4000
5 PPR (10 Cyl)	5000
6 PPR (12 Cyl)	6000

Use the UP/DOWN buttons to change the PPR setting. Press MENU to save your changes and exit calibration mode.

Tachometer Signal Hookup (Additional)

This performance tachometer has two signal input options. Choose the option best suited for your vehicle's ignition system. Only connect 1 signal input. If you are unsure which signal input to use, connect your signal source to the **PURPLE** input.

Purple Wire Input "Clean" Signal

On applications where a "clean" tachometer signal output is available (typically a 12V square wave signal) connect the signal wire from the signal source to the **PURPLE** wire on the back of the tachometer.

Applications with "clean" tachometer output signals include ignition boxes with tachometer output terminal, dedicated tachometer signal from ECU, and tachometer adapters.

Green Wire Input Ignition Coil (-)

On standard ignition coils connect the signal wire from the coil negative (-) to the **GREEN** wire on the back of the tachometer. Note: Some ignition coil applications (including many 4 cylinder applications) output a relatively clean signal. If this is the case for your application you may need to use the **PURPLE** signal input wire.

Troubleshooting

1. Non-Functioning or Erratic Tach Reading:

- Your tachometer may have a square grommet on the back. If so, the harness may have come unplugged from the circuit board. Simply remove the grommet and verify that the plug is securely pushed into its socket. Then reinstall the grommet.
- Using a multimeter. Set the meter to read resistance (Ohms Ω). Connect the black lead on the meter to the negative post on the vehicle's battery (do not assume the closest metal surface will be good enough). Next, connect the red lead on the meter to the wire you are using to supply ground to the Tach. If the Ohm reading is 5 or less the ground is good.
- Use the multimeter to check power to the Tach. The Tach should see a constant 12 volts with the key on, even with any accessories on (i.e. Radio, Lights, etc.).

2. Shift Light Flashes, but RPM needle stays steady:

This is mostly caused by a “noisy” signal. If there is a rapid sharp spike in the signal due to signal noise (common with HEI ignition systems) it could trigger the light but not be noticeable on the pointer.

- If using the green wire for signal input, try changing it to the purple wire input. This offers a different internal filter circuit.

- If switching input wires does not help, a tach filter may be needed to eliminate any signal noise.
- Testing the RPM signal with a multimeter: (See at right)
 1. Set the multimeter to frequency (Hz).
 2. Connect the black lead to the negative post on the vehicle's battery.
 3. Connect the red lead to the wire you have chosen for your Tach signal input.
 4. Start the engine and hold the throttle at a few RPM points (i.e. 1000, 1500, 2000) and record the readings (Hz) on the multimeter.
 5. Convert the readings to RPM, See formula below:

$$\text{RPM} = \text{Hz} \times \text{RPS} \times 60 \text{ seconds}$$

Example: (SBC @ 1500 RPM)

$$6 \times 4 \times 60 = 1440 \text{ RPM} \\ (\text{can be } \pm 200 \text{ RPM})$$

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