

INSTALLATION INSTRUCTIONS

TACHOMETER W/WARNING & PEAK

WHITE/AMBER LED DISPLAY

STEPMOTOR MOVMENT JAPAN

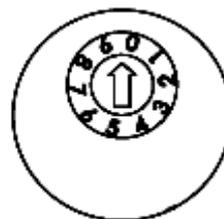
1 BEFORE YOU START

1. Read instructions completely before installation.
2. Install tachometer only when engine is cool and ignition is off.
3. Make sure all necessary tools, materials, and parts are on hand.
4. Refer to your vehicle's service manual for the location of tachometer sensor port, vacuum system, and/or charging system.
5. Disconnect negative (-) battery cable before installing tachometer.
6. Make sure mounting location does not impair visibility of interfere with driving. Also check behind the mounting location for any wiring or components before drilling.
7. When connecting electrical wire, install crimp terminals and make wire splices as needed. ALWAYS insulate wire splices with electrical tape to prevent shorting.
8. Follow all necessary safety procedures for protection.

NOTE: It may be necessary to reprogram your radio, clock, etc. after reconnecting the battery.

2 ENGINE CYLINDER SELECTION

The tachometer is designed for use with 1.2.3.4.5.6.7.8.9. Cylinder engines only. The cylinder select switch on the rear of the tachometer must be set prior to installation. Use your finger of a small screwdriver to slide the cylinder select switch. To the appropriate position: 1.2.3.4.5.6.7.8.or 9.

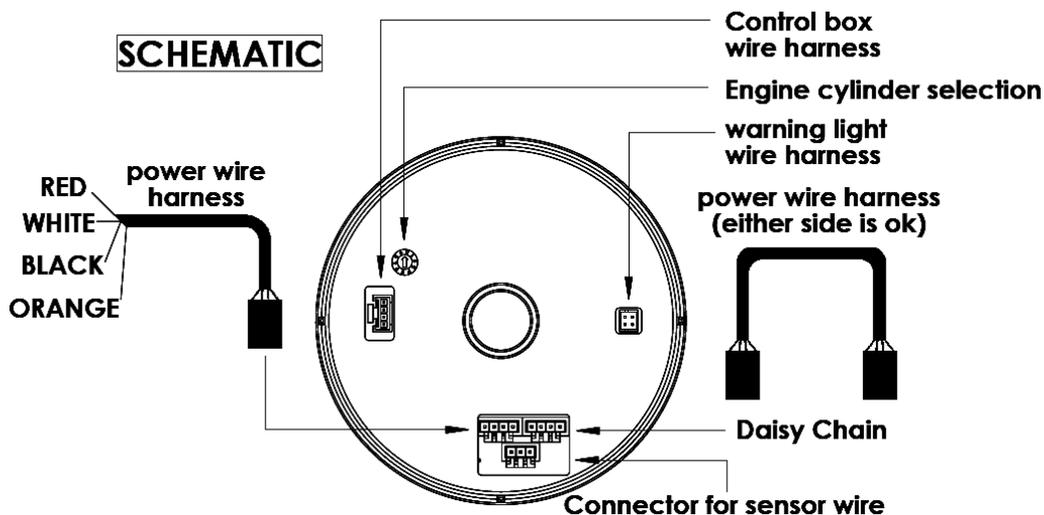


3 MOUNTING

You can mount your tachometer on or under the dashboard or on the center console according to your personal choice. Determine best position for good visibility before drilling screw holes.

4 TACHOMETER CONNECTION

1. Connect power wire (RED) to +12V battery wire.
2. Connect power wire (WHITE) to a switched +12V circuit at fuse box, or splice into any vehicle harness wire which is energized ONLY when ignition key is ON (RUN) position.
3. Connect power wire (BLACK) to ground, negative (-) battery terminal or a good chassis ground.
4. Connect power wire (ORANGE) to panel lights circuit at fuse box, or splice into any vehicle harness wire connected to the panel lights circuit.
5. Secure lead wires along their route to prevent damage from sharp edges, moving parts or hot engine components.
6. Turn on ignition. DO NOT START ENGINE tachometer pointer should rotate to minimum or "0" when ignition is turned on.
7. Start and run engine. REV engine several times and verify tachometer indication changes as rpm increases and decreases. Make sure tachometer pointer operation is smooth and even.



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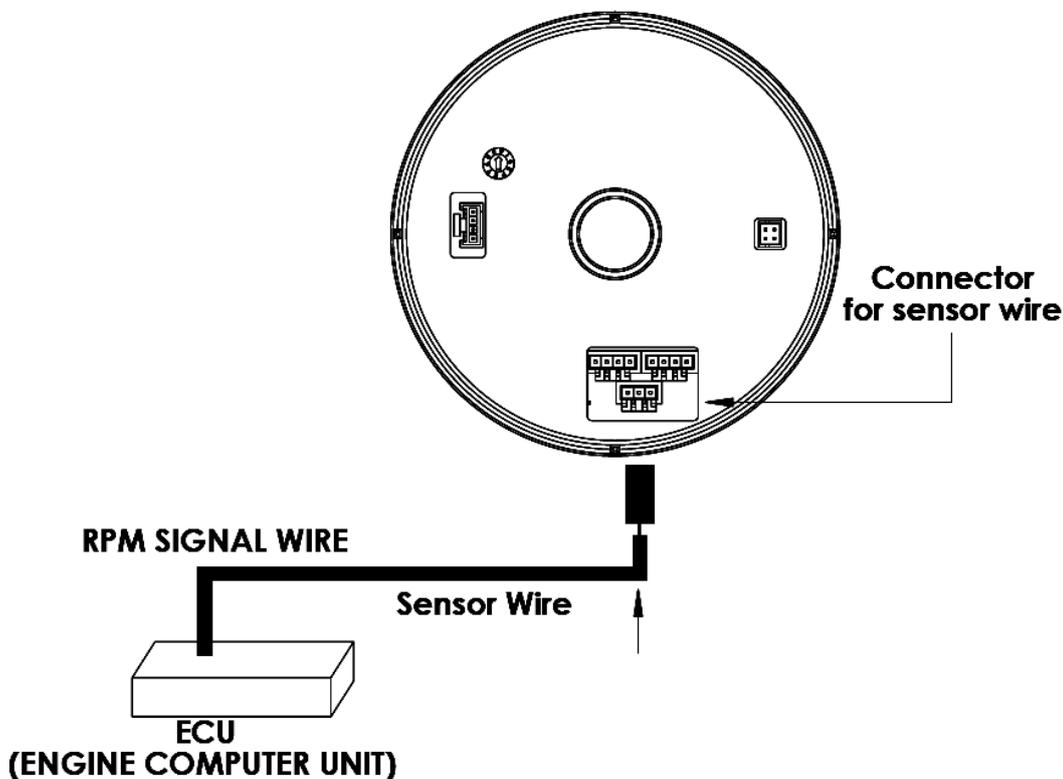
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WHITE/AMBER LED DISPLAY

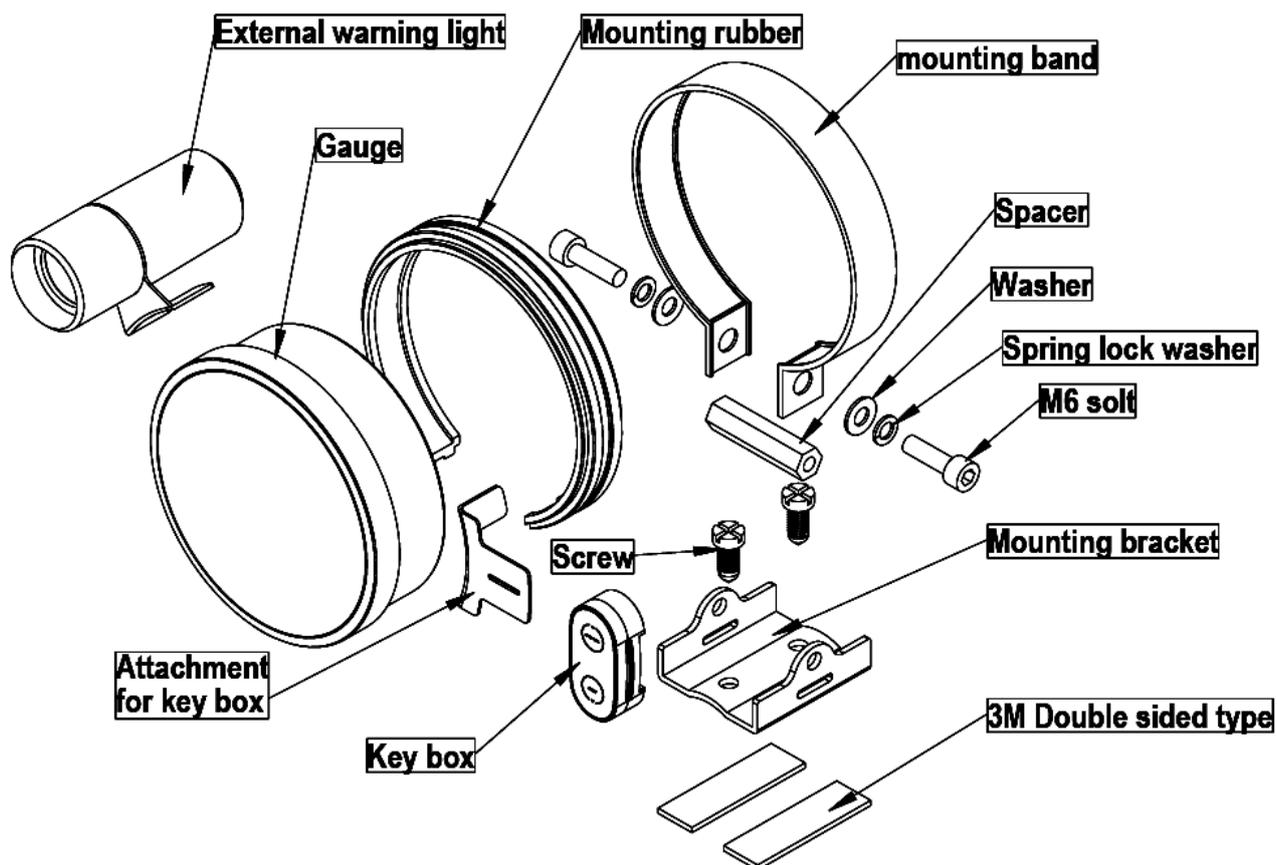
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5

Tachometer signal wire connections vary with vehicle make, model, and ignition type. Typical tachometer signal source locations are shown in the accompanying illustrations. Always consult the service manual for the vehicle you working on to ensure proper connection.



6 TACHOMETER ASSEMBLY



OPERATION INSTRUCTION



WARNING: IT IS DANGEROUS TO OPERATE THE SETTING OF THE GAUGE WHEN YOU ARE DRIVING. CONSIDERING YOUR AND OTHERS SAFETY, PLEASE OPERATE THE SETTING BEFORE DRIVING.

There are three modes which can be operated: **BACKLIGHT MODE**, **PEAK MODE** and **SETTING MODE**. In the setting mode, there are three functions to be operated: warning, sound and backlight brightness. Press <SET> to select the backlight color and <PEAK> to enter the peak mode when the gauge is in the normal mode. Hold <SET> for 3-second to enter into the **Warning 1 setting**, **Warning 2 setting**, **Sound setting**, and **Backlight Brightness setting** in sequence when the gauge is in the normal mode.

1. BACKLIGHT MODE:

- 1) There are two different colors LED backlight in one gauge: White and Amber.
- 2) Press <SET> to change the backlight color when the gauge is in the normal mode.

2. PEAK MODE:

- 1) Press <PEAK> to enter into the Peak Mode which you can see the needle shifts to the recorded peak value and the word "PEAK" is lighted up.
- 2) When the peak value is displayed, hold <PEAK> for 3-second to clear the previous peak value which you will see the word "PEAK" is flashing.
- 3) When the peak value is clear, the gauge will buzz as confirmation.
- 4) After 3-second of no operation activity, the gauge will return to the normal mode.

3. SETTING MODE:

There are three functions to be operated in this mode, warning, sound and backlight brightness. Hold <SET> to enter into the **Warning 1 setting**, **Warning 2 setting**, **Sound setting** and **Backlight Brightness setting** in sequence until the function setting you prefer is presented. When the needle light is flashing, the setting can be programmed.

Warning 1 setting

- 1) When the warning light is flashing, the warning 1 value can be programmed. Press <PEAK> to move the needle clockwise while press <SET> to move the needle counter-clockwise.
- 2) Hold either <PEAK> or <SET> to shift the needle in major increments in their representative directions.
- 3) The gauge will return to the normal mode after 5-second of no operation activity.

Warning 2 setting

- 1) When the warning light is on, the warning 2 value can be programmed. Press <PEAK> to move the needle clockwise while press <SET> to move the needle counter-clockwise.
- 2) Hold either <PEAK> or <SET> to shift the needle in major increments in their representative directions.
- 3) The gauge will return to the normal mode after 5-second of no operation activity.

Sound setting

- 1) When the warning light and the peak word are lighted up, press <PEAK> to enable the sound while press <SET> to disable the sound.
- 2) There are only key sound and warning 2 sound. Indeed, there is no sound for warning 1.
- 3) When the sound is enabled, which the warning 2 sound and key sound are turned on, the gauge will buzz twice as confirmation.
- 4) When the sound is disabled, which the warning 2 sound and key sound are turned off, the gauge will buzz once as confirmation.
- 5) The gauge will return to the normal mode after 5-second of no operation activity.

Backlight Brightness setting

There are nine-level brightness sections available for each daytime and nighttime. **In order to set the nighttime backlight brightness, the orange wire of the power wire harness should connect to dimmer/ 12V switched source (+).**

- 1) When the warning light and peak light are flashing alternately, press <PEAK> to brighten the backlight while press <SET> to weaken the brightness.
- 2) When the gauge is in the Backlight Brightness setting and Dimmer/ 12V switched source (+) is off, the daytime brightness can be selected.
- 3) When the gauge is in the Backlight Brightness setting and Dimmer/ 12V switched source (+) is on, the nighttime brightness can be set.
- 4) The gauge will return to the normal mode after 5-second of no operation activity.