Classic Instruments

ZST TACHOMETER
(6000RPM)

Installation Manual

Tachometer Installation

1) Make sure you have sufficient clearance (3 ½") behind the panel where you intend to mount the tachometer.
2) If necessary, cut a 3.375" hole or 4.625" hole (depending on which size tachometer you have) in the dash panel at the desired location.
3) Fit the mounting bracket over the mounting studs of the tachometer. The legs of the bracket may be shortened if required.

Tachometer Wiring

1) Always disconnect the ground lead from the vehicle battery before wiring any gauge.
2) Connect a switched +12VDC power source to the **Pink** wire of the gauge harness.
3) Connect a good chassis ground to the **Black** wire of the gauge harness.
4) Connect dash light power to the **Grey** wire of the gauge harness.
5) Connect one wire of the tachometer calibration button to the **Brown** wire of the gauge harness.
   a. Connect the other wire of the calibration button to a good chassis ground.
6) *Optional:* Connect a remote shift light indicator's Ground to the **Yellow / White** wire of the gauge harness.
7) Connect tachometer signal to the **White** wire of the gauge harness. Refer to the following list of ignition system types to help determine where to get the signal.

STANDARD POINTS & CONDENSER SYSTEM
Connect the negative side of the coil (usually marked as "-") to the white wire of the gauge harness.

GMC – HEI (High Energy Ignition System)
Connect the "TACH" terminal on coil side of distributor cap to the white wire of the gauge harness.

MSD (Multiple Spark Discharge System)
Connect the Tach signal on the MSD box to the white wire of the gauge harness.

VERTEX MAGNETO SYSTEM
Connect the "KILL" terminal on the side of a Vertex magneto body to the white wire of the gauge harness. An external adapter such as an MSD "Pro Mag Tach Converter" #8132 may be required.

ACCEL IGNITION COILS
Connect the negative side of the coil to the white wire of the gauge harness. CAUTION! Some Accel ignition coils require the tach signal wire to be connected to the "+" terminal on the coil! PLEASE carefully read Accel's instructions before connecting ignition coil.

MALLORY IGNITION
Connect the negative terminal side of coil (usually marked as "-") to the white wire of the gauge harness.
   IMPORTANT! Some Mallory ignition systems may require you to adjust the tachometer at the 4-cylinder setting (rather than the 8-cylinder setting).
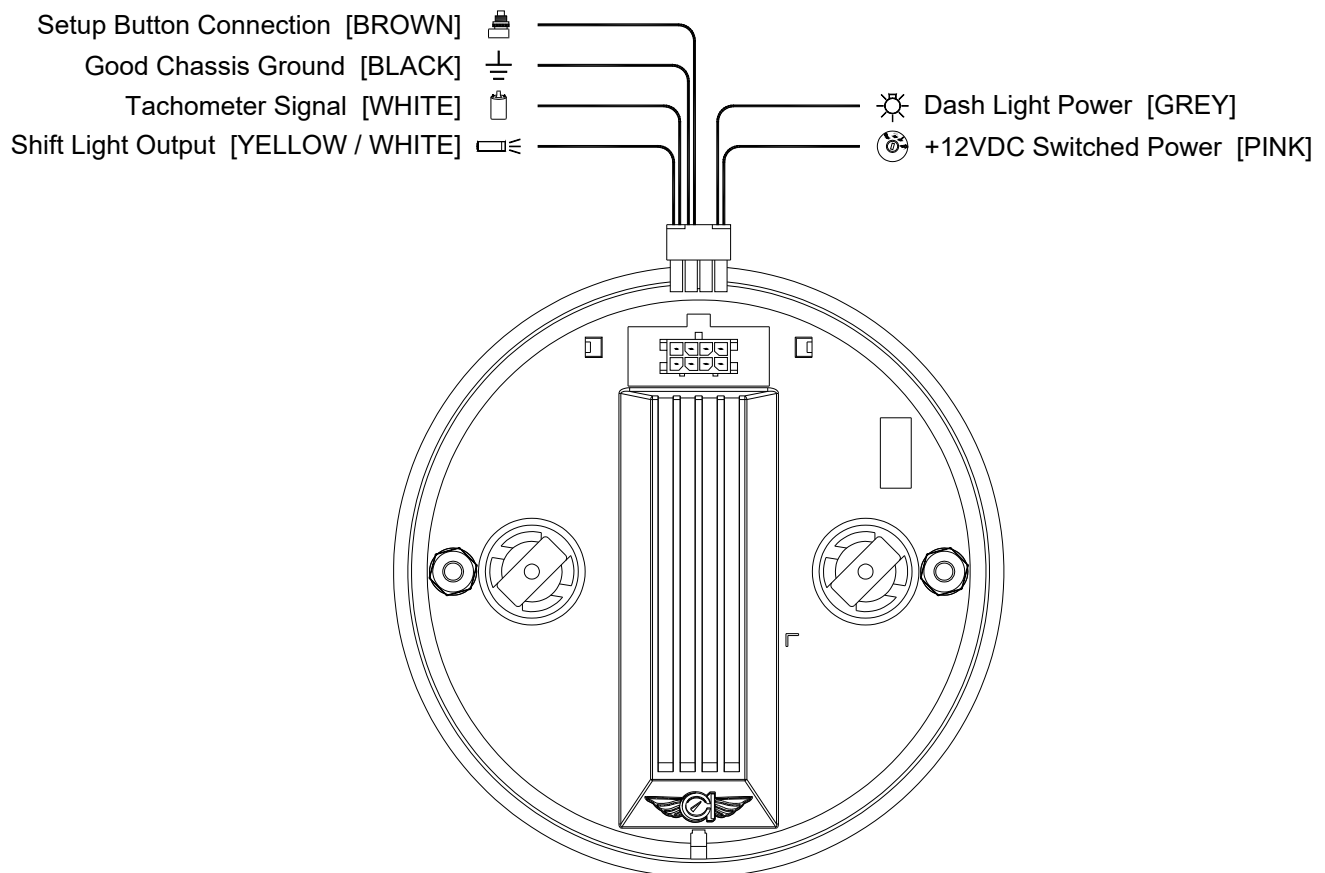
ECM TACHOMETER SIGNAL
Connect the signal wire from the ECM to the white wire of the gauge harness. When using this type of signal, you may need to set the tachometer to the 4-cylinder setting regardless of the actual cylinders on the engine. Also, set the signal type to 5V when using this signal.
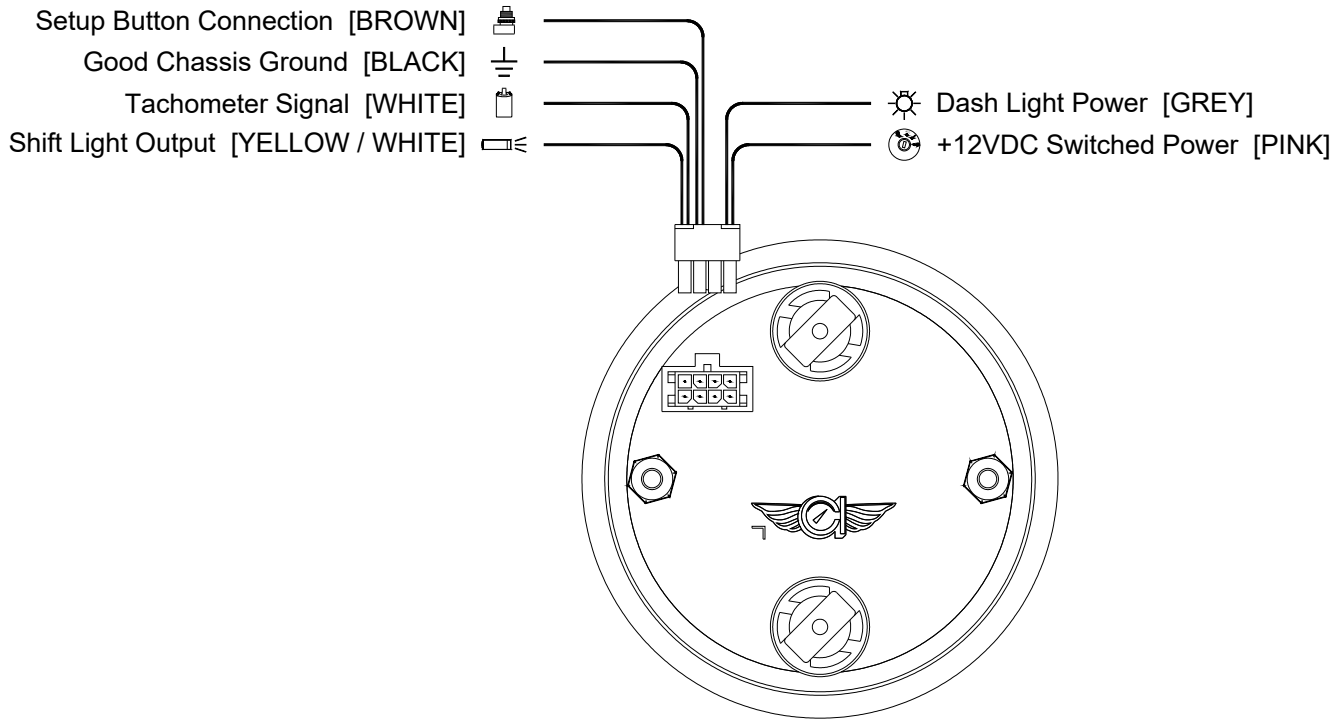
MULTIPLE COIL IGNITION SYSTEMS

A tach adapter is required for these ignition systems. A tach signal driver such as the MSD #8913, which produces a 12V square wave signal, is recommended along with a SN74Z signal converter. Please check with manufacturer for your specific application.

NOTICE! For all other ignition systems please look at the owner's manual for that system.

4 $^5/_8$-Inch Tachometer

Setup Button Connection [BROWN]

Good Chassis Ground [BLACK]

Tachometer Signal [WHITE]

Shift Light Output [YELLOW / WHITE]

Dash Light Power [GREY]

+12VDC Switched Power [PINK]

3 $^{3}/_{8}$-Inch Tachometer

Setup Button Connection [BROWN]

Good Chassis Ground [BLACK]

Tachometer Signal [WHITE]

Shift Light Output [YELLOW / WHITE]

Dash Light Power [GREY]

+12VDC Switched Power [PINK]

Tachometer Setup

Set Signal Type:

1. Start with power off.
2. Press and hold pushbutton.
3. While pressing pushbutton, apply power to the gauge (starting vehicle not necessary).
4. Release pushbutton once power is applied.
5. Tachometer pointer will indicate 1500 RPM.
6. Press and hold the pushbutton (with tachometer reading 1500 RPM) until the pointer moves to indicate the signal type.
7. Tapping the pushbutton will cause the pointer to alternate between 3750 RPM "Low Voltage Signal" *(from an ECM)* and 4500 RPM "High Voltage Signal" *(from standard, HEI or CDI {MSD} ignitions)*.
8. Press and hold the pushbutton until the pointer returns to 0 RPM to save the setting.

Set # of Cylinder Signal Type:

1. Start with power off.
2. Press and hold pushbutton.
3. While pressing pushbutton, apply power to the gauge (starting vehicle not necessary).
4. Release pushbutton once power is applied.
5. Tachometer pointer will indicate 1500 RPM.
6. Tap the pushbutton to index the pointer to 3000 RPM "4-cylinder", 4500 RPM "6-cylinder" or 6000 RPM "8-cylinder".
7. Press and hold the pushbutton with the pointer indicating the desired setting (3000, 4500 or 6000) to set the signal type. Once set, the pointer will return to 0 RPM.

Optional: Set Shift Light Trigger Point:

1. Start with power off.
2. Press and hold pushbutton.
3. While pressing pushbutton, apply power to the gauge (starting vehicle not necessary).
4. Release pushbutton once power is applied.
5. Tachometer pointer will indicate 1500 RPM.
6. Tap the pushbutton to index the pointer to 2250 RPM.
7. Press and hold the pushbutton (with tachometer reading 2250 RPM) <u>until the pointer moves</u> to indicate the shift light trigger point.
8. Press and hold the pushbutton to change the RPM shown. The first time the pushbutton is pressed and held, the RPM shown will increase. The second time the pushbutton is pressed and held, the RPM shown will decrease. The RPM shown will alternate between increasing and decreasing each time the pushbutton is pressed.
9. Once the correct RPM shift light trigger point is shown, wait 8 seconds without pushing the pushbutton in order to save the setting. The pointer will return to 0 RPM.

<u>Important: Turn power OFF to save changes</u>