1965 – 1966
Ford
Mustang

Installation Manual

Revision: May 3, 2013

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Welcome from the Team at Classic Instruments!

Our congratulations and appreciation for your purchase of one of the finest quality sets of specialty instruments ever produced! Your instrument set has been conceived, designed, and manufactured by Classic Instruments, Inc. in the U.S.A. Each instrument has been tested and certified for accuracy and quality before packaging and shipping.

For trouble-free installation and operation follow the instructions exactly as outlined. Your instruments were assembled to precise specifications and although each has a five (5) year warranty covering defective parts and workmanship – this warranty will not cover instruments or sender units which have been installed incorrectly.

Follow our recommended procedures for installation and proper hookup to maintain the value and appearance of your instrument set during many future years of accurate and dependable service!

LIMITED WARRANTY

Classic Instruments, Inc. (CI) warrants to the original purchaser that any CI product manufactured or supplied by CI will be free from defects in material and workmanship under normal use and service for a period of five (5) years from date of purchase.

Improper installation, use of sending units other than CI's or attempted repair or adjustments by other than CI shall void this warranty. Disassembly of any instruments or senders for whatever reason shall specifically void this warranty.

It's always easy to look to a part for an issue with your set. Before you conclude that a part may be bad, thoroughly check your work. Today's semiconductors and passive components have reached incredibly high reliability levels, but there is still room for error in our human construction skills. However, on rare occasions a sour part can slip through. Please be aware that testing can usually determine if the part was truly defective or damaged by assembly or usage. Don't be afraid of telling us that you "blew it", we're all human and in most cases, replacement parts are very reasonably priced.

Purchaser requesting a product to be repaired or replaced under warranty must first call CI at 1-800-575-0461 before the return of defective part. Send defective part either to 1299 M-75, through UPS, or to P.O. Box 411 through U.S. Mail, Boyne City, MI 49712, USA. Include a written description of the failure with defective part.

Purchaser agrees and accepts that under no circumstances will a warranty replacement be furnished until CI has first received, inspected, and tested the returned part.

All other warranties expressed or implied are hereby excluded including any implied warranty of merchandise and implied warranty of fitness for a particular purpose. The sole and exclusive remedy for breach of this warranty is limited to the replacement set forth above.

It is expressly agreed that there shall be no further remedy for consequential or other type of damage, including any claim for loss of profit, engine damage or injury.

TECHNICAL ASSISTANCE
1-800-575-0461
OR
Visit our website for the latest in gauge design and updates to our installation manual

www.classicinstruments.com

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Mounting Gauges in New Bezel

Required Parts:

- Classic Instruments 1965-66 Mustang 5 gauge kit or Ultimate Speedometer kit
- Mustang Adapter Panels
- 1965-66 Ford Mustang Gauge Bezel

Required Tools:

- #1 Phillips screwdriver
- #2 Phillips screwdriver
- 11/32” nut driver or socket and ratchet
- Side cutters

Required Hardware:

- Four 6-32 x 1/2” F-type self-tapping screws
- Four 6-32 x 1” F-type self-tapping screws
- Ten 10-32 x 1” machine screws
- Four 10-32 x ¼” machine screws
- Four 7/16” Aluminum Spacers
- One 3 ½” rubber O-ring

Steps:

1. Place the gauge bezel face down.
2. Remove the plastic pin at the top of the speedometer opening with side cutters or pliers. See Figure 1.
3. Place the gauges face down in the desired locations on the gauge bezel.
4. Put the supplied 3 ½” o-ring around the speedometer housing if using a Scott Drake reproduction housing. If using an OEM housing the o-ring is not required.
5. Place the aluminum adapter panel over the gauges. The panel will only fit correctly one way. The passenger side of the panel has one half-circle notch and the bottom has two half-circle notches. See Figure 2.

Figure 1

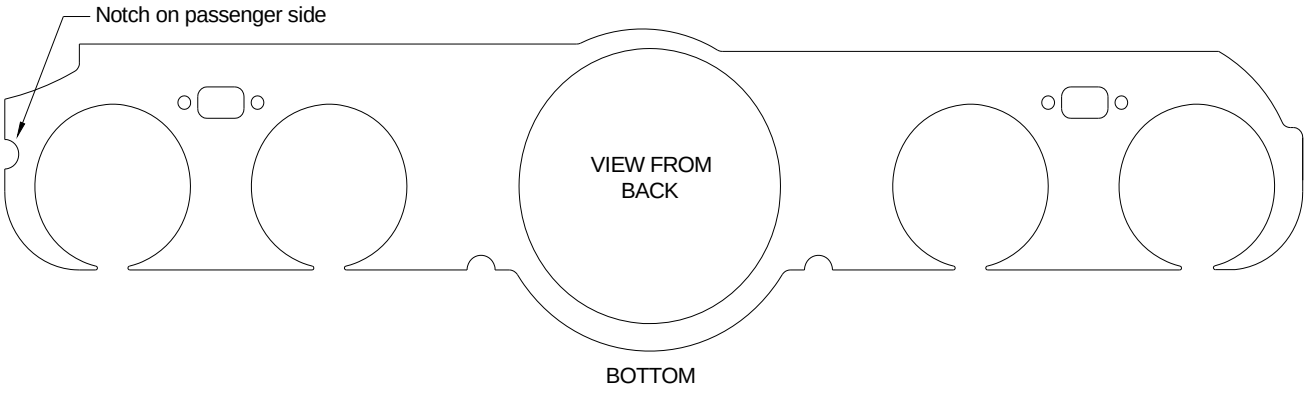

Figure 2: Aluminum Adapter Panel

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6. Use a #1 Phillips screwdriver to secure the mounting panel to the plastic gauge bezel with the 6-32 F-type self-tapping screws. The ½" long screws secure the bottom of the panel and the 1" long screws secure the top of the panel. Place the 7/16" aluminum spacers between the mounting panel and the plastic gauge bezel on the top four mounting holes. See Figures 3, 4 & 5.

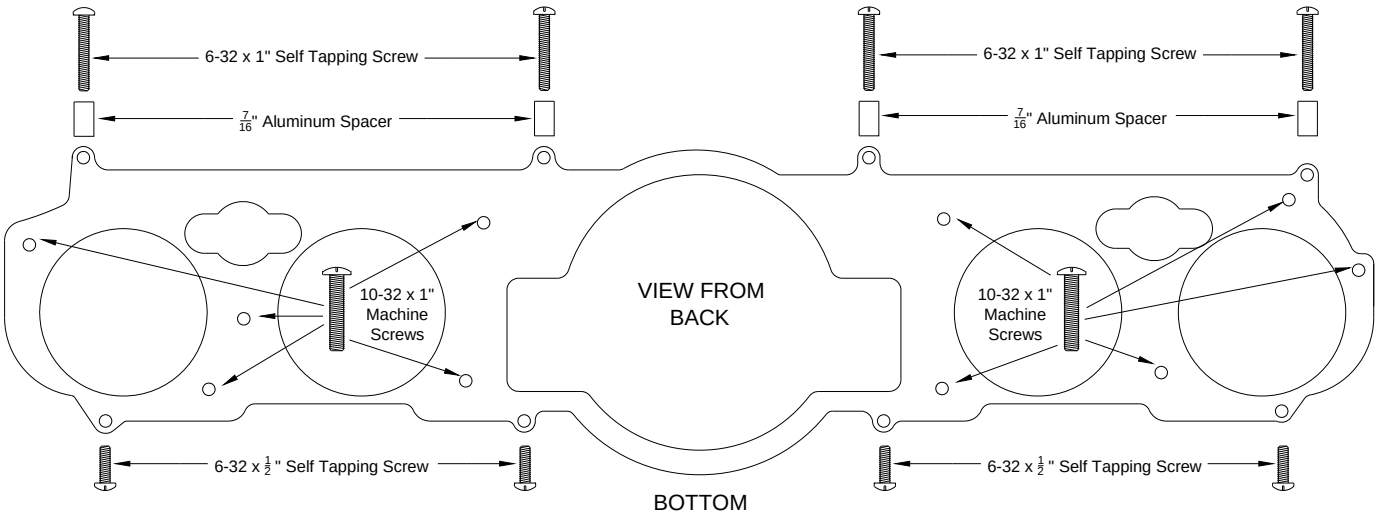


Figure 3: Mounting Panel

7. Tighten the ten 10-32 x 1" machine screws by hand through the holes in the mounting panel until the screw tips just contact the aluminum adapter panel. You should still be able to adjust the rotation of the gauges at this point.
8. Ensure the gauges are located correctly and straight. Use a #2 Phillips screwdriver to tighten the mounting panel with the 10-32 x 1" machine screws. Do not over tighten. Tighten evenly until the gauges will not rotate in the bezel by hand.
9. Push the turn signal lights into the rectangular openings in the aluminum adapter panel. Secure with two 10-32 x ¼" machine screws per side.

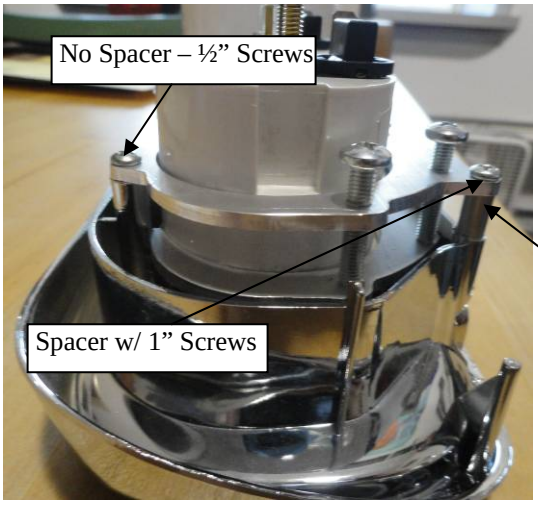


Figure 4

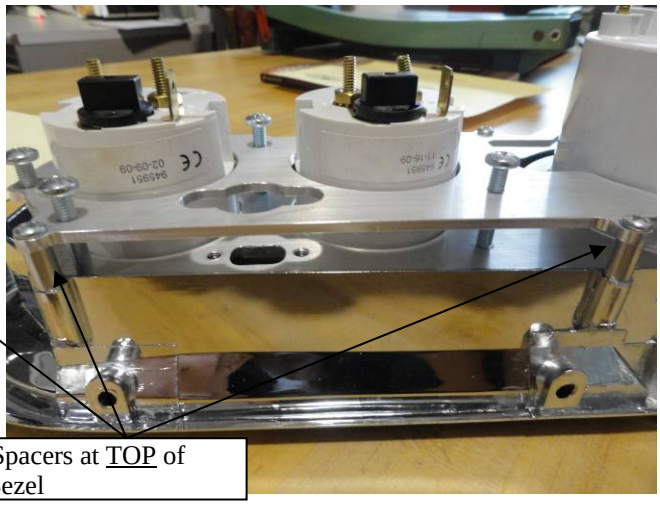


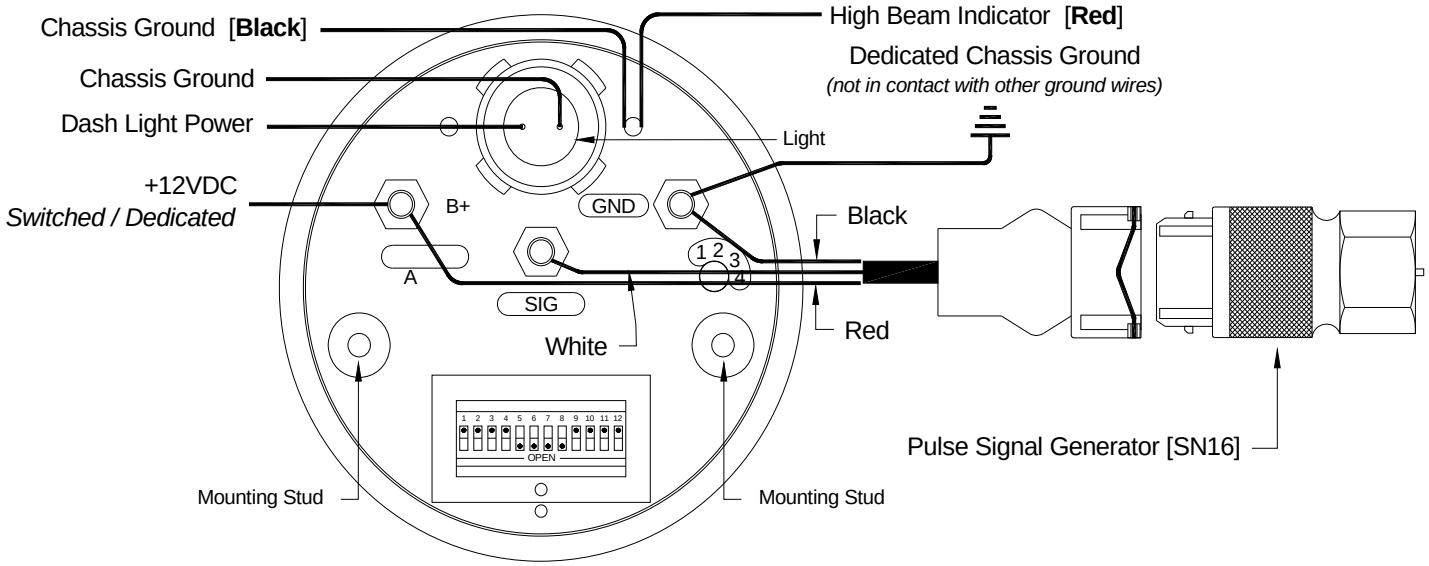
Figure 5

3 3/8” Speedometer Wiring

1) Always disconnect the vehicle battery before wiring any gauge.
2) Connect a switched +12VDC power source to the **B+** terminal on the back of the speedometer. *We recommend using a dedicated power source for the speedometer to avoid possible problems caused by bad “noisy” power.*
3) Connect a good chassis ground to the **GND** terminal on the back of the speedometer. *We recommend using a dedicated chassis ground (not stacked with other ground wires) to avoid possible problems caused by a bad ground.*
4) Connect a speed signal to the **SIG** terminal on the back of the speedometer:
   a. White signal wire from a pulse signal generator [SN16]
      i. *See “Pulse Signal Generator Wiring” section for complete SN16 wiring instructions*.

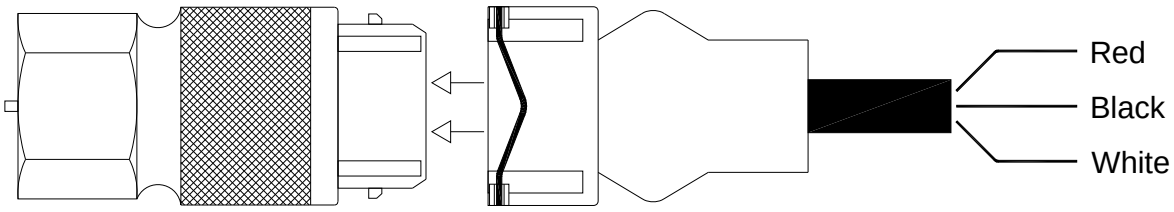
   [OR]
   b. Output from a [SN74] speedometer signal interface module.
      i. See “Speedometer Signal Interface Wiring” section for complete SN74 wiring instructions.
5) Connect dash light power to **one wire** of the speedometer’s light socket. *(Connect the other socket wire to a good ground but NOT the speedometer’s GND terminal)*
6) Connect the high beam indicator power to the **Red** #24AWG wire on the back of the speedometer.
7) Connect a good chassis ground to the **Black** #24AWG wire on the back of the speedometer.

3 3/8” Speedometer Wiring Diagram



16 Pulse Signal Generator [SN16] Wiring

Attach the signal generator to the transmission speedometer gear housing (where the speedometer cable originally connected). Do not use excessive force to tighten. These signal generators produce approximately 16,000 pulses per mile (PPM).



Red: ---------- +12VDC
Black:-------- Ground
White:-------- Signal

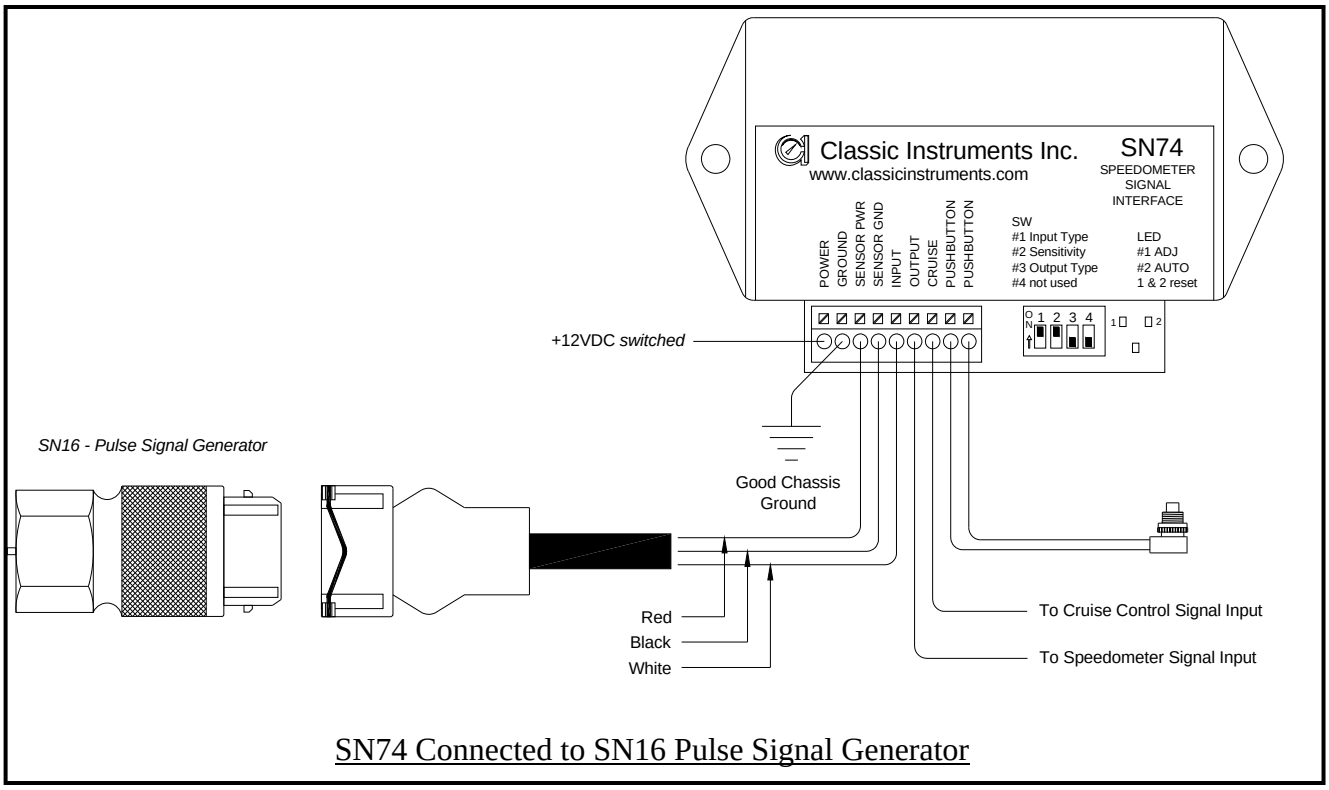
Speedometer Signal Interface [SN74] Wiring

1) Connect switched +12VDC to “POWER”
2) Connect chassis ground to “GROUND”
3) Connect the red wire from a SN16 pulse signal generator to “SENSOR PWR”. *(if not using the SN16, do not use this connection)*
4) Connect the black wire from a SN16 pulse signal generator OR one wire from the built-in transmission VSS (2-wire) to “SENSOR GND”. *(if using an ECM speed signal, do not use this connection)*
5) Connect the white wire from a SN16 pulse signal generator OR one wire from the built-in transmission VSS (2-wire) OR the ECM speed signal to “INPUT”
6) Connect “OUTPUT” to the signal connection of the speedometer.
7) Connect “CRUISE” to the signal input for a cruise control module *(if needed)*. The cruise control signal is 8,000 pulses per mile (PPM).
8) Connect one lead from the momentary pushbutton to each of the two “PUSHBUTTON” connections.
9) Determine the default pulse setting for the speedometer (Classic Instruments speedometer with 8 dip switches is 8,000ppm, Classic Instruments speedometer with 12 dip switches is 16,000ppm)
10) If speedometer dip switches are not in the default position, set them at this time (8,000ppm speedometer 2 6 7 8 OPEN, 16,000ppm speedometer 5 6 7 8 OPEN)
11) Set switches on the module according to the chart below based on the speed signal you will be using.

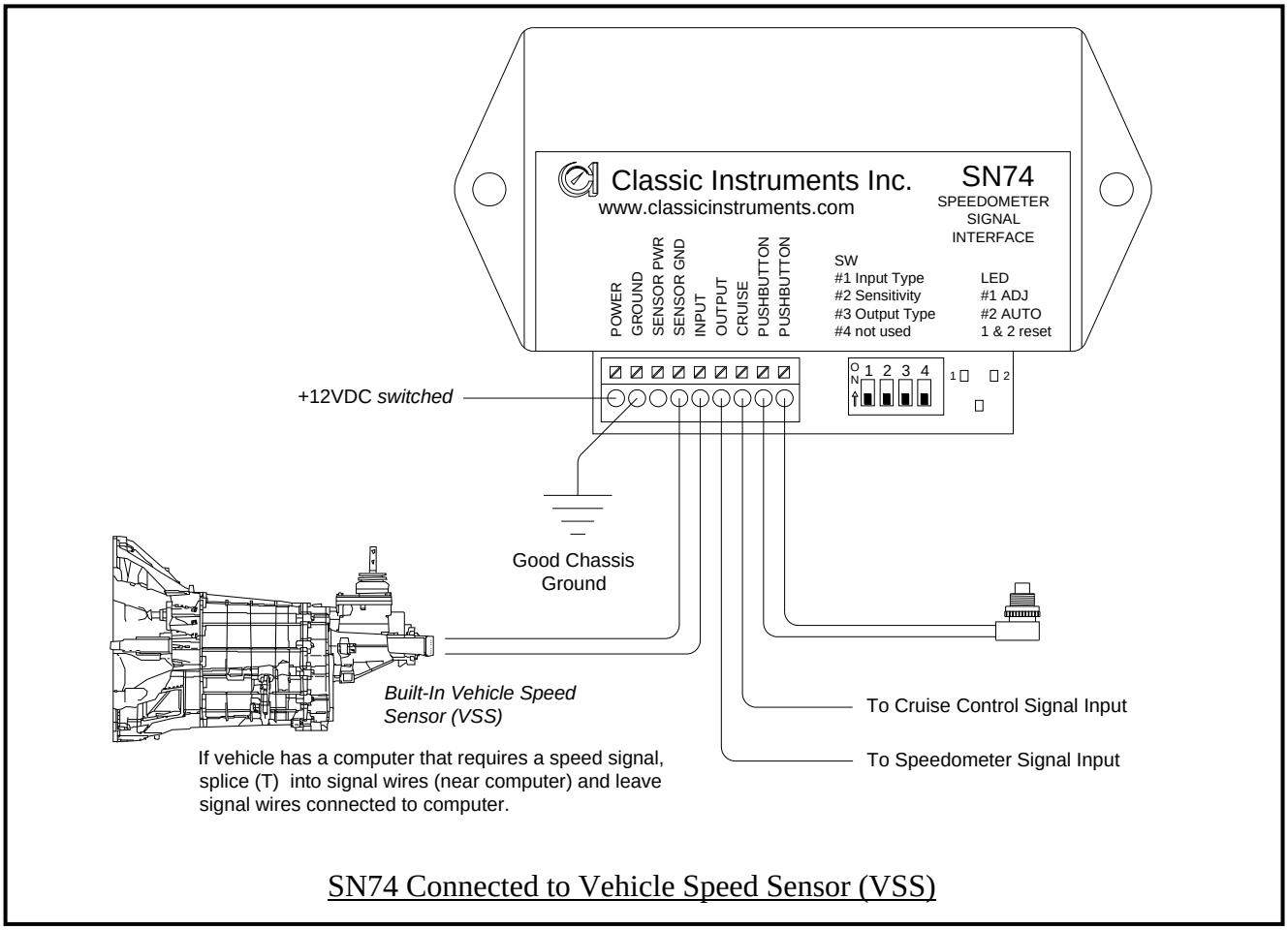
Signal Source	Gauge Type	Switch Setting
SN16 Pulse Signal Generator	8-Pulse *(8,000ppm)* 16-Pulse *(16,000ppm)*	1 2 3 ON – 4 OFF 1 2 ON – 3 4 OFF
VSS	8-Pulse *(8,000ppm)* 16-Pulse *(16,000ppm)*	3 ON - 1 2 4 OFF 1 2 3 4 OFF
ECM	8-Pulse *(8,000ppm)* 16-Pulse *(16,000ppm)*	1 2 3 ON – 4 OFF 1 2 ON – 3 4 OFF

Switch 1 – OFF = vehicle speed sensor signal, ON = Computer & SN16 signals
Switch 2 – OFF = high sensitivity, ON = low sensitivity
Switch 3 – OFF = 16,000ppm signal output, ON = 8,000ppm signal output
Switch 4 – *Not Used*

Speedometer Signal Interface [SN74] Wiring Diagrams



SN74 Connected to SN16 Pulse Signal Generator



SN74 Connected to Vehicle Speed Sensor (VSS)

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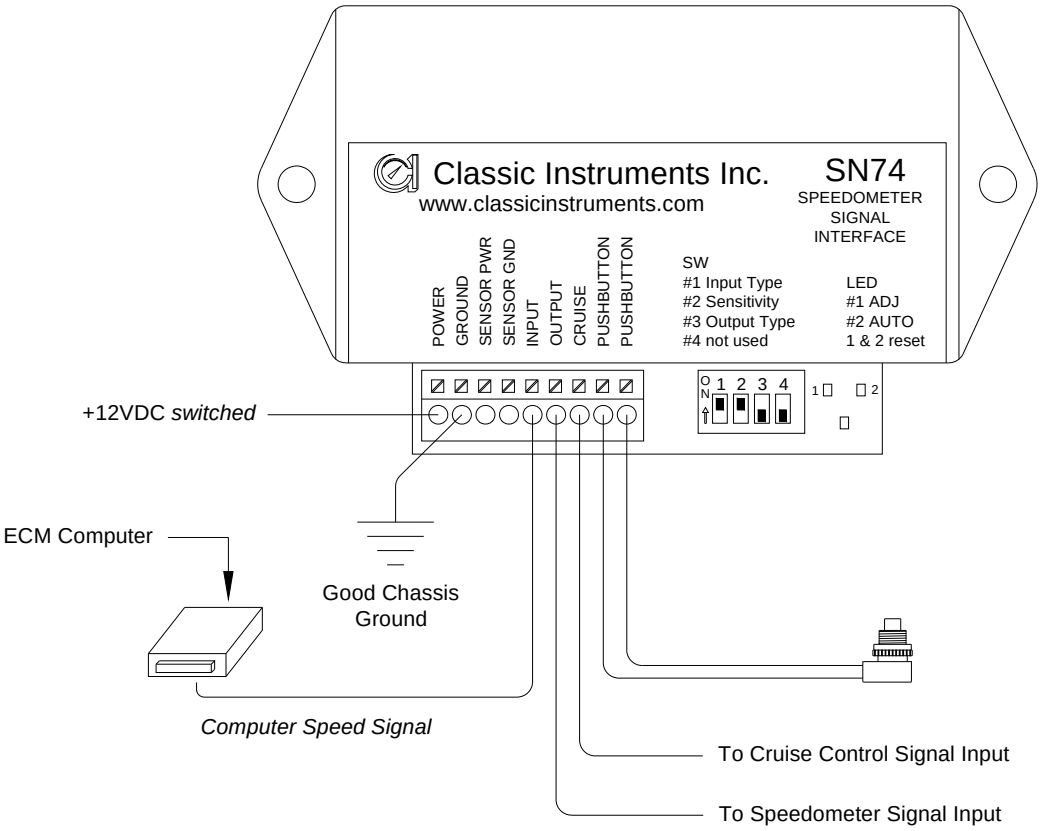


SN74 Connected to ECM Speed Signal

Speedometer Calibration Using SN74

Entering Calibration Mode

1) Start with the vehicle power / engine off. Push and hold the pushbutton while starting the engine.
2) When the engine is running, release the pushbutton.
3) The red LED labeled “1” on the module will be lit (indicating real-time calibration mode).
4) Tapping the pushbutton will cause the red LED labeled “2” on the module to turn on (indicating marked mile calibration mode).
5) Tapping the pushbutton again will cause both red LEDS on the module to turn on (indicating reset mode).
6) Tapping the pushbutton once again will cause the red LED labeled “1” to turn on again. Continuing to tap the pushbutton will cycle LEDS on the module through the real-time, marked mile and reset modes.
7) Push and hold the pushbutton for approximately 5 seconds to enter the mode indicated by the red LED of the module.

Real-Time Calibration

1) Enter the calibration mode selection as detailed in the “Entering Calibration Mode” section of the instructions.
2) Push and hold the pushbutton with red LED “1” lit until LED “1” starts blinking. *(approximately 5 seconds)*
3) Drive a known speed (use GPS or pace another car).
4) Press and hold the pushbutton to change the speed show on the speedometer. The first time the pushbutton is pressed and held, the speed shown on the speedometer will increase. The second time the pushbutton is pressed and held, the speed shown on the speedometer will decrease.
5) The pushbutton will alternate increasing or decreasing the speed shown on the speedometer each time it is pressed. Press and hold the pushbutton to fine tune the speed shown on the speedometer.
6) Once the correct speed on the speedometer has been achieved, wait 8 seconds without pushing the pushbutton in order to save the calibration.
7) The green LED below the red “1” and “2” LEDS indicates the module is getting power if on solid and indicates that the module is receiving a signal if blinking. (the green LED will not be on solid while selecting calibration modes, but will function when a calibration mode has been entered)

Marked Mile Calibration

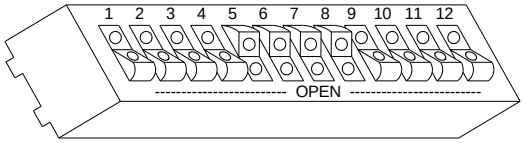
1) Enter the calibration mode selection as detailed in the “Entering Calibration Mode Selection” section of the instructions.
2) Push and hold the pushbutton with red LED “2” lit until LED “2” starts blinking *(approximately 5 seconds)*
3) Begin driving a known mile. *(The green LED on the module should blink once you start moving indicating that it is getting a signal.)*
4) When driving the known mile, the speedometer will not indicate any speed. This is normal.
5) At the end of the known mile, press and hold the pushbutton until the red LED “2” goes off *(approximately 5 seconds)*

Speedometer Calibration Using a SN16 Signal

1) Set the 12 dip switches on the back of the speedometer to their default position of *(5, 6, 7, 8 OPEN for a MPH speedometer or 4, 10, 11, 12 OPEN for a KPH speedometer)*. **Power to the speedometer must be OFF when making adjustments to the dip switches.**
2) Check the current speedometer calibration at a known 60mph by pacing a vehicle with a calibrated speedometer or by using a GPS.
3) Note the speedometer reading at a known 60mph.
4) Stop the vehicle and turn power OFF to the speedometer.
5) Look up the speedometer reading on the 16,000 PPM calibration chart and set the speedometer dip switches according to the chart. The dip switches shown on the chart should be the ONLY switches set to OPEN. All other dip switches should be set to CLOSED.
6) The speedometer is now calibrated. The dip switches must be set back to the default position in order to use the calibration chart on future calibrations.

Speedometer MPH Calibration Chart – SN16 Signal

(Default Dip Switch Setting)



(Switch 5 6 7 8 OPEN)

Set speedometer switches **5 6 7 8 OPEN**, all others closed (*code for 16,000 PPM*). Drive vehicle at 60mph. If the speedometer reads other than 60, turn off power & set switches per chart below.

Speedometer Reading	OPEN SWITCH	Speedometer Reading	OPEN SWITCH
40 MPH	8 9 11 12	80 MPH	4 5 6 10 12
41 MPH	7 10 12	81 MPH	4 5 6 8
42 MPH	7 8	82 MPH	4 5 6 8 9 11 12
43 MPH	7 8 9 11 12	83 MPH	4 5 6 7 10
44 MPH	6 10	84 MPH	4 5 6 7 8
45 MPH	6 8	85 MPH	4 5 6 7 8 9 11 12
46 MPH	6 8 9 11 12	86 MPH	3 10 12
47 MPH	6 7 10 12	87 MPH	3 8
48 MPH	6 7 8	88 MPH	3 8 9 11 12
49 MPH	6 7 8 9 11 12	89 MPH	3 7 10 12
50 MPH	5 10	90 MPH	3 7 8
51 MPH	5 8	91 MPH	3 7 8 9 11 12
52 MPH	5 8 9 11 12	92 MPH	3 6 11 12
53 MPH	5 7 10 12	93 MPH	3 6 8
54 MPH	5 7 8	94 MPH	3 6 8 9 11 12
55 MPH	5 7 8 9 11 12	95 MPH	3 6 7 10 12
56 MPH	5 6 10 12	96 MPH	3 6 7 8
57 MPH	5 6 8	97 MPH	3 6 7 8 9 11 12
58 MPH	5 6 8 9 11 12	98 MPH	3 5 10 12
59 MPH	5 6 7 10 12	99 MPH	3 5 8
60 MPH	5 6 7 8	100 MPH	3 5 8 9 11 12
61 MPH	5 6 7 8 9 11 12	101 MPH	3 5 7 10 12
62 MPH	4 10 12	102 MPH	3 5 7 8
63 MPH	4 8	103 MPH	3 5 7 8 9 11 12
64 MPH	4 8 9 11 12	104 MPH	3 5 6 10 12
65 MPH	4 7 10	105 MPH	3 5 6 8
66 MPH	4 7 8	106 MPH	3 5 6 8 9 11 12
67 MPH	4 7 8 9 11 12	107 MPH	3 5 6 7 10 12
68 MPH	4 6 10 12	108 MPH	3 5 6 7 8
69 MPH	4 6 8	109 MPH	3 5 6 7 8 9 11 12
70 MPH	4 6 8 9 11 12	110 MPH	3 4 10 12
71 MPH	4 6 7 10 12	111 MPH	3 4 8
72 MPH	4 6 7 8	112 MPH	3 4 8 9 11 12
73 MPH	4 6 7 8 9 11 12	113 MPH	3 4 7 10 12
74 MPH	4 5 10 12	114 MPH	3 4 7 8
75 MPH	4 5 8	115 MPH	3 4 7 8 9 11 12
76 MPH	4 5 8 9 11 12	116 MPH	3 4 6 10 12
77 MPH	4 5 7 10 12	117 MPH	3 4 6 8
78 MPH	4 5 7 8	118 MPH	3 4 6 8 9 11 12
79 MPH	4 5 7 8 9 11 12	119 MPH	3 4 6 7 10 12

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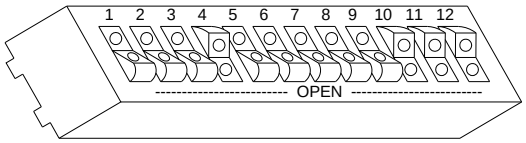
Speedometer KPH Calibration Chart – SN16 Signal



(Default Dip Switch Setting) (Switch 4 10 11 12 OPEN)

Set speedometer switches **4 10 11 12 OPEN**, all others closed (*code for 16,000 PPM*). Drive vehicle at 100kph. If the speedometer reads other than 100kph, set switches per chart below.

Speedometer Reading	OPEN SWITCH	Speedometer Reading	OPEN SWITCH
62 KPH	9 11 12	142 KPH	3 8 9 10 12
64 KPH	8 9	144 KPH	3 7 9 11
66 KPH	7 10 12	146 KPH	3 7 8 9
68 KPH	7 8 11 12	148 KPH	3 6 10 12
70 KPH	6	150 KPH	3 6 8 11
72 KPH	6 9 10 12	152 KPH	3 6 8 9 10 11 12
74 KPH	6 7 9 10	154 KPH	3 6 7 9 10 12
76 KPH	6 7 9	156 KPH	3 6 7 8 9 11
78 KPH	6 7 8 10 12	158 KPH	3 5 10 11 12
80 KPH	5 11	160 KPH	3 5 8 10
82 KPH	5 9 10 11 12	162 KPH	3 5 7 11
84 KPH	5 8 9 10 12	164 KPH	3 5 7 9 10 11 12
86 KPH	5 7 9 11	166 KPH	3 5 7 8 9 10
88 KPH	5 7 8 10 11 12	168 KPH	3 5 6 9 12
90 KPH	5 6 10 12	170 KPH	3 5 6 8 10 11 12
92 KPH	5 6 8 11	172 KPH	3 5 6 7 10
94 KPH	5 6 8 9 10 11 12	174 KPH	3 5 6 7 8 12
96 KPH	5 6 7 9 10	176 KPH	3 5 6 7 8 9 10 11 12
98 KPH	5 6 7 8 9 11	178 KPH	3 4 9 10
100 KPH	4 10 11 12	180 KPH	3 4 8 9 12
102 KPH	4 8 10	182 KPH	3 4 7 10 11
104 KPH	4 7 12	184 KPH	3 4 7 8 10
106 KPH	4 7 9 10 11 12	186 KPH	3 4 6 12
108 KPH	4 7 8 9 10	188 KPH	3 4 6 9 10 11
110 KPH	4 6 9 12	190 KPH	3 4 6 8 9 11 12
112 KPH	4 6 8 10 11	192 KPH	3 4 6 7 9 12
114 KPH	4 6 7 10	194 KPH	3 4 6 7 8 10 11
116 KPH	4 6 7 8 12	196 KPH	3 4 5 11 12
118 KPH	4 6 7 8 9 10 11	198 KPH	3 4 5 8
120 KPH	4 5 9 11 12	200 KPH	3 4 5 8 9 10 11
122 KPH	4 5 8 9 12	202 KPH	3 4 5 7 9 11 12
124 KPH	4 5 7 10 11	204 KPH	3 4 5 7 8 9
126 KPH	4 5 7 8 11 12	206 KPH	3 4 5 6 10 12
128 KPH	4 5 6	208 KPH	3 4 5 6 8 11 12
130 KPH	4 5 6 9 10 11	210 KPH	3 4 5 6 7
132 KPH	4 5 6 8 9 11 12	212 KPH	3 4 5 6 7 8
134 KPH	4 5 6 7 9	214 KPH	3 4 5 6 7 8 9 11
136 KPH	4 5 6 7 8 10 12	216 KPH	2 9
138 KPH	3 11 12	218 KPH	2 8 10 12
140 KPH	3 8	220 KPH	2 7 11

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Speedo / Tach Combo [Ultimate Speedometer] Wiring

1) Always disconnect the vehicle battery before wiring any gauge
2) Connect a switched +12VDC power source to the **Pink** wire of the gauge cluster wire harness. *We recommend using a dedicated power source for the speedo / tach gauge combo to avoid possible problems caused by bad "noisy" power.*
3) Connect a good chassis ground to the **Black** wire of the gauge cluster wire harness. *We recommend using a dedicated chassis ground (not stacked with other ground wires) to avoid possible problems caused by a bad ground.*
4) Connect a speed signal to the **Purple** wire of the gauge cluster wire harness to:
    a. White signal wire from a pulse signal generator [SN16]
        i. Connect the Red wire from the SN16 to the **Red** wire of the gauge cluster wire harness.
        ii. Connect the Black wire from the SN16 to a good chassis ground.

    [OR]

    b. Signal wire provided by the vehicle computer.
        i. In some installations, it is necessary to wire a signal filter [SN79] in-line with the computer speed signal.

    [OR]

    c. One wire from a transmission's 2-wire vehicle speed sensor (VSS).
        i. Either wire may be connected to the gauge clusters signal wire. Connect the remaining VSS wire to the same ground as the black wire of the gauge harness.

5) Connect a tachometer signal to the **Solid White** wire of the gauge cluster wire harness:

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

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

MSD (Multiple Spark Discharge System)
Connect the TACH signal on the MSD box to the white tachometer signal wire. If the tachometer does not respond, your MSD system may require a MSD Tach adapter. Part No. 8910 or 8920.

VERTEX MAGNETO SYSTEM
Connect the "KILL" terminal on the side of a Vertex magneto body to the white tachometer signal wire. 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 tachometer signal wire. 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 tachometer signal wire.

ECM TACHOMETER SIGNAL
Signal comes from the computer. When using this type of signal, the tachometer should be set for a 5V signal. *See Ultimate Speedometer Calibration for instructions.*

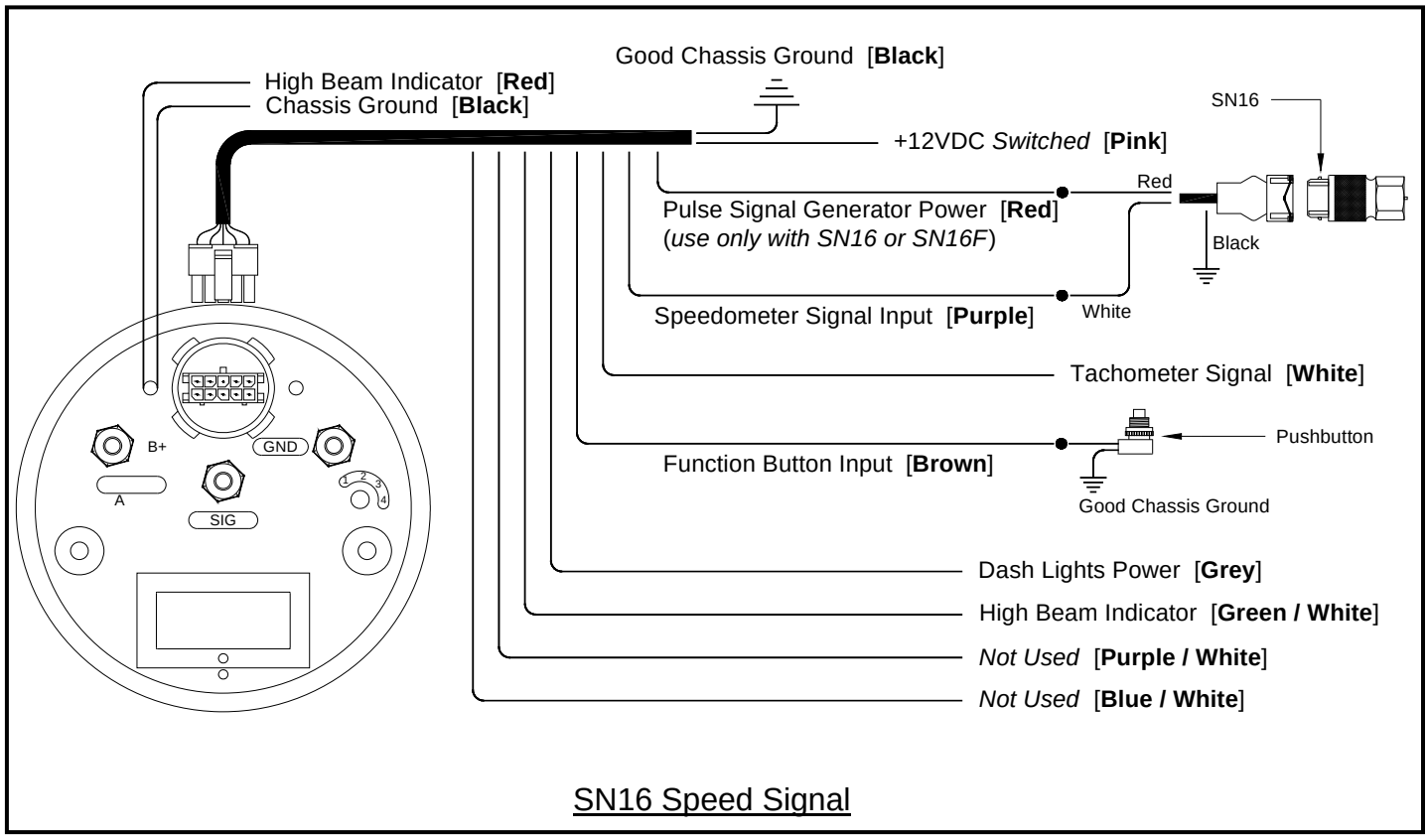
MULTIPLE COIL IGNITION SYSTEMS

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

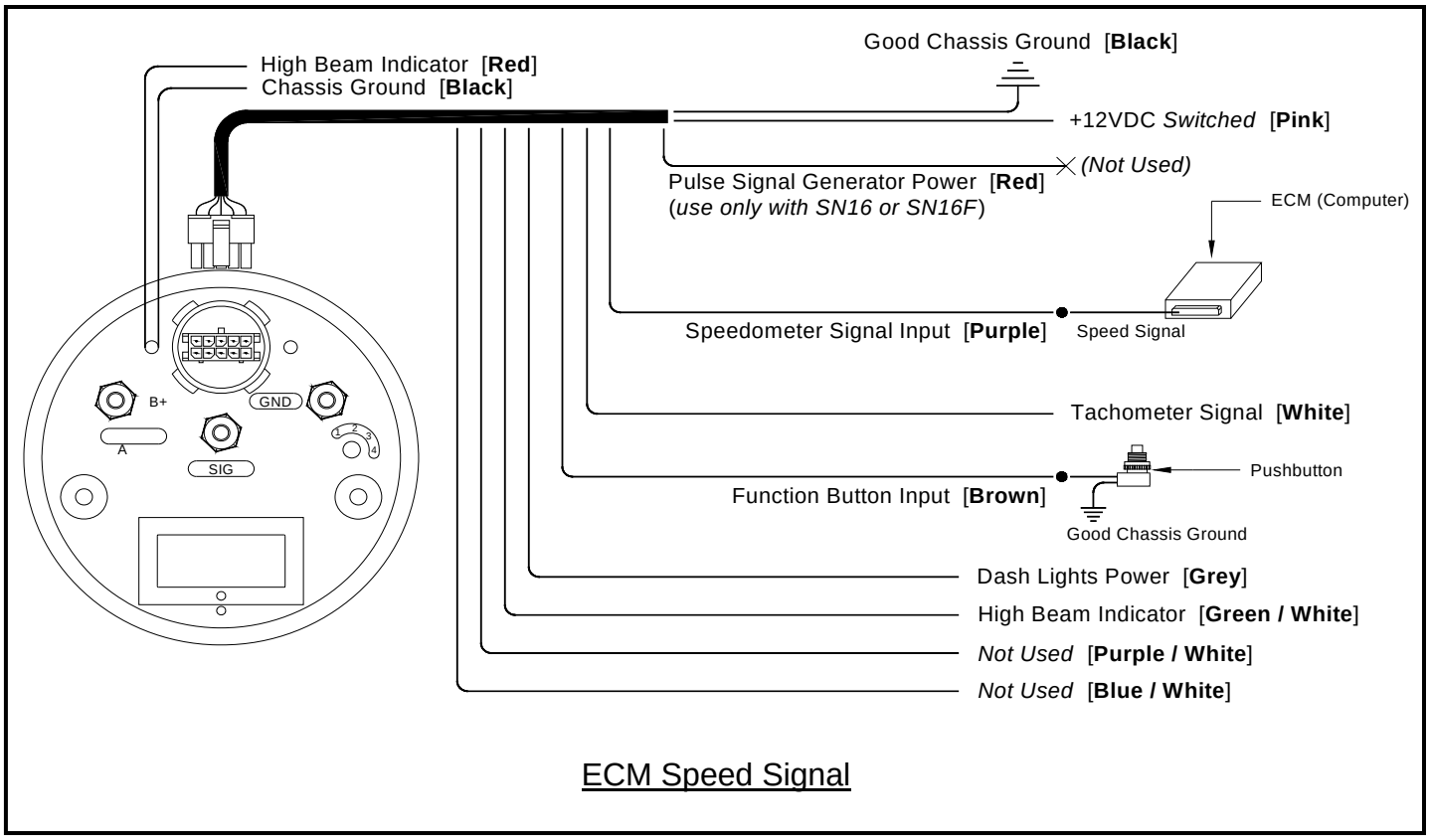
NOTICE! For all other ignition systems please look at the owner's manual for that system.

6) Connect dash light power to the **Grey** wire of the gauge cluster wire harness.
7) Connect high beam indicator power to the **Green / White** wire of the gauge cluster wire harness.
8) Connect the **Brown** wire of the gauge cluster wire harness to either wire of the included pushbutton.
   a. Connect the other wire of the included pushbutton to a good chassis ground.

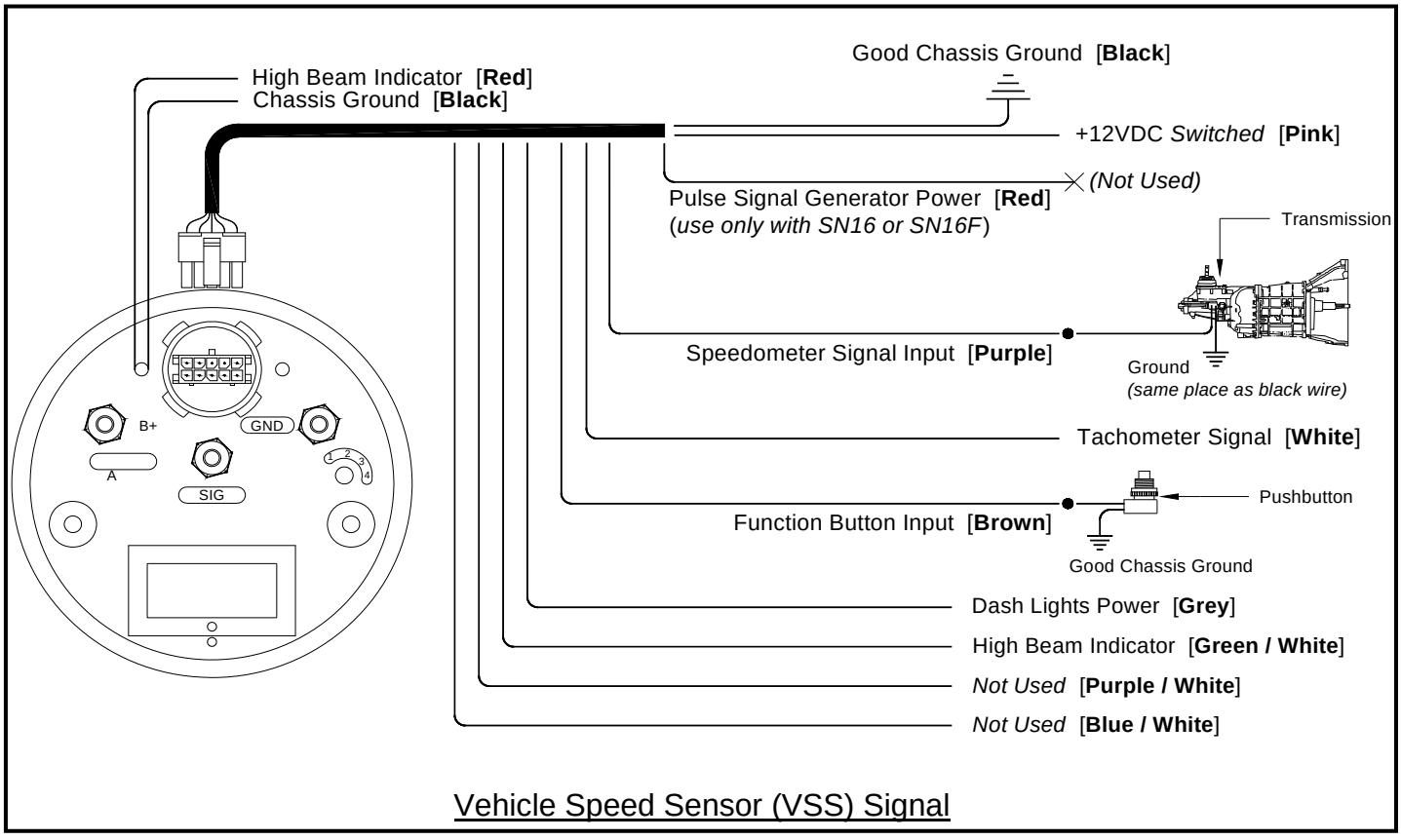
Ultimate Speedometer Combo Gauge Wiring



SN16 Speed Signal



ECM Speed Signal



Vehicle Speed Sensor (VSS) Signal

Revision: May 3, 2013

Setting up the Ultimate Speedometer

Speedometer / Tachometer Setup Option Menu		
Tach Pointer Location	**Setup Option**	**Description**
1000 RPM	Tachometer Cylinder Setup	Sets number of cylinders.
2000 RPM	Tachometer Signal Type	Selects between 5V and 12V tachometer signal.
3000 RPM	Speed Auto Calibrate	Calibrates speed using an exact marked mile.
4000 RPM	Real-Time Speed Adjust	Manually increase or decrease speed.
8000 RPM	Exit	Exit setup

Entering Setup Mode:

1) Start with the power off. While pressing the pushbutton, start the vehicle's engine. Release the pushbutton when the engine is running and the speedometer pointer is at 70MPH.

2) The tachometer will point to 1000 RPM and the speedometer will point at 70MPH once you have successfully entered the setup mode. **Fig. 1**

3) Tapping the pushbutton will cycle through the setup options.

4) Pressing and holding (approx. 4 seconds) the pushbutton will select the current setup option that the tachometer is indicating.

5) When setup is complete, select the exit option (8000 RPM) then press and hold the pushbutton. **Fig. 2**

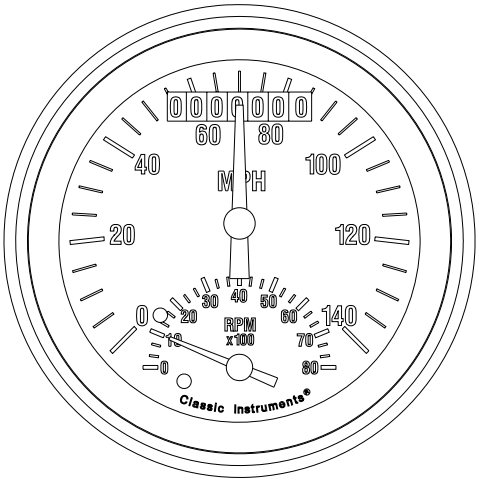


FIG. 1

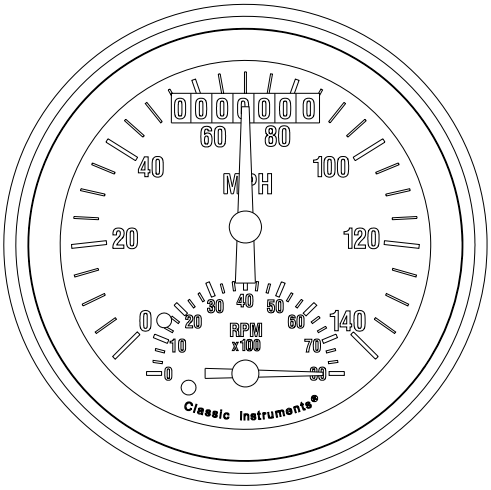


FIG. 2

Tachometer Setup:

Cylinder Select:

1) Tap the pushbutton until the tachometer points to 1000 RPM (tachometer cylinder setup option). Fig. 3

2) Press and hold (*4 seconds*) the pushbutton to enter the tachometer cylinder setup mode. The speedometer will point to the current cylinder number setting (40 MPH for 4 cylinders, 60 MPH for 6 cylinders, etc…).

3) Tap the pushbutton until the correct setting is selected.

4) Press and hold the pushbutton to save the setting. The speedometer pointer will again indicate 70 MPH and the tachometer will point to 8000 RPM (exit). Tachometer cylinder selection is now set.

5) If you are finished making setup changes, press and hold the pushbutton with the tachometer pointing to 8000 RPM to exit setup mode. Fig. 4

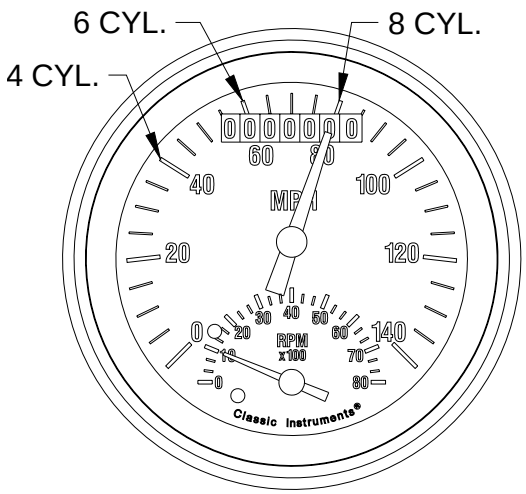


FIG. 3

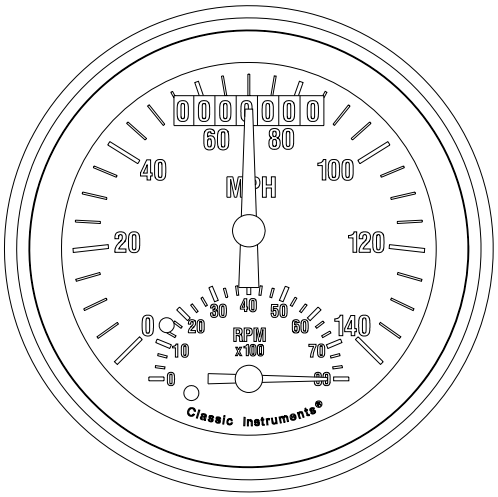


FIG. 4

Tachometer Signal Type:

1) Tap the pushbutton until the tachometer points to 2000 RPM (tachometer signal type option). **Fig. 5**

2) Press and hold (*4 seconds*) the pushbutton to enter the tachometer signal type mode. The speedometer will point to the current setting (50 MPH for 5V signal or 120 MPH for 12V signal). *Note: Use 5V setting if tachometer signal comes from a computer. For any other signal use 12V.*

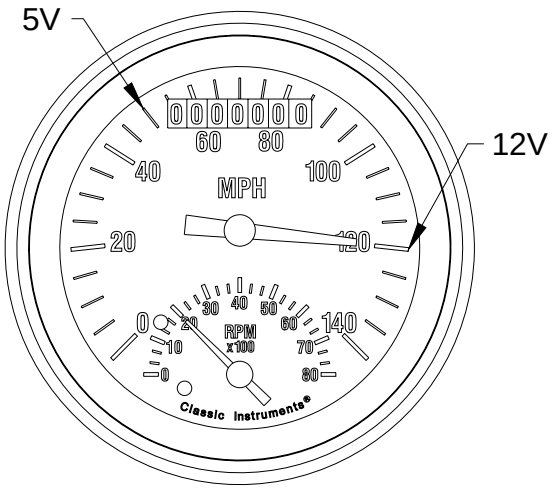


FIG. 5

3) Tap the pushbutton until the correct tachometer signal type setting is selected.

4) Press and hold the pushbutton to save the setting. The speedometer pointer will again indicate 70 MPH and the tachometer will point to 8000 RPM (exit). Tachometer signal type is now set.

5) If you are finished making setup changes, press and hold the pushbutton with the tachometer pointing to 8000 RPM to exit setup mode. **Fig. 6**

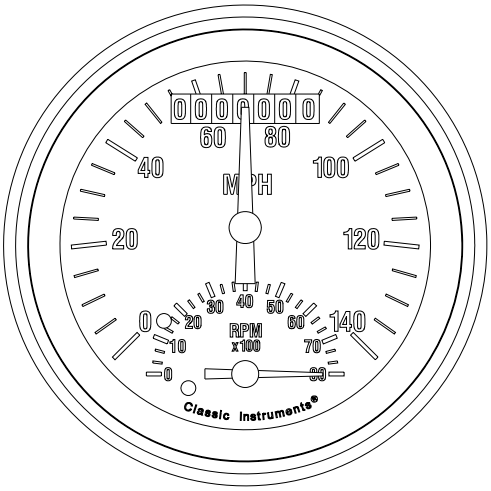


FIG. 6

Speedometer Setup:

There are two ways to calibrate the speedometer. Speed auto calibrate (using an exact marked mile) and real-time speed adjust (manually adjust speed up or down). It is recommended you use the speed auto calibrate option first and then make any fine tune adjustments using the real-time speed adjust option.

Speed Auto Calibrate:

1) Tap the pushbutton until the tachometer points to 3000 RPM (speed auto calibrate option). **Fig. 7**

2) Press and hold (*4 seconds*) the pushbutton to enter the speed auto calibrate mode. The speedometer will point to 30 MPH indicating you are in speed auto calibrate mode.

3) Begin driving the measured mile. The tachometer will operate as normal but the odometer will not move. When a speed signal is detected, the speedometer will point to 45 MPH. If a speed signal is NOT detected, the speedometer will continue to point at 30 MPH.

4) At the end of the measured mile, press and hold the pushbutton. The speedometer will again point up and the tachometer will point to 8000 RPM (exit). The speedometer is now calibrated.

5) If you are finished making setup changes, press and hold the pushbutton with the tachometer pointing to 8000 RPM to exit setup mode. **Fig. 8**

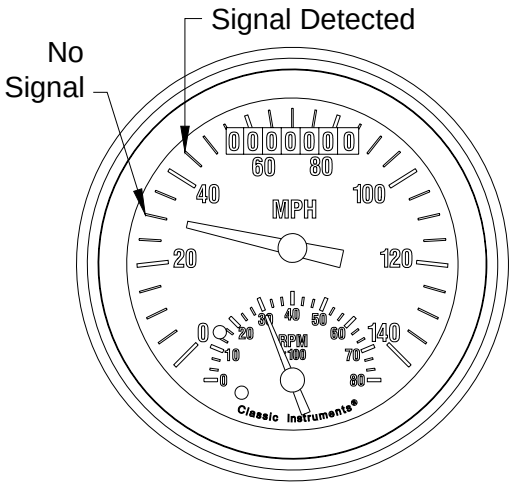


FIG. 7

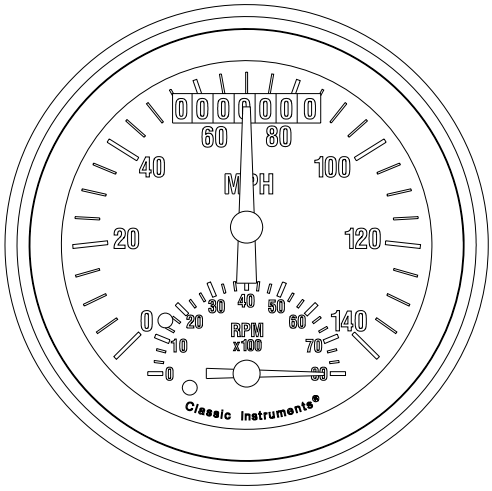


FIG. 8

Real-Time Speed Adjust:

1) Tap the pushbutton until the tachometer points to 4000 RPM (real-time speed adjust option). **Fig. 9**

2) Press and hold (*4 seconds*) the pushbutton to enter the real-time speed adjust mode.

3) Begin driving the vehicle at a steady known speed (using a GPS or pacing another vehicle). The tachometer will remain at 4000 RPM to indicate the gauge is in real-time speed adjust mode.

4) Pressing the pushbutton will begin to increase the speed reading until the button is released.

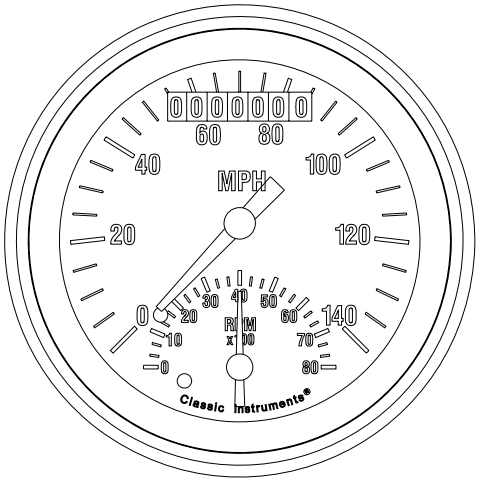


FIG. 9

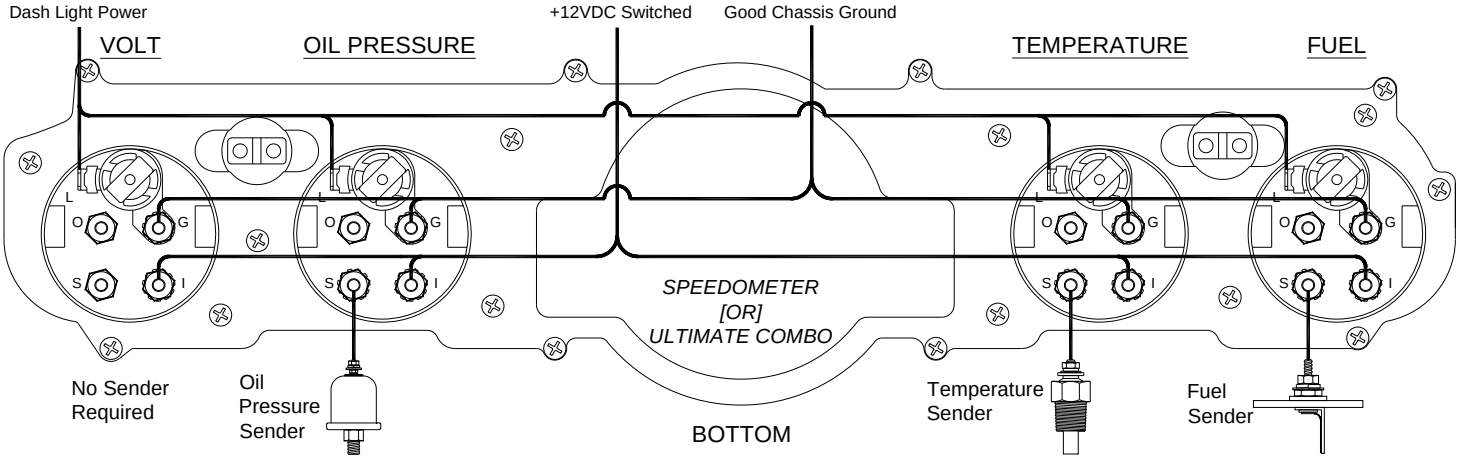
5) The next time the pushbutton is pressed the speed reading will decrease until the button is released.

6) Continue adjusting the speedometer reading until the correct speed is achieved.

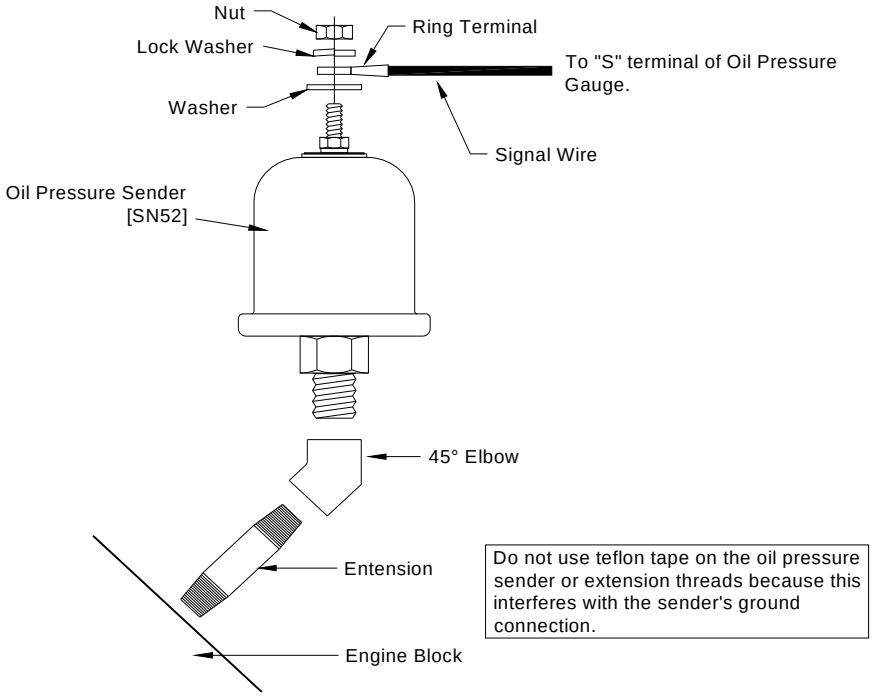
7) If no adjustments are made for 8 seconds, the current calibration setting will be saved. The speed setting may still be adjusted after this until the key is turned off and will be saved again after 8 seconds of pushbutton inactivity. When finished adjusting the speed, bring the vehicle to a stop and turn the key off to exit the setup mode.

Fuel, Oil Pressure, Temperature & Volt Gauge Wiring

1) Always disconnect the vehicle battery before wiring any gauge.
2) Connect a switched +12VDC power source to the "**I**" terminal on the back of each gauge.
3) Connect a good chassis ground to the "**G**" terminal on the back of each gauge. *(the "G" terminal is also one of the terminals used to secure the mounting bracket in the gauge pod)*
4) Connect the fuel signal to the "**S**" terminal on the back of the FUEL gauge.
5) Connect the temperature signal to the "**S**" terminal on the back of the TEMPERATURE gauge.
6) Connect the oil pressure signal to the "**S**" terminal on the back of the OIL PRESSURE gauge.
7) The VOLT gauge does NOT require a signal and has had the "S" terminal removed to prevent damage to the gauge.



Example of 2 1/8" Gauge Wiring



Oil Pressure Sender Wiring

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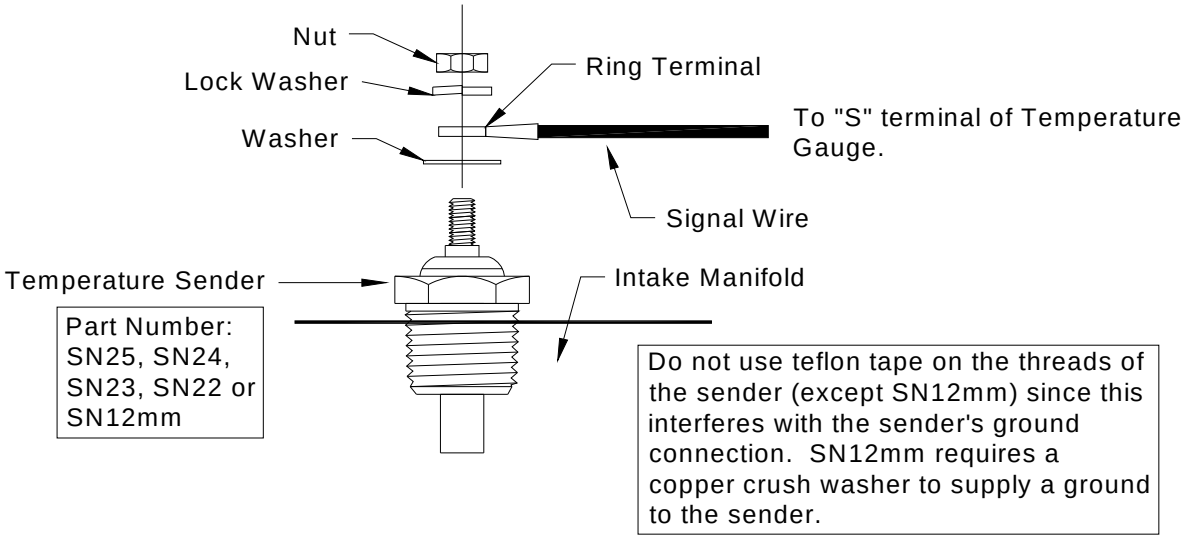
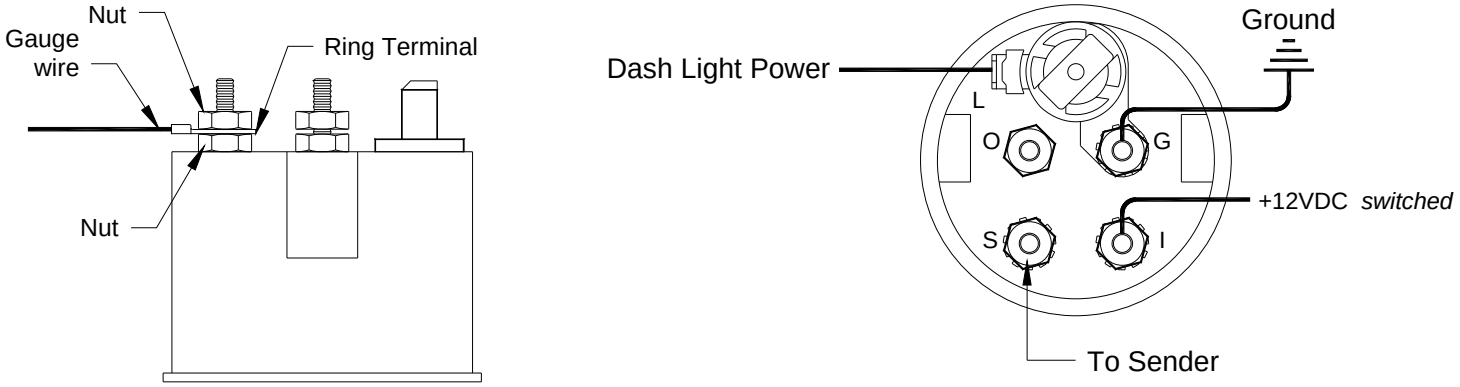


Temperature Sender Wiring



Fuel, Oil Pressure, Temperature, Volt Gauge Wiring

Happy Hot Rodding!

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