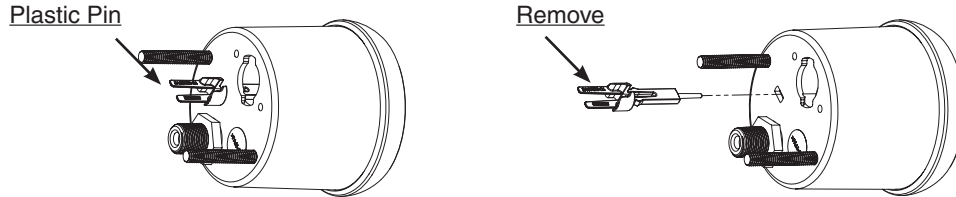


### QUESTIONS:

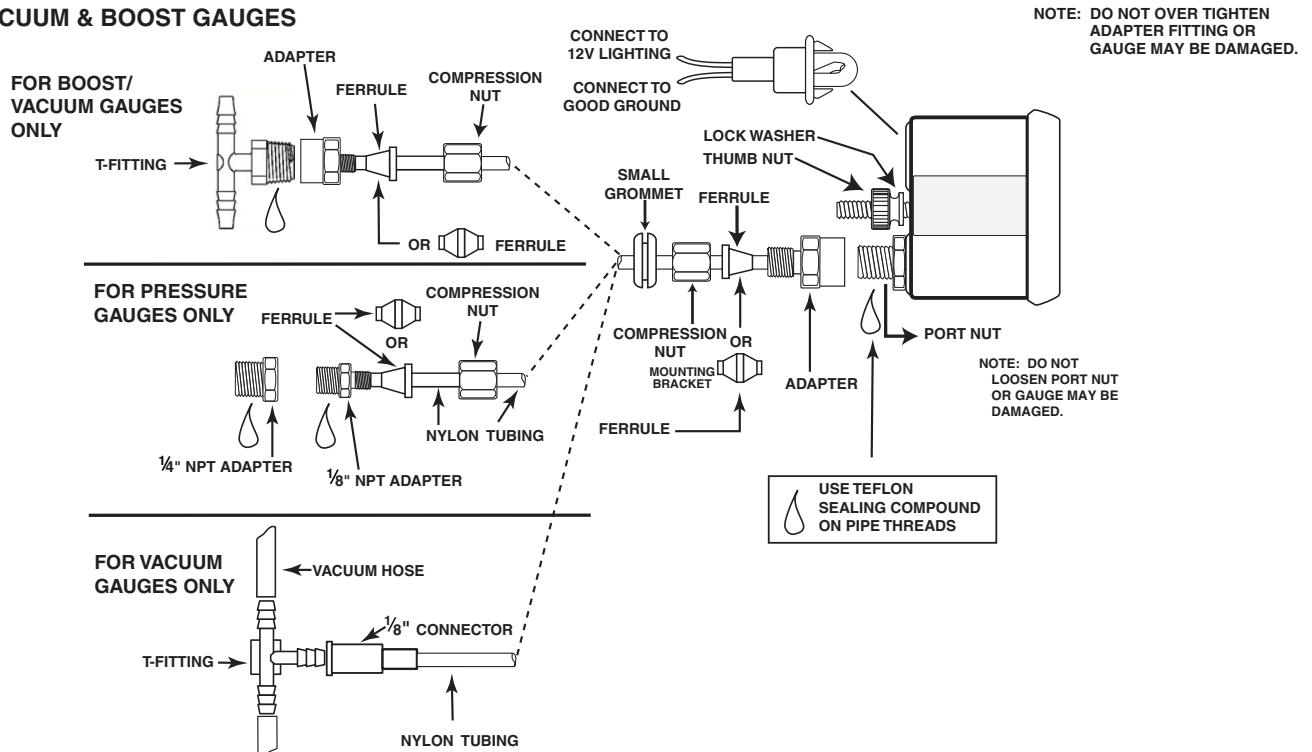
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### ON MECHANICAL VAC/BOOST GAUGES

To maintain proper calibration during shipping, the pointer of this gauge is held off zero by a plastic "pin" inserted into the gauge case and movement. This pin **MUST BE REMOVED** and discarded prior to installation and operation



### PRESSURE, VACUUM & BOOST GAUGES



**NOTE:** Some applications use electronic sensors in their pressure and temperature senders for engine control functions. Before removing the original sender, we recommend that you contact your dealer to be sure no critical functions will be disrupted. With pressure gauges, it is beneficial to add a T-fitting to install your new gauge and to keep the warning light operational. This allows you to monitor the pressure and still have a warning light to indicate emergency conditions.

1. Gauges may be mounted in In-dash holes or in custom mounting solutions. Secure gauge with mounting clamps supplied. Gauge mounts in 2-1/16" diameter hole,
2. Attach nylon pressure line to fitting on back of gauge using adapter, ferrule, and compression nut as shown in diagram above. Route line through grommet to engine compartment. Connect line to pressure port on engine by using 1/8" adapter (1/4"

if needed), ferrule and compression nut for pressure gauges or 1/8" connector and T-fitting for vacuum gauges.

3. Make sure line is free from hazard of moving parts or hot engine components.
4. Start engine and thoroughly check installation for leaks.
5. Twist in light socket assembly and connect one wire to dash lighting circuit or other 12V power source and the other wire to a good ground.

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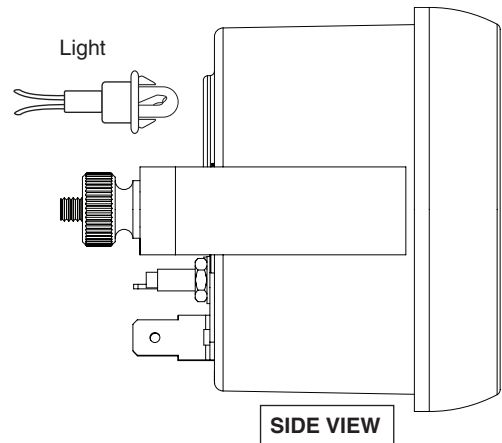
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### Mounting

These 2-1/16" gauges are panel mounted in a 2-1/16" dia. hole. Fasten with bracket supplied as shown. (Hookup wires are required.) To assure this instrument functions properly, please read instructions thoroughly before installing.

**CAUTION!**

As a safety precaution, the +12V terminal of this product should be fused before connecting to the 12V ignition switch. We recommend using a 3 AMP automotive type fuse.



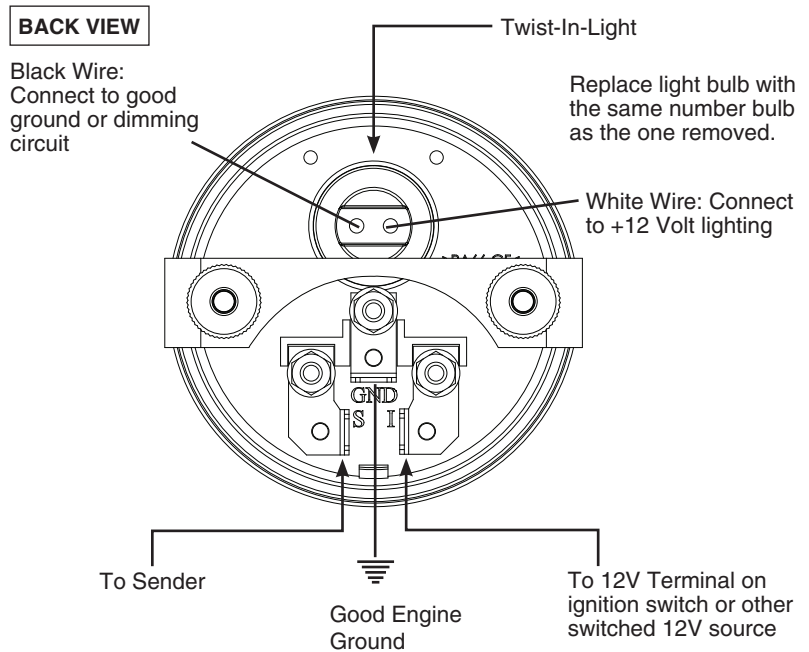
### Fuel Level

**Disconnect negative battery cable when wiring and reconnect to check reading.**

1. Disconnect negative (-) battery cable.
2. Existing wires may be used, or route proper length of 18 gauge, 2 conductor wire from fuel tank to gauge. Connect one end to terminal post on fuel level sender and opposite end to sender (S) terminal on gauge.
3. Connect wire from gauge ground terminal [GND(-)] to fuel tank ground.
4. Connect wire from ignition switch to positive I (+) terminal on gauge.

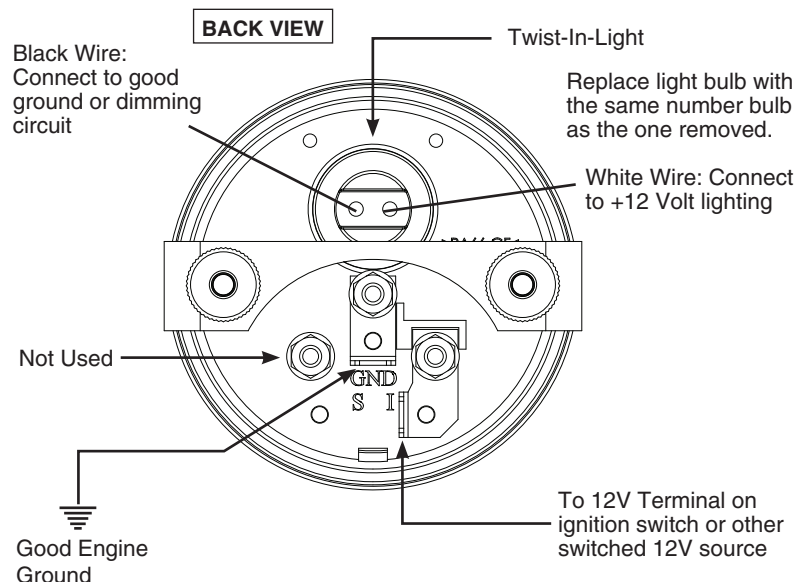
**CAUTION: Be careful not to touch ignition wire to the sender (S) terminal on back of gauge or the sender will be damaged.**

5. Install the light in the socket on the rear of the gauge and connect one wire to the dash lighting circuit or other 12V power source. Connect the other wire to ground.
6. Reconnect negative (-) battery cable.



### Voltmeter

1. Disconnect negative (-) battery cable.
2. Using 18 gauge wire. Attach one end to the [GND(-)] terminal on back of gauge, and the opposite end to a good engine ground.
3. Attach one length of wire to the positive I (+) terminal on back of gauge and opposite end to 12V terminal on ignition switch or other 12V power source.
4. Install the light in the socket on the rear of the gauge and connect one wire to the panel lighting circuit or other 12V power source. Connect the other wire to ground.
5. Reconnect negative (-) battery cable.

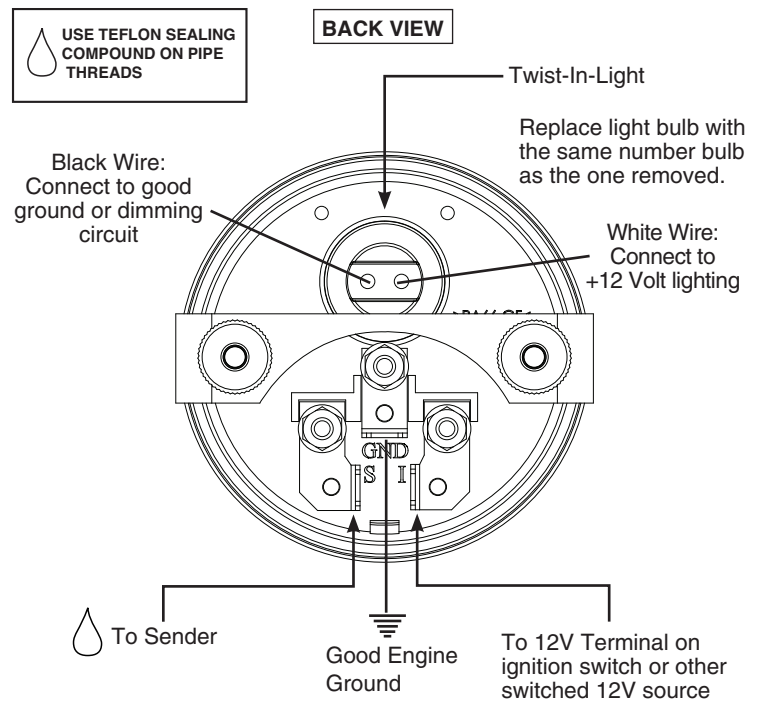


# Pressure Gauges

1. Disconnect negative (-) battery cable.
2. When installing fuel pressure sender, an adapter may be required for your specific application.
3. Install sender into pressure port of appropriate type. **If unit is to be installed on a high vibration application such as a full race engine or engine capable of high RPM, it is strongly recommended that the sender be remote mounted to the firewall or other structural member to insulate from vibration. Failure to remote-locate pressure senders on such an application could result in gauge failure and potential damage to vehicle and/or operator injury.** Braided stainless steel lines are sold separately and can be used to accomplish this. Sender should automatically be grounded when installed. If not, or if remote relocation of sender is required, a ground connection to sender "body" may need to be made.
4. Use 18-gage twin conductor wire. Connect one end to terminal post on pressure sender, and opposite end to sender (S) terminal on back of gauge.

**CAUTION: Be careful not to touch ignition wire to the sender (S) terminal on back of gauge or the sender may be damaged.**

5. Connect wire from ground terminal [GND (-)] on back of gauge to good engine ground near sender.
6. Connect wire from ignition switch to ignition I (+) terminal on back of gauge.
7. Install the light in the socket on the rear of the gauge and connect one wire to the panel lighting circuit or other 12V power source. Connect the other wire to ground.
8. Reconnect negative (-) battery cable.

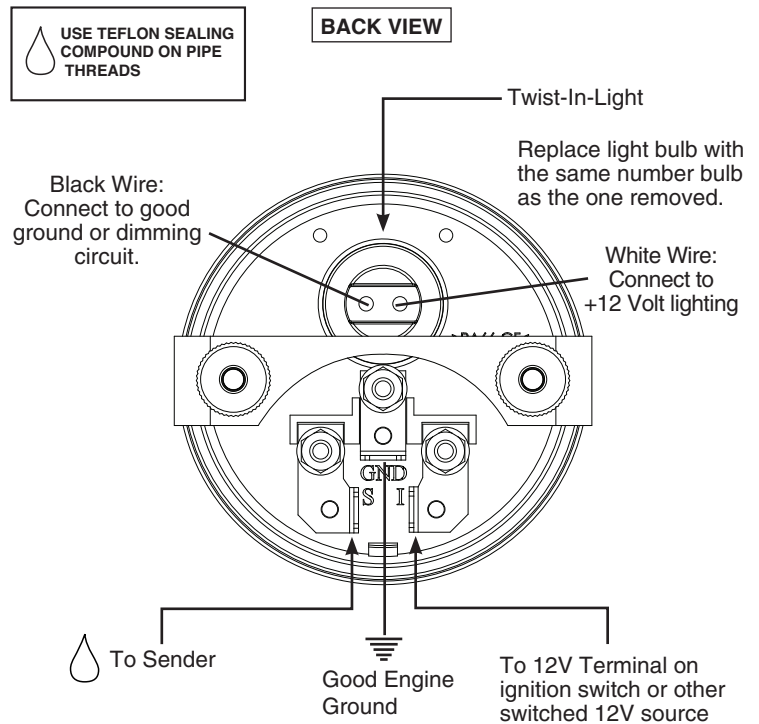


# Temperature Gauges

1. Disconnect negative (-) battery cable.
2. Install temperature sender.
  - A. Water Temp: Install temperature sender.
  - B. Oil Temp: Hole may have to be drilled and adaptor nut welded or brazed in pan. Be sure there is adequate internal clearance for nut and sender. Sender should automatically be grounded when installed. If not, proper ground connections should be made.
3. Use 18-gage twin conductor wire. Connect one end to terminal post on temperature sender, and opposite end to sender (S) terminal on back of gauge.

**CAUTION: Be careful not to touch ignition wire to the sender (S) terminal on back of gauge or the sender may be damaged.**

4. Connect wire from center terminal GND (-) on back of gauge to good engine ground near sender.
5. Connect wire from ignition switch to ignition I (+) terminal on back of gauge.
6. Install the light in the socket on the rear of the gauge and connect one wire to the panel lighting circuit or other 12V power source. Connect the other wire to ground.
7. Reconnect negative (-) battery cable.



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## Calibration

**IMPORTANT:** This tachometer is factory calibrated to operate on 8 cylinder engines. For 4 or 6 cylinder engines, it is necessary to make the proper adjustments to adapt this tachometer to your cylinder range.

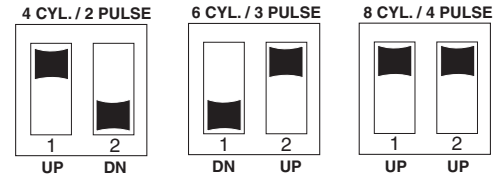
Locate the black plastic plug covering the switch access hole. Remove the plastic plug covering the access hole. Use a small screwdriver or an unwound paper clip to change the switch settings. Move each of the two switches to the proper cylinder selection according to the diagram illustrated on theright. Reinstall the plastic plug/cap into the access hole.

**NOTE:** This tachometer has an air core meter. With power off, it is normal for the pointer to leave zero. When power is applied, the pointer will move to the correct position.

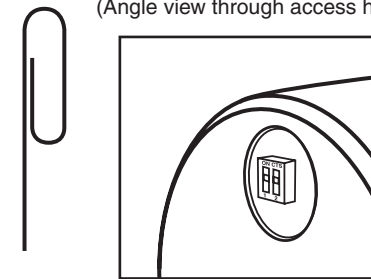
Figure A.

4 CYL. - Switch One up, Switch Two down  
6 CYL. - Switch One down, Switch Two up  
8 CYL. - Both switches up

Figure A

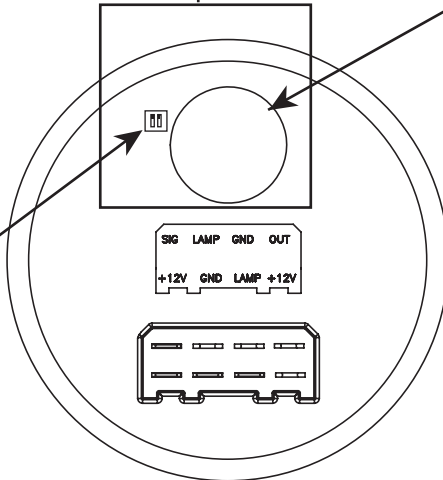


(Angle view through access hole)



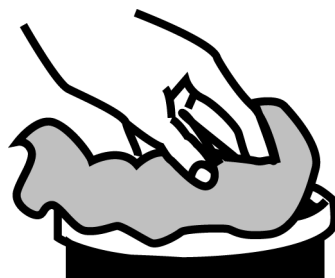
Access switch through access hole.

Switch is not visible from this angle, shown for location only.



## Lens Cleaning

To prevent scratching the lens when cleaning, use a mild, soapy solution to clean. Wipe lightly with a soft cloth.

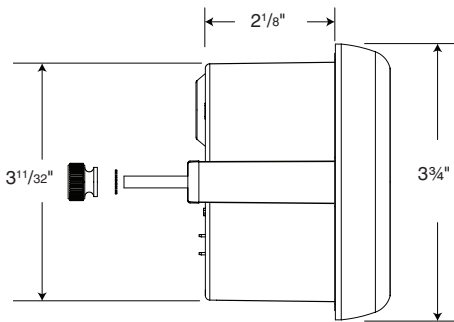


## Note:

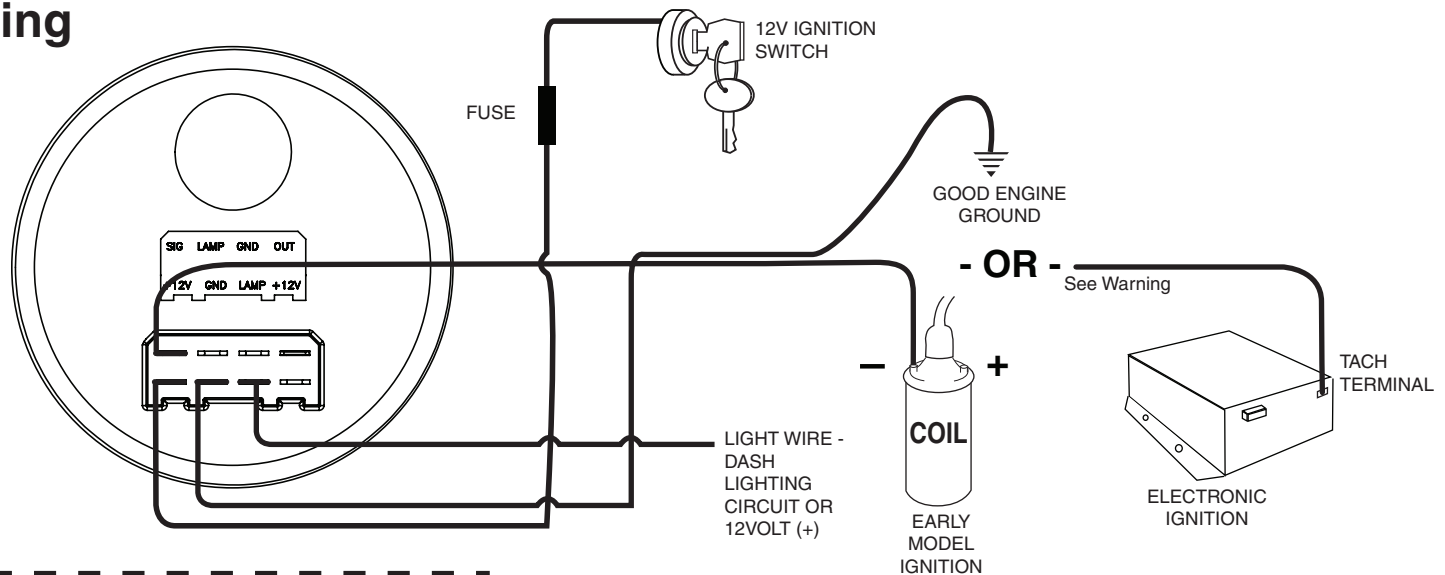
This tachometer operates on most early model ignitions, factory electronic and high performance electronic racing ignitions.

# Mounting

1. Mount tachometer in a 3-<sup>3</sup>/<sub>8</sub>" dia. hole. Be careful not to cut the hole too large.
2. Cut a <sup>3</sup>/<sub>8</sub>" dia. hole in the firewall for the tachometer wires. Place a rubber grommet in the hole and route the wires through the grommet to the engine compartment.
3. Connect the tachometer wires as shown in the wiring sections.
4. Secure the tachometer to the dashboard using the provided bracket and hardware.



# Wiring



## WARNING

Warranty will be void if connected to coil when using an aftermarket ignition box such as, but not limited to products from the following manufacturers: MSD, Crane, Jacobs, Mallory, Holley, Etc.. Prior to installation of your tachometer, check with the ignition box manufacturer for recommended tachometer signal location.

## CAUTION!

As a safety precaution, the +12 V terminal of this product should be fused before connecting it to the 12V ignition switch. We recommend using a 3 Amp fuse, or equivalent to help protect this product.

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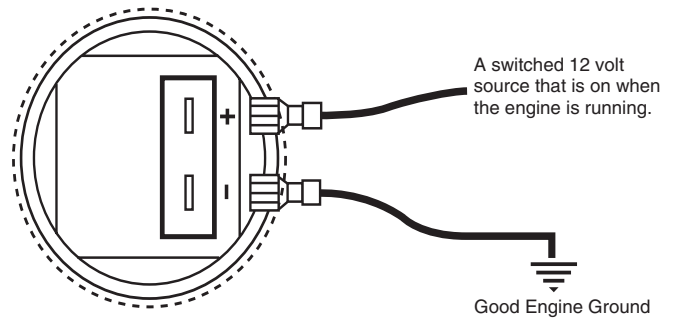
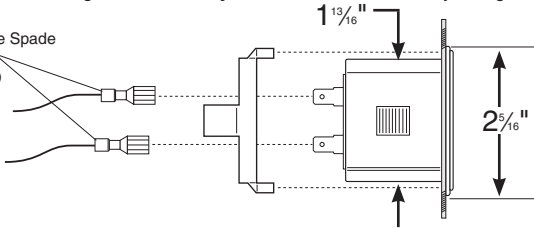
# INSTALLATION INSTRUCTIONS 2" ELECTRICAL HOURMETER



## INSTALLATION

1. Disconnect negative (-) battery cable.
2. Mount gauge into instrument panel using mounting bracket provided.
3. Using 18 gauge wire with 1/4" female spade terminal, attach spade to the negative (-) terminal on back of gauge and the opposite end to a good ground.
4. Attach second length of wire to the positive (+) terminal on gauge and opposite end to a switched 12V power source that is on when the engine is running.
5. Reconnect negative (-) battery cable.
6. After starting engine, check wiring and connections for hot spots and be prepared to shut off the engine **immediately** if detected and correct any wiring errors.

1/4" Female Spade Terminals (not provided)



### CAUTION!

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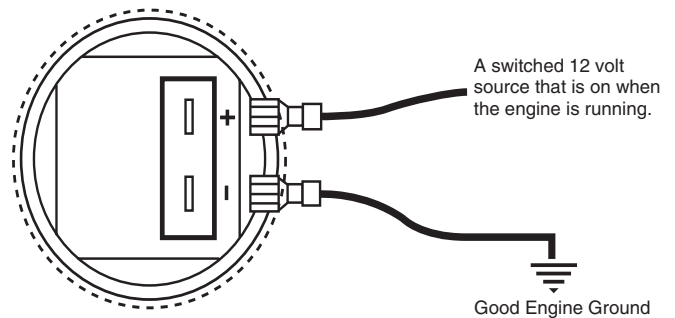
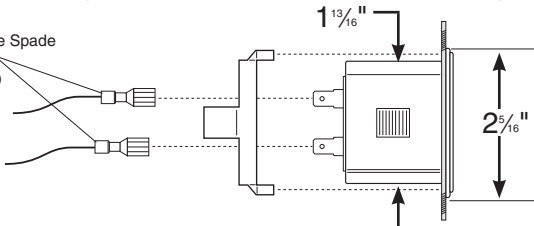
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