

## Engine Cylinder Adjustments

This tach is factory calibrated to operate on 8 cyl engines. For 4 or 6 cylinder engines, it is necessary for you to make proper adjustments.

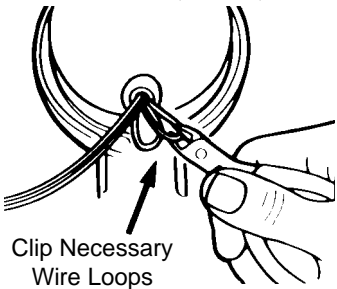
**8 Cylinder:** No adjustment necessary.

**6 Cylinder:** Clip BROWN wire loop only. Insulate with electrical tape.

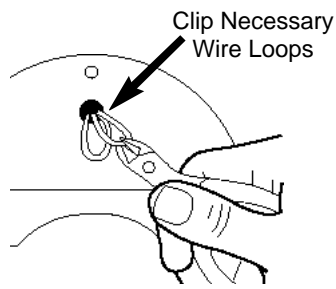
**4 Cylinder:** Clip BROWN and ORANGE wire loops. Insulate with electrical tape.

**Model 4594:** After clipping necessary wire(s) and insulating them; push wires into hole and use the hole plug to seal the hole.

### Models 6801, 6802, 6803



### Model 4594



**NOTE:** This tachometer is water resistant on the face only. This includes normal car washing, even moderate pressure washing. It has not been designed to receive extreme water pressure or any washing on the back side of the tachometer. We strongly recommend that you take precautions to protect the back side of the product from these conditions. In order to prevent condensation, instruments require ventilation; this results in points of entry for mud and water through the backside. The back of the water resistant tachometer must be protected in mud or dirt racing. Failure to take these precautions may result in voiding product warranty.

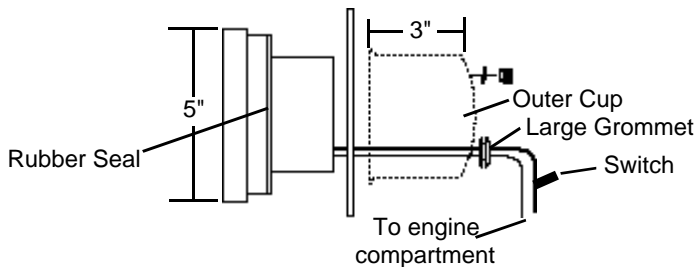
**NOTE (Model 4594 only):** The glow in the dark coating on the dial of this gauge may turn gray if exposed to direct sunlight for extended periods of time. When the car is not being used and will be in direct sunlight for long periods of time, place the provided red plastic cover on the gauge.

**NOTE:** The pointer on your tachometer may not always rest at zero when the 12V power is off. This is normal. When the engine is started, the pointer will register the correct RPM.

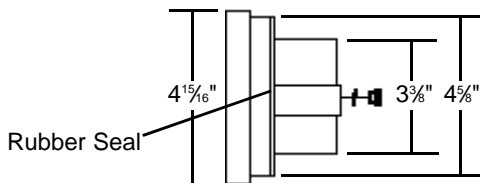
## Mounting

### Models 6801, 6802, 6803

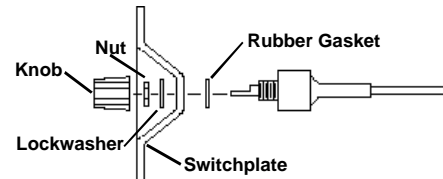
1. Route cables and switch through outer cup. Install large grommet where cables pass through hole in outer cup to prevent chafing.
2. Cut a 3 $\frac{3}{8}$ " dia. hole in the dashboard for the tachometer.
3. Cut a  $\frac{3}{8}$ " dia. hole in the firewall where the tachometer wires will be routed. Place small rubber grommet in the hole and route the GREEN and BLACK wires through to the engine compartment.
4. Connect the tachometer wires as shown on the following pages.
5. Secure the tachometer in the dashboard using the outer cup, rubber seal, finger nuts, and lockwashers provided. Tighten finger nuts firmly by hand. Do not overtighten.



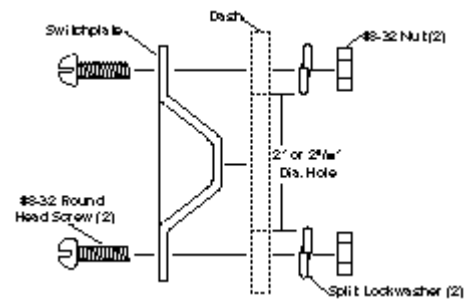
### Model 4594 only



### Mounting Switch to Switchplate

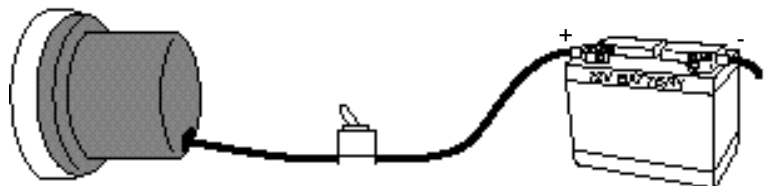


### Mounting Switch to Dash



## Powering Your Tach

**NOTE:** 12V power must be supplied to the tachometer to maintain the memory function. Power can come from a battery with a tach on/off switch.



# Operating Memory Feature

Memory tachometers record the highest RPM reached during each race. Recall your RPM using dash-mounted remote memory switch. Operate switch as shown here.

## Use As Tach

Race with the switch in "TACH" position. The tach will function as normal to monitor engine RPM.



## Recall RPM

Switch to "RECALL" to display peak RPM. This can be done during or after a race. To clear for next race, see Erase Memory step. **IMPORTANT: See Powering Your Tach Section.**



## Erase Memory

Switch to "ERASE" mode before each race. This clears previous runs from the memory. Recording will begin when switch is returned to TACH mode.



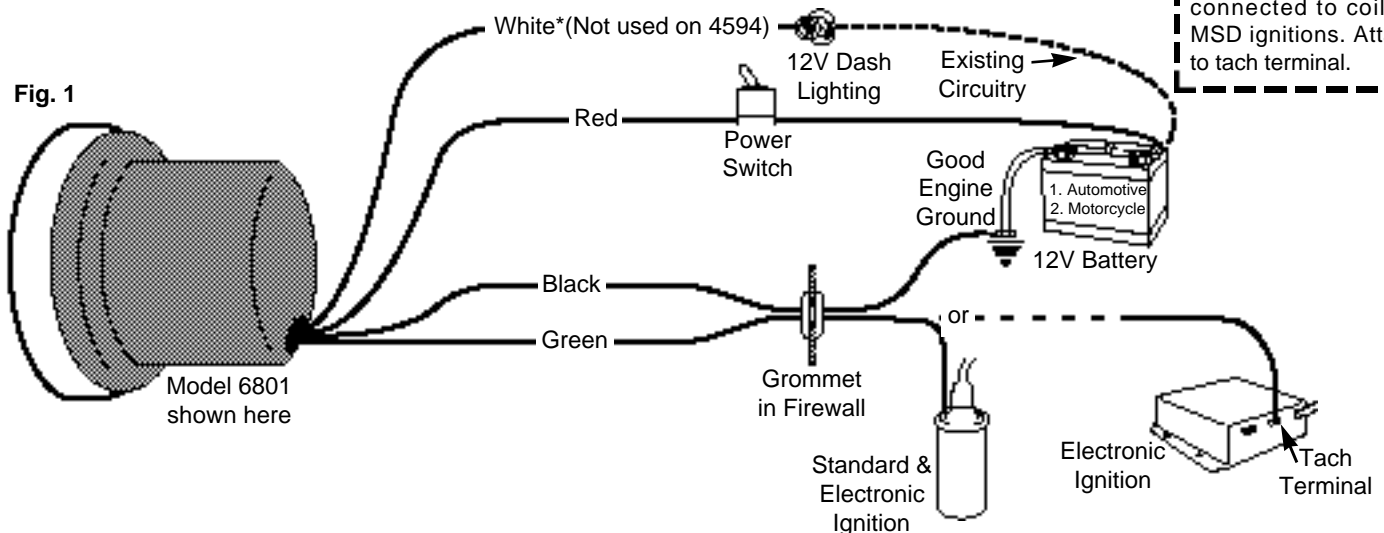
# Wiring

## Standard/Electronic Ignitions

(Accel BEI & Laser Ignitions Require Model 5215 Adapter)  
**Models 4594, 6801**

Connect the tachometer wires as show in Fig. 1. All wires passing through firewall should be routed through the rubber grommet provided. If splice connector is used be sure to make the connection inside the car's driving compartment.

\*If tach is not equipped with white wire, light is powered by RED 12V positive tach lead



## Installation Tips

1. Mount tach base firmly to reduce vibration, wear, and tear.
2. Use a separate 12V battery supply wire for tachometer. This will eliminate interference caused by other electrical components within the vehicle.
3. Avoid connecting tach power and ignition leads together. Use separate battery leads for ignition and tach to avoid excess voltage drop.
4. Avoid routing tach wires near ignition wiring.
5. Solder all connections and avoid crimp-type connectors if possible. This will minimize loose connections that could cause problems.
6. Make sure you have a good ground to engine or battery negative terminal.
7. Wire installations should be neat and tied down to prevent tugging or fraying of wires at connections.
8. Avoid contact of the tach with windshield or other objects to maintain rubber shock absorbing feature.

## Troubleshooting

**If your tach does not function properly after installation check the following:**

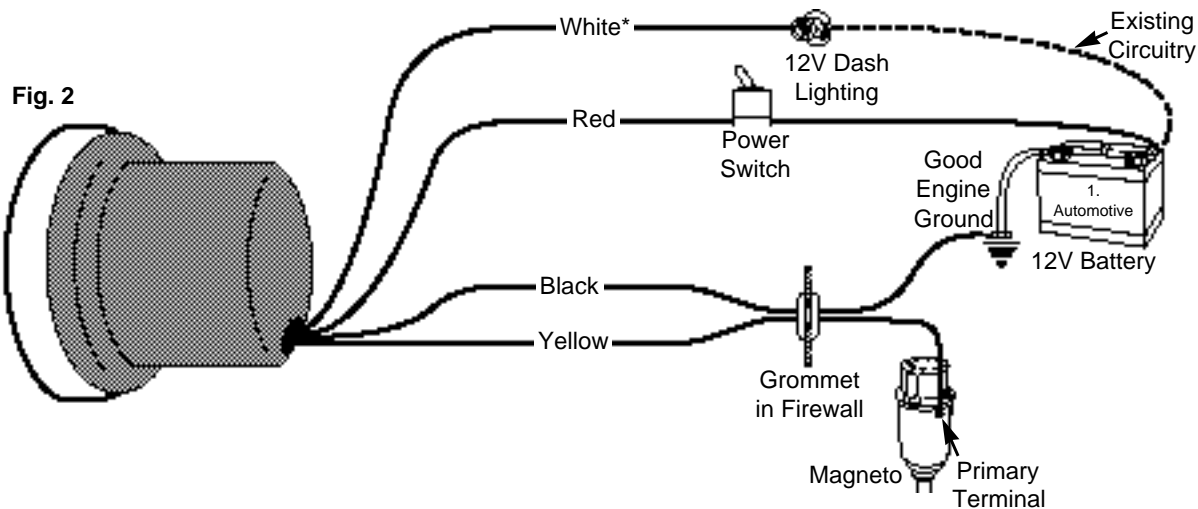
1. Are all electrical connections correct and tight?
2. Are all wires tightly connected to the proper terminals?
3. If neither tach nor dial lights work, check ground and 12V power connections.
4. Check for point float and bounce or other ignition malfunctions.
5. Ignition manufacturers recommend that the ignition and coil be matched according to criteria which they establish (often the ignition and coil are products of the same company). If they are mismatched, minor malfunctions may occur, showing as erratic readings on the tach. Mismatched coil and ignition types are often the cause of incorrect tach performance.

# Wiring

## Vertex Magneto Ignitions Model 6802

Connect the tachometer wires as show in Fig. 2. All wires passing through firewall should be routed through the rubber grommet provided. If splice connector is used be sure to make the connection inside the car's driving compartment.

\*If tach is not equipped with white wire, light is powered by RED 12V positive tach lead



### Installation Tips

1. Mount tach base firmly to reduce vibration, wear, and tear.
2. Use a separate 12V battery supply wire for tachometer. This will eliminate interference caused by other electrical components within the vehicle.
3. Avoid contact between the stock mounting tach and windshield or other rigid objects.
4. Avoid routing tach wires near ignition wiring.
5. Solder all connections and avoid crimp-type connectors if possible. This will minimize loose connections that could cause problems.
6. Make sure you have a good ground to engine or battery negative terminal.
7. Wire installations should be neat and tied down to prevent tugging or fraying of wires at connections.
8. A 12V power source **MUST** be used to power this tachometer. A 12V motorcycle battery is a good alternative for cars without batteries. A battery with a 5 amp hour minimum rating is recommended.

### Troubleshooting

**If your tach does not function properly after installation check the following:**

1. Are all electrical connections correct and tight?
2. Are all wires tightly connected to the proper terminals?
3. If neither tach nor dial lights work, check ground and 12V power connections.
4. Check for point float and bounce or other ignition malfunctions.
5. Ignition manufacturers recommend that the ignition and coil be matched according to criteria which they establish (often the ignition and coil are products of the same company). If they are mismatched, minor malfunctions may occur, showing as erratic readings on the tach. Mismatched coil and ignition types are often the cause of incorrect tach performance.
6. Is the Inductive Trigger installed correctly?

# Maintenance

## Lens Cleaning

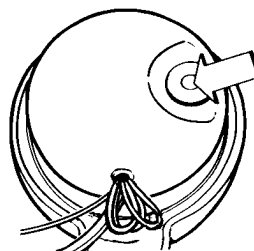
The clear lens on your tachometer is made of acrylic plastic. To prevent scratching, caution must be used when cleaning. Use a mild, soapy solution and soft cloth to clean. Wipe lightly.



## Models 6801, 6802, 6803 only

### Light Replacement

Remove snap plug and replace old bulb with Auto Meter No. 3216 or GE 53 bulb.



# Wiring

## Super Mag & Vertex OXC Ignitions

### Model 6803

Connect the tachometer wires as showing Fig. 3. All wires passing through firewall should be routed through the rubber grommet provided. If splice connector is used be sure to make the connection inside the car's driving compartment.

**Note:** For Super Mag applications it is recommended that ground straps be connected from the magneto clamp to both cylinder heads.

\*If tach is not equipped with white wire, light is powered by RED 12V positive tach lead

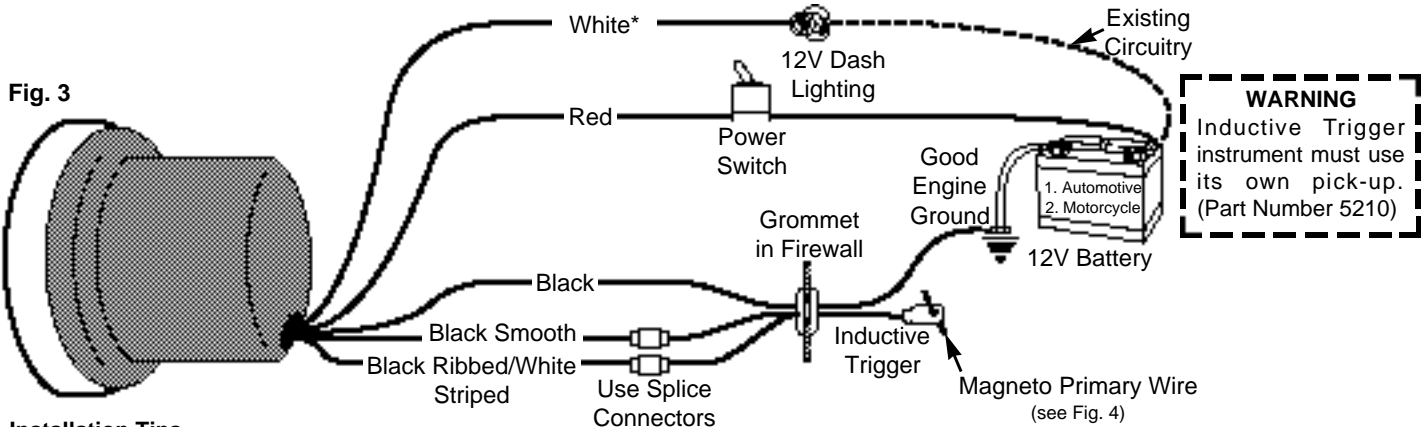


Fig. 3

### Installation Tips

1. Mount tach base firmly to reduce vibration, wear, and tear.
2. Use a separate 12V battery supply wire for tachometer. This will eliminate interference caused by other electrical components within the vehicle.
3. Avoid contact between the stock mounting tach and windshield or other rigid objects.
4. Avoid routing tach wires near ignition wiring.
5. Solder all connections and avoid crimp-type connectors if possible. This will minimize loose connections that could cause problems.
6. Make sure you have a good ground to engine or battery negative terminal.
7. Wire installations should be neat and tied down to prevent tugging or fraying of wires at connections.
8. A 12V power source **MUST** be used to power this tachometer. A 12V motorcycle battery is a good alternative for cars without batteries. A battery with a 5 amp hour minimum rating is recommended.

### Troubleshooting

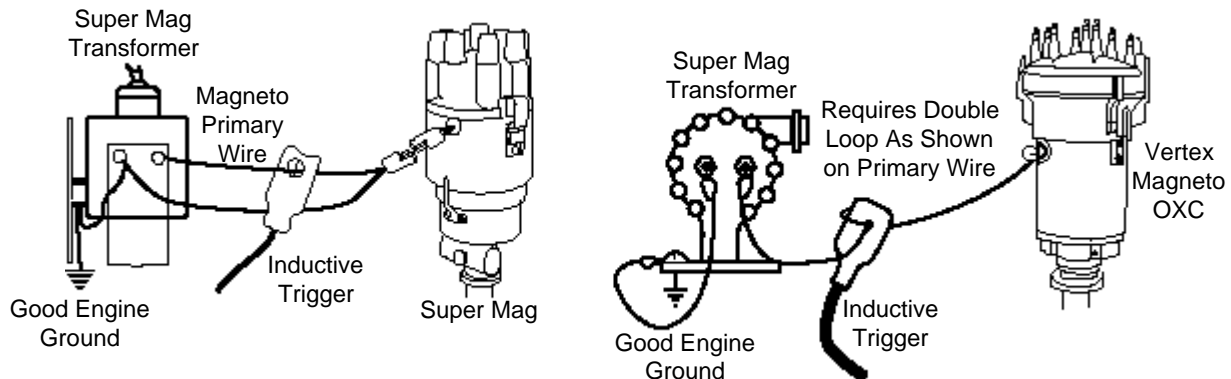
**If your tach does not function properly after installation check the following:**

1. Are all electrical connections correct and tight?
2. Are all wires tightly connected to the proper terminals?
3. If neither tach nor dial lights work, check ground and 12V power connections.
4. Check for point float and bounce or other ignition malfunctions.
5. Ignition manufacturers recommend that the ignition and coil be matched according to criteria which they establish (often the ignition and coil are products of the same company). If they are mismatched, minor malfunctions may occur, showing as erratic readings on the tach. Mismatched coil and ignition types are often the cause of incorrect tach performance.
6. Is the Inductive Trigger installed correctly?

### Installing Inductive Trigger

The inductive trigger should be connected to the magneto primary wire as shown here. Be sure to secure the inductive trigger with the nylon wire tie to prevent strain on magneto primary wires. (See Fig. 4)

Fig. 4



## SERVICE

For service send your product to Auto Meter in a well packed shipping carton. Please include a note explaining what the problem is along with your phone number. Please specify when you need the product back. If you need it back immediately mark the outside of the box "RUSH REPAIR," and Auto Meter will service product within two days after receiving it. (\$10.00 charge will be added to the cost of "RUSH REPAIR.") If you are sending product back for Warranty adjustment, you must include a copy (or original) of your sales receipt from the place of purchase.

### 12 MONTH LIMITED WARRANTY

Auto Meter Products, Inc. warrants to the consumer that all Auto Meter High Performance products will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at Auto Meter's option to the consumer, when it is determined by Auto Meter Products, Inc. that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the Auto Meter instruments. In no event shall this warranty exceed the original purchase price of the Auto Meter instruments nor shall Auto Meter Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product. Warranty claims to Auto Meter must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. Auto Meter Products, Inc. disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by Auto Meter.

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