**Caution!!!**

As a safety precaution, the RED wire of this product should be fused before connecting it to the positive (+) side of the 12V DC battery. We recommend using a 4 Amp, 3AG fast-acting type cartridge fuse (Littlefuse® # 312 004 or an equivalent) in line with the RED wire of our product.

**Warning Light Notes:** To change warning light bulb, unscrew and remove the lens cap. Press in on bulb and turn approximately 1/8 turn counter clockwise. Bulb will now pull out. If you cannot grasp the bulb to pull it out, attach a piece of tape to the top of the bulb and remove the bulb.

**Note:** If temperature switch has 1 terminal, black ground wire is not required.
GENERAL WIRING NOTES:
1. Connect Red Wire to 12 volt power source. The gauge illumination lights and warning lights are all connected to the Red Wire. **NOTE:** With the ignition ON and before the motor is started, all pressure lights should be illuminated. If not, check the black wire and connections to the switches.
2. Connect Black Wire (ground) to good engine ground.

**IMPORTANT:** All pressure switches are internally grounded. It is necessary for the switches to be mounted in a good grounded location in order for the warning lights to operate correctly.

SWITCH SETTINGS:
Oil Pressure – Warning Light will come on if pressure falls below 18 psi
Fuel Pressure – Warning Light will come on if pressure falls below 4 psi
Water Temperature – Warning Light will come on if temperature rises above 220°F
Oil Temperature – Warning Light will come on if temperature rises above 275°F

OIL TEMPERATURE:
Follow these instructions for installing the Oil Temperature Warning Light Switch.

1. Thread the Oil Temperature Switch into a $\frac{1}{2}$" NPT fitting in the oil cooler or in-line between cooler and engine. Use thread sealing compound sparingly on Switch threads. **NOTE:** The Oil Temperature Switch will have 275°F stamped on the side of the housing.
2. Use supplied temperature switch wiring harness. (yellow wire)
3. Connect spade terminal to the temperature switch.
4. Route other spade terminal through fire wall and connect to the ground tab of the warning light.

Follow these instructions for installing the Oil Temperature Gauge Sensor.

1. Cut a $\frac{7}{8}$" hole in firewall and route Oil Temperature Gauge Sensor at end of gauge tubing through hole. Slit the rubber grommet and position in hole so gauge tubing is held firmly in place.
2. You may use the supplied $\frac{1}{2}$-NPT mounting nut in a "T" an oil cooler line, or into a $\frac{1}{2}$-NPT nut welded or brazed to the side of the oil pan sump. Auto Meter offers a weld in fitting (p/n #2261) that accepts mechanical gauge sensing probe and sealing nut. **NOTE:** Do not over tighten sealing nut. A $\frac{1}{8}$ turn beyond snug should be sufficient.
   Make sure gauge tubing is routed away from hazardous moving parts or hot engine components.
3. Start engine and inspect for any leaks.

WATER TEMPERATURE:
Follow these instructions for installing the Water Temperature Warning Light Switch.

1. Thread the Water Temperature Switch into a $\frac{1}{2}$" NPT Port in Manifold, Cylinder Head or Water outlet. Use thread sealing compound sparingly on Switch threads. **NOTE:** The Water Temperature Switch will be have 220°F stamped on side of the housing.
2. Use supplied temperature switch wiring harness. (blue wire)
3. Connect 2 smaller spade terminals to the temperature switch and connect the black wire to a good engine ground.
4. Route 1/4" spade terminal through fire wall and connect to the ground tab of the warning light.

Follow these instructions for installing the Water Temperature Gauge Sensor.

1. Cut a $\frac{7}{8}$" hole in firewall and route Water Temperature Gauge Sensor at end of gauge tubing through hole. Slit the rubber grommet and position in hole so gauge tubing is held firmly in place.
2. Insert and tighten mounting nut in the $\frac{1}{2}$" pipe threaded outlet on engine. (For engines with $\frac{3}{8}$" NPT hole use Auto Meter No. 2263-Brass or No. 2272-Alum.) Insert Sensor in the mounting nut and carefully tighten the sealing nut. Apply an anti-seize compound to avoid seizing of the Water Temperature Sensor to the sealing nut. **NOTE:** Do not over tighten sealing nut. A $\frac{1}{8}$ turn beyond snug should be sufficient.
   Make sure gauge tubing is routed away from hazardous moving parts or hot engine components.
   Check for adequate internal clearance for the Temperature Sensor.
3. Start engine and inspect for any leaks.

**NOTE:** Should you ever need to remove the temperature sensor, loosen the sealing nut without allowing the mounting nut to rotate. Failure to follow this procedure may break capillary tubing internally, thus, voiding warranty.
OIL & FUEL PRESSURE:
The Oil Pressure Warning Light Switch has been pre-wired to the Red Warning Light on the Panel. The fuel pressure warning light has been pre-wired to the white warning light on the panel.

Follow these instructions for installing the stainless steel line from the gauge to the oil pressure port. (Line not included)

1. Attach fitting (A) to vehicle outlet using liquid teflon sealant.
2. Attach pressure hose swivel coupling (B) to fitting (A).
3. If routing through the firewall, drill a 3/4" diameter hole and use rubber grommet (C). Slit grommet to fit over hose.
4. Attach fitting (D) to gauge using liquid teflon sealant on pipe threads.
   (D) : Straight fitting for PANEL mounting.
5. Attach other end of pressure hose to swivel coupling fitting (B) to fitting (D) on gauge.

IMPORTANT: When tightening, be sure to not overtighten aluminum fittings.
To remove pressure hose, always loosen swivel coupling first.

NOTE: To mount fuel pressure gauge inside of vehicle you must use a pressure isolator (Auto Meter p/n 5282)

REPLACEMENT PARTS

- Gauge illumination light socket & light; Model 3220.
- Replacement light bulb for 3220 socket; #168 bulb.
- 18 PSI Pressure Switch for Oil Pressure; Model 3241.
- 200° Temperature Switch; Model 3247.
- 275° Temperature Switch; Model 3248.
- Replacement light bulb for warning lights; # 1889 bulb.

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. 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.