BEFORE YOU START
Read instructions completely before installation.

WEAR SAFETY GLASSES.
Install gauges only when engine is cool and ignition is off. Make sure all necessary tools, materials, and parts are on hand.

Disconnect negative (-) battery cable before installing gauges.
NOTE: It may be necessary to reprogram your radio, clock, etc. after reconnecting the battery.

Make sure mounting location does not impair visibility or interfere with driving. Also check behind the mounting location for any wiring or components before drilling.

Refer to your vehicle's service manual for the location of sensor port, vacuum system, and/or charging system.

NOTE: Some vehicles use temperature and pressure sensors for engine control functions. Use a T-fitting if necessary when installing gauge sensors.

When connecting electrical wires, install crimp terminals (purchased separately) and make wire splices as needed.

ALWAYS insulate wire splices with electrical tape to prevent shorting.

Follow all necessary safety procedures for protection.

GENERAL INFORMATION
CAUTION: As a safety precaution, the 12V (+) terminal of this product should be fused before connecting it to the 12V (+) ignition switch. We recommend using a 1 Amp, 3 AG fast-acting type cartridge fuse.

LIGHTING
Gauges come with amber and white through-the-dial LED lighting. For white lighting, connect the WHITE wire to your 12V (+) dash light circuit. For amber lighting connect the ORANGE wire to your dash circuit.

NOTE: For gauges with a tinted lens, connect the desired light wire to your 12V (+) ignition source so that the gauge backlight is always on when gauge is on.

MOUNTING
2-1/16" gauge mounts in a 2-1/16" diameter hole. Insert gauge through front of panel or hole in dashboard. Fasten with supplied u-clamp and thumb screws.

LENS PROTECTIVE FILM
The gauge comes with a soft protective plastic film on the lens. Remove the protective film when gauge installation is complete.

LENS CLEANING
The gauge lens is made of acrylic plastic. Do not use any chemicals or abrasives on the lens. To prevent scratching, caution must be used when cleaning. To clean, wipe lightly with a damp soft cloth.

GAUGE INSTALLATION

Secure all tubing connections with clamps (purchased separately).

Disconnect negative (-) battery cable.

Determine routing for PVC tubing. Use an existing firewall grommet, or drill a 3/8" (9.5mm) diameter hole through firewall to accommodate tubing. Install a rubber grommet (purchased separately) in hole, or wrap with electrical tape, to protect tubing from chaffing or other damage.

Connect PVC tubing to gauge. Route tubing through grommet in firewall.

Cut the original manifold line and attach each end to the T-fitting as shown below. Connect PVC tubing from gauge to the perpendicular node of the Tee.

Secure tubing along its route to prevent damage from sharp edges, moving parts, or hot engine components.

Using 18 AWG stranded or heavier wire:

Connect BLACK wire to good vehicle ground.

Connect RED wire to a 12V (+) ignition source.

For white backlight connect the WHITE wire to dash lighting circuit. For amber backlight connect the ORANGE wire to dash lighting circuit.

NOTE: For gauges with a tinted lens, connect the desired light wire to your 12V (+) ignition source so that the backlight is on when the gauge is on.

Reconnect negative (-) battery cable. Start and run engine for approximately 30 seconds. Turn off engine and check gauge installation for leaks. Tighten or reseal tubing connections as needed and retest.