UNIVERSAL GAUGE POD
INSTALLATION INSTRUCTIONS

IMPORTANT
WEAR SAFETY GLASSES

Contents of Package

#	Component	Picture	Qty.
1	Pod, top		1
2	Pod, bottom		1
3	Pod, pedestal		1
4	Faceplate		1
5	Tape, adhesive	(No Picture)	1
6	#10 X 3/4" Screw		1
7	#10, Washer		1
8	#6 x 5/16, Screw		3
9	#6, Lock washer	#-9	3
10	Isopropel Alcohol Wipe (IPA)	(No Picture)	1
11	Primer 94	(No Picture)	1
12	Keps Nut		1

TOOLS REQUIRED

Trim removal tool		Scissors	
Drill		1/16" drill bit	
#2 Phillips Screw Driver		#10 drill bit	
Dremel™ Tool set			

NOTE: This pod was designed for Full Sweep and Short Sweep Electric Gauges.

- This installation instruction does not cover installation of the respective gauge wire harnesses into the vehicle. Especially as it relates to the installation of the harness into the engine compartment,
- This mounting solution, is targeted for 2-1/16" short sweep electric and 2-1/16" full sweep electric gauges.
- Prior to performing a full installation, we recommend to do a dry install without attaching it to the car. This will allow you to get familiar with the product.

IMPORTANT
WEAR SAFETY GLASSES

This mounting solution offers two basic types of installation method:

E-Z INSTALLATION:
The mounting solution is attached to the dash board by using the supplied heavy duty double sided adhesive tape. This does not require a mechanical alteration of the dash board. This requires a thorough preparation of the dash board with isopropyl alcohol (IPA) and primer. (Both are provided)

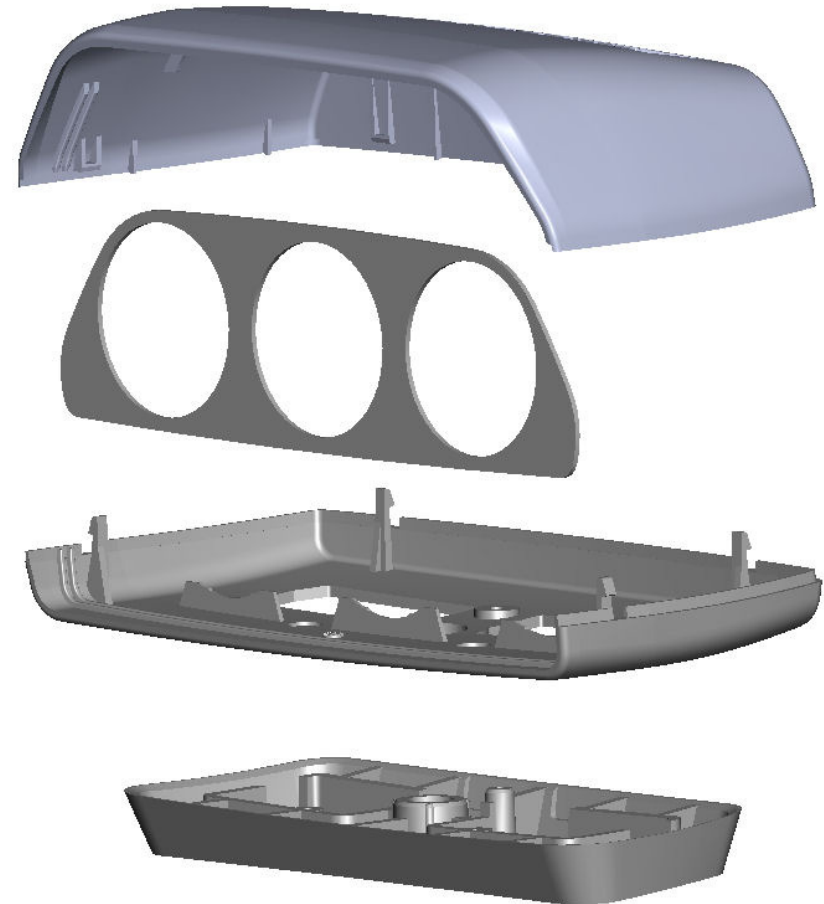The routing of the wire harness would then run on top of the dash board.

PERMANENT INSTALLATION:
The mounting solution is attached to the dash board by using the supplied mounting hardware. This requires permanent mechanical modification of the dash board. The required modification consists of drilling two holes into the dash board.

Since this installation requires creating one opening in the dash board, a second opening in the dash board would allow for the wire harness to be HIDDEN.

This installation instruction assumes that you have access to the underside of the dash. If this is not the case, it is possible to use a sheet metal screw (not supplied) to attach the pedestal to the dash.
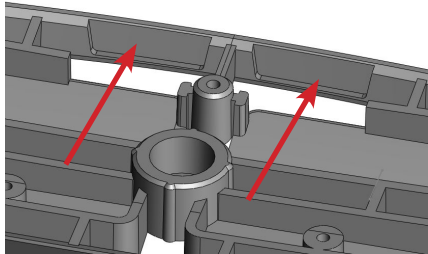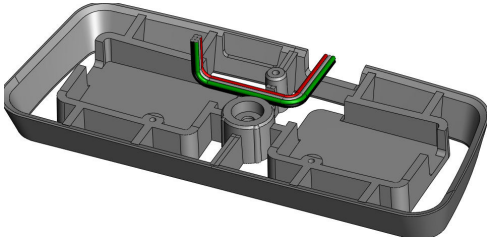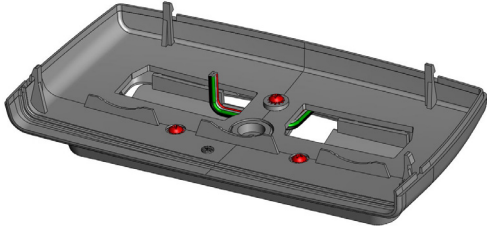
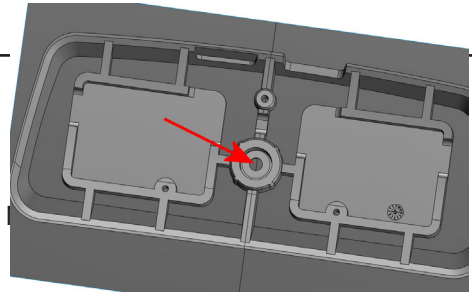**THIS MODIFICATION IS NOT REVERSIBLE!**

Exploded view of the assembly (without gauges):

IMPORTANT
WEAR SAFETY GLASSES

POD PREPARATION/ E-Z INSTALLATION

#	DESCRIPTION	PICTURE
1	Create an opening for the gauge wire harness to exit the pedestal: There are two sections where the wall is intentionally kept thinner to create a template for the opening. For starters open one section to determine if there is enough room for the wire harnesses to exit. If needed, make a second opening. --- Using a DREMEL™ or other suitable tool, and a suitable bit, GRADUALLY create an opening in the back wall until all gauge wiring harnesses fit through the opening.	
2	Lay wiring for all three gauges into the pedestal with any gauge connectors going towards the gauges. Tip: Label each set of wires as to what gauge it will go to.	
3	Feed the wire wiring through the openings in the bottom piece. Put the bottom piece over the pedestal and secure it with the three #6 screws and #6 star washers. **Take care not to pinch any wires in the step.** Tighten the three #6 screws. Torque not to exceed: 5 in/lbs	

POD PREPARATION/ PERMANENT INSTALLATION

#	DESCRIPTION	PICTURE
1	Place the provided pedestal on the dash board at a location where the contour of the dash best fits to the contour of the pedestal.	No Picture
2	Mark the center for the hole that will be used for the mounting screw.	
3	Create the hole for the center mounting screw. Pre-drill using a 1/16" drill Use a 13/64" (or #10) drill bit to drill to final size. **NOTE**: If you choose not to use the #10 screw that is included, select a drill size that is best for the hardware you have selected.	

IMPORTANT
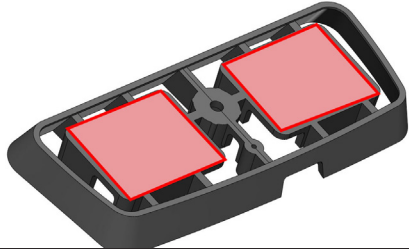**WEAR SAFETY GLASSES**

E-Z INSTALL CONTINUED

Dashboard preparation:

The bottom surface of the pedestal is, like most dashboard surfaces, not flat but has rather large compound radius. The pictures show a simulated dash!
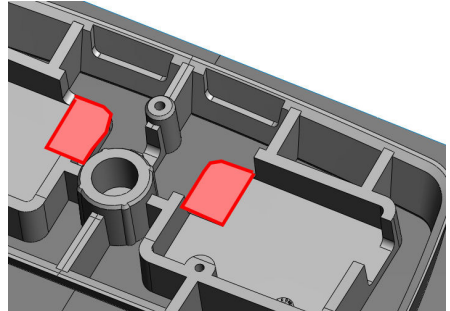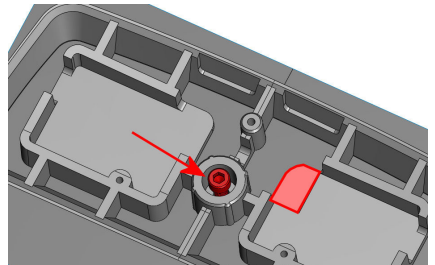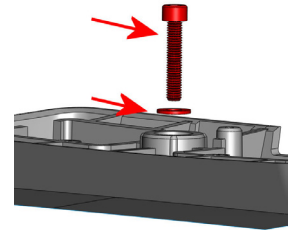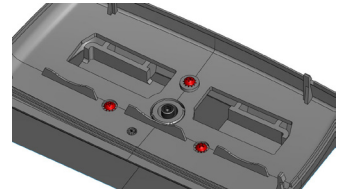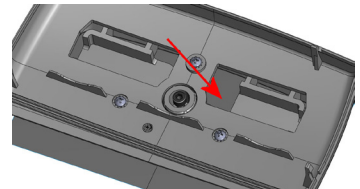
PERFORM A TEST FIT ON THE DASH BOARD PRIOR TO COMMITING THE PEDESTAL TO ITS FINAL POSITION ON THE DASH.

4	Wipe dust off the dash board Wipe the dash board with IPA Wipe the dash board with the primer	No Picture

To Mount the pedestal/bottom piece sub-assembly to the dash board:
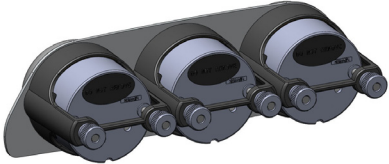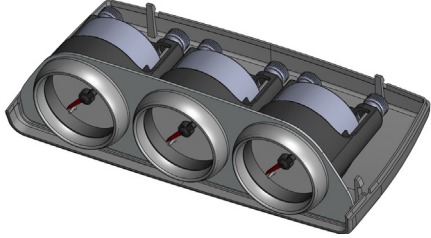
5	Wipe dust off the mounting pads on the bottom piece. Scuff the mounting pads on the bottom of the pedestal with an abrasive pad (similar to 3M™ Scotchbrite™) Wipe the mounting pads on the bottom of the pedestal with IPA Wipe the mounting pads on the bottom of the pedestal with the promoter.	
6	Peel off the protective layer on the double sided adhesive tape on one side only. Apply tape to the mounting pad surfaces on the bottom of the pedestal.	No Picture
7	Remove protective layer from 2nd side of tape. Apply assembly to dash * Skip to step #9 on following page for continued instructions.	No Picture

PERMANEMT INSTALL CONTINUED

4	Create an additional opening in the pedestal. Using a DREMEL™ or other suitable tool, and a suitable bit, GRADUALLY create an opening in the floor of the pedestal base until all three harnesses fit through the opening. **NOTE**: Depending, on what gauges you plan to install, the total thickness of the gauge wire harness may vary. We recommend to start out with a smaller opening and size it as needed.	
5	Place the pedestal on dash and TEMPORARILY insert the #10 mounting screw, which will locate the pedestal on the dash board.Then mark the opening with a marker and remove the #10 screw and the pedestal. Using a DREMEL™ or other suitable tool, and a suitable bit, GRADUALLY create an opening in the dash until all gauge wiring fits through the opening	
6	Place the pedestal back on the dash and secure it using the #10 screw, washer and #10 keps-nut. Torque: not to exceed 5 in/lb	KEPS NUT GOES UNDER DASH
7	Mount the bottom piece on the pedestal, using the three #6 screws and #6 star washers. Torque: not to exceed 5 in/lb	
8	Feed the gauge wiring through the dash board, pedestal and bottom piece. Continue with step 9.	

IMPORTANT
WEAR SAFETY GLASSES
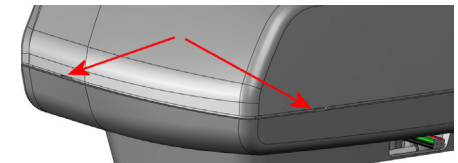
Final Assembly:

9	Insert three 2" gauges into the face plate. It does not matter what gauge goes into what opening of the face plate. Attach the three gauges to the face plate by using the mounting brackets and mounting hardware that came with each of the gauges. Make sure the gauges are aligned horizontally.	
10	Set the gauge/face plate assembly into the bottom piece. The face plate fits into the receiver groove that runs along the bottom piece.	
11	Connect each gauge with its respective wiring.	No Picture

12	Take the top piece and snap on to the bottom piece.	
	This does require that you guide the gauge/face plate assembly into the groove in the top piece. The top piece is held in place by four heavy duty snap hooks.	

Disassembly / Removal of the top piece:

- The top snaps to the bottom piece via 4 heavy duty snap hooks.
- The receiver features are in the top half.
- The snap hooks are in the bottom half.
  In order to remove the top from the bottom, insert a very small screwdriver into one of the small slots and push the snap hook inward slightly.

SERVICE

12 MONTH LIMITED WARRANTY

EXTREME ENVIRONMENT GAUGE (EEG)
FULL SWEEP ELECTRIC TEMPERATURE GAUGE

2650-1906-77 Rev. A
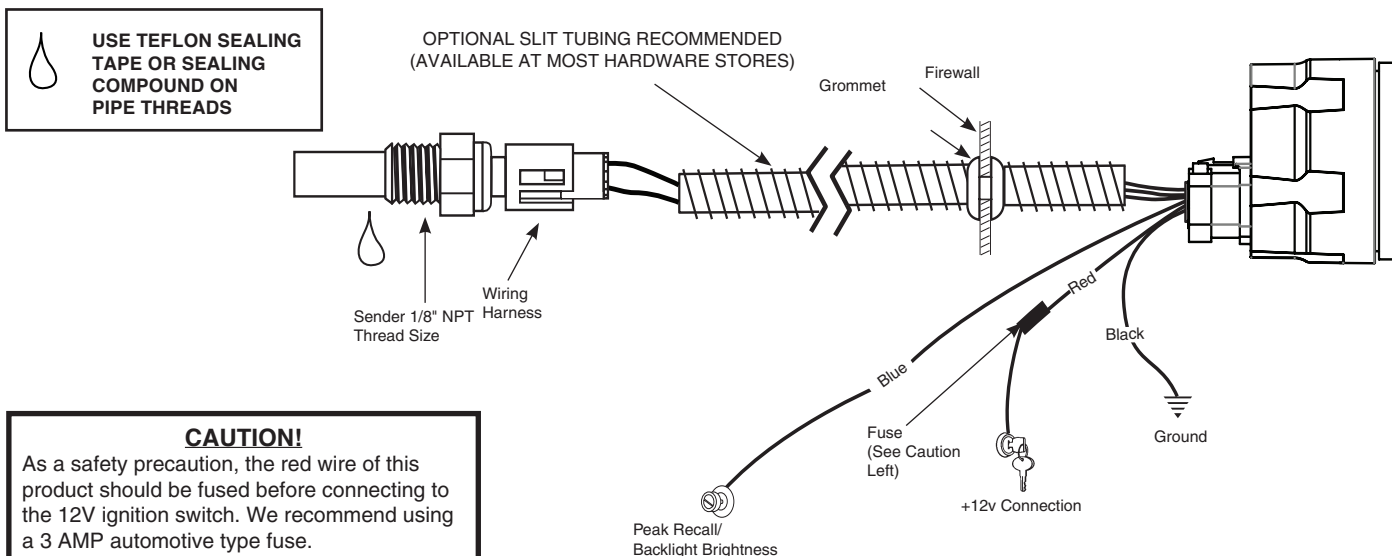
IMPORTANT

WEAR SAFETY GLASSES

USE TEFLON SEALING TAPE OR SEALING COMPOUND ON PIPE THREADS

OPTIONAL SLIT TUBING RECOMMENDED (AVAILABLE AT MOST HARDWARE STORES)

Grommet

Firewall

Sender 1/8" NPT Thread Size

Wiring Harness

Red

Blue

Black

Fuse (See Caution Left)

Ground

+12v Connection

Peak Recall/ Backlight Brightness

CAUTION!

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

Installation

NOTE: Some late model vehicles use electronic sensors in their pressure and temperature senders for engine control functions. Before removing the original sender, we recommend that you contact your automotive dealer to be sure no critical functions will be disrupted.

1. Check that you have all parts required for installation, and the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 2-1/16" hole. Use supplied bracket to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided. (Grommet will require slit.)
5. Connect the blue wire to switched ground for peak recall, the red wire to switched +12V source and the black wire to ground. (see diagram for details)
6. Install temperature sender.
   Note: Included sender is 1/8" NPT. For 3/8" NPT or 1/2" NPT ports, use included adapter.
7. Cut end of included dielectric grease packet, and squeeze grease into connector of temperature sender prior to

connecting harness. (Important: This will protect connection from dirt and moisture.)
8. Reconnect negative (-) battery cable.

NOTE: Test all fittings and connections for leaks. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.

Caution: LUBRIPLATE® DS-ES is a non-hazardous substance. However, it is recommended to wash hands thoroughly after use.

NOTE: When the ignition is off the pointer may not always rest at zero.

Power-Up

The pointer will move counter clockwise to the lowest tick mark and then moves to the current gauge reading. This procedure is an auto calibration function and is performed on every power up. While this test is being performed, the gauge may make a clicking sound. This is normal.

Peak Recall

Switch the blue wire to ground momentarily to recall the highest temperature reading since the memory was last cleared. The **PEAK** value will be displayed for five seconds. After five seconds, the gauge returns to normal operation. To clear the memory, hold the blue wire to ground for two seconds while the **PEAK** value is displayed. The dial will flicker white to indicate that the value has been cleared. The **PEAK** recall value is retained when power is removed from the gauge.

Full Dial Warning

This gauge features full dial warning. When a warning point is reached, the entire dial illuminates red. In addition, the dial illumination will flash red when an over warn point is reached. The warning points for this gauge are set as follows:

Water Temperature

The high warning value for the Water Temperature gauge has a preset value of 230°F. At 230°F or greater, the dial will illuminate red. The high over warn for the Water Temperature gauge has a preset value of 240°F. At 240°F or greater, the dial will blink red.

Oil Temperature

The high warning value for the Oil Temperature gauge has a preset value of 260°F. At 260°F or greater, the dial will illuminate red. The high over warn for the Oil Temperature gauge has a preset value of 280°F. At 280°F or greater, the dial will blink red.

Backlight Brightness

During normal operation, the backlight brightness is fixed. The gauge allows five preset backlight brightness settings. The default brightness is 75% of maximum. To change the brightness:

1. While the gauge is powered OFF, hold the blue Peak Recall wire to ground.
2. Apply power to the gauge and wait for the pointer to zero and move beyond full scale. The pointer will be pointing straight down at center bottom of the dial.
3. Release the blue Peak Recall wire from ground.
4. Switch the blue Peak Recall wire to ground momentarily to cycle through the five brightness settings.
5. The five options are 0%(OFF), 25%, 50%, 75% or 100% of maximum.
6. Once the desired brightness is selected release the blue Peak Recall wire from ground.
7. After 5 seconds, the gauge shall flicker white indicating the brightness value has been saved.
8. The gauge then returns to normal operation.

EXTREME ENVIRONMENT GAUGE (EEG)
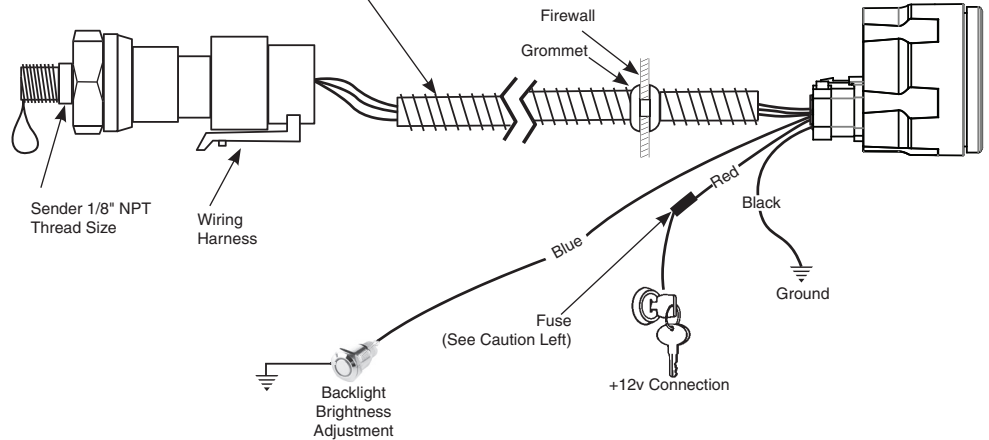# FULL SWEEP ELECTRIC PRESSURE GAUGE

2650-1920-77 Rev. A

IMPORTANT

WEAR SAFETY GLASSES

Use teflon sealing compound sparingly where symbol indicates. (Tape not recommended on these threads.)

OPTIONAL SLIT TUBING RECOMMENDED (AVAILABLE AT MOST HARDWARE STORES)

Firewall

Grommet

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

NOTE: When the ignition is off the pointer may not always rest at zero.

Sender 1/8" NPT Thread Size

Wiring Harness

Blue

Red

Black

Ground

Fuse (See Caution Left)

+12v Connection

Backlight Brightness Adjustment

Installation

WARNING:
The fuel system is pressurized and often retains this pressure for an extended period of time. Properly vent your fuel system before installing the fuel pressure sender. If you are not familiar with the proper method of venting, you MUST have this done by an experienced mechanic.

1. Check that you have all parts required for installation, and the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 2"1⁄16" hole. Use supplied bracket to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided. (Grommet will require slit.)
5. Connect the blue wire to switched ground for peak recall, the red wire to switched +12V source and the black wire to ground. (see diagram for details)

6. For oil pressure gauge installation, an optional 1⁄4" NPT adapter is included. For fuel pressure gauge, install the 1⁄8" NPT pressure sender into the fuel system (See caution below). 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 either the fenderwell or firewall, 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 by AutoMeter, and can be used to accomplish this.
7. Reconnect negative (-) battery cable.

   NOTE: Test all fittings and hoses for any leakage. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.

CAUTION:
If you will be working with the fuel system, take care to insure no sparks or flames occur. Do not smoke while installing the fuel pressure sender.

Power-Up

The pointer will move counter clockwise to the lowest tick mark and then moves to the current gauge reading. This procedure is an auto calibration function and is performed on every power up. While this test is being performed, the gauge may make a clicking sound. This is normal.

Full Dial Warning

This gauge features full dial warning. When a warning point is reached, the entire dial illuminates red. In addition, the dial illumination will flash red when an over warn point is reached. The warning points for this gauge are set as follows:

Oil Pressure

The low warning value for the Oil Pressure gauge has a preset value of 10 PSI. At 10 PSI or less, the dial will illuminate red. The low under warn for the Oil Pressure gauge has a preset value of 7 PSI. At 7 PSI or less, the dial will blink red.

Fuel Pressure

The low warning value for the Fuel Pressure gauge has a preset value of 4 PSI. At 4 PSI or less, the dial will illuminate red. The low under warn for the Fuel Pressure gauge has a preset value of 3 PSI. At 3 PSI or less, the dial will blink red.

Water Pressure

The low warning value for the Water Pressure gauge has a preset value of 4 PSI. At 4 PSI or less, the dial will illuminate red. The low under warn for the Water Pressure gauge has a preset value of 3 PSI. At 3 PSI or less, the dial will blink red.

Backlight Brightness

During normal operation, the backlight brightness is fixed. The gauge allows five preset backlight brightness settings. The default brightness is 75% of maximum. To change the brightness:

1. While the gauge is powered OFF, hold the blue wire to ground.
2. Apply power to the gauge and wait for the pointer to zero and move beyond full scale. The pointer will be pointing straight down at center bottom of the dial.
3. Release the blue wire from ground.
4. Switch the blue wire to ground momentarily to cycle through the five brightness settings.
5. The five options are 0% (OFF), 25%, 50%, 75% or 100% of maximum.
6. Once the desired brightness is selected release the blue wire from ground.
7. After 5 seconds, the gauge shall flicker white indicating the brightness value has been saved.
8. The gauge then returns to normal operation.

EXTREME ENVIRONMENT GAUGE (EEG)
FULL SWEEP ELECTRIC VOLTMETER GAUGE
2650-1981-77

IMPORTANT

WEAR SAFETY GLASSES

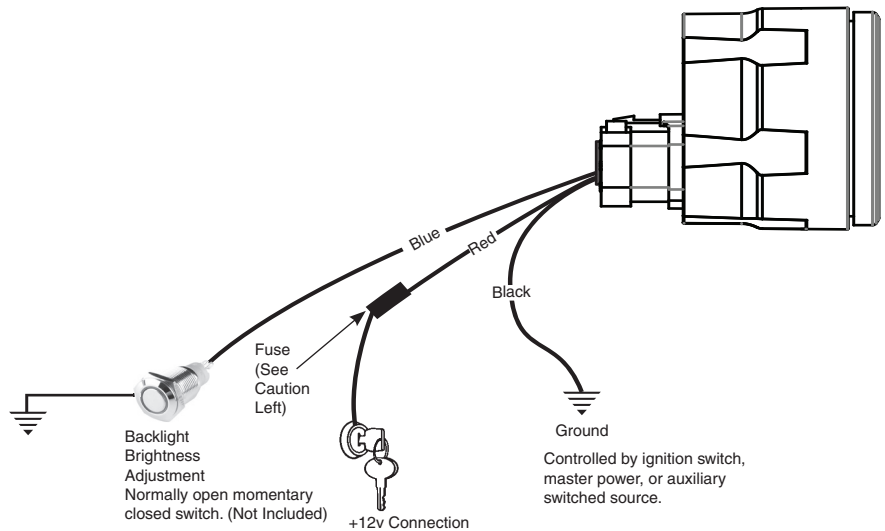**CAUTION!**
As a safety precaution, the red wire of this product should be fused before connecting to the 12V ignition switch. We recommend using a 3 AMP automotive type fuse.

NOTE: When the ignition is off the pointer may not always rest at zero.

Blue   Red

Black

Fuse (See Caution Left)

Ground

Backlight Brightness Adjustment Normally open momentary closed switch. (Not Included)

+12v Connection

Controlled by ignition switch, master power, or auxiliary switched source.

Installation

1. Check that you have all parts required for installation, and the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 2-1⁄16" hole. Use supplied bracket to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided (Grommet will require slit.)
5. Connect the blue wire to switched ground for peak recall, the red wire to switched +12V source and the black wire to ground. (see diagram for details)
6. Slide the instrument into panel hole from the front. Secure behind panel with supplied twist lock ring. DO NOT OVERTIGHTEN!

Power-Up

The pointer will move counter clockwise to the lowest tick mark and then moves to the current gauge reading. This procedure is an auto calibration function and is performed on every power up. While this test is being performed, the gauge may make a clicking sound. This is normal.

Full Dial Warning

This gauge features full dial warning. When a warning point is reached, the entire dial illuminates red. In addition, the dial illumination will flash red when an over warn point is reached. The warning points for this gauge are set as follows:

The low warning value for the Voltmeter gauge has a preset value of 11 Volts. At 11 Volts or less, the dial will illuminate red. The low under warning value for the Voltmeter gauge has a preset of 10 Volts. At 10 Volts or less, the dial will blink red.

Backlight Brightness

During normal operation, the backlight brightness is fixed. The gauge allows five preset backlight brightness settings. The default brightness is 75% of maximum. To change the brightness:

1. While the gauge is powered OFF, hold the blue wire to ground.
2. Apply power to the gauge and wait for the pointer to zero and move beyond full scale. The pointer will be pointing straight down at center bottom of the dial.
3. Release the blue wire from ground.
4. Switch the blue wire to ground momentarily to cycle through the five brightness settings.
5. The five options are 0% (OFF), 25%, 50%, 75% or 100% of maximum.
6. Once the desired brightness is selected release the blue wire from ground.
7. After 5 seconds, the gauge shall flicker white indicating the brightness value has been saved.
8. The gauge then returns to normal operation.