

# INSTALLATION INSTRUCTIONS

## ELITE DIGITAL DUAL PRESSURE GAUGES

2650-1945-77 Rev. A

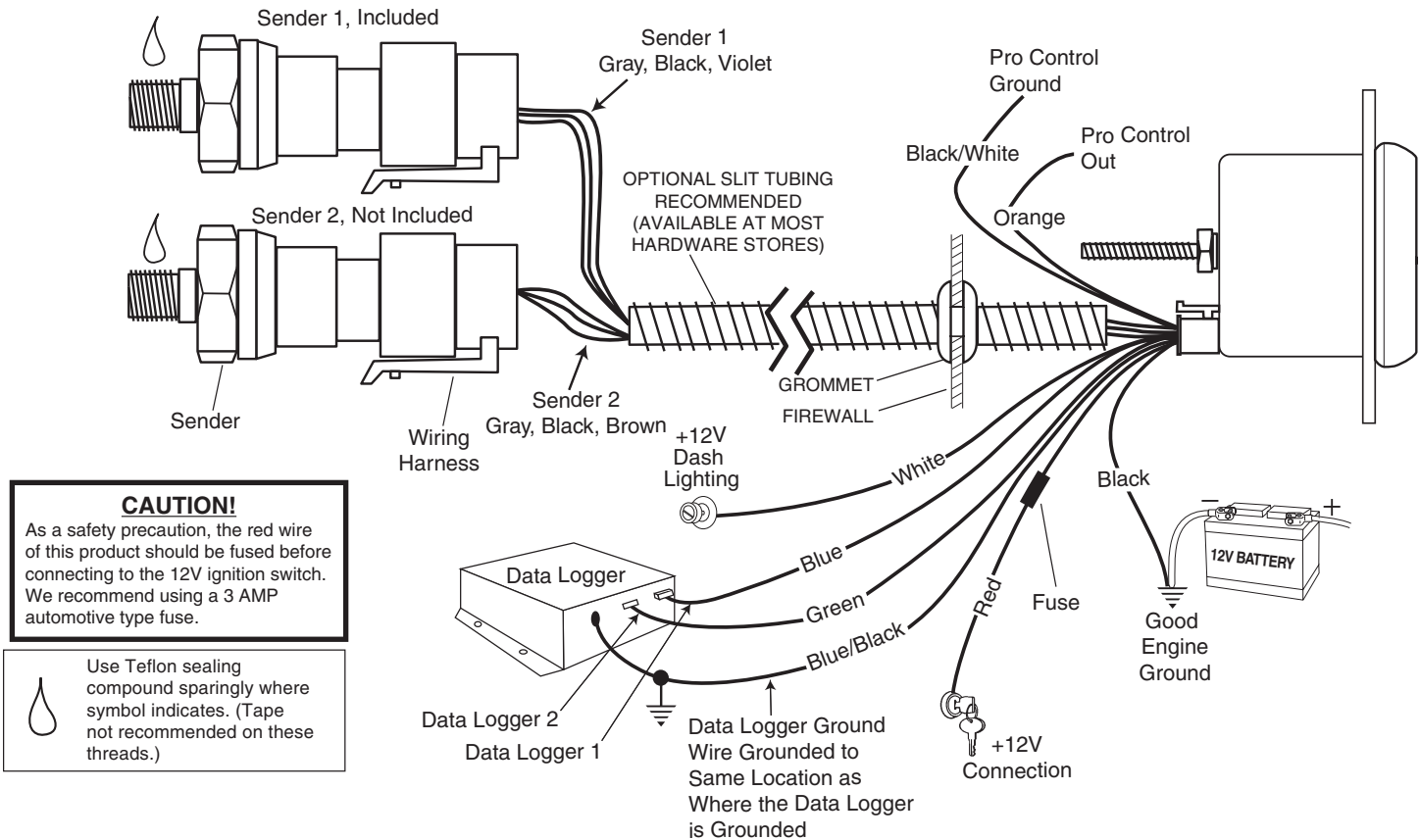
Models 6752-CB, 6752-PH, 6752-SC, 6752-UL



### QUESTIONS?

If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s), please contact AutoMeter Technical Service at 866-248-6357. You may also email us at [service@autometer.com](mailto:service@autometer.com).

Additional information can also be found at [www.autometer.com](http://www.autometer.com)



## Connections

Red	Switched +12V	Orange	Pro Control Out
Black	Good Engine Ground	Black/White	Pro Control Ground
White	+12V Dash Lighting	Blue	Data Logger Output Channel 1
Gray, Black, Violet	Pressure Sender 1	Green	Data Logger Output Channel 2
Gray, Black, Brown	Pressure Sender 2	Blue/Black	Data Logger Ground

## Installation - Fuel & Boost Pressure

### 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 brackets and nuts 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 white wire to dash lighting or switchable 12v light source, the red wire to switched +12V source and the black wire to ground. (see diagram for details) Digital display will dim when power is applied to white wire.

### 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.

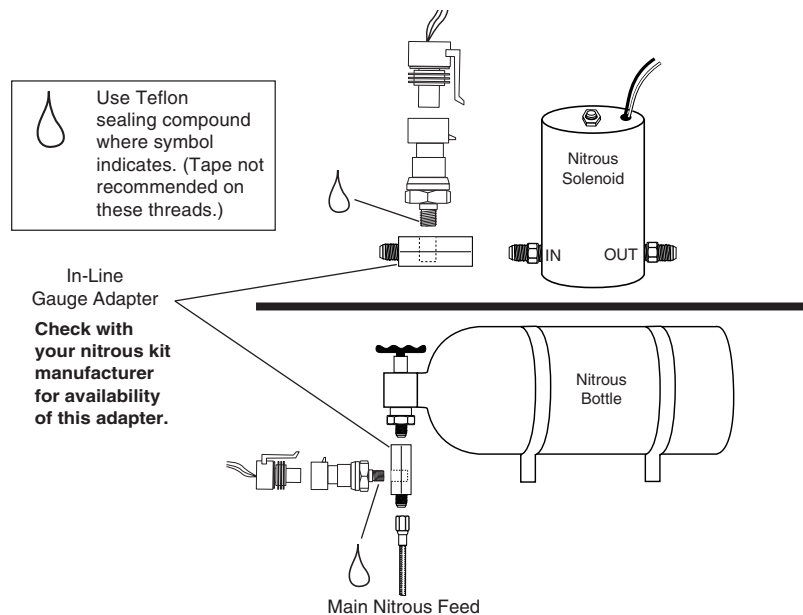
6. For fuel pressure gauge, install the 1/8" NPT pressure sender into the fuel system (See warning)  
If unit is to be installed on a high vibration application such as a full race engine or engine capable of high RPM, it is strongly recommended that the sender be remote mounted to either the fenderwell 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. For boost pressure gauge. Boost pressure needs to be installed in the intake system after the turbo or supercharger. The sender in this kit uses a 1/8" NPT thread. You will have to use either an appropriately sized T with a 1/8" NPT hole installed in a vacuum line, or if no vacuum lines are available you will need to drill and tap the intake to thread the sender in directly. **Use caution!** Removal of the intake for drilling and tapping is recommended to avoid dropping metal shavings into the engine.
8. 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.

# Installation - Nitrous Pressure

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 brackets and nuts to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided.
5. Connect the white wire to dash lighting or switchable 12v light source, the red wire to switched +12V source and the black wire to ground. (see diagram for details) Digital display will dim when power is applied to white wire.
6. **Make sure the nitrous bottle valve is closed and there is no pressure in the system.**
7. Remove the main nitrous feed line from the bottle or the nitrous solenoid. Install on in-line gauge adapter either on the nitrous bottle or nitrous solenoid. Re-install the main nitrous feed line. Install pressure sender and wiring harness.
8. Open the nitrous bottle valve.

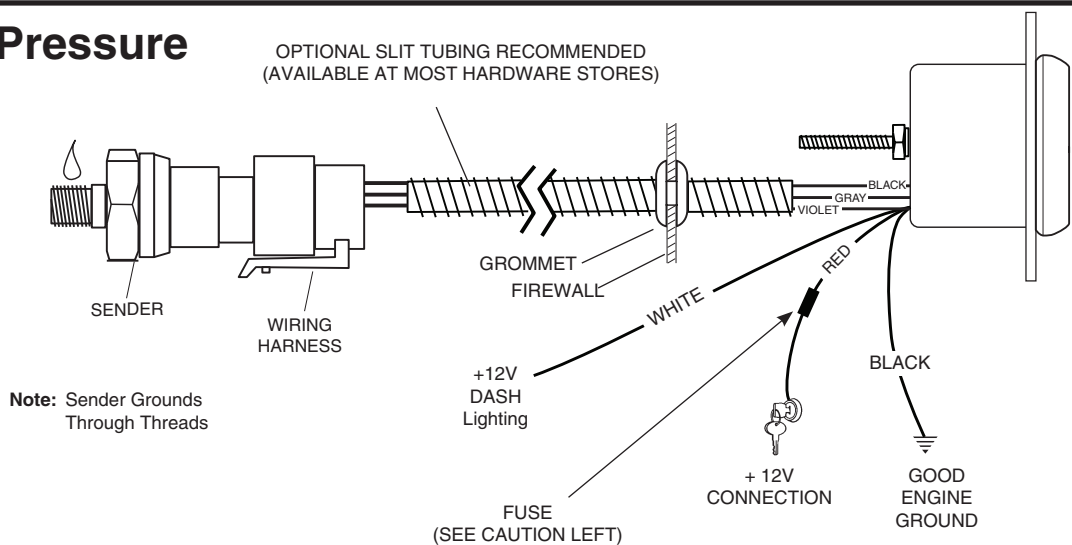
**NOTE:** Test all fittings and hoses for any leakage. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.



# Installation - Oil Pressure

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

**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:** 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 brackets and nuts to secure gauge to dash.
4. Connect the white wire to dash lighting or switchable 12v light source, the red wire to switched +12V source and the black wire to ground.(see diagram for details) Digital display will dim when power is applied to white wire.
5. 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 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. Sender features 1/8" NPT male fitting and comes with 1/4" NPT adapter..

If not, or if remote relocation of sender is required, a ground connection to sender "body" may need to be made. (but not to sender terminal)

6. Route wiring through the firewall. If a new hole is drilled in the firewall, a grommet is recommended. Connect plug to pressure sender.
7. 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.

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## Menu Options:

There are many features provided by your AutoMeter Elite Digital Dual Pressure gauge. Use the left (-) button to navigate through the following options in order:

- Peak Recall – Digit display will show "P"
  - Differential Mode – Digit display will show "diF"
  - Pro Control 1 Set – Digit display will show "PC1"
  - Pro Control 2 Set – Digit display will show "PC2"
  - Pro Control Active State – Digit display will show "PCA"
  - Pressure Channel 1 Display Assignment – Digit display will show "CH1"
  - Pressure Channel 2 Display Assignment – Digit display will show "CH2"
  - Channel 1 Alarm Set – Digit display will show "A1"
  - Channel 2 Alarm Set – Digit display will show "A2"
  - Channel 1 Pressure Sender Set – Digit display will show "P1"
  - Channel 2 Pressure Sender Set – Digit display will show "P2"
  - Select English or Metric Units for the Digit Display – Digit display will show "uni"
  - Gauge Firmware Revision – Digit display will show a the firmware revision number.
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## Power-Up

When power is applied to the gauge, the digit display will light with "8.8.8." and the entire bargraph display will light for one second. Then the gauge will begin normal operation and display real time sender readings.

## Sender Range Set

The Elite Digital Dual Pressure Gauge works with many different AutoMeter pressure sender ranges. This can also be used with other pressure senders as long as the output from the sender is 0.5V to 4.5V (low to high). This kit includes one AutoMeter model 2246 0-100 PSI sender. To set Channel 1 to the proper range for the attached sender, press the left button repeatedly until the digit display shows "P1". Then press the right button. Use the right (+) and left (-) buttons until the number shown on the display is the full scale pressure of the sender on Channel 1. Values above 999 are shown with a decimal. For example, 1600 psi would be shown as "1.60" on the display. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

To set Channel 2 to the proper range for the attached sender, press the left button repeatedly until the digit display shows "P2". Then press the right button. Set the pressure in the same manner as Channel 1.

### Available AutoMeter Pressure Senders

2229 - 0-60	2245 - 0-15
2239 - 0-30	2246 - 0-100
2240 - 0-1600	

## Channel Assignment

The Elite Digital Dual Pressure Gauge has two displays, one shows digits, the other is a radial bar graph consisting of 30 green LED's. If a 100 PSI pressure sender is assigned to the bar graph display, all 30 LED's will be lit if the gauge reads 100 psi. Only the 15 left side LED's will be lit if the gauge reads 50 PSI. No LED's will be lit if the gauge reads 0 PSI. To assign Channel 1 to one or both displays, press the left button repeatedly until the digit display shows "CH1". Then press the right button. The digit display will show "dig", "bAr", "bth", or "---". To assign Channel 1 to the digit display, press the left button until the digit display shows "dig". Wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting. Saving the setting when the digit display shows "bAr" assigns Channel 1 to the bar graph display. Saving the setting when the digit display shows "bth" assigns Channel 1 to both the digit display and the bar graph display. Saving the setting when the digit display shows "---" assigns Channel 1 to neither display.

To assign Channel 2 to a display, press the left button repeatedly until the digit display shows "CH2". Then press the right button. Assign Channel 2 in the same manner as Channel 1.

## Peak Recall

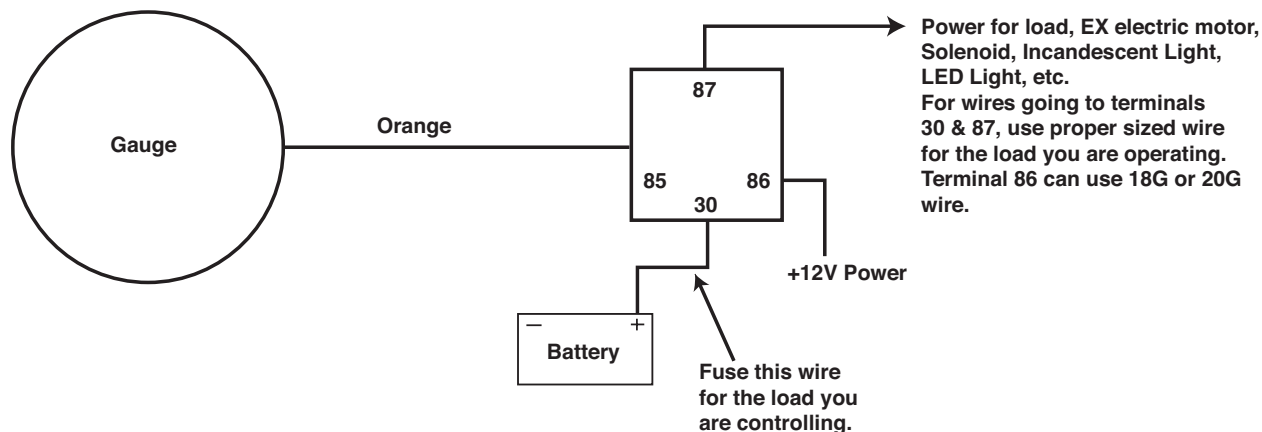
To view pressure peaks, press the left button. The digit display will show "P". Press the right button. The digit display and bar graph display will show the highest pressure values measured by the gauge. After 3 seconds the gauge will return to normal operation. Pressing the right button while the peaks are still being shown will clear the peaks. The display will show "---", then the gauge will return to normal operation.

## Pro Control On Set

The Pro Control Output orange wire supplies ground when activated. It is recommended to use a relay switch such as the Dedenbear HPR or equivalent. If you are planning to operate something that draws less than 1 amp you may wire the orange wire direct to the load without a relay. To set the pressure level that will activate the Pro Control Output, press the left button until the digit display shows "PC1" or "PC2", depending on the pressure channel it's being set for. Press the right button. The digit display will show "on". Press the right button again. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of pressure. Values above 999 are shown with a decimal. For example, 1600 psi would be shown as "1.60" on the display. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

It is possible to set Pro Control values for both channels. If either channel exceeds it's Pro Control set point, the Pro Control Output will activate. Both channels must be below their Pro Control set point to deactivate the output.

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## Pro Control Off Set

If it is desired to have the Pro Control Output deactivate at a different pressure than it activates, press the left button until the digit display shows "PC1" or "PC2", depending on the pressure channel it's being set for. Press the right button. The digit display will show "on". Press the left button. The digit display will show "OFF". Press the right button again. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of pressure. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

## Pro Control Active State

This will allow the user to change the Pro Control to activate above the set value and turn off below the set value. To change this, press the left button until the display shows "PCA", then press the right button. The digit display will show "PLC". Press the left button. The digit display will show "PCH". Press the right button.

## Alarm Set

This Alarm feature will cause the digit display or the bar graph display to flash rapidly if the pressure channel shown on that display is below a user set value. To set the pressure level that will activate the Alarm, press the left button until the digit display shows "A1" or "A2", depending on the pressure channel it's being set for. Press the right button. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of pressure. Values above 999 are shown with a decimal. For example, 1600 psi would be shown as "1.60" on the display. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

## Differential Mode

This will allow the user to view the difference in pressure of the two channels on the digital display. The bar graph display will continue to show whichever channel was assigned to it. To turn on differential mode, press the left button until the display shows "diF". Press the right button. The display will show "OFF". Press the left button. The display will show "On". Press the right button.

## English or Metric Units

This will allow the user to view the pressure value shown on the digit display in BAR instead of psi. To change this, press the left button until the digit display shows "uni", then press the right button. The digit display will show "PSI". Press the left button. The digit display will show "bAr". Press the right button. Pressure will now be displayed in BAR. The bar graph display is not affected by this. If a 100 PSI sender is used on this, all 30 LED's will light at 100 PSI.

## Data Logger Output

The AutoMeter Elite Digital Dual Pressure gauge has a signal output for each channel for supplying information to a Data Logger or engine management system. The signal provided is a linear 0-5v output. The Data Logger will output 0.0 volts for a measured pressure of 0 PSI. It will output 5.0 volts at full scale pressure (100 PSI if set to this in Sender Range Set).

To calculate the measured pressure from the voltage output:

$$T = \text{Maximum Pressure} * (\text{Voltage Out}/5.00)$$

## 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

AutoMeter Products, Inc. warrants to the consumer that all AutoMeter High Performance products purchased from an Authorized AutoMeter Reseller 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 AutoMeter's option, when determined by AutoMeter that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the AutoMeter High Performance product and the necessary labor done by AutoMeter to effect the repair or replacement of the AutoMeter High Performance product. In no event shall AutoMeter's cost to repair or replace an AutoMeter High Performance Product under this warranty exceed the original purchase price of the AutoMeter High Performance Product. Nor shall AutoMeter Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of an AutoMeter High Performance Product. This warranty applies only to the original purchaser of the AutoMeter High Performance Product and is non-transferable. This warranty also applies only to AutoMeter High Performance Products purchased from an Authorized AutoMeter Reseller. 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. AutoMeter disclaims any liability for consequential damages due to the breach of any written or implied warranty on all products manufactured by AutoMeter Products, Inc. For a comprehensive listing of Un-Authorized AutoMeter Resellers please visit [www.autometer.com/autometerlocator/index/unauthorized](http://www.autometer.com/autometerlocator/index/unauthorized).

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