

INSTALLATION INSTRUCTIONS HIGH PRESSURE GAUGE ISOLATOR



QUESTIONS:

If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s), please contact Auto Meter Technical Service at **815-899-0801**.

You may also email us at **service@autometer.com**.

Additional information can also be found at http://www.autometer.com/tech_faqs.aspx

Safety First

The isolator allows interior mounting of pressure gauges without the danger of routing a line containing dangerous fluid into the driving compartment. This is accomplished by plumbing the isolator between the pressure source and the gauge. When pressurized, the fluid bears against a diaphragm inside the isolator, which transmits the pressure through the line connecting the isolator to the gauge. The corresponding fluid pressure is then displayed on the gauge.

WARNING

This isolator must not be used for applications with Nitromethane. This fluid will cause the isolator diaphragm to quickly deteriorate and render it ineffective.

Important Notes

1. Isolator must be mounted in the engine compartment. (Do not mount onto the fire wall - per NHRA/IHRA rules)
2. Do not remove the plastic cap with label until the isolator is connected to the gauge.

Installation

Figure 1

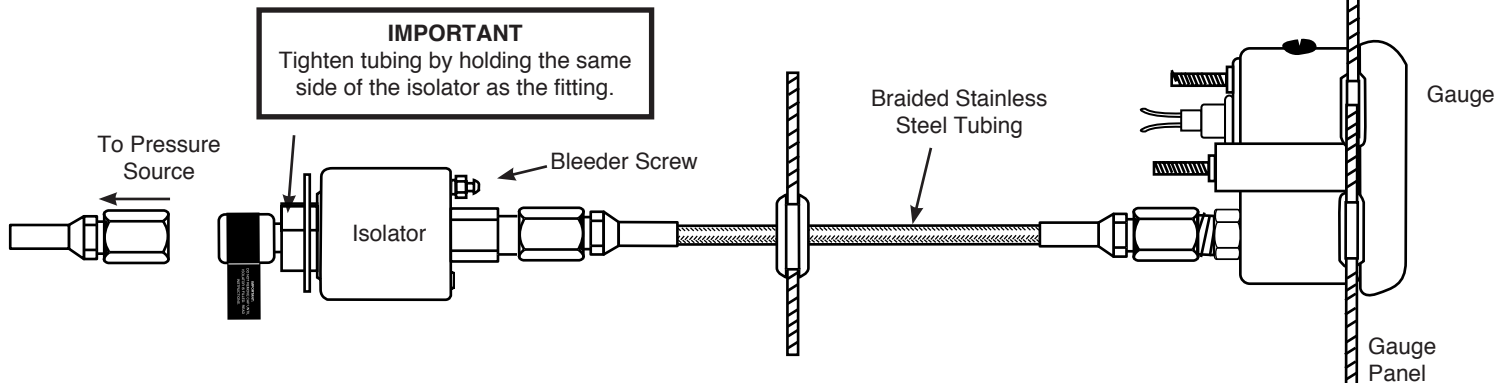
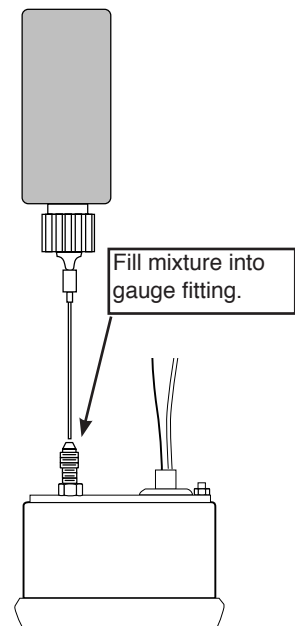


Figure 2



Filling Procedure for the Gauge

(gauge should have a -4AN fitting)

1. Drill a $\frac{3}{32}$ diameter hole through the restriction plug inside the threaded fitting on the gauge.
2. Fill the supplied squeeze bottle approximate $\frac{1}{4}$ the way full with a 50/50 mixture of water and antifreeze. Put the cap and filling needle on the bottle.
3. Being careful not to scratch the lens, set the gauge down with the fitting facing up. Insert the needle into the fitting. Fill the gauge until the mixture comes to the top of the fitting. See Fig. 2 (**Do not spill mixture and allow it to get into the gauge.**)
4. Put the black plastic cap, from the hardware kit, onto the gauge fitting.

Installation of Isolator and Gauge

Tip: To help prevent the isolator from oxidizing and discoloring, it can be cleaned and sprayed with a clear lacquer (available at most hardware stores).

1. Drill a $\frac{7}{8}$ " diameter hole into the fire wall.
2. Route the braided tubing through the firewall into the passenger compartment, and through the gauge mounting hole.
3. Protect the interior of the car in case a leak should occur during the rest of the installation.
4. Hold the gauge with the fitting up and remove the plastic cap from the back of the gauge.
5. While holding the braided tubing up, remove the steel plug and quickly thread the braided tubing onto the gauge. (Be careful not to spill any fluid) See Fig. 3
6. Tighten the tubing securely onto the gauge (11-12 FT. LB.).

NOTE: Fluid leaking from the system will cause the gauge to read incorrectly. If a leak occurs, please send the isolator and line assembly to Auto Meter Products to be refilled. (A refilling fee will be charged to the customer)

7. Slit the rubber grommet provided and position it into the fire wall to firmly hold the braided tubing in place.
8. At this time the plastic cap with label can be removed from the fuel side of the isolator.
9. Tee the isolator into the vehicles fuel system with the appropriate fittings and tubing. It is recommended that Auto Meter tubing be used (Refer to chart).

Note: When tightening the braided tubing or fittings on the isolator, be sure to use the wrench flats just under the fitting to hold the isolator. Do not use the wrench flats on the opposite end of the isolator, doing so could damage the diaphragm as a result (refer to chart for suggested fittings).

10. Start the engine, while engine is running, check for leaks, smooth operation and check the gauge for suspicious readings.

Tubing

model #	
3227	3ft
3229	4ft
3228	6ft



Fittings

model #	
3273	45° swivel nut elbow for -4AN
3274	90° swivel nut elbow for -4AN
3275	Ford fuel rail ($\frac{1}{8}$ pipe thread to -4AN)

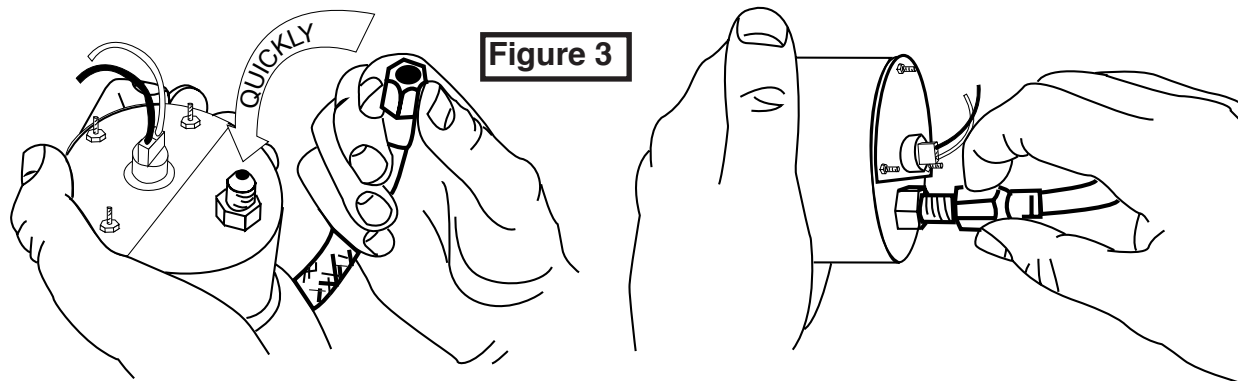


Figure 3

Troubleshooting

1. Gauge indicates pressure when there is no system pressure.

The fluid in the isolator, tubing and gauge has expanded due to a temperature increase. This causes the diaphragm to be forced to the end of it's stroke, causing pressure on the gauge side of the isolator. To remove this pressure, disconnect the tubing from the pressure source. **(Do not loosen or remove tubing between the isolator and gauge. Do not allow any fuel to spill onto a hot engine, fire could result. Most fuel injector systems will hold pressure for many hours.)**

Open the bleeder screw to allow the excess 50/50 mixture to come out. Then, being careful not to over tighten, retighten the bleeder screw (16 IN. LB. Max) and reconnect the tubing to the pressure source.

2. Gauge action is erratic

Excess air could be in the tubing between the pressure source and the isolator. You will need to let the air out by loosening the tubing on the isolator just enough to allow the air to bleed out. Do not remove the tubing. Tighten the tubing when fuel starts to trickle out.

3. The gauge stops at a pressure lower than the system pressure.

This is caused by too much air between the isolator and the gauge. If this problem occurs the gauge needs to be removed from the isolator and sent back to Auto Meter Products for refilling. Be sure to plug the tubing after disconnecting the gauge.

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 this product 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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