

# AEROMOTIVE Part # 17114 Sensor Relocation Kit INSTALLATION INSTRUCTIONS

This product is not legal for sale or use on emission-controlled vehicles except when used as a direct replacement part matching OEM specification.

#### **WARNING!**



Always be aware of flammable situations. Drilling and grinding can be potential ignition sources. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle and workspace before proceeding with the installation. Ensure you are working in a well ventilated area with an approved fire extinguisher nearby.

#### **WARNING!**



Installation of this product requires modification to a fuel tank/ the fuel system, failure to satisfy all safety considerations will result in fire, explosion, injury and/or loss of life to yourself and/or others. All fuel system components MUST be located as far from heat sources as possible, like exhaust, engine block,

etc.

#### **WARNING!**



Mechanical and hydraulic lifting devices can tip over or lower accidentally due to incorrect maneuvering or technical errors. A falling object can cause injury and/or loss of life to yourself and/or others. When working under the vehicle, always use stands, and ensure that the ground or floor is stable and level. Never crawl under a vehicle which is only supported by a jack.

#### **WARNING!**



The fuel system is under pressure. Do not open the fuel system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

#### **CAUTION!**



When installing this product always wear safety glasses and other appropriate safety apparel. A drilling operation will cause flying metal chips. Flying metal chips can cause eye injury.

#### **CAUTION:**



Installation of this product requires detailed knowledge of automotive systems and repair procedures. We recommend that this installation be carried out by a qualified automotive technician. Careless installation of this product can result in damage to the product, injury or loss of life to yourself and/or others.

## **Compatible Fuels:**

Pump Gas Race Gas E85 Alcohol/Ethanol

#### Parts Included:

1 ea 15110 Block-off Plate	12 ea Tie Wraps
1 ea 15109 Sensor Line Adapter	6 ea Solder Splice Connector
2 ea O-Rings for Block-off Plate	10 ft Wire Loom
2 ea Hose Clamps	12 ft 1/4" ID Plastic Tubing
2 ea 10-24 Screws	6 in ¼" ID Rubber vacuum Hose
2 ea #10 Lock Washers	12 ft 18 ga. Gray Wire
2 ea 5mm Screws	12 ft 18 ga. Red Wire
	12 ft 18 ga. Brown Wire

#### Note: A Heat gun is required for proper installation of the solder Splice connectors.

The following steps are typical of most installations:

- 1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve the fuel system pressure.
- 2. Raise the vehicle and support it with jack stands.
- 3. Referring to the appropriate vehicle service manual for instructions, remove the OEM fuel pressure sensor from the fuel rail.



4. Locate the enclosed Aeromotive block-off plate, apply a light oil to the two



replacement o-ring's and install on the block-off plate.

5. Using the two 5mm screws included with the kit (these screws will have the finer threads of the two pair), attach the Aeromotive block-off plate to the OEM fuel rail using care not to cut the o-rings during installation and tighten.



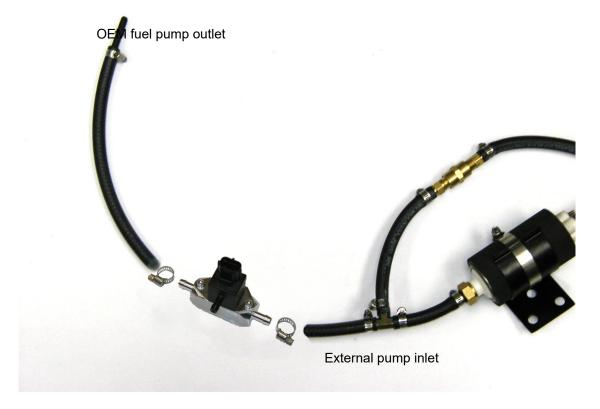
- 6. Inspect and replace, if necessary, the o-rings on the OEM fuel pressure sensor.
- 7. Place a couple drops of light oil on the o-rings to ease installation.
- 8. Install the OEM fuel pressure sensor in the sensor line adapter using the provided 10-24 screws and lock washers and tighten.



9. In the 5/16" fuel injection line between the outlet of the OEM fuel pump and the inlet of the secondary line fuel pump determine an appropriate location to install the sensor adapter.

Note: Be sure to route all fuel lines clear of any moving suspension or drivetrain components and any exhaust components! Protect fuel lines from abrasion and road obstructions or debris.

10. Cut the 5/16" fuel injection hose in the location determined above and install the sensor adapter using the provided hose clamps.



11. Using the provided wire loom assembly, plan a route from the OEM fuel pressure sensor connector in the engine compartment to the new fuel pressure sensor location. Trim the wire loom assembly to the desired length if needed. Secure the wire loom assembly to the vehicle using the provided tie-wraps.

Note: Be sure to route all lines clear of any moving suspension or drivetrain components and any exhaust components! Protect lines from abrasion and road obstructions or debris.

- 12. Cut the OEM Fuel pressure sensor connector wires from the OEM wiring harness leaving several inches of wire on the connector.
- 13. Remove approx. 3/16" of insulation from each of the 3 wires on the sensor connector you removed and the 3 wires on the OEM wiring harness.



14. Remove approx. 3/16" of insulation from both ends of the 3 wires in the Aeromotive wire loom assembly.



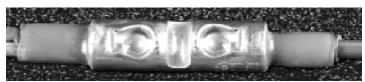
15. Using the provided solder splice connectors connect the grey, brown and red wires of the Aeromotive wire loom to the grey, brown, and red wires of the OEM wire loom in the engine compartment.



Insert wires into each end up to wire stop



Using a heat gun, heat the center until you see solder disk melt and flow outwards (typically 30-60 seconds)



After the solder flows, heat each end until it shrinks creating an insulating seal

- 16. Using the provided 12' pc. of 1/4" ID plastic tubing, connect one end of the tubing to the OEM manifold vacuum line which was removed from the fuel pressure sensor in the engine compartment. Route the plastic tubing along side the Aeromotive wire loom in the next step.
- 17. Using the same steps as above, connect the grey, brown and red wires of the Aeromotive wire loom to the grey, brown, and red wires of the OEM fuel pressure sensor, now in the rear of the vehicle.
- 18. Plug the fuel pressure sensor connector into the fuel pressure sensor.
- 19. Connect the plastic vacuum/boost line that was routed along side the Aeromotive wire loom to the fuel pressure sensor vacuum port using a short section of the provided 1/4" rubber vacuum hose.
- 20. Recheck all wires for proper routing. Again, make sure all wires are routed clear of all moving parts and exhaust components. Protect wires from cutting and abrasion as necessary.
- 21. Carefully lower the car onto the ground.
- 22. Test drive the car to ensure proper operation and re-check the fuel system for leaks. If any leaks are found, immediately discontinue use of the vehicle and repair the leak(s)!

# **Contact Us**

RGA NUMBER REQUIRED FOR ALL RETURNS TO AEROMOTIVE.

To obtain an RGA number, please call (913) 647–7300 and ask for the Returns and Repairs department or complete the online form under the "Rebuilds" section at <a href="https://www.aeromotiveinc.com">www.aeromotiveinc.com</a>.

• Shipping & Returns

Aeromotive Inc. 10955 Mill Creek Road Lenexa, KS 66219

**General Inquiries and Tech Line: (913) 647-7300** 

General Email: <a href="mailto:info@aeromotiveinc.com">info@aeromotiveinc.com</a>
Tech Email: <a href="mailto:tech@aeromotiveinc.com">tech@aeromotiveinc.com</a>

The Aeromotive Tech Lines are open Monday through Friday from 9:30AM to 5:00PM Central Standard Time.



**WARNING**: This product can expose you to chemicals, including chromium, which is known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, visit: <a href="https://www.p65Warnings.ca.gov">www.p65Warnings.ca.gov</a>

### AEROMOTIVE, INC. LIMITED WARRANTY

This Aeromotive Product, with proof of purchase dated on or after January 1, 2003, is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase. No warranty claim will be valid without authentic, dated proof of purchase.

This warranty is to the original retail purchaser and none other and is available directly from Aeromotive and not through any point of distribution or purchase.

If a defect is suspected, the retail purchaser must contact Aeromotive directly to discuss the problem, possible solutions and obtain a Return Goods Authorization (RGA), if deemed necessary by the company. Please call 913-647-7300 and dial option 3 for the technical service dept. All returns must be shipped freight pre-paid to the company and with valid RGA before they will be processed.

Aeromotive will examine any product returned with the proper authorization to determine if the failure resulted from a defect or from abuse, improper installation, misapplication or alteration. Aeromotive will then, at it's sole discretion, return, repair or replace the product.

If any Aeromotive product is determined defective, buyer's exclusive remedy is limited in value to the sale price of the good. In no event shall Aeromotive be liable for incidental or consequential damages.

Aeromotive expressly retains the right to make changes and improvements in any product it manufactures and sells at any time. These changes and improvements may be made without notice at any time and without any obligation to change the catalogs or printed materials.

Aeromotive expressly retains the right to discontinue at any time and without notice any Aeromotive product that it manufactures or sells.

This warranty is limited and expressly limits any implied warranty to one year from the date of the original retail purchase on all Aeromotive products.

No person, party or corporate entity other than Aeromotive shall have the right to: determine whether or not this Limited Warranty is applicable to any Aeromotive product, authorize any action whatsoever under the terms and conditions of this Limited Warranty, assume any obligation or liability of any nature whatsoever on behalf of Aeromotive under the terms and conditions of this Limited Warranty.

This Limited Warranty covers only the product itself and not the cost of installation or removal.

This Limited Warranty is in lieu of and expressly excludes any and all other warranties, expressed or implied. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.