



AEROMOTIVE
Part # 18653 & 18654
86-93 Mustang 5.0L Stealth Fuel System Kit
INSTALLATION INSTRUCTIONS

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.

Installation of this product requires handling of gasoline. Ensure you are working in a well ventilated area with an approved fire extinguisher nearby. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle before proceeding with the installation.

When installing this product, wear eye goggles and other safety apparel as needed to protect yourself from debris and sprayed gasoline.

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.

Aeromotive system components are not legal for sale or use on emission controlled motor vehicles.

This kit contains the following parts:

- 1 ea fuel tank kit
 - 1 ea fuel tank w/sump, pump and filter
 - 1 ea pickup block-off plate

Warning – The included Aeromotive fuel pump is not compatible with alcohol based fuels or fuel additives!

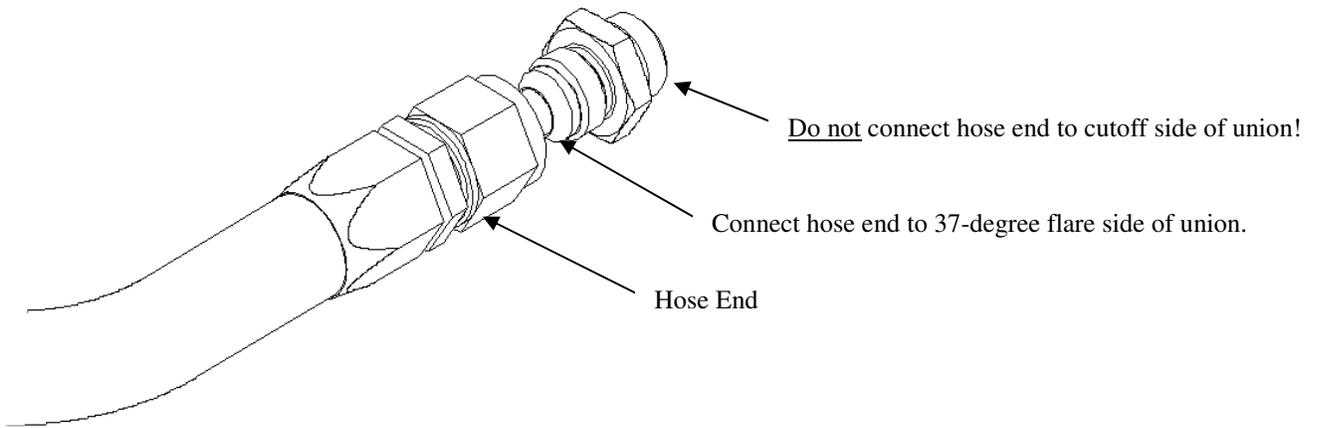
The following steps are typical of most installations:

Section 1 - Fuel Tank Installation

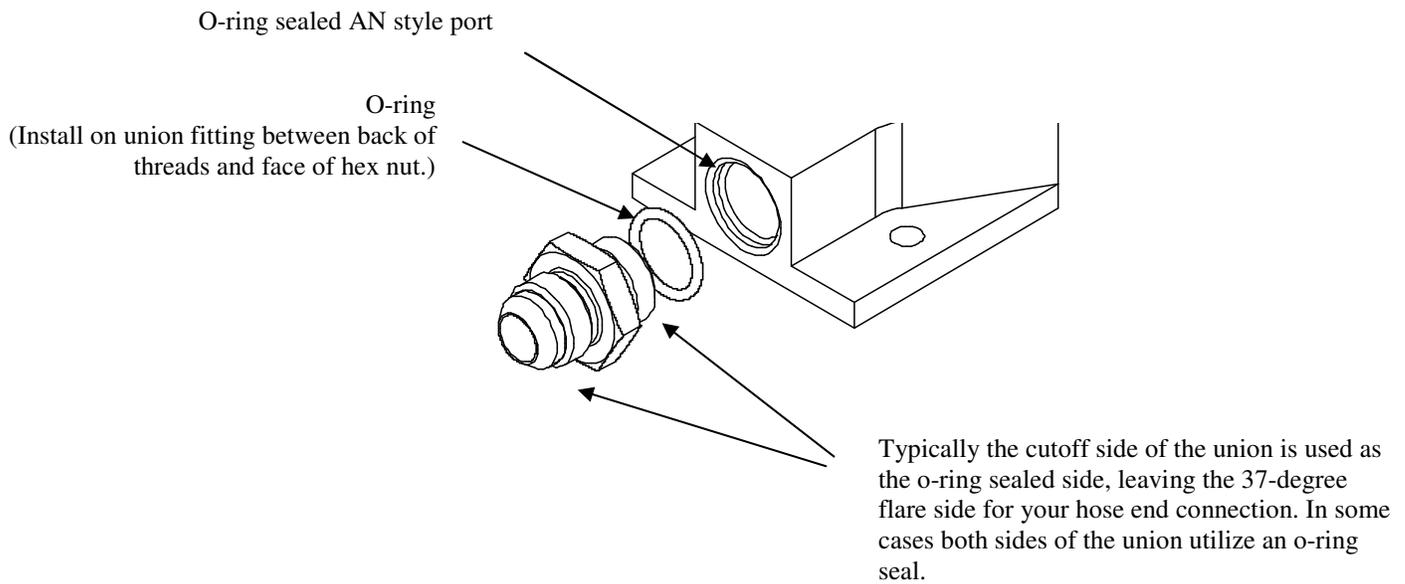
Section 2 - Final Checks and System Start-up

Section 3 - Filter Maintenance

Typical hose end to fitting connection:



Typical o-ring sealed port connection:



Section 1 - Fuel Tank Installation:

- 1-1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve the fuel system pressure.
- 1-2. Raise the vehicle and support it with jack stands.
- 1-3. Referring to the appropriate vehicle service manual for instructions, drain, disconnect any electrical and fuel component connections and remove the OEM fuel tank. The removal of the vehicles exhaust system may be necessary for fuel tank removal.
- 1-4. Once the OEM fuel tank has been removed, remove the plastic fuel tank shield from the bottom of the tank.
- 1-5. Measure the position of the sump on the supplied Aeromotive fuel tank and mark the plastic fuel tank shield accordingly. Using a ½” drill bit, drill the four corners of the sump cutout in the plastic fuel tank shield. Using a small hand saw or reciprocating saw, cut out the remaining area from the plastic fuel tank shield. Once you have completed this step your plastic fuel tank shield should look similar to Figure 1-1.



Figure 1-1

- 1-6. Inspect the inside of the plastic fuel tank shield for any sharp edges that could puncture the fuel tank. If any sharp edges are found, correct before proceeding
- 1-7. Position the plastic fuel tank shield on the Aeromotive fuel tank.
- 1-8. Carefully flip the fuel tank / plastic fuel tank shield assembly over.
- 1-9. From the old OEM fuel tank, remove the filler neck rubber grommet, fuel level sender, vent and vent grommet, and wiring harness. Reinstall each of these components in the new Aeromotive fuel tank while inspecting them for any damage. If any of the OEM components are damaged replacement parts are available through your local Ford dealer or auto parts store. See figure 1-2.
- 1-10. Remove the OEM fuel pick up from the OEM fuel tank, inspect the gasket for any damage. Using the OEM gasket install the Aeromotive provided return pick-up block off plate in the new Aeromotive fuel tank.
- 1-11. Using any household tape, secure the plastic tank shield to the fuel tank by wrapping a strip of tape around both, as shown in figure 1-2.

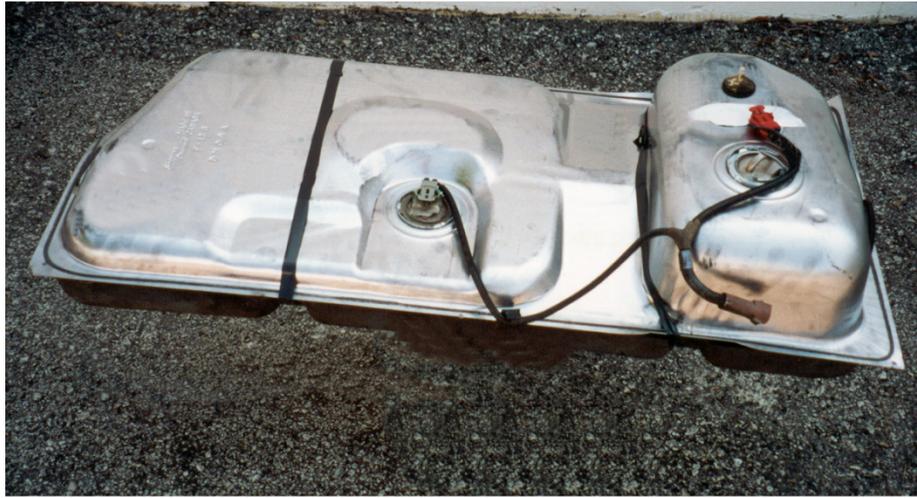


Figure 1-2

- 1-12. Position the fuel tank under the vehicle, insuring that the retaining rings on the return and fuel level sender are secure. Apply a light weight oil to the filler neck grommet to ease installation.
- 1-13. As the Aeromotive fuel tank is lifted into position reattach the vent line to the top of the fuel tank and work the filler neck into the grommet on the side of the fuel tank. Once the Aeromotive fuel tank is in position, align tank straps, ensure that there are not any hoses or wiring pinched and tighten the strap bolts.
- 1-14. Connect fuel feed line to the outlet of the Aeromotive pump using an AN-10 fitting and o-ring(Aeromotive p/n 15608 for -10 line or p/n 15610 for -8 line). Connect the fuel return to the bung provided in the sump using an AN-10 fitting and o-ring(Aeromotive p/n 15609 for -6 line). Connect fused and switched battery power to the fuel pump. Please note that the circuit providing power to the pump must be capable of 30 amps minimum. A power relay should be used to power the pump and must be used if the pump is to be switched on using the cars' computer or ignition key. We recommend purchasing and installing Aeromotive p/n 16301 to power your new fuel pump.
- 1-15. Complete any remaining fluid and electrical connections. Make sure all fluid connections are tight and all hoses and wiring are clear of vehicles exhaust and suspension.

Section 2 – Final Checks and System Start-up

2-1. Ensure that any spilled gasoline and any gasoline soaked shop towels are cleaned up and removed from the vicinity of the vehicle!

2-2. Carefully lower the car onto the ground.

2-3. Fill the fuel tank with gasoline and check for any leaks in the system, if any leaks are found repair immediately.

CAUTION: While performing the following steps, if any fuel leaks are detected, immediately turn the ignition OFF, remove any spilled fuel and repair the leak(s) before proceeding!

2-4. Reconnect the battery and turn the ignition to the ON position **WITHOUT** starting the car. After several seconds, check the fuel pressure. If there is no fuel pressure, turn the ignition key to the OFF position, wait one minute, return the ignition to the ON position, and recheck the fuel pressure. Repeat this ignition OFF and ON procedure until the fuel pressure gauge registers fuel pressure.

2-5. With the fuel pressure gauge registering fuel system pressure, check for fuel leaks throughout the entire fuel system! If any fuel leaks are found, turn the ignition key to the OFF position, remove any spilled fuel and repair the leak before proceeding!

2-6. Once the fuel pressure gauge registers fuel system pressure and there are no fuel leaks, start the engine and adjust the regulator to the desired fuel pressure.

2-7. Test drive the car to insure 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)!

Section 3 – Filter Maintenance

Follow this procedure to check and clean the filter element contained in the fuel sump. Filter should be cleaned for the first time as soon as possible after the first 500 miles of use. Filter cleaning should be performed at regular intervals thereafter.

3-1. Raise the vehicle and support it with jack stands. Disconnect the battery ground cable.

CAUTION: While performing the following steps, a small amount of fuel will leak from the sump filter assembly. Extinguish all sources of ignition and prohibit smoking in the area before continuing. Make sure there is an approved fire extinguisher nearby.

3-2. Place a small drain pan underneath the sump. Remove the 8-32 screw and lock washer locking the filter endcap in place.

3-3. Turn the filter endcap counter clockwise until the tabs on the endcap line up with the slots in the filter cover. Pull the endcap out of the filter housing and set aside.



3-4. Grasp the end of the fuel filter element, contained inside of the filter housing, and pull it out. Clean or replace the element as needed.



3-5. Apply a small amount of grease to the o-ring on the inside edge of the filter element. Slide the element into the filter housing until you feel it snap into place.

3-6. Apply a small amount of grease to the o-ring on the filter endcap. Position the endcap over the filter cover, aligning the tabs and slots. Push the endcap into the housing, being careful not to nick or cut the o-ring.

3-7. Rotate the endcap clockwise until it stops. Insert and tighten the 8-32 screw and lock washer that were previously removed.

3-8. Check the sump for any leakage from the filter housing area.



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: www.p65Warnings.ca.gov

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.

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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.