



AEROMOTIVE
Part # 17157
05'- Present Mustang Fuel System Chassis 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.

Maximum continuous operating pressure should not exceed 70 psi.

This kit contains the following parts:

- | | |
|--|---------------------------------------|
| 1 ea fuel cell (18667) | 4 ea p/n 15685 AN-08 bulkhead fitting |
| 1 ea fuel filter bracket (12305) | 12 ea cushioned hose clamps |
| 1 ea fuel filter (12321) | 5 ea AN-08 straight hose end |
| 30 ft AN-08 black nylon braided line | 1 ea AN-08 45-degree hose end |
| 3 ea p/n 15610 AN-08 to cutoff AN-10 union | 8 ea AN-08 90-degree hose end |
| 2 ea p/n 15645 AN-08 tank fitting | 12 ea self-drilling screw |

Section 1 - Fuel system 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 drive shaft and exhaust system may be necessary for fuel tank removal.
- 1-4. Once the OEM fuel tank has been removed, tie up all electrical connections and hoses that were disconnected.
- 1-5. Find a suitable place in the trunk to mount the fuel cell. For mounting use Aeromotive bracket P/N 18701, or call Aeromotive. Here is a typical install of a fuel cell in a SN197, **Figure 1-1**.

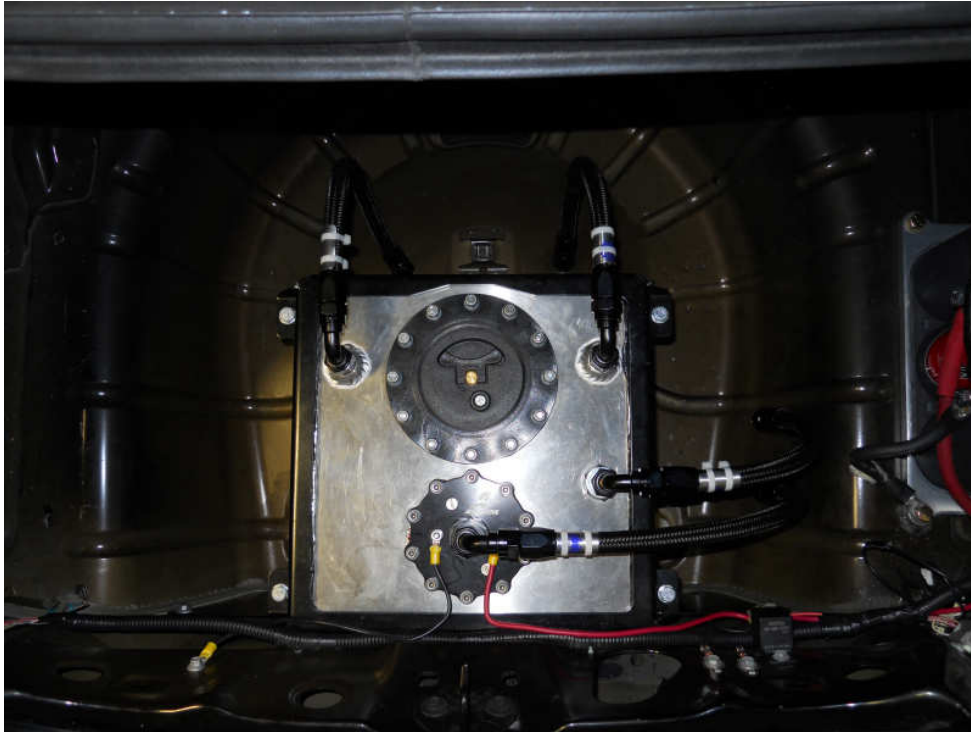


Figure 1-1

- 1-6. Find a suitable place for the two tank vent pass through fittings (15645), typical locations is trunk floor. Drill two holes making sure you place them in a location where you can get access to the back side for the lock nuts. The system comes with two tanks vents and both must be used for the system to function properly.
- 1-7. Assembly two identical hoses, 90 degree hose end on one side and a straight on the other. These will be used for the tank vent hoses, **Figure 1-2**.

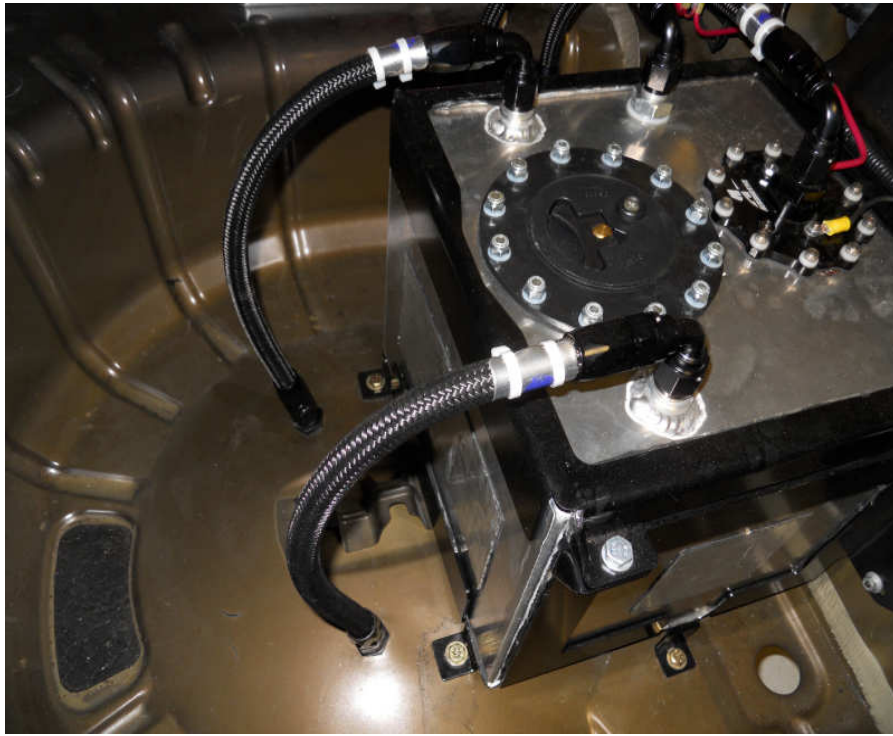


Figure 1-2

1-8. Next find a place for the two AN-08 fuel bulk heads, p/n 15685. The most common place for the two bulk heads are on the driver's side in the spare tire well. Drill the two holes two inches apart, **figure 1-3**.



Figure 1-3

1-9. Install one of the supplied 15610 fittings into the outlet of fuel pump (Make sure the fitting has the AN-10 o-ring installed on it).

1-10. Assemble two hoses, both with 90-degree hose end on all ends. One will be used for the pump outlet and the other will be used for the return, **figure 1-4**.

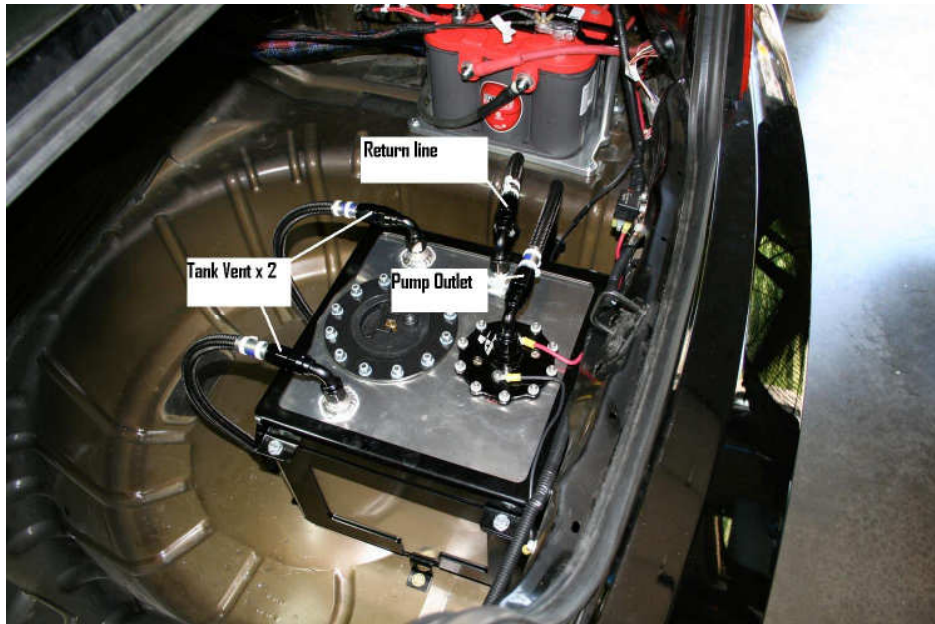


Figure 1-4

- 1-11. After connecting the return and pump outlet lines to the bulk heads, move to the under side of the vehicle.
- 1-12. Find a suitable place for the fuel filter (12321) and mounting bracket (12305). Typical mounting location on passenger side frame rail, **figure 1-5**.



Figure 1-5

- 1-13. Once the filter has been mounted, assemble a hose with a 90-degree fitting on one end and a straight on the other. This line will finish the connection from the feed bulk head to the filter, **figure 1-6**. **NOTE: Make sure you connect to the pump outlet and not the return.**



Figure 1-6

1-14. In the engine bay find a suitable place for the two AN-08 bulk heads. Typical place for these are behind the passenger side strut tower, **figure 1-7**.

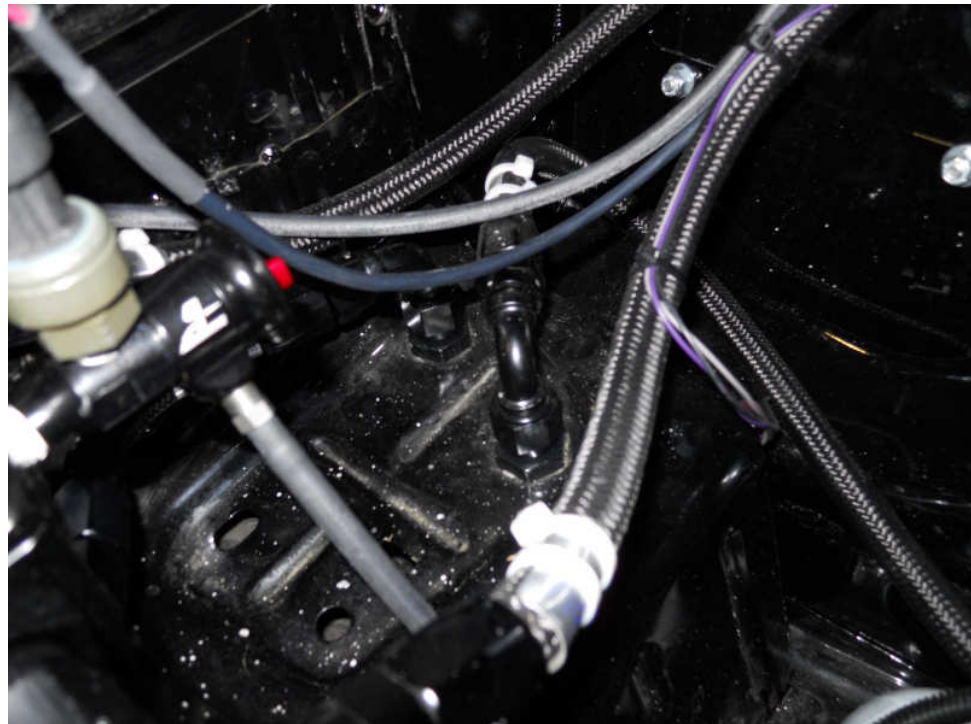


Figure 1-7

1-15. Once you have both bulk heads installed, assemble a hose with a 45-degree fitting on one end and a straight on the other. This line will connect to the outlet of the fuel filter (45-degree hose end) and one of the bulk heads you just installed.

- 1-16. Finish up the last line by assembling a hose with a straight hose end on one side and a 90-degree on the other. This hose will make the connection from the return bulk head in the engine bay to the return bulk head in the trunk.
- 1-17. Now use the cushioned hose clamps to attach the lines to the body of the vehicle. **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.**
- 1-18. For pump wiring, use Aeromotive part # 16301.

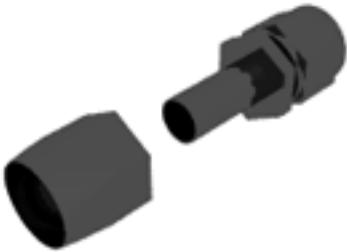
Section 2 - Fuel Line Hose End Installation:

CAUTION:

When assembling this product, wear eye goggles and other safety apparel as needed to protect yourself from debris and sharp edges.

2-1. Wrap hose with masking tape at desired cutoff length. Cut hose through masking tape squarely to desired length using a cut-off machine or a fine tooth hacksaw. Remove the masking tape.

2-2. Unthread the hose socket from the rest of the hose end fitting.



2-3. Insert hose in the socket with a twisting and pushing motion until the hose is fully seated in the socket.



2-4. Using a grease pencil, marker or tape, mark the location of the hose in relation to the hose socket that you just installed.

2-5. Using a light oil, lubricate the inside of the hose and hose end mating parts.

2-6. Carefully thread the hose end onto the hose socket, making sure that the hose does not push out of socket, by observing the mark you placed on the hose in step 2-4.



2-7. Using a properly sized wrench, complete threading the two components together (The maximum allowable gap between the two fitting components is .030 inches).



2-8. Inspect the hose for push out by comparing the mark you made on the hose in step D to the hose end socket location.

2-9. Clean all debris from exterior and interior of hose.

2-10. All lines should be tested to twice their operation pressure prior to use.

Section 3 – Final Checks and System Start-up

3-1. **Ensure that any spilled gasoline and any gasoline soaked shop towels are cleaned up and removed from the vicinity of the vehicle!**

3-2. Carefully lower the car onto the ground.

3-3. 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 of OFF, remove any spilled fuel and repair the leak(s) before proceeding!

3-4. 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.

3-5. 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!

3-6. 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. Turning the adjustment screw clockwise will increase fuel pressure.

3-7. Once the desired fuel pressure is achieved, tighten the regulator adjustment jam nut and attach the vacuum line.

3-8. 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)!



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.

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.