



AEROMOTIVE
Part # 18709
Extension for Dual Phantom System
Tank Depths 10"-20"
INSTALLATION INSTRUCTIONS

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, failure to satisfy all safety considerations will result in fire, explosion, injury and/or loss of life to yourself and/or others.

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.

Parts Included:

1ea Fuel Pump Hanger, 18"	2ea Electrical Pig Tail, 20" Long
2ea 10-24 x 3/8" Socket Head Cap Screws	4ea Butt Splice Connector
2ea #10 Lock washer	2ea Hose Clamp, Pinch
1ea Foam Extension, 12"	2ea Hose Clamp, Worm Drive (Optional)
2ea Supply Tubing, 5/16" ID, 18"	

Tools / Supplies Needed:

P/N 18309 Dual Phantom Fuel System Kit	Terminal Crimpers
5/32" Allen Wrench	Soldering Iron, 100 watt (Optional)
Pliers	Solder, Resin Core
Wire cutters / strippers	

The enclosed Aeromotive Phantom Extension Kit is designed to be used in conjunction with the Aeromotive Dual Phantom kit P/N 18309. This extension kit is for the purpose of increasing the maximum installation depth of standard Phantom kits to fit tanks up to 20" deep.

This kit assumes that you have verified that the top of the fuel tank will withstand the additional loading imparted on it due to the additional length of the assembly.

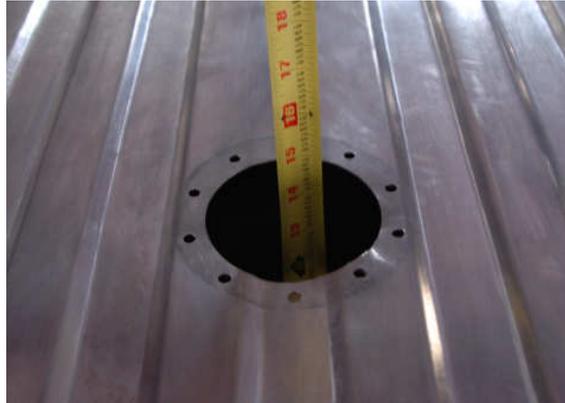
The installation instructions that came with your original Aeromotive Dual Phantom Fuel System Kit (P/N 18309) must be followed for proper final installation. These instructions only outline the changes made to the standard Dual Phantom kit in order to fit the P/N 18709 extension kit.

Failure to follow the above recommendations may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

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

The following steps are typical of most installations:

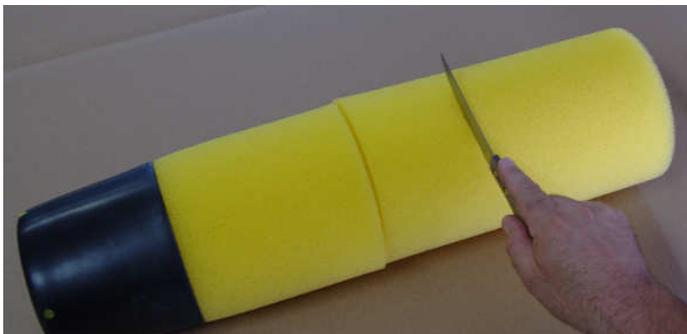
1. Using a tape measure, determine the depth of the tank at the fuel pump location.



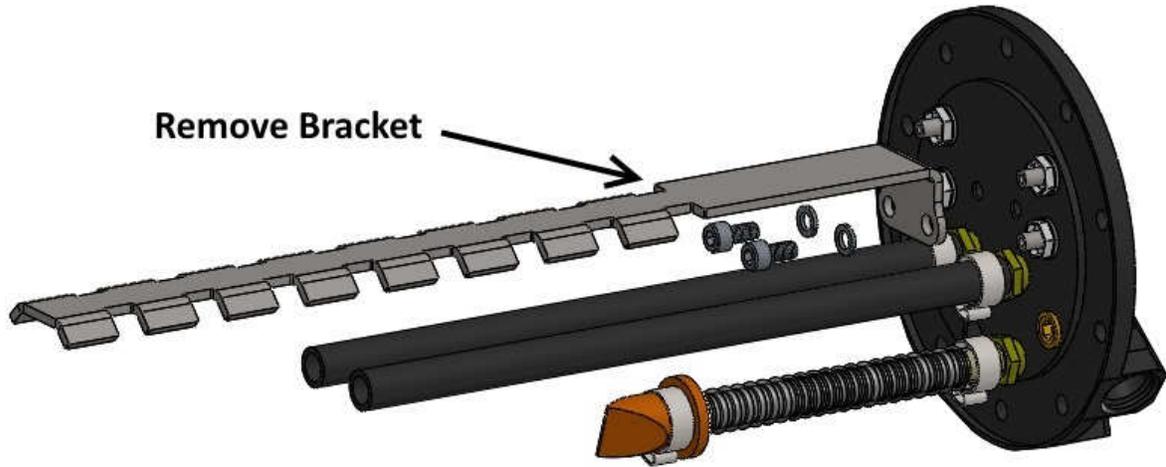
2. Stack the additional foam section on top of the foam baffle assembly from the original Phantom kit. Measure the foam baffle assembly from the bottom (black rubber part) up and mark the assembly 1" longer than the determined tank depth. (If the tank was 15" deep, mark the foam baffle assembly to be 16" long)



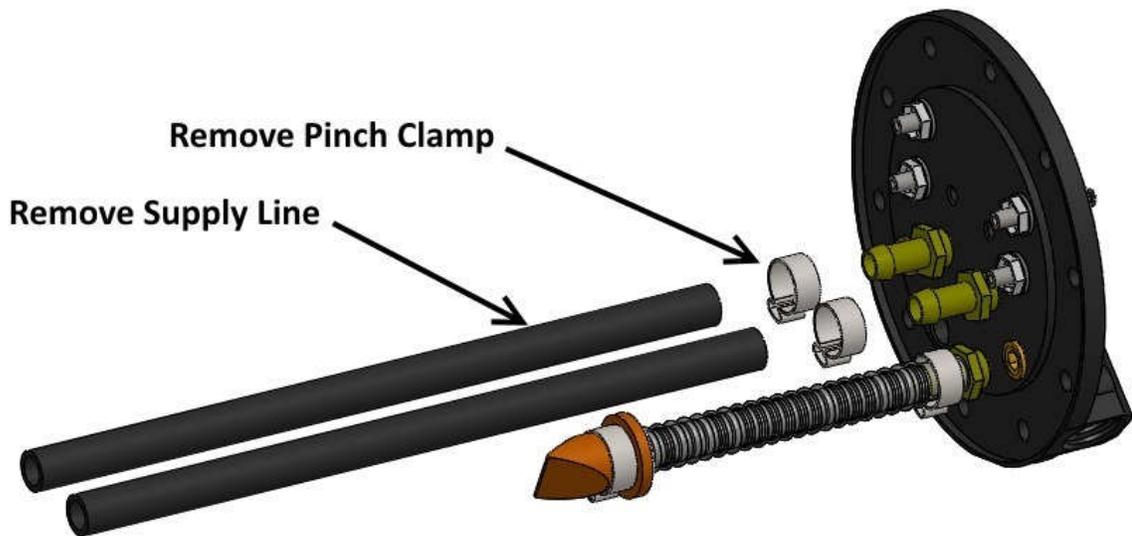
3. Using a bread knife or hacksaw with fine-tooth blade, carefully cut the additional foam section to the desired length.



4. Using the 5/32" Allen wrench, remove the original fuel pump bracket from the original fuel pump hanger assembly.



5. Remove each of the original fuel supply lines from the standard Phantom fuel pump hanger assembly. To remove the original pinch clamps from the line, grasp the pinched portion of each clamp with a pair of pliers and twist to loosen.



6. Unsolder each of the original fuel pump power leads from the bottom of the fuel pump hanger assembly. Using a 100-watt soldering iron, heat and tin the hot iron, then apply it to each side of the electrical bulkhead where the wire attaches and hold it until the solder melts, then pull each wire out of the bulkhead socket. Perform this step for all four wires.

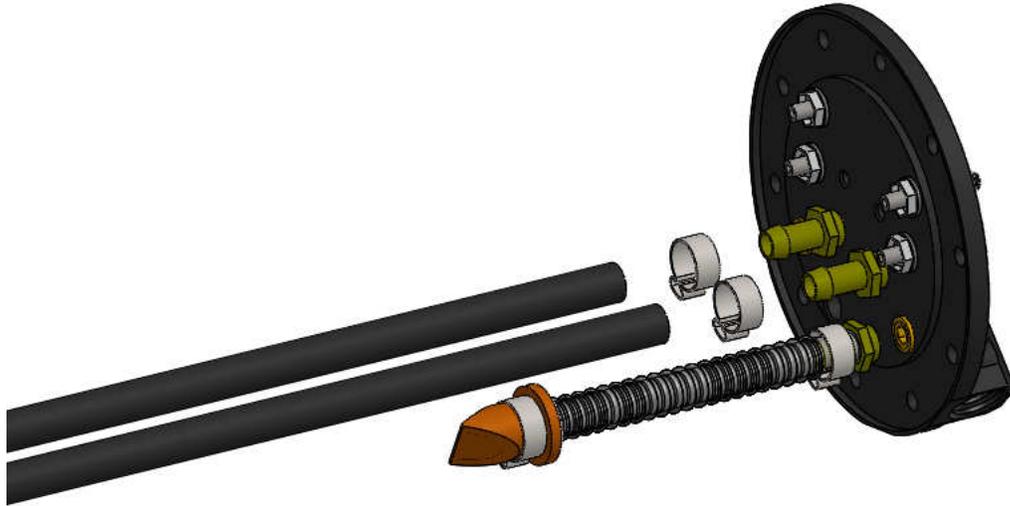
Note: If you do not have a 100-watt soldering iron, you have the option of extending the pump wires by cutting the existing connector plug(s) off the soldered power leads and splicing a part of the new harness to it. The old and the new harness spliced together must be of an overall length sufficient to reach the new, deeper pump mounting location. In this case, use the included butt-splice connectors and the proper electrical pliers to crimp the new wires to the existing wires.

Warning: Do not use a torch to unsolder the electrical bulkheads, use a soldering iron! Excessive heat from a torch can damage the o-ring seals in the electrical bulkheads.

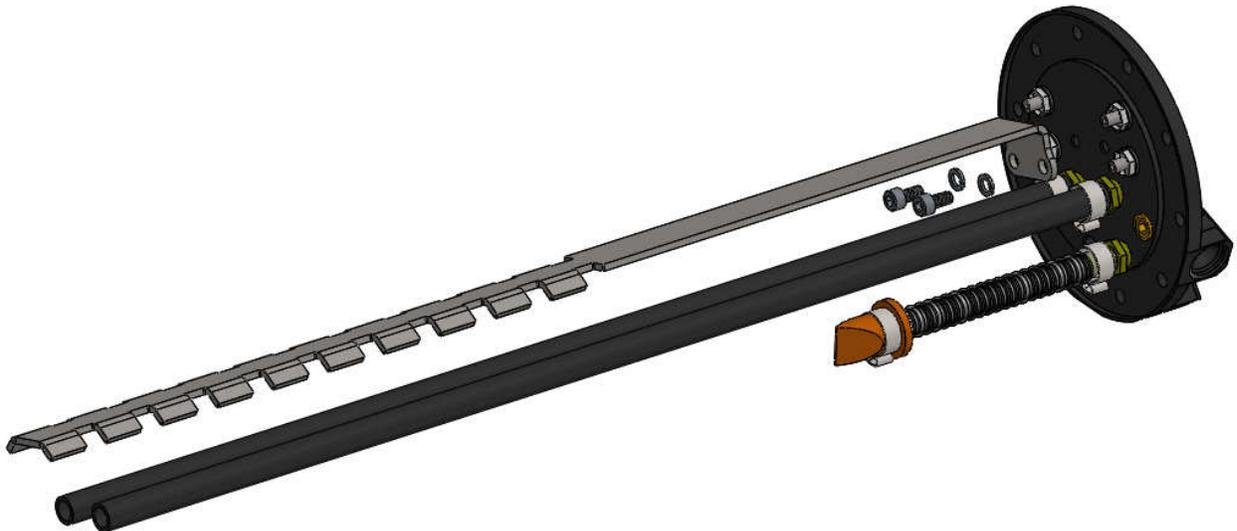
- Using the above soldering iron, reverse the above steps to install and solder the new power leads. Use the included pig-tail assemblies with red and black wires and plug.

Inspect the newly installed power leads for any exposed areas (bare wire) that could potentially allow the positive and negative wires to contact each other unshielded, or for any other contact point of a bare wire to the fuel pump hat or bracket assembly. Gasoline does not conduct electricity, but metal to metal contact can and does. Ensure there's no possibility of such contact creating an arc in the tank. If any such contact areas exist, STOP the installation until these areas are repaired/resolved.

- Find the new, longer fuel supply lines and install them on the fuel supply barbs in the bottom of the hat. Choose either the included pinch or worm style clamp, slip one over each line and up to the barb and secure the new lines to the barb fittings.



- Using the 5/32" Allen wrench, install the longer fuel pump bracket from the extension kit. If you have lost any of the original hardware, don't worry, replacement hardware is included in your extension kit.



- You are now ready to install the extended Aeromotive Dual Phantom Fuel System per the original installation instructions.



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.