AEROMOTIVE
Part # 18110, 18410, and 18810
1967-1972 C10 Chevy Truck Rear Mount Tank
Product Description
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 appeal. 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**

The enclosed Aeromotive fuel tank/pump assembly utilizes an outlet cap terminating with two -06 ORB female ports, one for the supply and one for the return. Use of a bypass regulator with return line is required.

Carbureted or EFI Application

- AN-06 (3/8") fuel lines should be used on supply and return lines on 18110 and 18410 part numbers. AN-08 (1/2") fuel line should be used on the supply and return lines for part number 18810.

Tank vent connections, when available, are typically stock-style and should be connected to the stock tank vent provisions in the car from the factory. If an auxiliary tank vent connection is provided and the stock vent connections / components are not available in the car, an appropriately sized rubber fuel line is required and should be connected to the tank vent hose barb and secured with a hose clamp. The vent hose should then be routed with the opposite end mounted higher than the tank filler cap, using a tip-over vent valve, or routed from the highest point back down to a point 1" below the bottom of the fuel tank and secured to ensure it cannot move.

Suggested Outlet Cap Fittings:

PN: 15606 (-06 ORB x -06 AN Flare) Used in PN's: 18110 and 18410
PN: 15689 (-06 ORB x -06 AN Flare Direct Port Fitting) Used in PN: 18810
PN: Fragola 497308BL (-06 AN x -08 AN Expander) Use in conjunction with PN: 15689

Suggested Wiring Kit:

PN: 16307

The fuel pump used in PN: 18110 is 200lph pump (part # 11137).
200 Stealth Fuel Pump Specifications:

Fuel pump flow:	215 LPH @ 40 psi and 13.5V
Current Draw:	8.3 amps @ 40 psi and 13.5V
Continuous operating psi range:	3psi to 65 psi with carb or EFI bypass regulator
Continuous current draw range:	7-11 amps at pressures from 3psi to 65 psi
Pump internal By-Pass / Max Pressure:	95 psi maximum, dead-head pressure

The fuel pump used in PN: 18410 is the Aeromotive Stealth 340 (part # 11541).
340 Stealth Fuel Pump Specifications:

Fuel pump flow:	340 LPH @ 40 psi and 13.5V
Current Draw:	13 amps @ 40 psi and 13.5V
Continuous operating psi range:	3psi to 65 psi with carb or EFI bypass regulator
Continuous current draw range:	10-15 amps at pressures from 3psi to 65 psi
Pump internal By-Pass / Max Pressure:	105 psi maximum, dead-head pressure

The fuel pump used in PN: 18810 is the 450lph pump (part # 11145).
340 Stealth Fuel Pump Specifications:

Fuel pump flow:	430 LPH @ 40 psi and 13.5V
Current Draw:	15.3amps @ 40 psi and 13.5V
Continuous operating psi range:	5 psi to 65 psi with carb or EFI bypass regulator
Continuous current draw range:	15-19 amps at pressures from 3psi to 65 psi
Pump internal By-Pass / Max Pressure:	120 psi maximum, dead-head pressure

To ensure proper pump function and fuel pump service life, we strongly recommend the following:

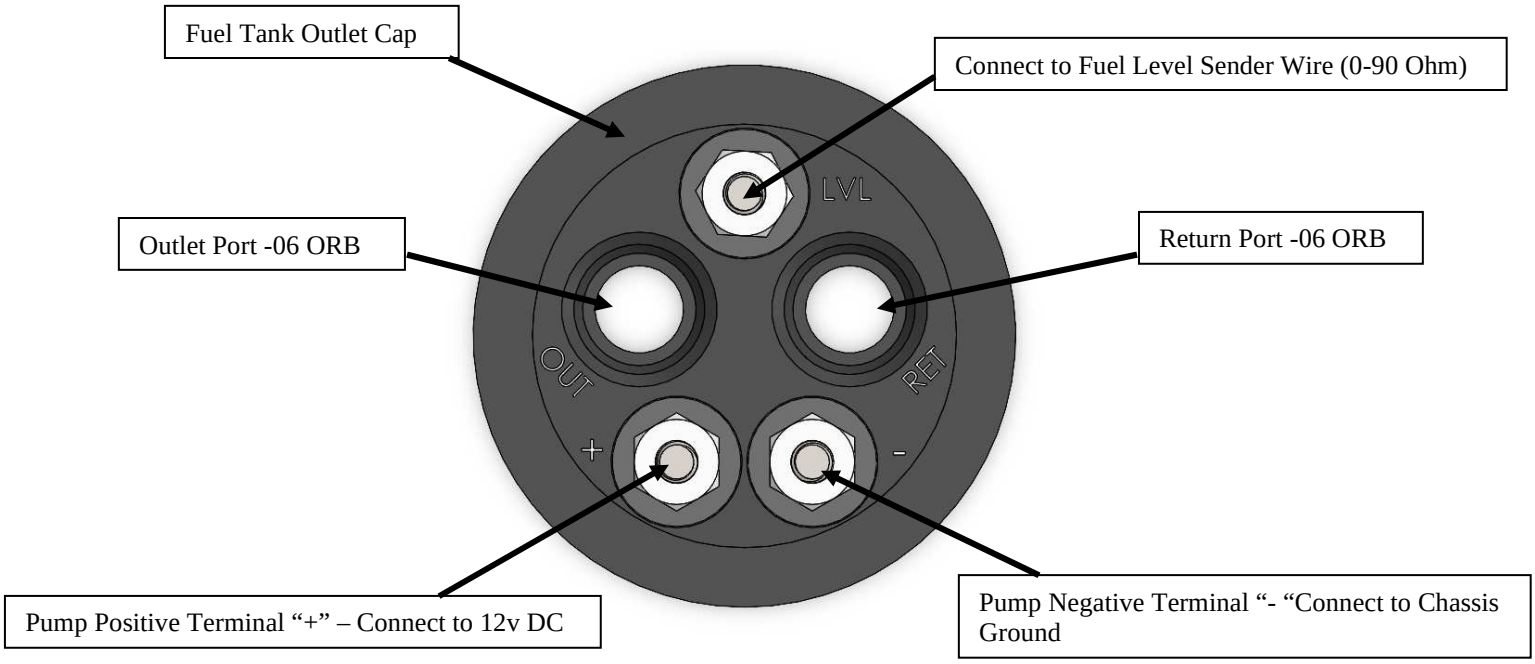
- **Use of correct fuel line size as stated above.**
- **Installation of 10-micron post-filter between tank and regulator. (i.e., P/N 12301 for PN: 18810 (450lph Pump) for PN: or 12347 for PN's 18110 (200lph Pump) and 18410 (340lph Pump).**
- **Fuel pump wiring should be 10 gauge wire and triggered with a relay rated at a minimum of 20 amps or more (Aeromotive fuel pump wiring kit 16307).**
- **A high flow, return style regulator must be used (EFI – PN: 13109, 13138 or 13303. Carb – PN: 13220).**
- **EFI Pressure Regulator Note: OEM or aftermarket style "Corvette" filter/regulator combos are NOT recommended, having proven unable to handle the included high flow pump, resulting in premature fuel pump failure.**
- **Carb Pressure Regulator Note: Single stage bypass regulators for carbureted engines are NOT recommended. AN-06 return line and return connections on this tank will not allow pressure to be adjusted below 10-PSI. A dual stage bypass/dead-head style regulator (PN: 13220) is required.**

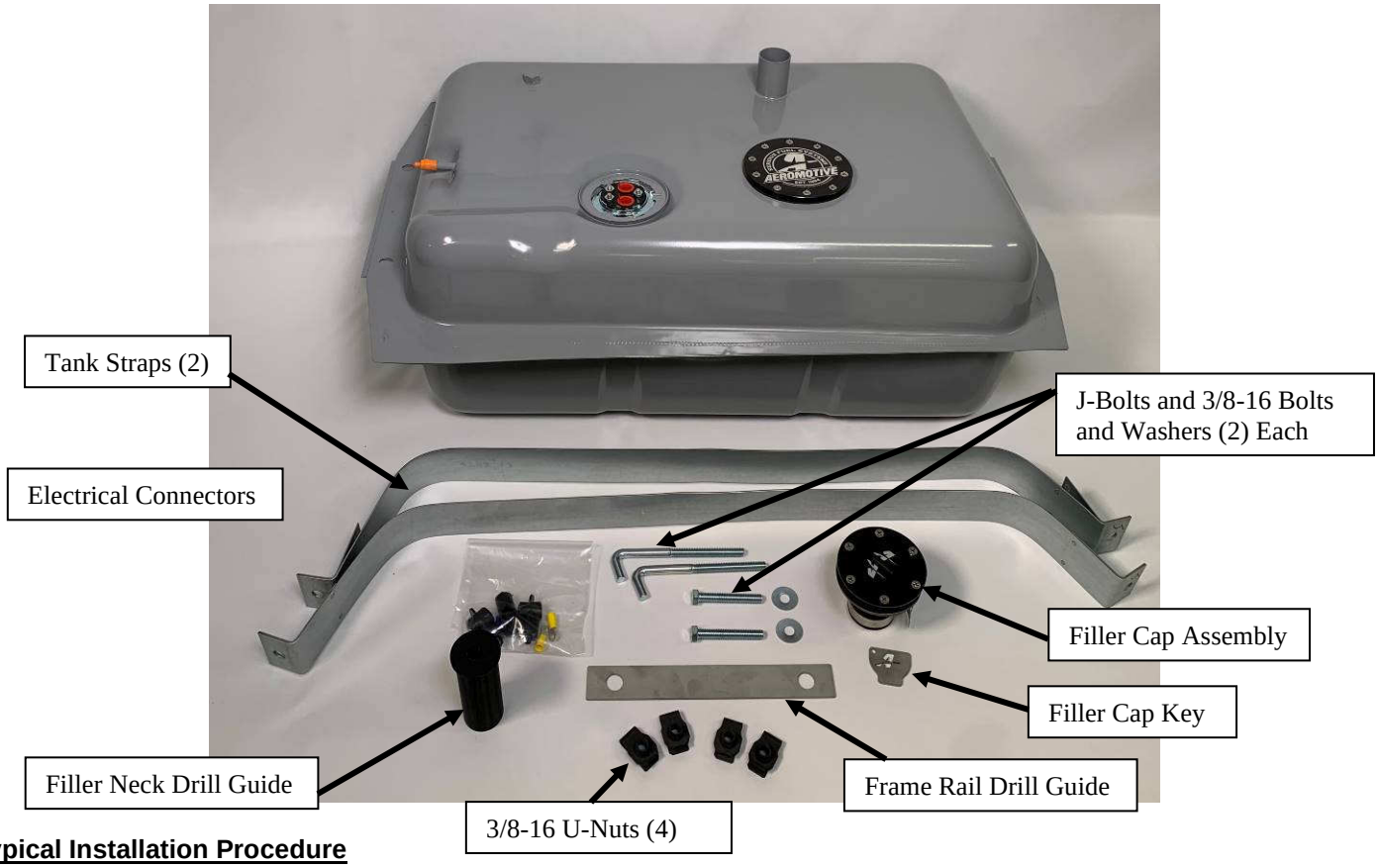
Failure to follow the above recommendations may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

Tank Fuel Level Sender: 0-90 Ohm Range
Tank Capacity: 17gal

Tools Required for Typical Installation

Drill
¼" Drill Bit
5/8" Drill Bit
2 ¼" Metal Hole Saw
Tape Measure
Hammer
Center Punch
Small "C" Clamp
Die Grinder with Deburr Bit or Round File
5/16 Nut Driver
9/16" Socket and Ratchet
Phillips Head Screwdriver or Bit for Drill
Floor Jack and Jackstands (If not using a lift)





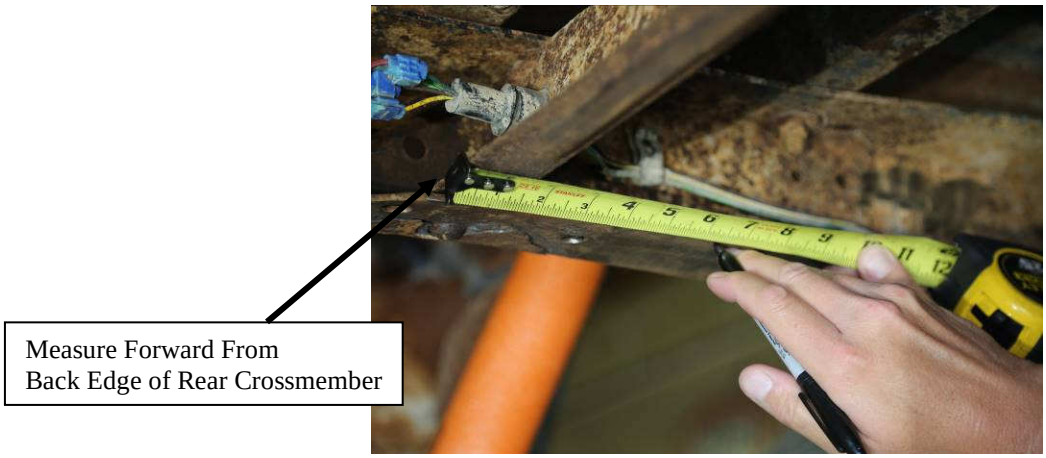
Typical Installation Procedure

1. Disconnect negative "- "post of battery.

2. Following a vehicle specific repair manual, drain and remove the OEM fuel tank located behind the seat in the cab. The OEM fuel lines can be removed as well and will not be used during re-assembly. Clean up any spilled fuel around the work area.

3. Once the OEM tank is removed from the vehicle, raise and support the vehicle with either a vehicle lift or a jack and jackstands. Ensure the vehicle is properly supported before working underneath it.

4. Using the tape measure, make a mark on the bottom of the driver's side frame rail measured from the back of the rear crossmember forward 6 3/8". This will be the reference mark for the frame rail drill guide. See pictures below.

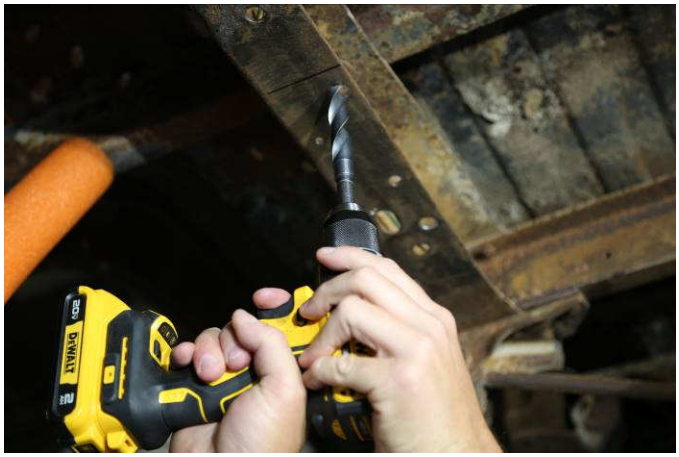


5. Line the back of the frame rail drill guide up with the mark on the frame, the frame rail drill guide should be flush with the inside of the frame rail, once in position, use the clamp to hold in place. See pictures below.

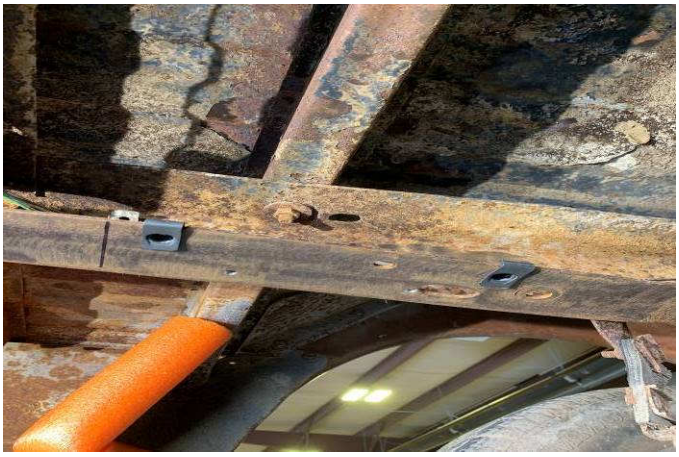
6. Mark the holes on the bottom of the frame rail with the sharpie or marker, repeat this process for the passenger side of the vehicle.

7. Once the holes are marked on both sides of the frame rail, carefully raise the tank in the vehicle and line up the holes on the tank with the marks on the frame rail. Check for tank interference with the front or rear crossmember, if the tank does not interfere with either crossmember or frame rail, drop the tank back down.

8. If the drill hole locations are verified, center punch the holes and first drill a ¼" pilot hole, then drill the hole to the finish diameter of 5/8". Then use the die grinder or round file to deburr the holes.



9. Next, install the four u-nuts on the frame rail holes as shown in the picture below.



10. Drop the fuel filler drill guide and sharpie marker in the tank filler neck as shown in the picture below.

11. Use the floor jack to raise the tank back up into the vehicle, line up the holes in the tank flange with the holes drilled in the frame rail. Using the two 3/8" x 2 ½" bolts (one on either side of the tank) secure the tank to the frame rails.

12. Reach in between the frame and the bottom of the bed to grab the drill guide, pick up on the drill guide until the sharpie contacts the bottom of the bed. Twist the drill guide or the sharpie to make a mark on the bottom of the bed floor. This is the center of the fuel filler cap and will give you the location of where to drill. See pictures below.

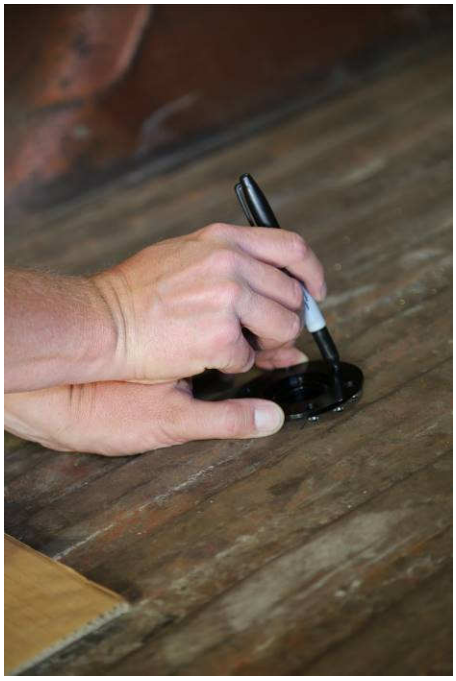
Lift Drill Guide Upwards until Marker makes Contact with the Bed Floor. Then Rotate Drill Guide/Marker to make a Mark on Bed Floor.

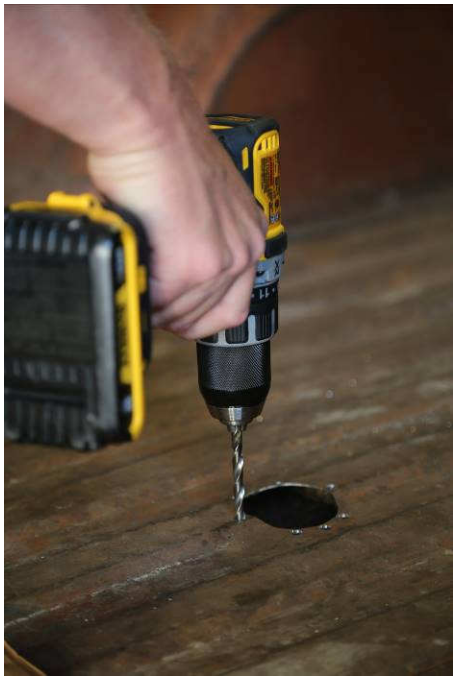
13. Remove the tank from the vehicle and verify a visible mark is on the bottom of the bed floor that corresponds to the tank filler neck location.

14. Center punch the mark on the bottom of the bed floor and drill a pilot hole with the ¼" drill bit from the bottom of the bed floor.

15. Next, using the 2 ¼" metal hole saw, drill the hole for the fuel filler cap housing from the top of the bed floor using the pilot hole as the center. Deburr the hole with die grinder or round file once the hole is drilled.

16. Loosely install the filler cap in the hole as shown in the picture below. Use the cap as a guide to mark the six mounting holes for the filler cap housing. Center punch the holes and drill with the ¼" drill bit. Deburr the holes once drilled.

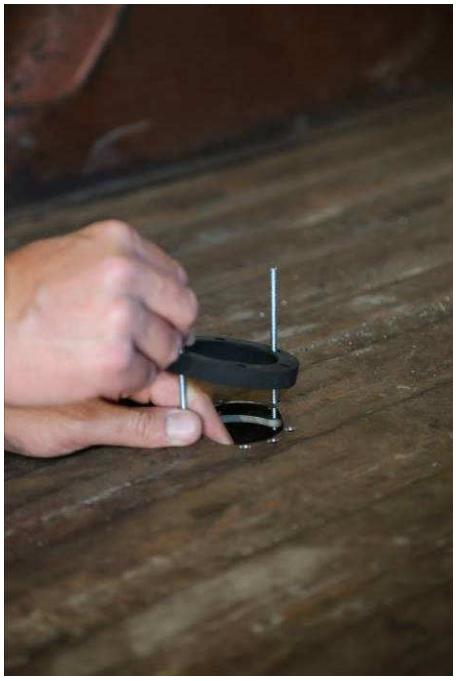
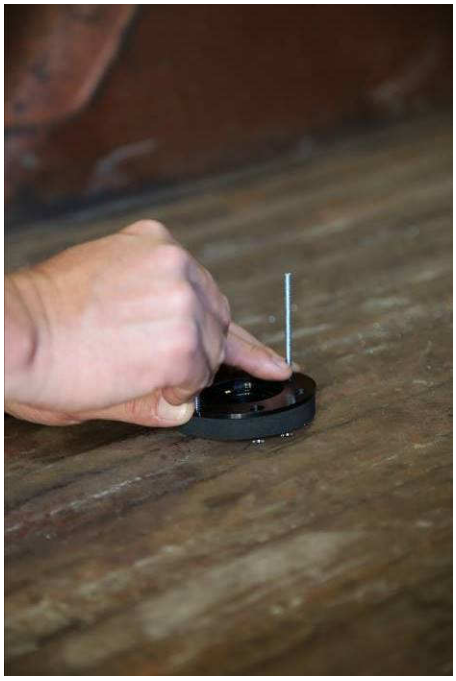
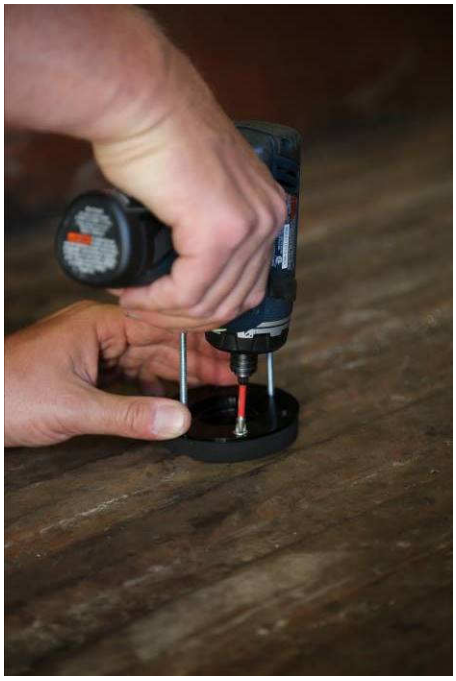




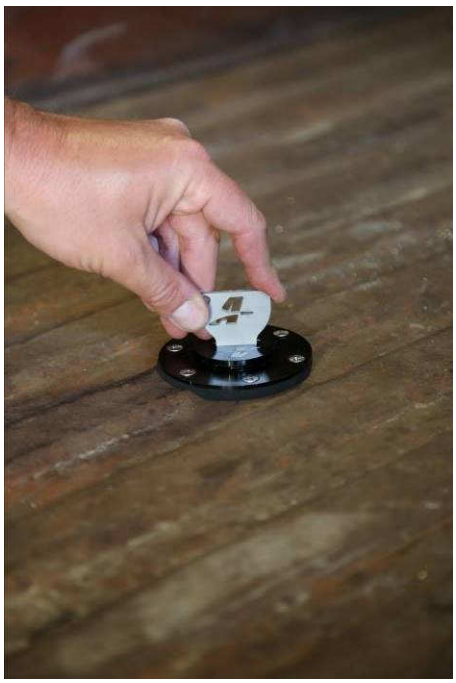
17. Insert the retaining ring through the hole and line up six holes in the bed with the threaded holes in the retaining ring. Using the two provided 10-24 x 4" studs, thread them into two of the six mounting holes, preferably two holes that are directly across from each other. Hold onto one of the studs to keep the retaining ring from falling**. Note: Have the gasket, filler cap housing, and screws nearby for this step.** See pictures below.

18. The studs are used as an installation tool and will be removed later during assembly.

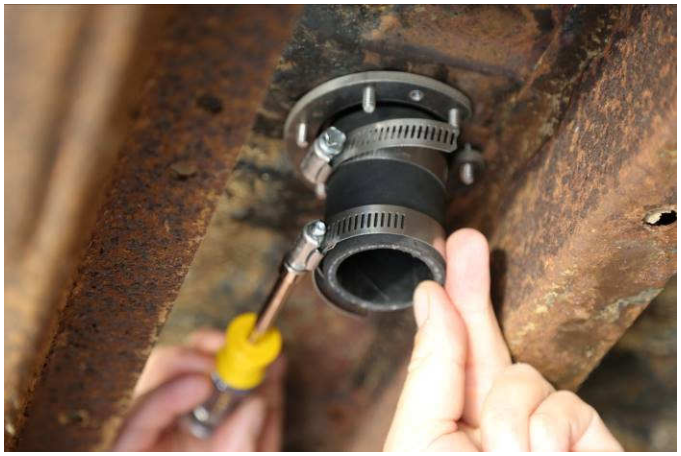
19. Slide the gasket and filler cap housing over the studs and position on the bed floor. Once in position, start but don't fully tighten the 10-24 screws. Tighten in a cross pattern to start compressing the gasket. See pictures below.

20. Once four of the screws are started, remove the two studs and insert the two remaining screws in the holes. Now fully tighten the filler cap screws, they just need to be tight enough to compress the gasket and sit flush on the bed floor. Do not overtighten the screws to avoid damaging the housing. Next, install the fuel filler cap using the provided key. See pictures below.



21. From the underside of the bed, install the filler neck hose and tighten to the filler cap housing with one of the hose clamps. Now, very loosely tighten the second hose clamp near the bottom of the hose. Just to secure it in position for the tank filler neck, the clamp will be fully tightened once the tank is installed. **Note: Position the hex head from the hose clamp so it is facing towards the side of the truck, if it is positioned so the hex is facing the front or back of the truck, you won't be able to tighten it in a later step.** See pictures below.



22. Connect all electrical and hose connections on the tank outlet cap and raise the tank up with a jack into position, line it up with the tank mounting holes previously drilled. When raising the tank ensure the filler neck of the tank slides into the fuel filler hose. Keep the jack under the tank while you attach the hardware and straps in the following steps. Note: Ensure the filler neck hose is not distorted or wrinkled before fully raising the tank into position. **Note: See electrical schematic and information below.**

23. Next, thread the two J-bolts bolts up through the tank mount holes and into the u-nuts on one side of the tank completely or until the stop. Orient the "J" so they are pointing towards the outside of the vehicle. **Note: When threading the J-bolts into the U-nuts you may need to pull them slightly outwards while threading them in order for them to clear the side of the tank, especially when they are close to being fully threaded in.**

24. Hang the two straps from the J-bolts. **Note: It is helpful to straighten out the tank straps and loosely conform them to the tank shape prior to installing them.** See pictures below.

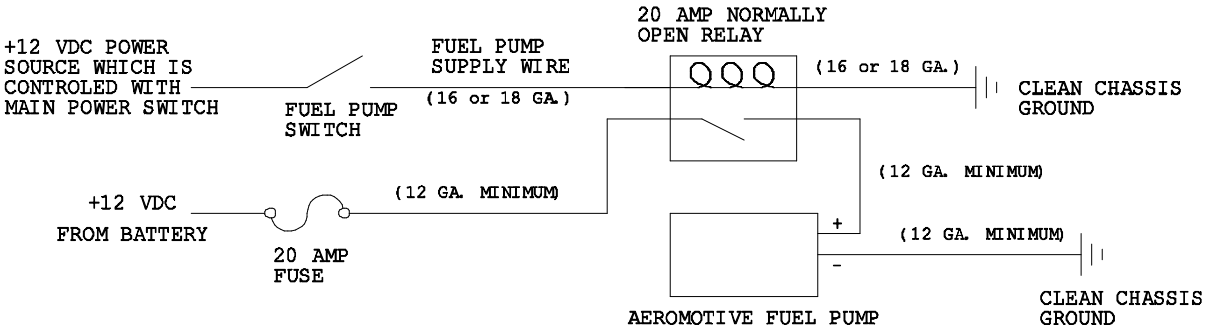
25. On the opposite side of the tank from the "J" bolts, use the two 3/8 bolts to tighten the straps up to the tank. See pictures below.

26. Once the tank is secured and the filler neck is aligned with the filler hose, reach in behind the bed crossmember and tighten the lower hose clamp with a 5/16 nut driver. See picture below.

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

Connect electrical power (12 VDC) to the pump. Make sure you use stranded, insulated copper wire, in the sizes shown, with matching crimp-type connectors for all connections. ***CAUTION: The pump must not be connected directly to the battery. Note: Connect the provided ground wire from a bare metal tank surface to a clean chassis ground, this is to ensure correct operation of the fuel level sender. Failure to do this can***

result in poor level sender performance! Connect the Aeromotive fuel pump as shown in the following diagram:



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

27. Turn the fuel pump ON **without starting the engine**, allow the pump to run for several seconds and check the fuel pressure. If no pressure, turn the fuel pump OFF, wait one minute, then turn the fuel pump ON and recheck the pressure. Repeat this fuel pump OFF and ON procedure until the fuel pressure gauge registers pressure or you detect a fuel leak. If necessary, loosen the fuel line fitting at the pressure regulator to bleed off excessive air in the system. Tighten any fuel line fittings which were loosened and ensure that any spilled fuel is cleaned up and removed from the vicinity of the vehicle. If no pressure is registered on the gauge after running the pump for several seconds and you have found no leaks, check all fuel and electrical connections to determine the cause.

28. Once the fuel pressure gauge registers pressure, start the engine. The gauge on the fuel pressure regulator should register between 3 and 12 psi for carb and 35-60 for EFI. Now adjust the fuel pressure regulator to the desired setting. Test drive the vehicle 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) before further use!

Contact US

Aeromotive Product Warranty, Policy and Procedure: Retail

All Aeromotive products sold are warranted 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. 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 proper authorization to determine if the failure resulted from a defect or from abuse, improper installation, misapplication or alteration. Aeromotive will then, at its sole discretion return, repair or replace the product.
Complete Warranty Information is available at: https://aeromotiveinc.com/product-warranty/

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.

- **Shipping Address**
  Aeromotive Inc.
  7805 Barton St.
  Lenexa, KS 66214

- **Sales & Returns**
  Aeromotive Inc.
  11414 W 79th Street.
  Lenexa, KS 66214

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

General Email: info@aeromotiveinc.com
Tech Email: tech@aeromotiveinc.com

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: 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.