



AEROMOTIVE
Part # # 17241
BB Chevy Lower Left Mounting
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!



etc.

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,

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 p/n 11105 Fuel Pump	1 ea 1/4-28 x 1 Socket Head Cap Screw
1 ea Fuel Pump Bracket	3 ea 3/8-24 x 1 Socket Head Cap Screws
1 ea p/n 21106 BB Chevy Crankshaft Mandrel	2 ea 10-32 x 3/16" Setscrew
1 ea p/n 21108 14-Tooth Crankshaft Pulley	1 ea 10-32 x 1/2" Setscrew
1 ea 28-Tooth Pump Pulley	2 ea 7/16-14 x 1 1/2" Threaded Studs
2 ea Spacers	2 ea 3/8-16 X 1" Bolts
1 ea Drive Belt	2 ea 3/8" Flat Washers
2 ea 1/8" key way	

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

The enclosed Aeromotive fuel pump utilizes an o-ring sealed AN-10 style inlet and outlet ports; these ports are **NOT PIPE THREAD** and utilize **NO THREAD SEALANT**.

A high capacity 100 micron fuel filter must be installed between the fuel tank and pump inlet as well as a high capacity 10 micron fuel filter on the pump outlet. We recommend an Aeromotive P/N 12302 on the inlet side and an Aeromotive P/N 12301 on the outlet side. Call us for info.

To use this pump in your vehicle's fuel system, we strongly recommend the following:

The use of a front mounted fuel cell.

Gravity feed the pump by mounting it lower than the fuel cell.

Utilize AN-10 size high pressure fuel lines, fittings and o-rings for all connections from the fuel cell to the engine.

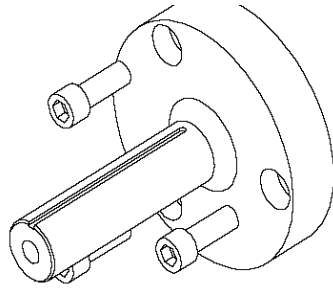
Failure to follow the above recommendations may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

Performance Specifications: Model 17241

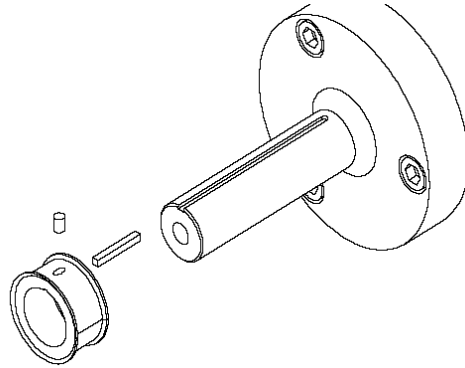
Fuel Compatibility	Gasoline & Methyl Alcohol
Port Sizes	Inlet & Outlet AN-10

The following steps are typical of most installations:

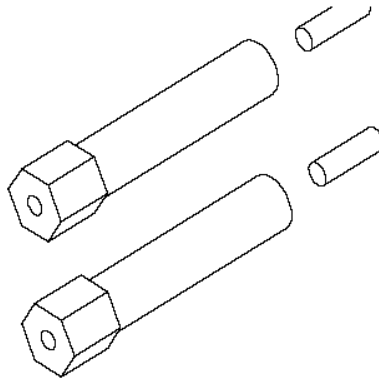
1. Once the engine has been allowed to cool, relieve the fuel system pressure and disconnect the negative battery cable.
2. Raise the vehicle and support it with jack stands.
3. Attach the drive mandrel to the front face of the harmonic balancer with 3 of the 3/8-24 x 1 socket head cap screws.



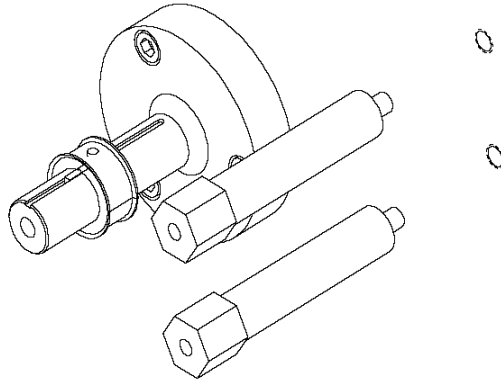
4. Place one of the 1/8" square keys in the keyway on the mandrel.
5. Slide the 14-tooth pulley on to the mandrel
6. Thread the two 10-32 x 3/16" setscrews into the 14-tooth pulley; leave the assembly loose until final alignment can be determined.



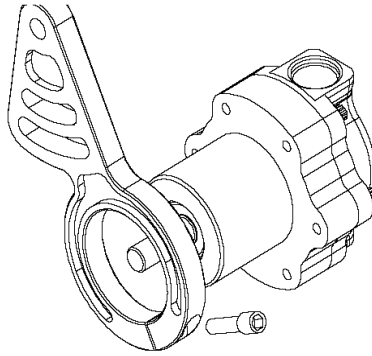
7. Thread each of the 7/16-14 x 1 1/2" studs into each of the two spacers



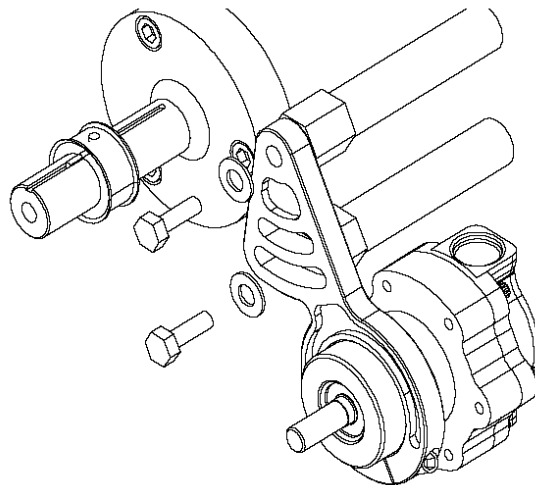
8. Locate the two 7/16" mounting holes on the block, looking at the front of the engine block there will be two 7/16" threaded holes oriented vertically from each other to the right of the crankshaft. Thread each of the spacer / stud assemblies into each of the two mounting holes and tighten.



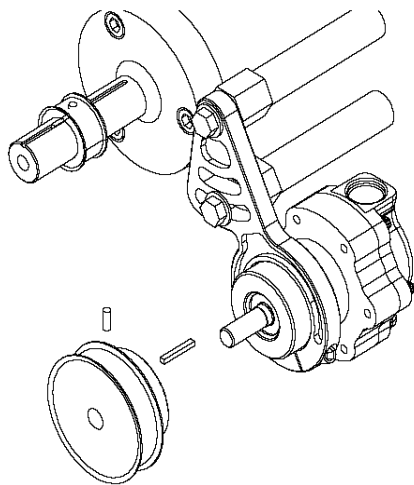
9. Thread the 1/4-28 x 1 socket head cap screw into the bracket but do not tighten.
10. Slide the bracket onto the pump in the orientation shown below;



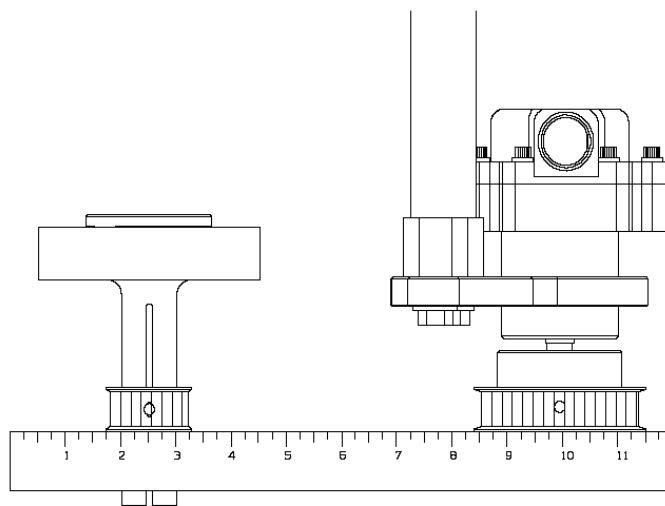
11. Using the two 3/8-16 X 1" bolts and two 3/8" flat washers attach the fuel pump bracket to the spacers; leave the assembly loose until final alignment can be determined.



12. Place one of the 1/8" square keys in the keyway on the pump.
13. Slide the 28-tooth pulley on to the pump shaft.
14. Thread the 10-32 x 1/2" setscrew into the side of the 28-tooth pulley; leave the assembly loose until final alignment can be determined.

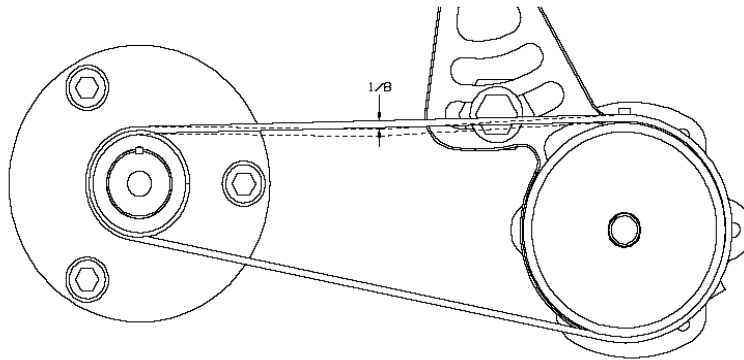


15. Using a straightedge align the pulley on the crankshaft with the pulley on the fuel pump. Alignment may be achieved by moving the pump location in the mounting bracket and by moving the location of the 14-tooth pulley on the drive mandrel. ***In some cases it may be necessary to shorten the pump bracket spacers to accommodate other accessories on the drive mandrel.***

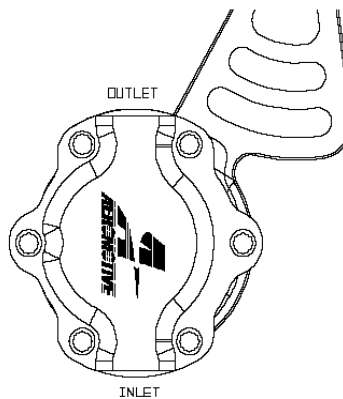


16. Once the pulleys are aligned, tighten the pump bracket screw and both pulley setscrews. It is recommended to use a removable Loc-tite thread locker on the setscrews to prevent them from loosening during operation.

17. Install the drive belt onto the pulleys and apply tension to the belt by rotating the pump along the slots in the bracket. The belt tension should be adjusted such that the center of the belt will deflect 1/8". Once this desired tension is achieved, tighten the two 3/8" bolts holding the bracket to the spacers.

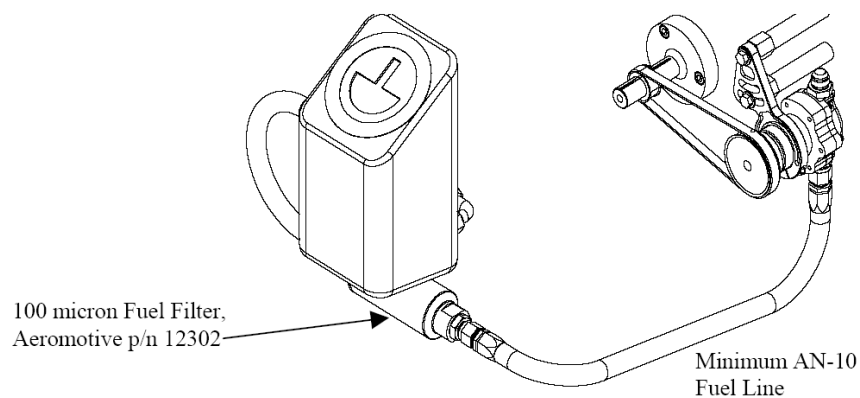


18. Identify which port is the inlet by comparing your installation with the diagram below.



19. Place several drops of a clean, general-purpose light oil into the inlet side of the pump to aid in the initial priming of the fuel system.
20. Connect the fuel cell sump to the fuel filter inlet, we recommend using fuel filter Aeromotive p/n 12302, utilizing a minimum of AN-10 steel braided fuel line. Next, connect the fuel filter outlet to the fuel pump inlet utilizing a minimum of AN-10 steel braided fuel line, refer to Figure 1 for determining the fuel pump inlet. **It is recommended that a front mount fuel cell be used for best results.**

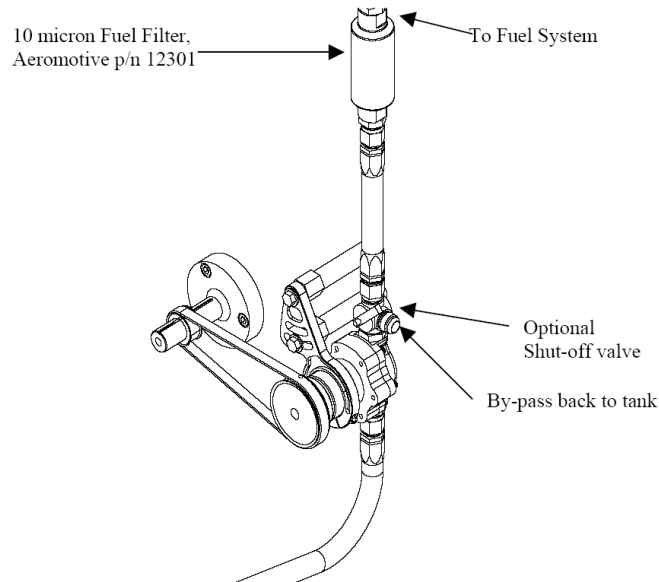
Note: Be sure to route all fuel lines clear of any moving suspension or drivetrain components, and any exhaust components! Protect fuel lines from abrasion and track obstructions or debris.



21. Connect the fuel pump outlet to the fuel filter inlet. We recommend using fuel filter Aeromotive p/n 12301, utilizing a minimum of AN-08 steel braided fuel line. Next, connect the fuel filter outlet to the vehicle's fuel system. **Make sure you use high pressure (1000 psi minimum) fuel line for these connections!**

Note: If you are using a fuel system shut-off valve, ensure the valve incorporates a by-pass valve!

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 track obstructions or debris.



22. If you are using this fuel pump with an EFI style fuel system we recommend using Aeromotive p/n 13110 Fuel Pressure Regulator. For Carbureted applications we recommend Aeromotive p/n 13202 Fuel Pressure Regulator.
23. Ensure that any spilled fuel and any fuel soaked shop towels are cleaned up and removed from the vicinity of the vehicle!

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

24. Turn the engine over **without starting the engine**, allow the pump to prime for several seconds and check the fuel pressure. If there is no pressure, wait one minute, then turn the engine over, recheck the pressure. Repeat this procedure until the gauge registers pressure or you detect a fuel leak.
25. Carefully lower the vehicle to the ground.
26. 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)!**