" THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "



Big block installation updated

For a Classic performance enthusiast, there's nothing quite like experiencing the torque and acceleration of a big block up front. Like the old saying goes: "There's no replacement for displacement." This tech help article, an update of our 1991 version, will cover the installation of a big block into a Classic Chevy. This installation includes a complete bracket and hardware kit that will allow a bolt-in for any 1955-57 Chevy passenger car.

Our kit, part #18-200, has been designed so that a minimum amount of modifications are made to your Classic, thus preserving the original value while giving you big block power! (See photo #1.) Absolutely no firewall hammering or welding is required, and the only tools needed are a drill and some simple hand tools. It is also designed so that you can add accessories, such as high profile valve covers.

The kit includes all bolts, rubber mounts and other hardware needed. It is designed for use with TH350-TH400 or a TH700R-4 transmissions. It can also be used to install a 4-speed, part #18-209.

Here is a list of parts we used in this installation.

Part # Description

18-200 Big block engine mounting kit, auto.

19-26 Turbo 400 rear transmission tail support mount

19-03 Turbo rear crossmember

Here are some other engine components.

18-209 Big block engine mounting kit, stdd.

18-205 Oil pan

18-210 Oil pan (Mark V)

18-206 Oil pump pickup

24-52 Harness

24-52C Headers, jet hot coated

18-201 Upper radiator hose

18-202 Lower radiator hose

51-03 Crank pulley, two groove

53-34 Crank pulley, third track

18-203 Water pump pulley (short water pump)

51-60 Air conditioner bracket

53-70 Power steering pump bracket

53-71 Power steering pump brace

53-30 Power steering pulley, two groove

18-204 Alternator bracket

41-15 Alternator belt

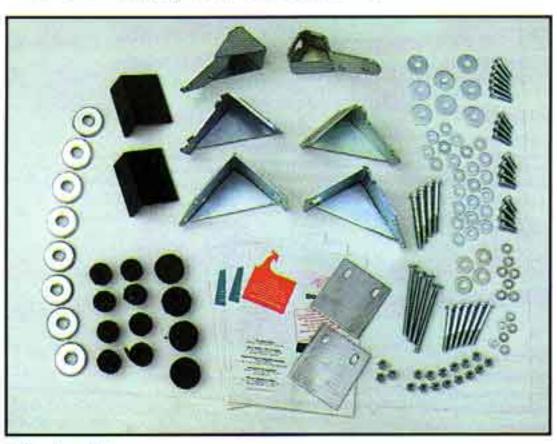
41-16 Air conditioner belt

41-17 Power steering belt

18-52 Heavy duty radiator

29-66 High volume fuel pump

51-04 Heavy duty fan blade, 17"



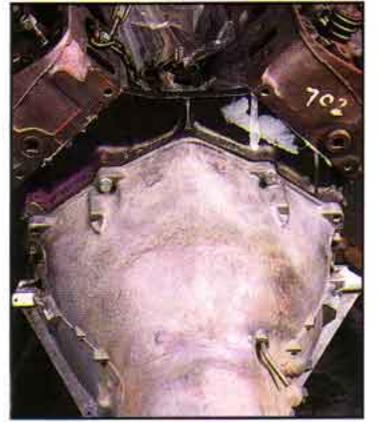


Photo #2

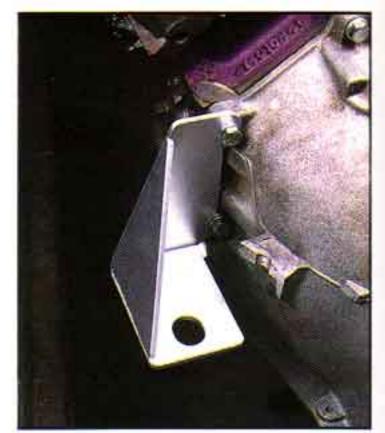


Photo #3



Photo #4



Photo #5



Photo #6

For the purpose of this article, the body of our Classic Chevy has been removed from the frame. This is for photographic purposes only. This installation can easily be completed on a fully assembled car! However, if you are building a "frame-off" street machine or if your front end sheet metal is removed, engine installation is somewhat easier.

First, bolt the engine and transmission assembly together using two of the 3/8" x 1 1/2" coarse thread bolts and lock washers provided. These bolts should be installed in the top two transmission holes. (See photo #2.) Install the left (driver's side) transmission mount bracket on the left side of the engine/transmission assembly using two 3/8" x 1 1/2" coarse thread bolts and lock washers. (See photo #3.) Repeat this procedure for the right transmission mount. (See photo #4.) Tighten all bolts. Note: If these brackets bind against the transmission before they are pulled up flush, relieve the transmission casting slightly with a grinder to obtain proper clearance.

Next, install the left transmission frame bracket on the original left hand frame horn using three of the 3/8" x 3-1/4" coarse bolts, flat washers and lock nuts provided. (See photo #5.) Repeat for the right transmission frame bracket. (See photo #6.) Photo #7 shows the rear view of the completed right hand frame bracket installation. Tighten all bolts.

Locate two of the special large flanged washers and one large rubber grommet. Assemble and install them on the left transmission mount. (See photos #8 and #9.) The inner flanged part of each washer should face away from the rubber grommet. Repeat this step for the right side. (See photo #10.)

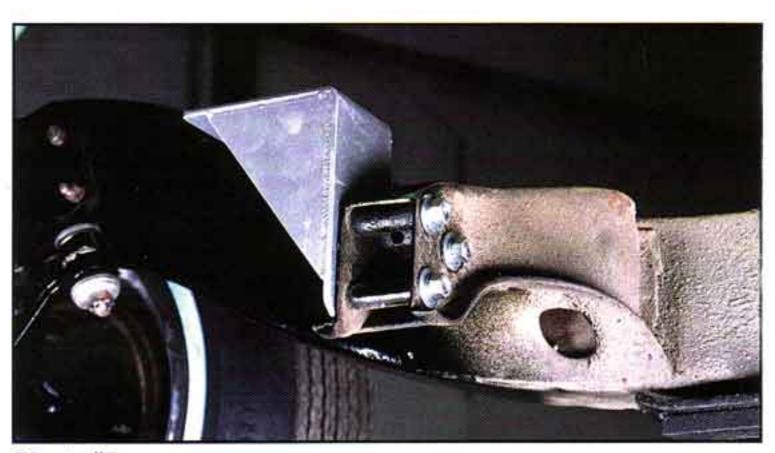


Photo #7



Photo #8

Big block installation updated

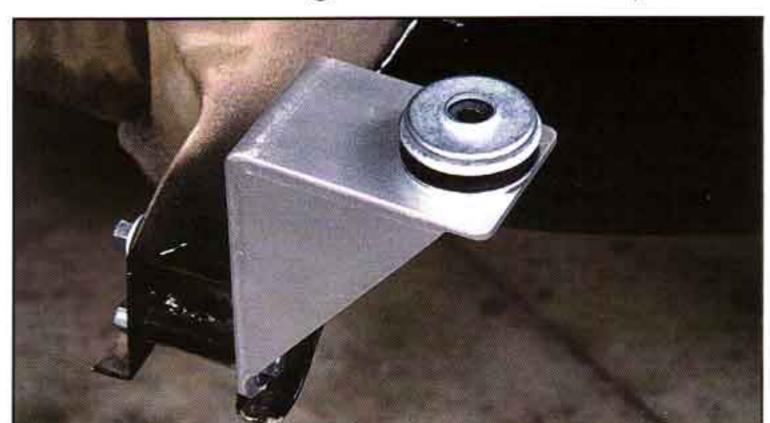


Photo #9



Photo #10



Photo #11

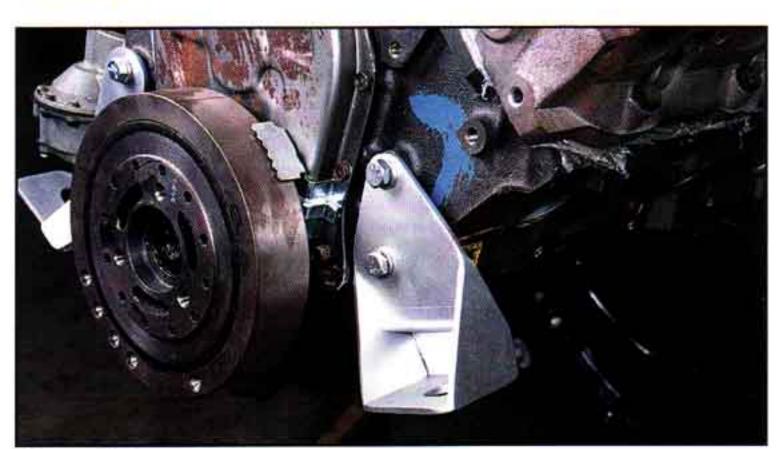


Photo #12

Big block installation updated

Next, install the right front engine mount bracket on the front of the engine using the 7/16" x 1" coarse bolts and lock washers provided. (See photo #11.) Install the left front engine bracket using the two remaining 7/16" x 1" bolts and lock washers. (See photo #12.) Tighten all bolts.

Install the remaining large flanged washers and large rubber grommets in the forward most 6-cylinder mounting holes on the original front crossmember. (See photo #13.) The engine is now ready to put in place. Using an engine hoist, lift the engine high enough to clear the front frame crossmember and push back into place. Roll it back until the front and rear engine and transmission brackets are directly over top of the frame mounts. Gently drop the engine into place until all the mounts "key" onto the special flanged washers. Remove the engine hoist and move it out of the way.

There are four long 7/16" coarse bolts provided in the kit. Two are 3 1/2" long, the others are 3 3/4". The two shorter bolts are used on the front engine mounts. Locate one of the 7/16" x 3 1/2" coarse bolts and slip one of the 1 5/8" diameter flat washers and small rubber grommets down over the bolt. (See photo #14.) Install the grommet and bolt assembly up through the bottom of the frame so the end of the bolt passes through the grommet assembly installed previously. (See photo #15.) From the top, slip another small rubber grommet and 1 5/8" diameter flat washer over the bolt and install a 7/16" coarse self-locking nut. (See photo #16.) Tighten the nut until the rubber grommet squeezes out and slightly exceeds the diameter of the metal washer. Repeat for the right side. (See photo #17.)

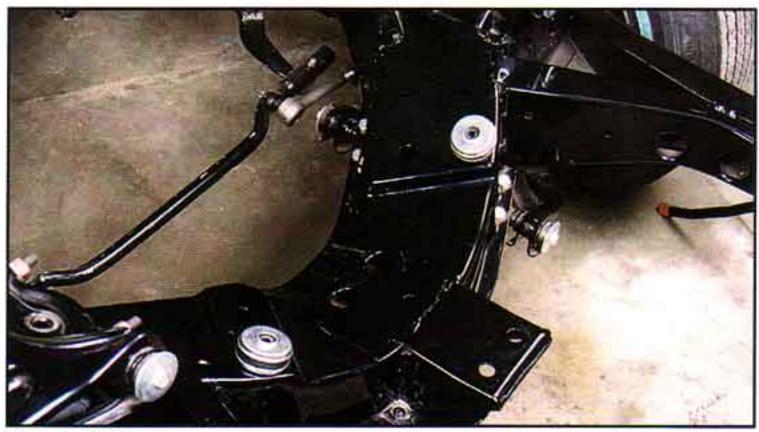


Photo #13

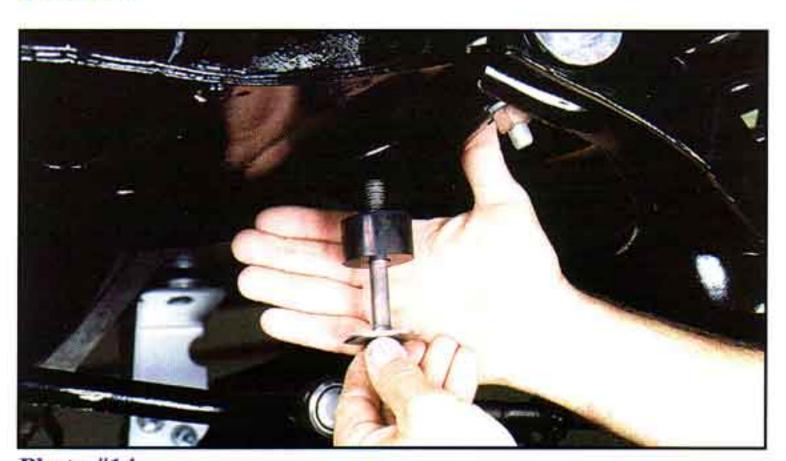


Photo #14

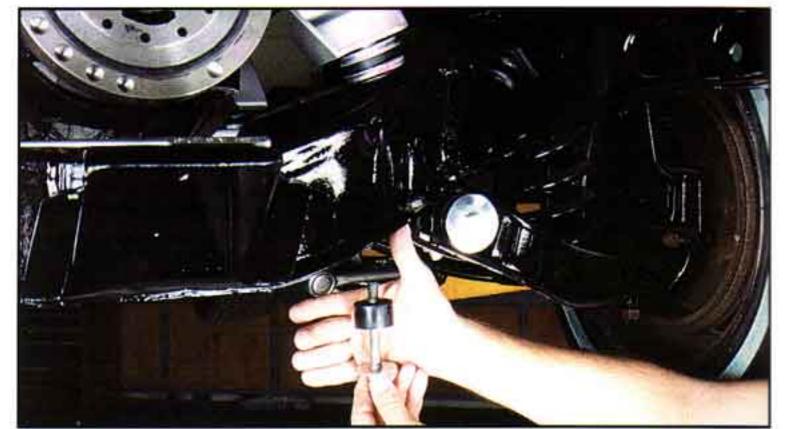


Photo #15



Photo #16

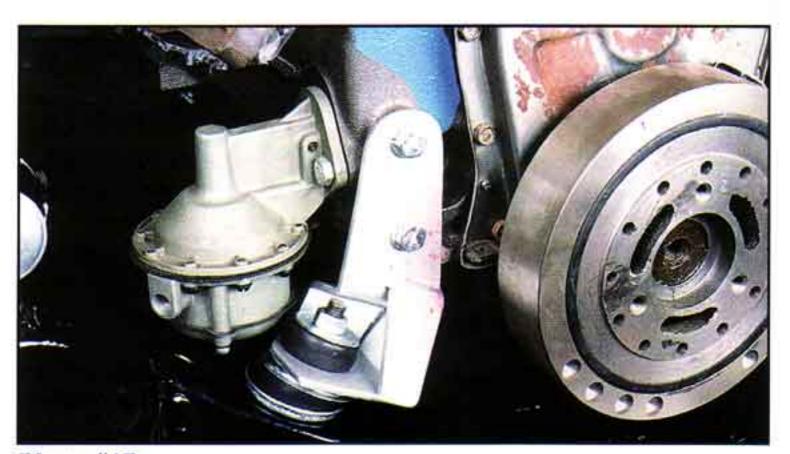


Photo #17

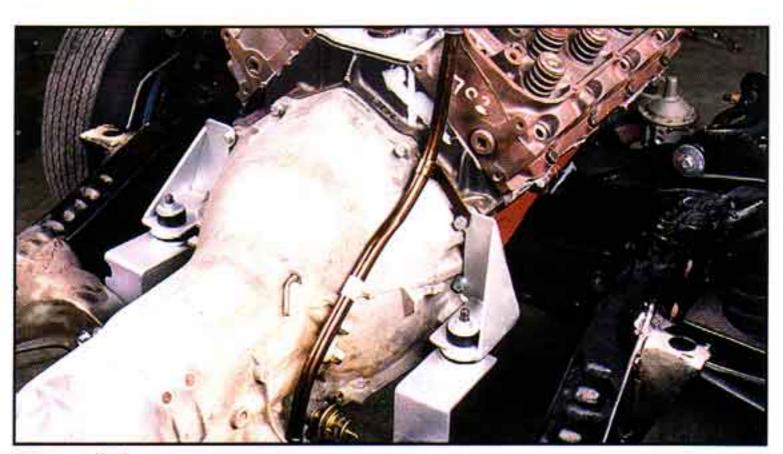


Photo #18

Using the two 7/16" x 3 3/4" coarse thread bolts, secure the rear mounts using the remaining small grommets and 1 5/8" flat washers. (See photo #18.) Install and tighten the two remaining 7/16" self-locking nuts. Tighten until the rubber grommets are squeezed out slightly.

Now that the engine and transmission assembly is in place in the car, it is time to install the rear crossmember. Begin by attaching the Turbo 400 rear mount, part #19-26 or #19-18 for TH700R-4 or TH350, to the transmission tailshaft using the two 7/16" x 1" coarse bolts, lock washers and washers provided. (See photo #19.)

Attach the rear crossmember, part #19-03, to the mount just installed with the 7/16" x 1" coarse bolts, lock washers and washers provided. The crossmember should be oriented so the crossmember mounting flange points toward the front of the car. (See photo #20.)

The left side crossmember-to-frame bracket has a wide leg, while the right bracket is symmetrical. Locate and install the left crossmember bracket on the crossmember using two of the 3/8" x 1 1/4" coarse bolts provided. The wide leg on this bracket should be attached to the crossmember. Be sure to include a 3/8" flat washer on the top and bottom before installing a 3/8" self-locking nut. Do not tighten the bolts. (See photo #21.) Attach the right crossmember bracket in the same manner with the adjusting slot holes attached to the crossmember. (See photo #22.) Do not tighten the bolts.

So far your assembly should look like ours in **photo #23.** Using a measuring tape, measure from the forward corner of the #3 right hand inner body mount bracket on the frame to the rear edge of the crossmember bracket just installed. Shift the crossmember front to rear until a measurement of 10 1/8" is obtained. Clamp the bracket to the frame. (See photo #24.) Repeat this procedure for the other side

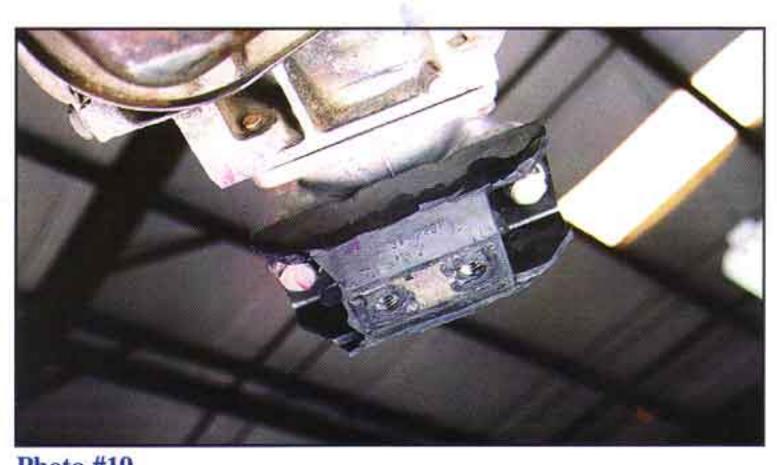


Photo #19



Photo #20

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Photo #21



Photo #22



Photo #23



Photo #24

Big block installation updated

and clamp the left hand bracket. Your measurements may not be exactly the same as ours, but keep in mind that both brackets need to be in the same relative position to keep the crossmember square. It may be necessary to loosen the crossmember-to-transmission mount bolts so the crossmember will shift front to rear on the transmission.

Next, position both crossmember brackets up and down so the crossmember firmly supports the rear of the transmission. Our brackets ended up about 2" from the bottom edge of each frame rail. (See photo #25.) Once you are satisfied with the position of the crossmember, center punch all four holes on the inside of both frame rails. (See photo #26.)

Remove the crossmember and frame bracket assembly from the transmission and drill the center punched holes with a 3/8" or slightly larger drill bit. (See photo #27.) Now clamp the large flat frame reinforcing plates to the outside of the frame so the slotted holes are directly opposite the holes just drilled in the inner frame rails. These reinforcing plates should not hang over the top or bottom edge of the frame. With these brackets clamped in place, drill the outer bolt holes. (See photo #28.)

Reinstall the crossmember and frame bracket assembly on the transmission. Install two 3/8" x 5" coarse carriage bolts through the reinforcing plate, through the frame and through the crossmember frame bracket. Now install a 3/8" flat washer and self-locking nut on each bolt. (See photo #29.) Repeat for the other side. Tighten the frame-to-crossmember bracket nuts first, and then the crossmember-to-crossmember bracket bolts. Also be sure the crossmember-to-transmission mount bolts are tight. Photo #30 shows what your completed crossmember assembly should look like. Good luck! ❖



Photo #25



Photo #26



Photo #27



Photo #28

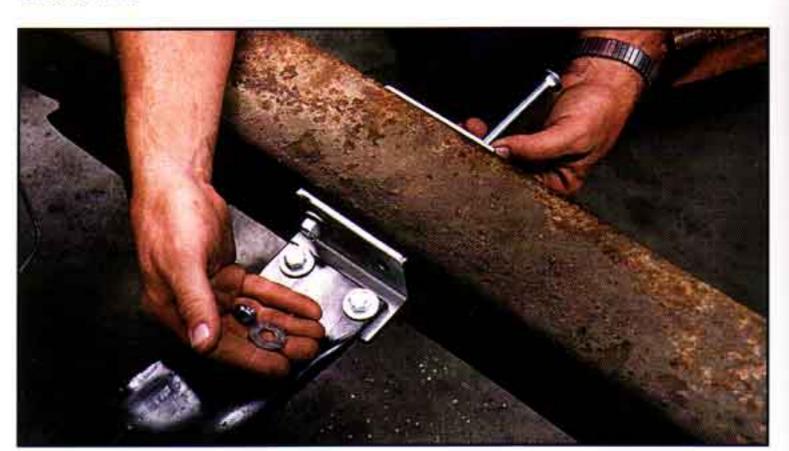


Photo #29



Photo #30