

This month we will continue our three-part series on the complete installation of a Big Block Chevy in a 1955-57 passenger car. Last month we covered the basic engine installation. This month we will install the oil pan, headers transmission cooling lines and a few other basic components. Keep in mind that our installation requires no frame or firewall modifications and is designed to minimize the alterations required on an original car.

Classic Chevy has worked very closely with Headman Headers and Moroso Performance Products to design custom fit parts for your Big Block installation! With the help of the professionals Headman South, we have designed custom Big Block headers that fit our installation flawlessly, even with the 605 steering box! No more beating those headers with a hammer or cutting and welding to make them fit. Along with Moroso, we designed a 7-quart high performance oil pan that fits with no drag link or suspension modifications! We have successfully worked with two of the biggest names in the performance industry to give you the finest quality parts available.

For photographic purposes only, the body has been removed from the frame for our article. All the installation procedures can easily be completed with the body on the frame and the car fully assembled.

Following is a list of parts installed this month:

Parts Needed:

18-205 Big Block Moroso Oil Pan (with gaskets and bolts)

18-206 Deep sump oil pump pickup (use with 18-205)

18-70 Oil filter spin-on conversion.

19-101 Turbo 400 small modulator valve

19-34 Turbo400 dipstick assembly29-66 High volume fuel pump

24-52 Big Block Headman Headers

(includes gaskets, collectors and bolts)

18-207 Big Block dipstick

18- 208 Tall Chevy Power Big Block chrome valve covers

19-100 Big Block Turbo 400 transmission cooling lines

Keep in mind that the oil pan, P/N 18-205 and Headers, P/N 24-52, are brand new, custom designed pieces that are engineered to work only with our P/N 18-200 Big Block engine bracket kit.



Photo #1

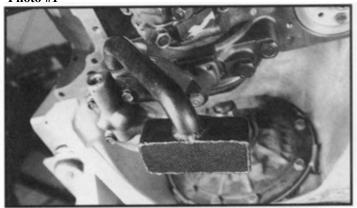


Photo #2

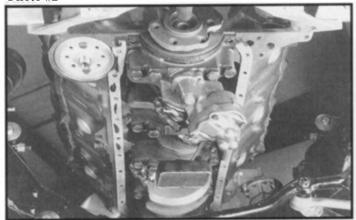


Photo #3



Photo #4



Photo #1 shows the Big Block Moroso Oil Pan, **P/N** 18-205. This oil pan comes complete with gaskets and installation bolts. Begin oil pan installation by installing the oil pump on the rear main bearing cap. Choose a quality, high volume pump, such as the Melling M-77HV we are using. Now install the deep sump oil pump pickup, **P/N** 18-206, using the front oil pump cover attaching bolt (Photo #2).

- 2. Secure the rubber end gaskets and cork side gaskets to the bottom of the block. A little gasket sealer should be used on the cork flat gaskets with some extra at the ends where the gaskets key into the rubber end gaskets (Photo #3). Remove the large nut and lockwasher that secures the pitman arm to the steering box. Pull the pitman arm from the box using a puller. Swing the drag link down away from the engine as far as possible.
- 3. Install the oil pan up from the bottom working it up over the front crossmember and into place without disturbing the gaskets just installed. Be sure the drag link fits into the cutout in the oil pan sump (Photo #4). Secure the oil pan using the 5/16" course thread bolts provided (Photo #5). The two 1/4" bolts attach the front of the pan to the timing chain cover. Reinstall the pitman arm on the steering box and check for proper oil pan clearance (Photo #6). There should be a minimum of 3/8" clearance between the oil pan sump and the drag link.
- **4.** If your engine does not have a provision for a screw-on style oil filter, install the oil filter spin on conversion, **P/N 18-70**. Install a short spinon oil filter such as a Fram PH25 (Photo #7).
- **5.** Install the Turbo 400 small modulator valve, **P/N 19-101**. Use of this small modulator is necessary for proper frame horn clearance (Photo #8). Secure the valve using the stock 400 modulator clamp and bolt. Install the Turbo 400 dipstick assembly, **P/N 19-34**, on the passenger side of the transmission. Secure to the engine using the top right transmission bracket-to-engine bolt (Photo #9).
- **6.** If you are going to use power steering, install the 605 box, **P/N 53-37** or **P/N 53-38** using the original three carriage bolts and nuts (Photo #10). If you wish to use an original steering box, be sure it is in place at this time.



Photo #5



Photo #6

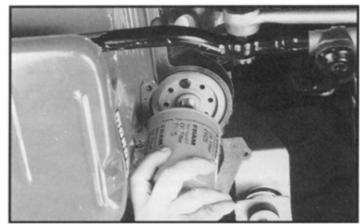


Photo #7

Photo #8

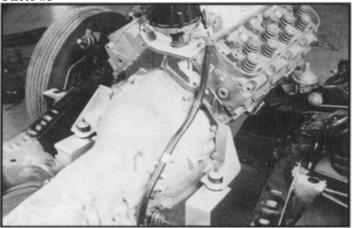


Photo #9

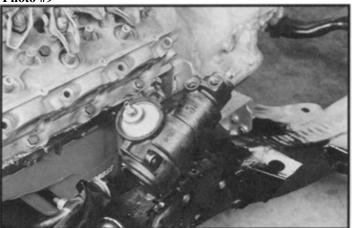


Photo #10



- 7. Install the high volume fuel pump, P/N 9-66 using two short 3/8" coarse thread bolts. If you choose to use a different pump, be sure the bottom of the pump clears the frame by at least 3/8" (Photo 8). Photo #12 shows our custom Big Block Headman Headers, P/N 24-52. These headers come complete with gaskets, collectors and all related mounting hardware. Header pipe diameter is 1³/4" with 2¹/4" collector outlets. Begin installation by passing the right hand header up past the drag link beside the block from the bottom (Photo #13). Once the header is in place on the head, install the header gasket and secure with eight short 5/16" header bolts provided (Photo #14). Tighten all bolts. Note the clearance between the control arm and all steering components (Photo #15).
- **9.** Install the left hand header from the bottom, working it past the oil filter, over the drag link and up next to the steering box (Photo #16). Temporary removal of the oil filter makes this installation easier. Install the remaining header gasket and eight short 5/16" course attaching bolts (Photo #17). Tighten all bolts. Note the clearance between the steering box and steering components.
- 10. Once the headers are in place, install the collector gaskets, collectors and collector flanges to the headers, using the 5/16" coarse thread bolts and nuts provided. Be sure to rotate the collectors for maximum ground clearance, particularly if your car is lowered (Photo #18).

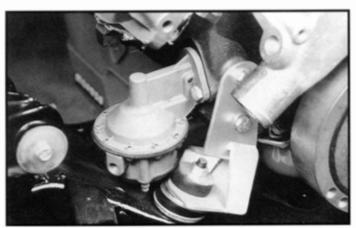


Photo #11



Photo #12



Photo #13

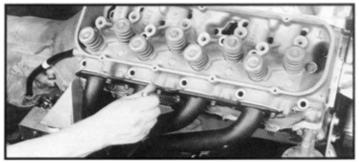


Photo #14

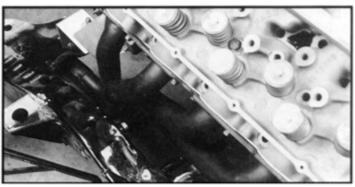


Photo #15

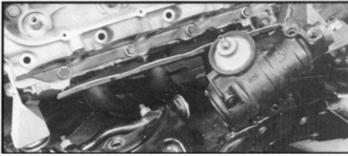


Photo #16

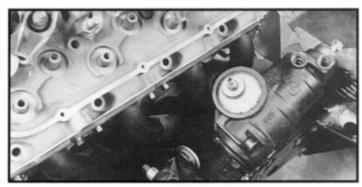


Photo #17



11. Install the Big Block dipstick, P/N 18-207, using the appropriate header-to-head bolt (Photo #19). Photo #20 shows the Big Block tall Chevy Power valve covers, P/N 18-208. These covers are tall enough to clear most roller rocker setups and add that "finishing touch" to a well detailed Big Block!

12. Photo #21 shows the Big Block/Turbo 400 Transmission cooling lines, P/N 19-100. These lines come complete with all fittings and clips. These lines are designed for use with the six-cylinder position Heavy Duty four-core radiator, P/N 18-52 to be installed next month.

13. Install both lines up from the bottom and over the drag link on the right side of the engine (Photo #22). Attach the lines to the transmission fittings located above the modulator valve and route as shown in Photos #23 and #24. Secure the lines to each other, using the clips provided. The front of the lines should cross out in front of the balancer and lay on top of the radiator support to be installed later (Photo #25).

Next month, we will complete the Big Block installation. Included will be: all engine pulleys, air conditioning, alternator and power steering brackets and components, heavy duty radiator and hose installation along with column shift and power booster installation!



Photo #18



Photo #19



Photo #20

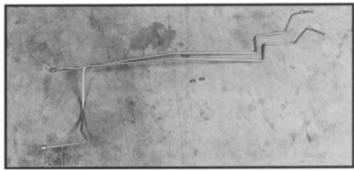


Photo #21



Photo #22



Photo #23



Photo #24



Photo #25

