

Figure 1: Prepping The Block

To ease installation of the studs and fasteners, chase the water pump mounting threads and the threads on the two lower bosses on either side of the balancer with a 3/8-16 tap.

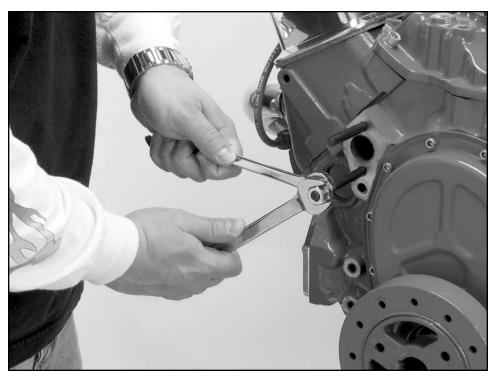


Figure 2: Install Mounting Studs

Install the four studs until the threads are completely screwed into the block. Use the two included 3/8-16 nuts tightened against each other to act as a drive nut to ease installation (see illustration below). Use an RTV silicone sealant on the threads and seat them firmly into the block.





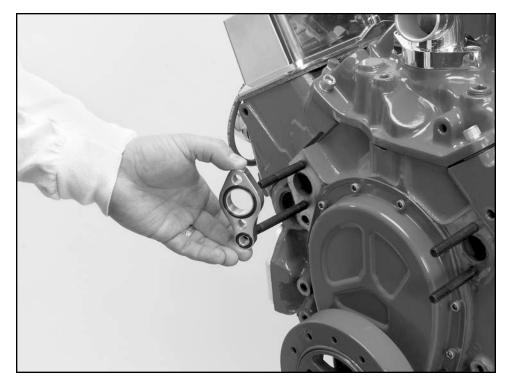


Figure 3: Install O-Rings & Water Pump Spacer

The water pump spacer and alternator mounting bracket incorporate o-rings for sealing. Install o-rings on both sides of brackets making sure to install the two small bypass o-rings on the water pump spacer bracket. Slide the water pump spacer onto the water pump studs on passenger side of block and seat against block.

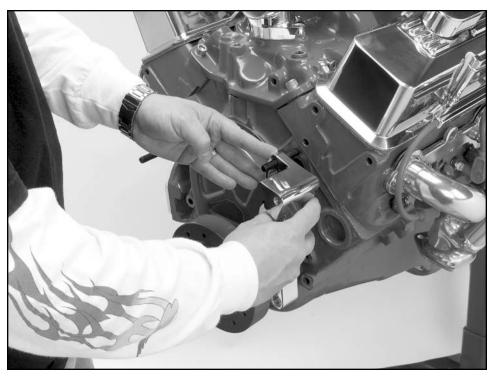


Figure 4: Install Alternator Bracket

Slide alternator bracket on to water pump studs on driver side of block and seat against block.



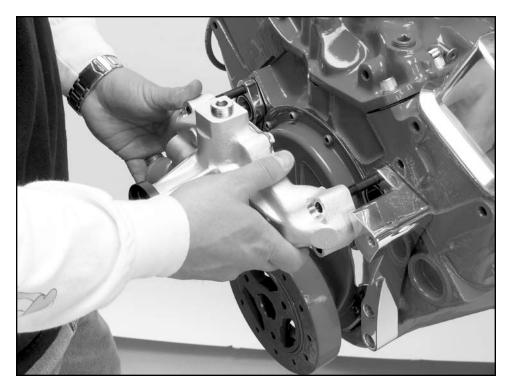


Figure 5: Install Water Pump

Slide the water pump over the four mounting studs.



Figure 6: Install Spacer Nuts to Water Pump

Install the four spacer nuts that hold the water pump in place. The short spacer nut attaches to the passenger side lower stud.



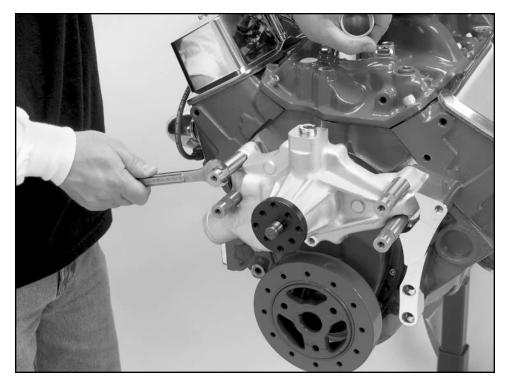


Figure 7: Complete Water Pump Install

Tighten the four spacer nuts that hold the water pump in place. Now would be a good time to install the heater hose fitting onto the water pump.

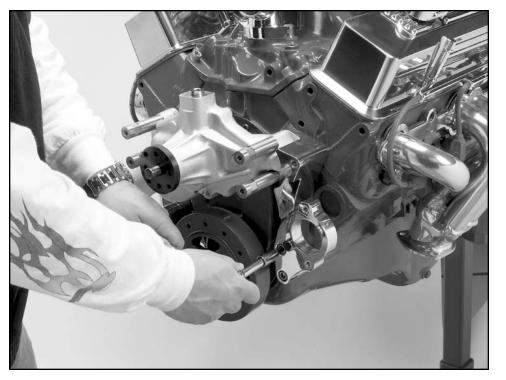


Figure 8: Install Power Steering Bracket

If your kit <u>does not</u> include power steering, now is the time to install the two 3/8-16 x 1-1/4" socket head cap screws on the lower end of the alternator bracket. If your kit <u>does</u> include power steering, install the power steering bracket using two 3/8-16 x 2" socket head cap screws on the lower end of the alternator bracket.



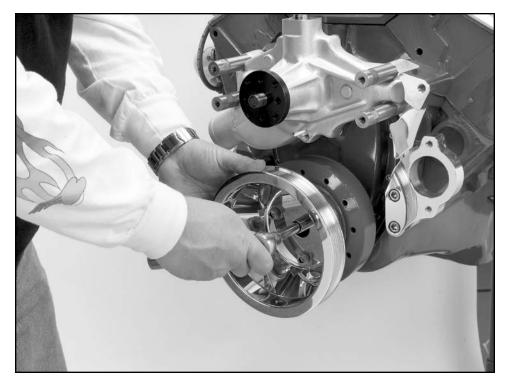


Figure 9: Install Crankshaft Pulley

Install the crankshaft pulley on the harmonic balancer using three $3/8-24 \times 1$ " socket head cap screws and three 3/8" belleville washers. Torque to 35 ft.lbs.

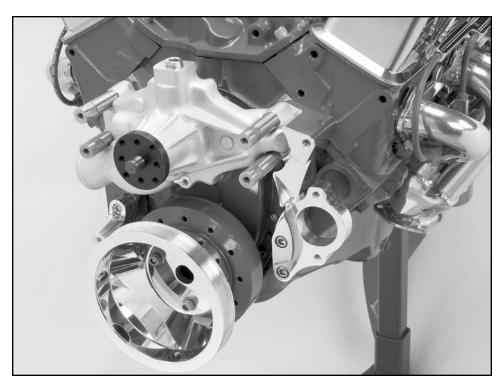


Figure 10: Install Lower Tensioner Bracket

Install the lower tensioner support bracket using two 3/8-16 x 2" socket head cap screws to the two threaded bosses on the lower passenger side of the block.





Figure 11: Install Power Steering Pump & Pulley

If your kit <u>does</u> include power steering, attach the power steering pump and pulley to the power steering bracket using two 5/16-24 x 3" socket head cap screws & two 5/16" lock washers. If your kit <u>does not</u> use power steering proceed to figure 12.



Figure 12: Install Belt Tensioner

Install the belt tensioner to the tensioner support bracket and the lower water pump spacer nut using one 8mm-1.25 x 25mm socket head cap screw and one 8mm-1.25 x 25mm flat head cap screw.





Figure 13: Install Bridge Bracket

Install the bridge bracket to the three water pump spacer nuts and the tensioner housing using three 8mm-1.25 x 25mm 12 pt. cap screws and one 8mm-1.25 x 25mm flat head cap screw.



Figure 14: Bridge Bracket Tightening Instructions

Tighten the 8mm-1.25 x 25mm flat head cap screw and the $8\text{mm-1.25} \times 25\text{mm}$ 12 pt. cap screw on the passenger side of the bracket.

Do not tighten the two 8mm-1.25 x 25mm 12 pt. cap screws on the driver side of the bracket at this time.





Figure 15: Install Water Pump Pulley

Install the water pump pulley on the water pump using four $5/16-24 \times 1/2$ " socket head cap screws.



Figure 16: Installation Checkpoint

The system is now ready to install the tensioner pulley and alternator.



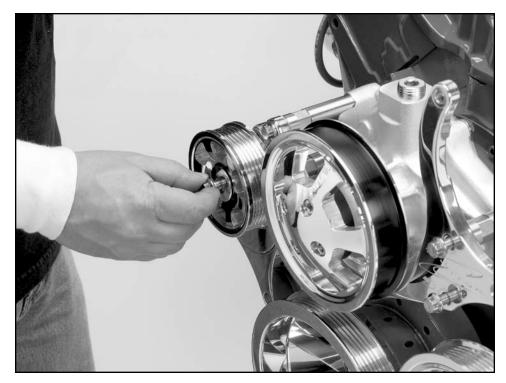


Figure 17: Install Tensioner Pulley

Install the tensioner pulley and aluminum load washer to the tensioner using a $3/8-16 \times 3/4$ " 12 pt. cap screw.



Figure 18: Install Alternator

Install the 10mm-1.5 x 80mm 12 pt. cap screw in the lower alternator mounting hole and the 8mm-1.25 x 25mm 12 pt. cap screw in the top ear of the alternator. 10mm shim washers are provided to shim alternator to bridge bracket if needed. The alternator mounting boss may vary in width in the polishing process.





Figure 19: Install Serpentine Belt

With a 5/8" six point socket or box wrench, turn the belt tensioner release nut <u>clockwise to unload the spring</u> and install the serpentine belt.

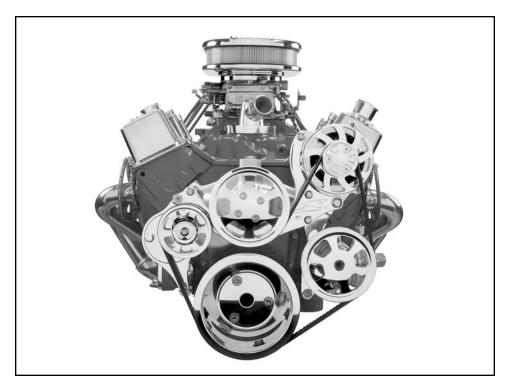


Figure 20: System Complete

ribbed (77920) styles.

The system is complete and ready for alternator wiring and power steering hoses. A Billet Specialties power steering remote reservoir is available in smooth (77910) or





Billet Specialties, Inc. 500 Shawmut Ave. La Grange, IL 60526 Tech Line 708/588-0505 Fax 708/588-7181 billetspecialties.com

