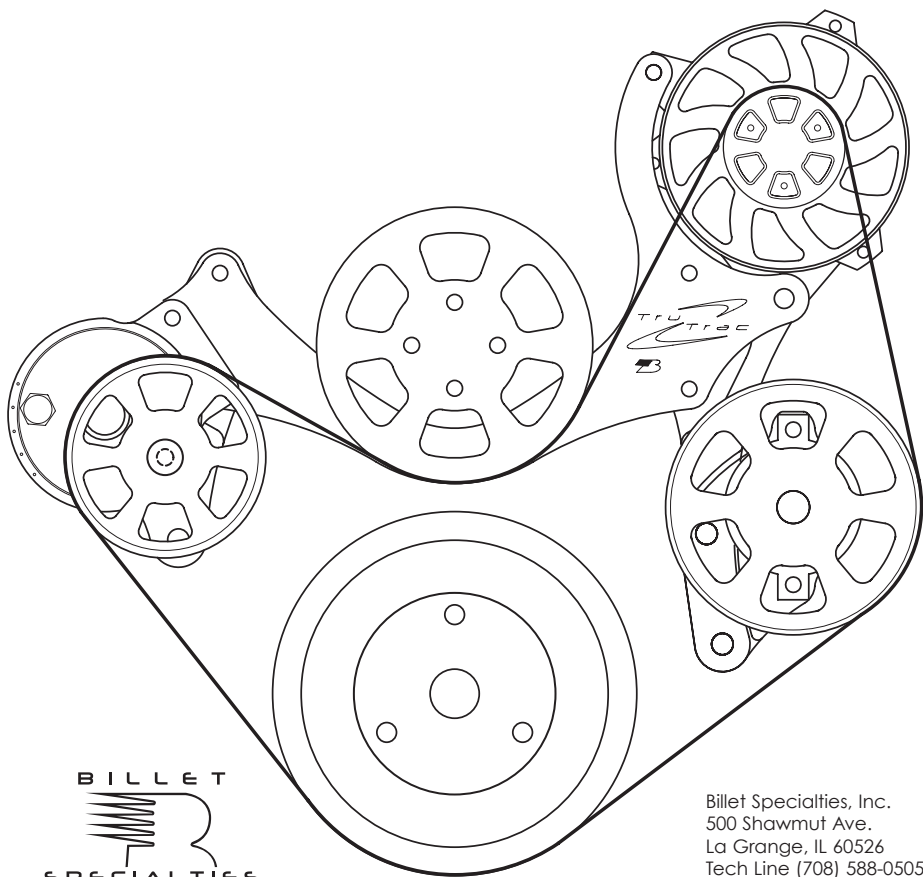



# Tru Trac

## Big Block Installation Manual For Systems without A/C

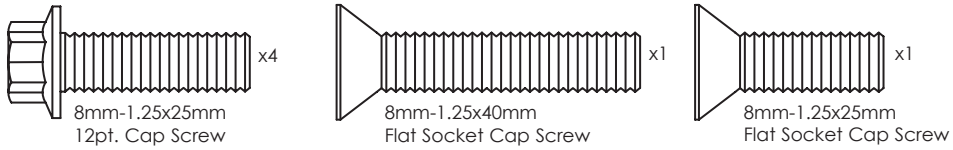


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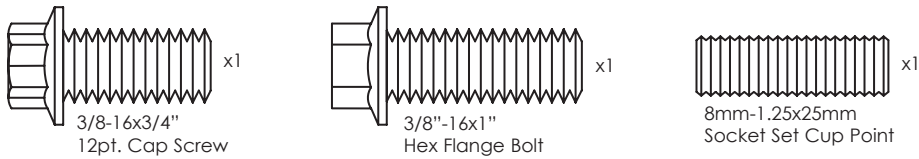
Billet Specialties, Inc.  
500 Shawmut Ave.  
La Grange, IL 60526  
Tech Line (708) 588-0505  
Fax (708) 588-7181

# Hardware List For Chevrolet Big Block Tru Trac Serpentine System Without A/C

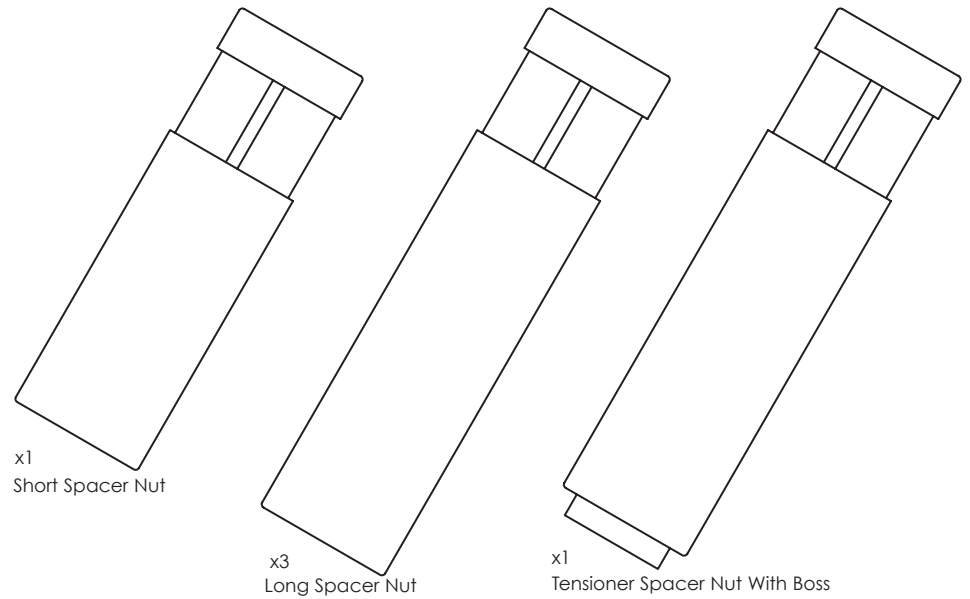
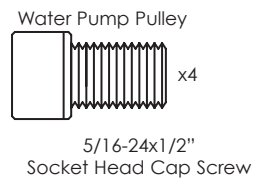
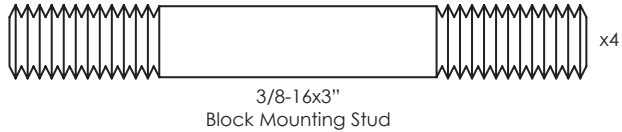
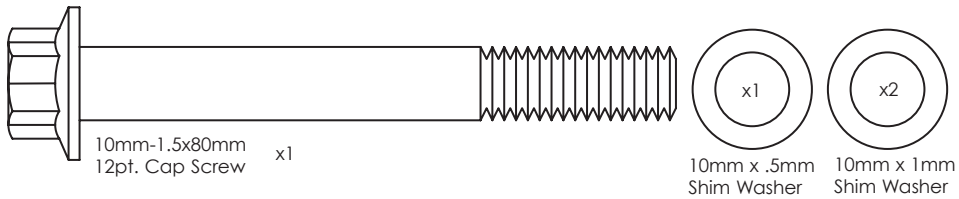
## Bridge Bracket Screws



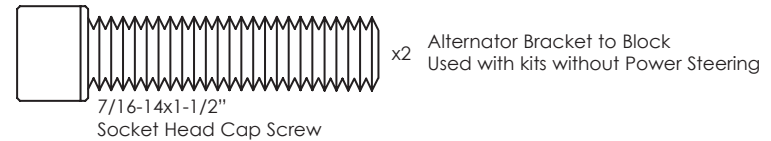
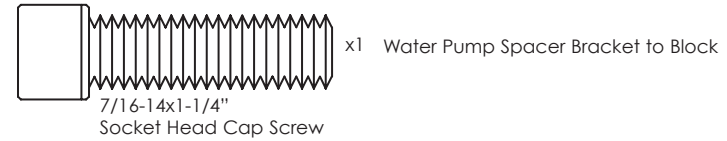
## Tensioner Screws



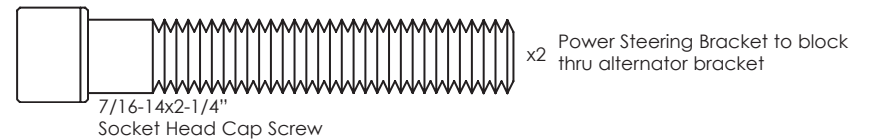
## Alternator Screws



## Crank Pulley Screws



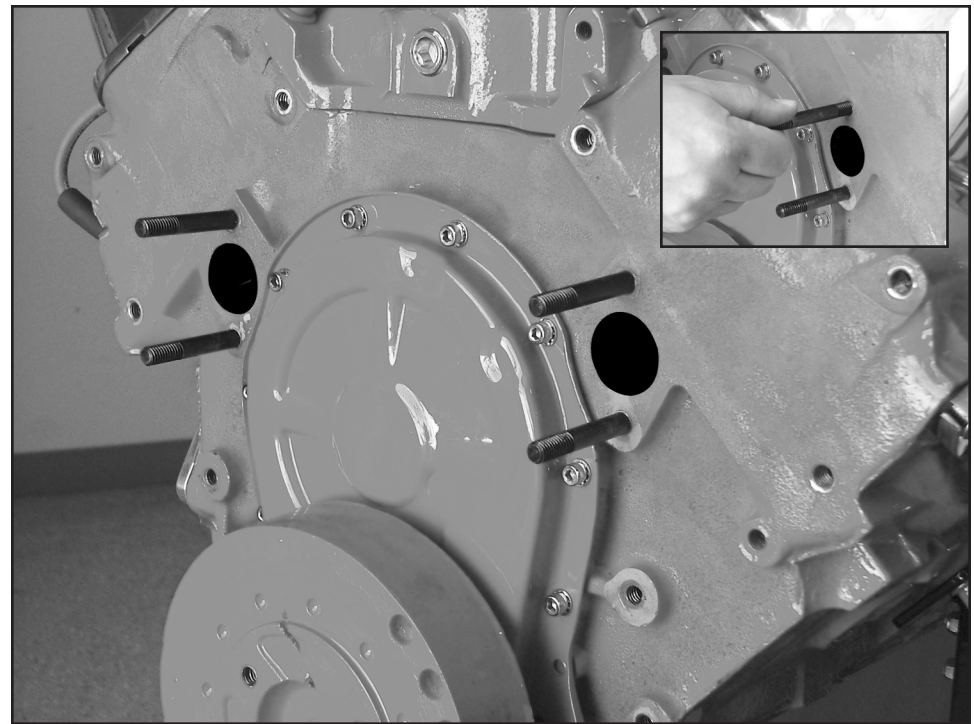
## Hardware Included For Tru Trac Kits WITH Power Steering





**Figure 1: Prepping The Block**

Start by removing any accessories that may be on the motor. To ease in the installation of the studs and fasteners, chase the water pump mounting threads with a 3/8-16 tap and the threads on the two lower bosses on either side of the balancer with a 7/16-14 tap. Make sure block face is clean and free of gasket material.



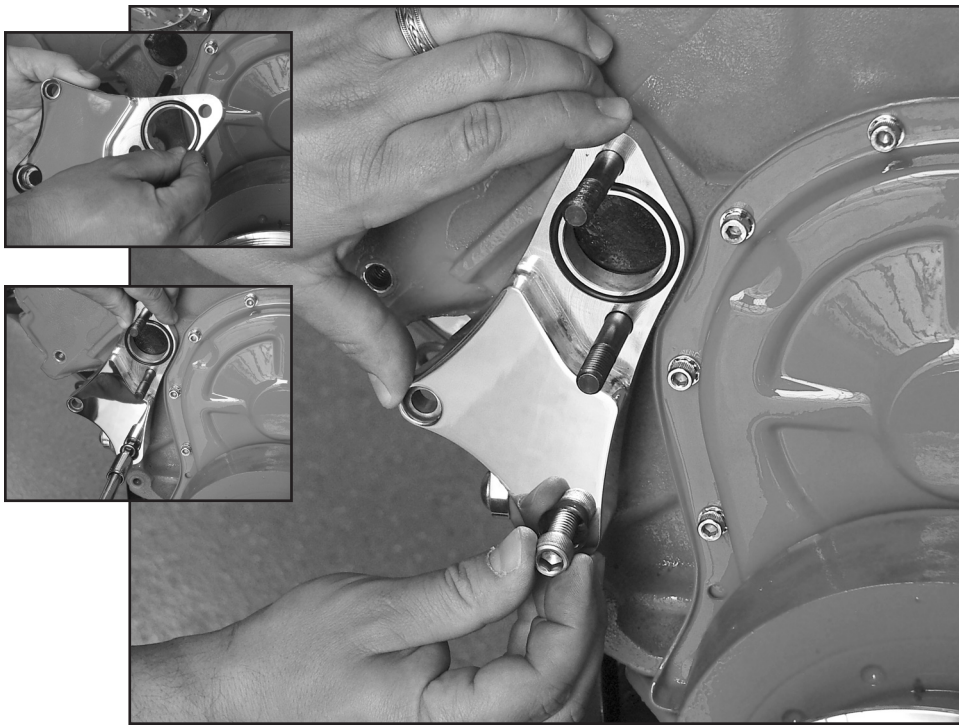
**Figure 2: Install Mounting Studs**

Install the four 3/8-16x3" block mounting studs until the threads are completely screwed into the block. Two 3/8-16 nuts can be 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.



\*Example

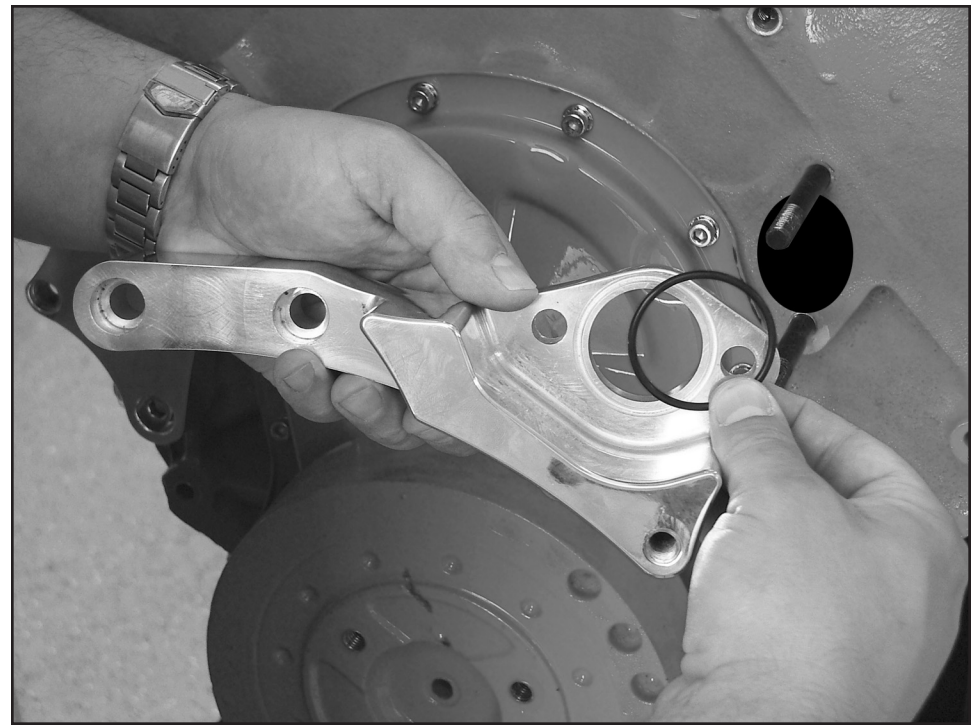




**Figure 3: Install O-Rings & Water Pump Spacer Bracket**

The water pump spacer and alternator mounting brackets incorporate o-rings for sealing.

Slide the water pump spacer bracket onto the water pump studs on passenger side of block and seat against block. Attach to block with 7/16-14x1-1/4" socket head cap screw.

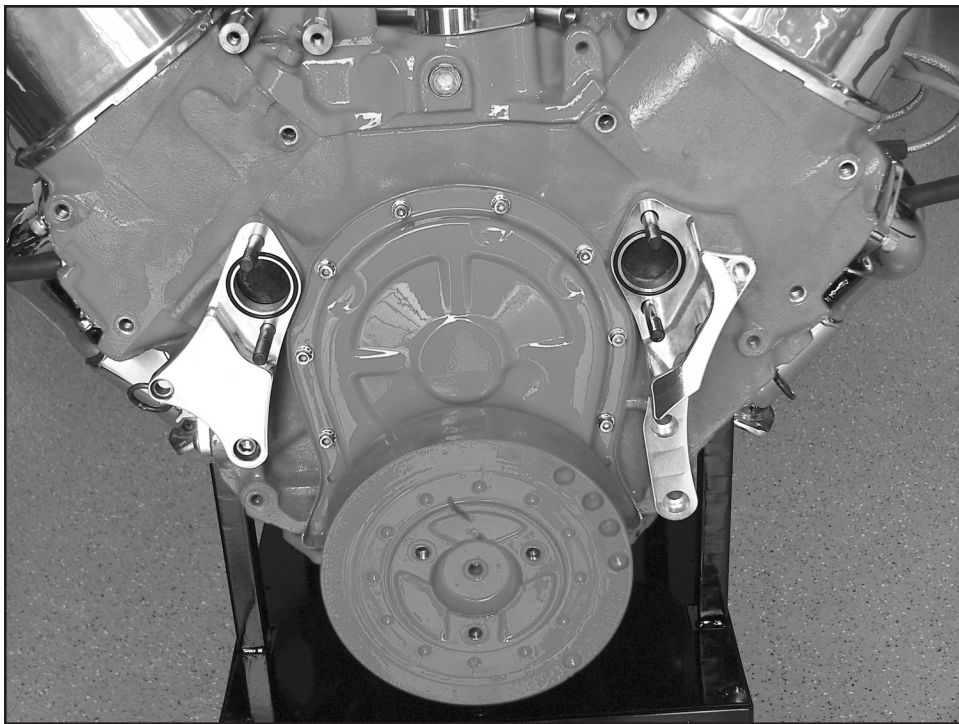


**Figure 4: Install Alternator Bracket**

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

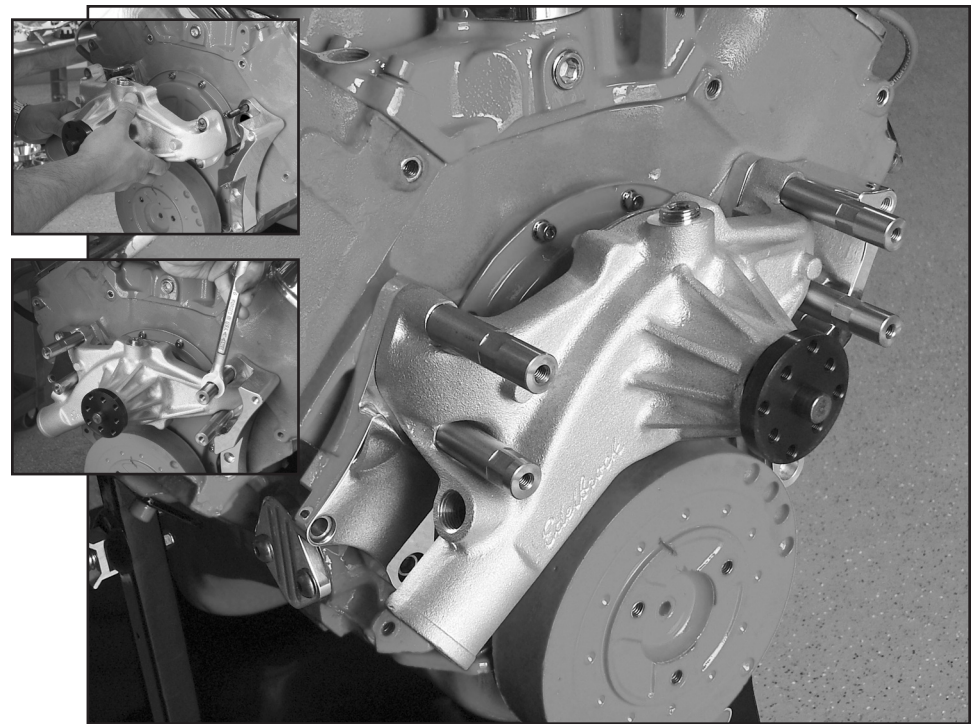






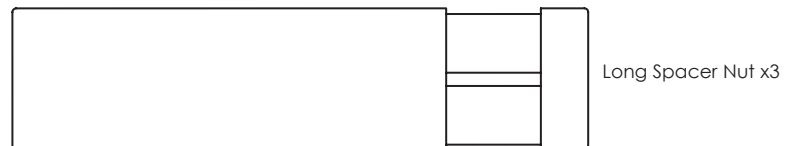
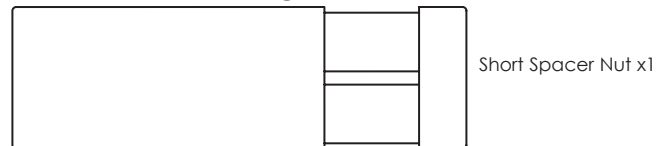
**Figure 5: Power Steering Vs. Non-Power Steering**

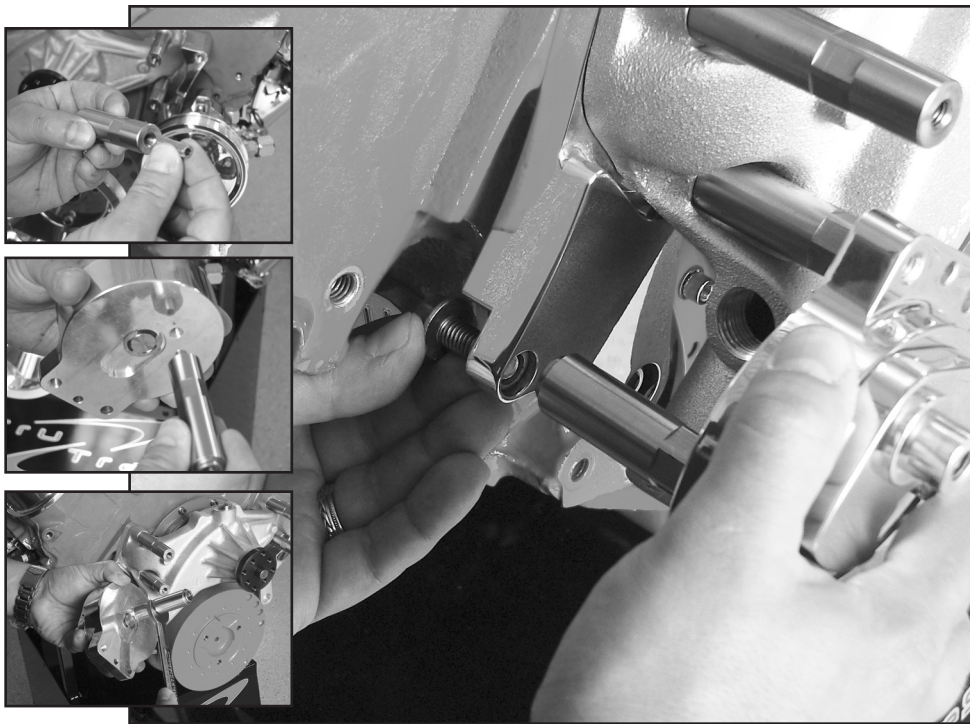
If your kit does not include power steering, now is the time to install the two 7/16-14 x 1-1/2" socket head cap screws on the lower end of the alternator bracket. If your kit does include power steering, proceed to *Figure 6*.



**Figure 6: Install Water Pump & Spacer Nuts**

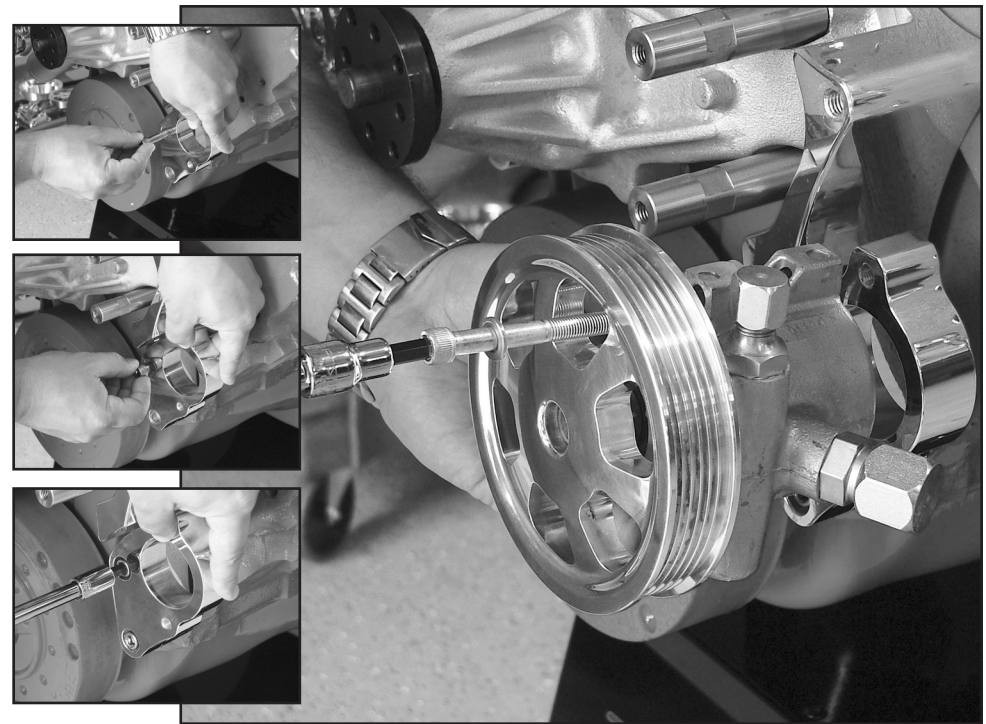
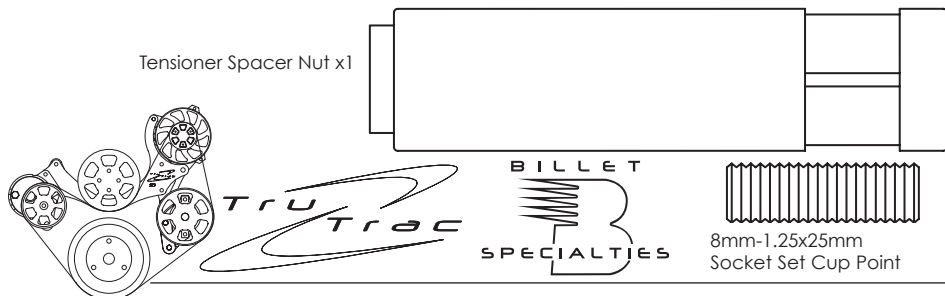
Slide the water pump over the four mounting studs. Install the four spacer nuts that hold the water pump in place. The short spacer nut attaches to the passenger side lower stud. The long spacer nuts without a boss install on the three remaining studs. Now would be a good time to install the heater hose fitting onto the water pump.





**Figure 7: Install the Tensioner**

Thread 8mm-1.25x25mm socket set stud into the tensioner spacer nut with boss, tighten with 4mm allen key (stud installs in spacer nut opposite of boss). Attach the tensioner spacer nut with boss to the backside of tensioner. Attach assembly to lower water pump spacer bracket ear with 3/8-16x1" Hex Flange Bolt. **Do not completely tighten at this time.**

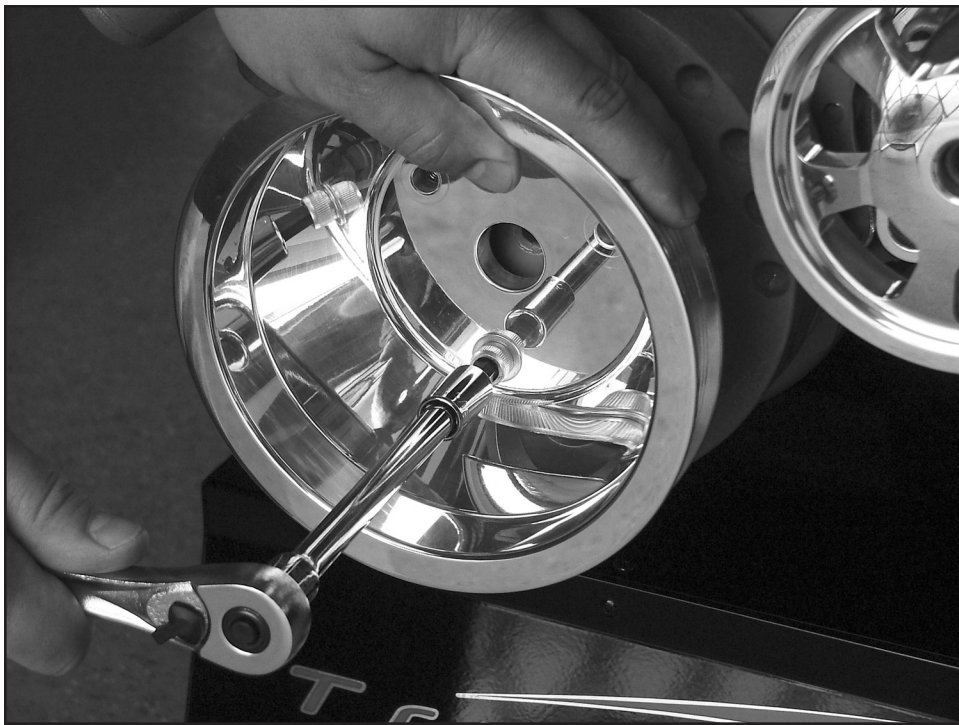


**Figure 8: Install Power Steering Bracket, Pump & Pulley**

Install the power steering bracket using two 7/16-14x2-1/4" socket head cap screws on the lower end of the alternator bracket and tighten. Attach the power steering pump and pulley assembly to the power steering bracket using two 5/16-24 x 3" socket head cap screws & two 5/16" lock washers. If your kit does not use power steering proceed to *Figure 9*.

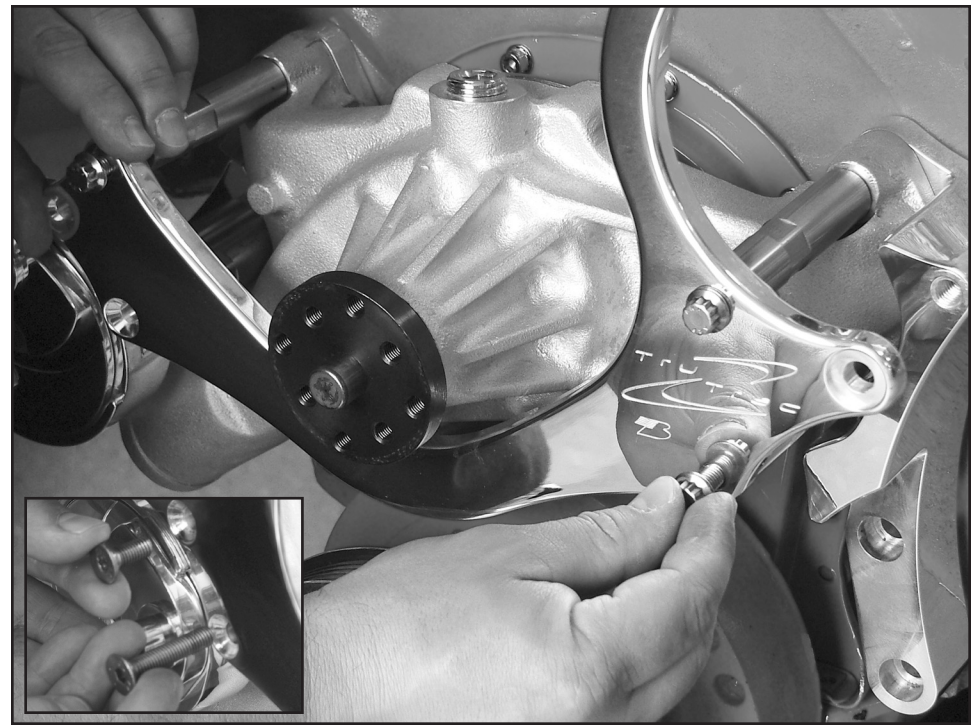






**Figure 9: Install Crankshaft Pulley**

Install the crankshaft pulley on the harmonic balancer using three 3/8-16 x 1" socket head cap screws and three 3/8" Belleville washers. Torque to 35 ft. lbs.

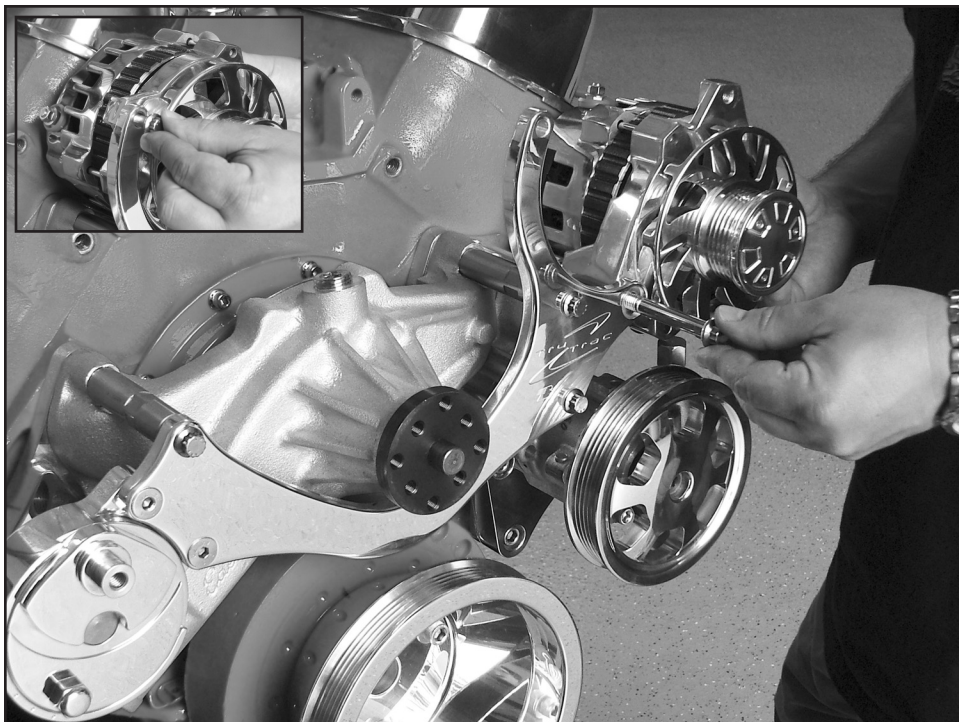


**Figure 10: Attaching Bridge Bracket**

Install the bridge bracket to the three water pump spacer nuts using three 8mm-1.25 x 25mm 12 pt. cap screws. The bridge bracket also attaches to the tensioner using a 8mm-1.25x40mm flat socket cap screw (installs in lower boss through bracket and tensioner into spacer nut), and a 8mm-1.25x25mm flat socket cap screw (installs through bracket into tensioner).

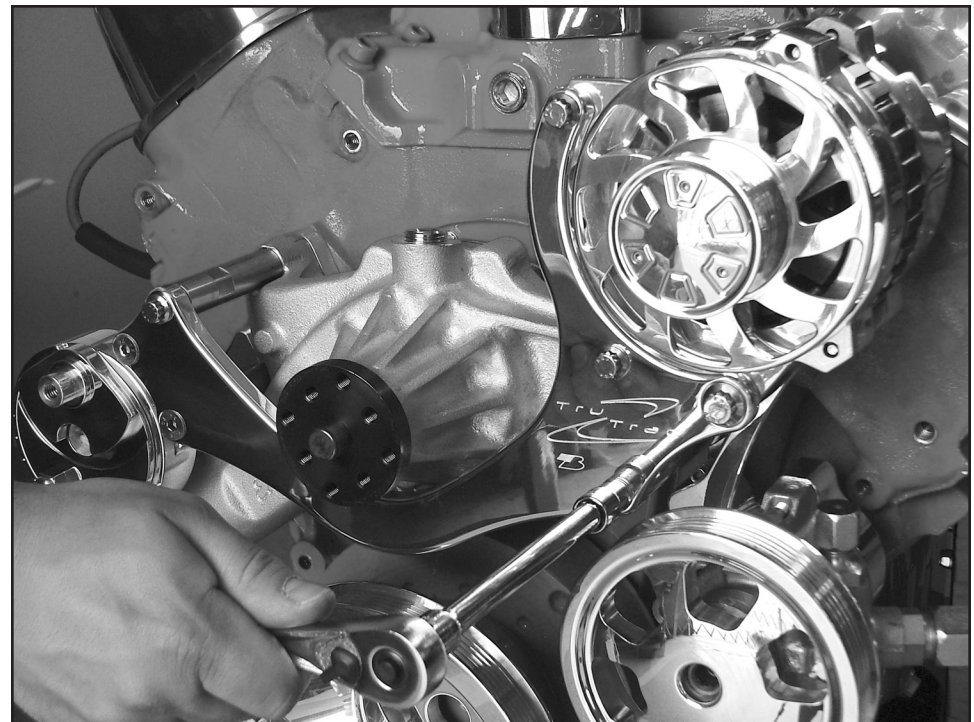
The water pump spacer nuts may need to be loosened to help align the bridge bracket with screw holes.





**Figure 11: Attaching Alternator**

To install the alternator insert the alternator behind the bridge bracket and install the 10mm-1.5 x 80mm 12 pt. cap screw in the lower alternator mounting hole. The alternator mounting boss may vary in width in the polishing process. 10mm shim washers are provided to shim alternator to bridge bracket (washers may not be needed). Complete alternator installation using one 8mm-1.25 x 25mm 12 pt. cap screw to attach the top ear of the alternator to the bridge bracket.



**Figure 12: Finish Bridge Bracket Installation**

At this point we are ready to tighten the long spacer nuts and hex flange bolt on tensioner bracket. Once these are tightened you may then tighten all bolts on the bridge bracket assembly.







**Figure 13: Install Tensioner Pulley**

Install the tensioner pulley and aluminum load washer onto the tensioner using a 3/8-16 x 3/4" 12 pt. cap screw.



**Figure 14: Install Water Pump Pulley onto Pump**

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

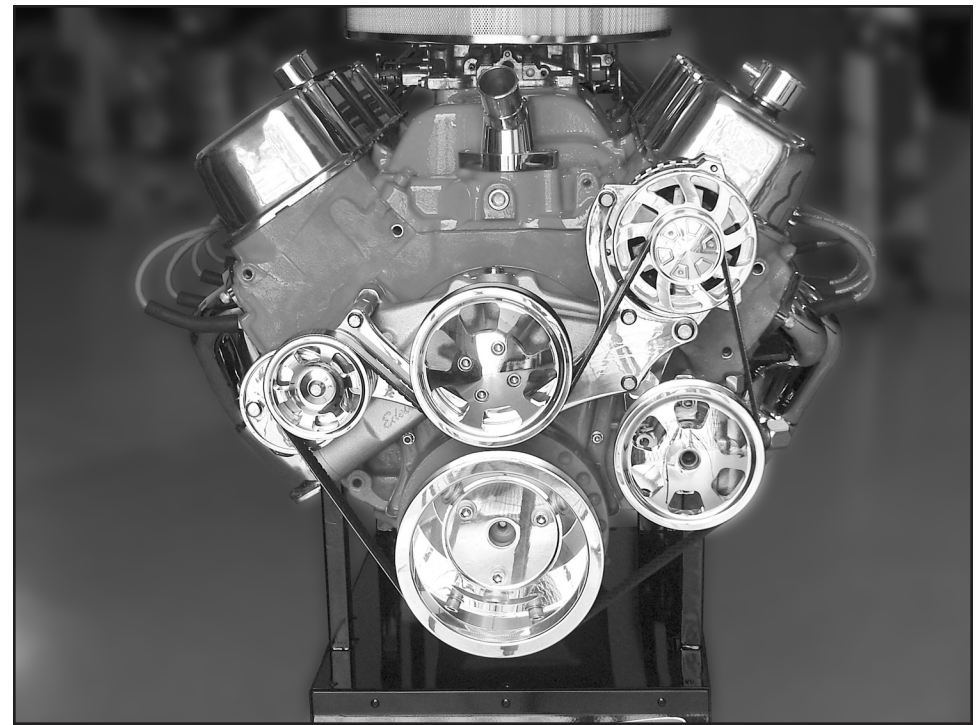




**Figure 15: Install Serpentine Belt**

With a 5/8" six-point socket or six-point box wrench, turn the belt tensioner release nut clockwise to unload the spring.

Slip the belt over the tensioner into the belt groove.



**Figure 16: Completed Tru Trac**

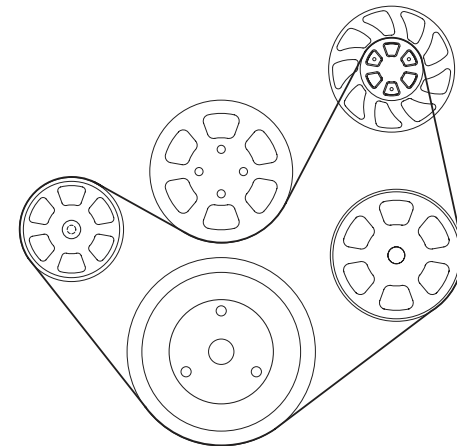


Illustration: Serpentine Belt Path with Power Steering





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