

# TRU Track

## 348/409 CHEVROLET

Installation Manual  
For Systems without A/C  
#14405 / #14425



**BilletSpecialties**

**Billet Specialties, Inc.**

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# PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLING ANY COMPONENTS OF THE TRU TRAC SERPENTINE SYSTEM

Tech Line: 708.588.0505  
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 www.billetpecialties.com

## Prepping The Block

- Disconnect the battery
- Remove the existing alternator, air conditioning compressor and associated brackets
- Remove pulleys and water pump
- Remove all traces of gasket and sealer with a gasket scraper and Scotch Brite® pad.
- Clean the water pump mounting threads with a 3/8-16 thread chaser.

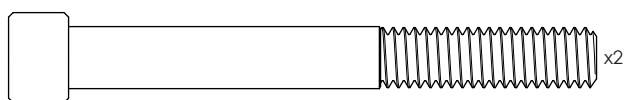
### Included Serpentine Belt

With P/S	Goodyear	6-Rib Poly-V Serpentine	Length: 53.75"	#4060537
Without P/S	Goodyear	6-Rib Poly-V Serpentine	Length: 51.0"	#4060510

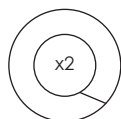
### TECH TIP:

Billet Specialties recommends the use of Anti-Seize on all fasteners to prevent thread lock-up.

### Packaged With Power Steering Pump



5/16-18 x 2-3/4" Socket Head Cap Screw

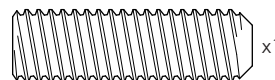


5/16" Lock Washer

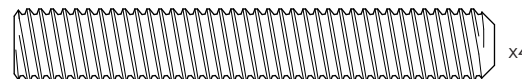
## Required Tools & Materials

- Anti-seize Compound
- Loctite 272 Thread Locker
- Permatex Hylomar® Gasket Dressing
- RTV Silicone
- 3/16" Hex Key
- 7/32" Hex Key
- 1/4" Hex Key
- 3/8" Hex Key
- 5/8" Combination Wrench
- 9/16" Combination Wrench
- 3/4" Combination Wrench
- Gasket Scraper
- Scotch Brite® Pad
- Socket Wrench & Extension
- 10mm 12pt. Socket
- 12mm 12pt. Socket
- 3/8" 12pt. Socket

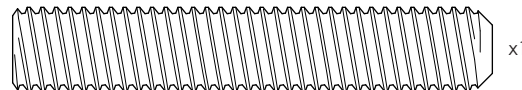
### Packaged With Water Pump



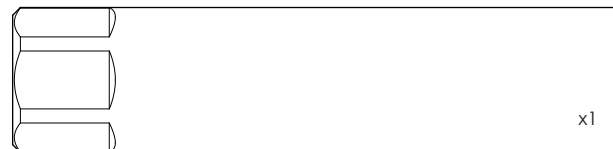
3/8-16 x 1-1/4" Socket Set Screw



3/8-16 x 2-1/2" Socket Set Screw



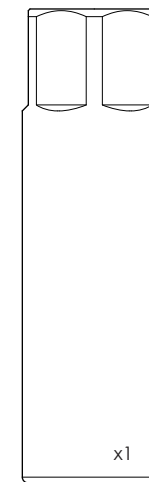
7/16-14 x 2-1/2" Block Mounting Stud



Stainless Stand-Off - 3.214"

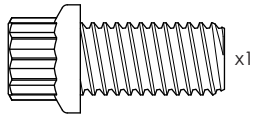


Aluminum Stand-off - 3.520"

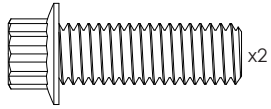


Stainless Stand-off - 2.470"

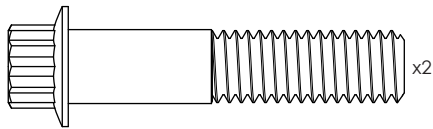
**Packaged In Main Box**



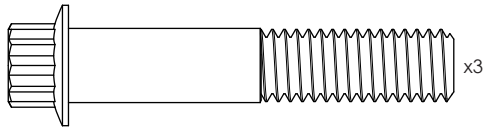
3/8-16 x 3/4" 12-point Cap Screw



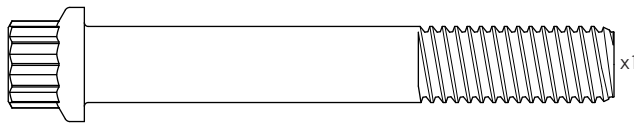
8mm-1.25 x 25mm 12-point Cap Screw



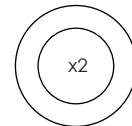
3/8-16 x 1-3/4" 12-point Cap Screw



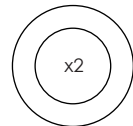
3/8-16 x 2" 12-point Cap Screw



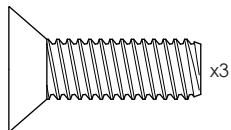
10mm-1.5 x 70mm 12-point Cap Screw



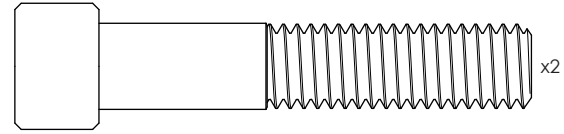
10mm x 16mm Shim Washer



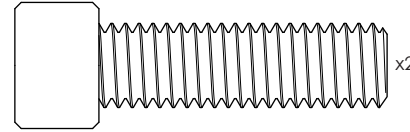
10mm x 16mm Shim Washer



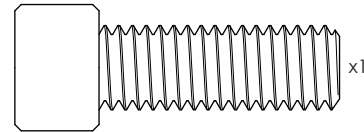
5/16-18 x 1" Flat Head Cap Screw



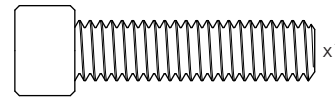
7/16-14 x 2-1/4" Socket Head Cap Screw With Power Steering



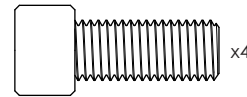
7/16-14 x 1-1/2" Socket Head Cap Screw Without Power Steering



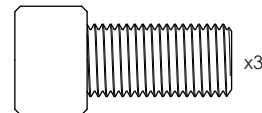
7/16-14 x 1-1/4" Socket Head Cap Screw



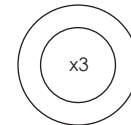
5/16-18 x 1-1/4" Socket Head Cap Screw



5/16-24 x 3/4" Socket Head Cap Screw



3/8-24 x 3/4" Socket Head Screw



3/8" Belleville Washer



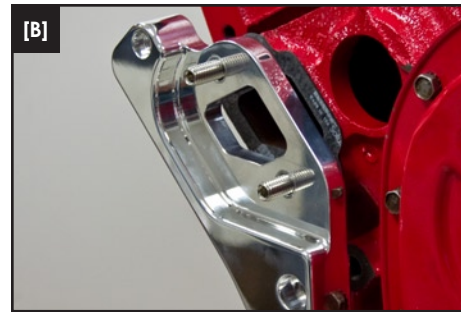
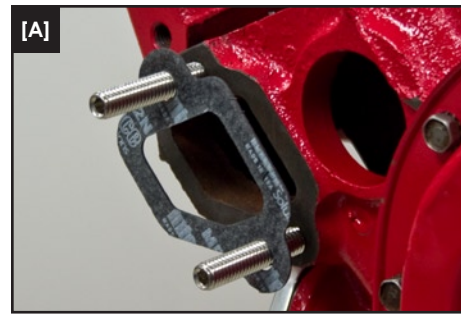
**Figure 1: Install Block Mounting Studs**

**[A]** Thread the 7/16-14 x 2-1/2" stud into the bottom passenger side of the engine block leaving 2" of thread exposed as shown.

**[B]** Thread the two 3/8-16 x 2-1/2" studs into the passenger side water pump holes.

**[C]** Apply RTV silicone to one of the last two 3/8-16 x 2-1/2" studs. Thread the stud with RTV silicone into the driver side bottom water pump hole. Now thread the last 3/8-16 x 2-1/2" stud into the driver side top water pump hole.

**Note:** All water pump studs should be installed finger tight. All but the driver side bottom stud (the one with RTV silicone) will be replaced with bolts later in the installation.



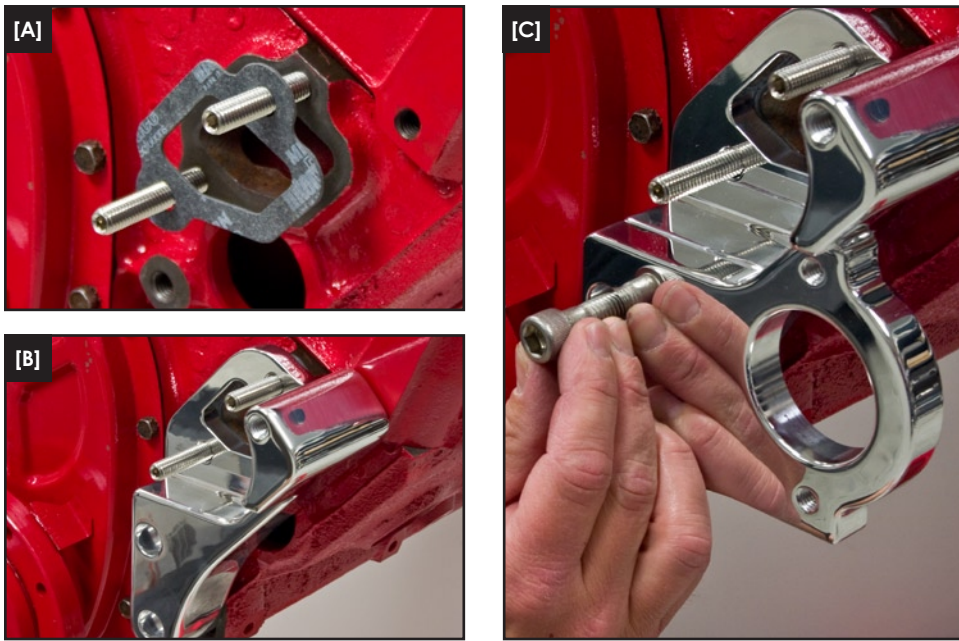
**Figure 2: Install Tensioner Bracket**

**[A]** Apply Permatex Hylomar® gasket dressing to both sides of one water pump gasket, place gasket over passenger side studs.

**[B]** Slide the tensioner bracket over the two water pump studs and the 7/16" stud installed in Figure 1 [A].

Apply anti-seize to the following:  
(1) 7/16-14 x 1-1/4" socket head cap screw

**[C]** Thread the 7/16-14 x 1-1/4" socket head cap screw through the tensioner bracket and into the block. Tighten firmly, 76 ft.lbs.



**Figure 3: Install Alternator Bracket**

**[A]** Apply Permatex Hylomar® gasket dressing to both sides of one water pump gasket, place gasket over driver side water pump studs.

**[B]** Slide the alternator bracket over the two studs.

**With Power Steering**

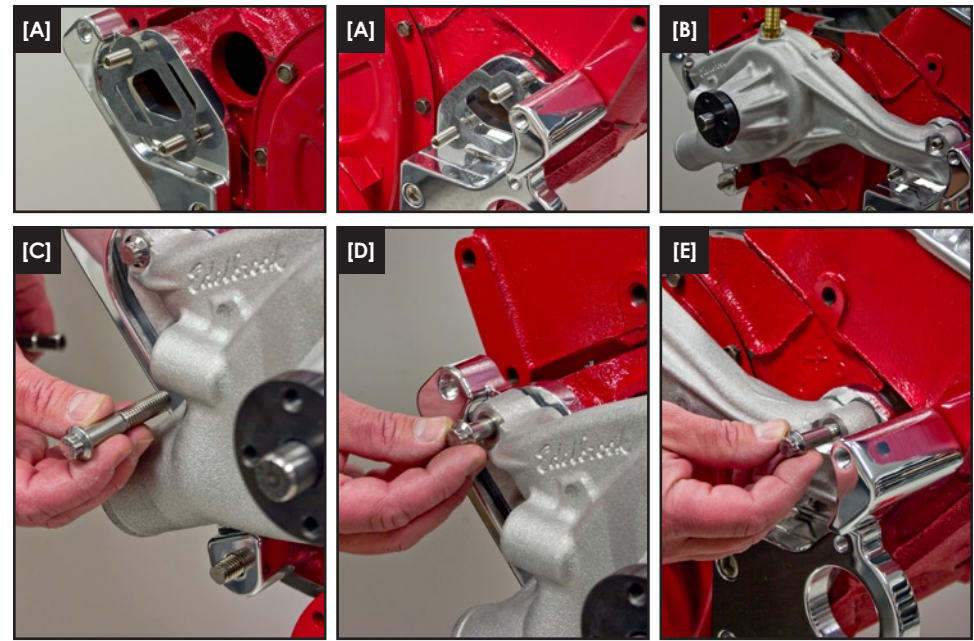
Apply anti-seize to the following  
(2) 7/16-14 x 2-1/4" socket head cap screws

**[C]** Place the power steering bracket on the alternator bracket as shown and thread the two 7/16" socket head cap screws through the power steering bracket, alternator bracket and into engine block. Tighten firmly.

**Without Power Steering**

Apply anti-seize to the following:  
(2) 7/16-14 x 1-1/2" socket head cap screws

Thread 7/16-14 x 1-1/2" socket head cap screws through the alternator bracket and into engine block. Tighten firmly, 76 ft.lbs.



**Figure 4: Install Water Pump**

**[A]** Apply Permatex Hylomar® gasket dressing to both sides of the remaining water pump gaskets and install gaskets over studs.

**[B]** Slide water pump over studs into place.

Apply RTV silicone to the following  
(3) 3/8-16 x 2" ARP 12-point cap screws

**[C]** Remove the passenger side bottom water pump stud and replace with one of the 12-point screws and finger tighten.

**[D]** Remove the passenger side top water pump stud and replace with one of the 12-point screws and finger tighten.

**[E]** Remove the driver side top water pump stud and replace with the final 12-point screw.

Tighten all fasteners firmly, 36 ft.lbs.

**Note:** Now is a good time to install the 1/2" barbed heater hose fitting on the water pump (not included with kit).



**Figure 5: Install Stand-offs & Tensioner**

Apply anti-seize to the following:

- (1) 5/16-18 x 1-1/4" socket head cap screw
- Exposed threads of the two block mounting studs

**[A]** Install the longer (3.214") stand-off to the driver side water pump stud and tighten firmly.

**[B]** Install the shorter (2.470") stand-off to the lower passenger side bracket and tighten firmly.

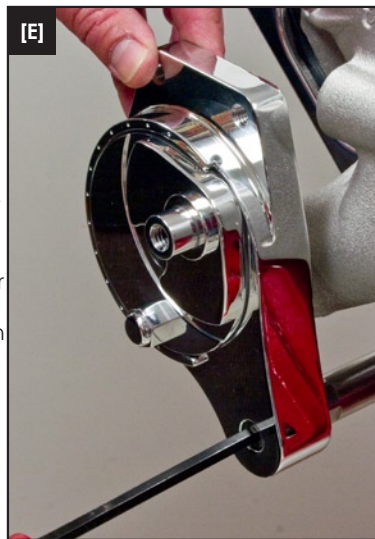
Apply anti-seize to the following:

- (1) 3/8-16 x 1-1/4" socket set screw

**[C]** Install the polished billet (3.520") stand-off to the top hole of the passenger side bracket by first threading half the length of the 3/8-16 x 1-1/4" socket set screw into the stand-off.

**[D]** Thread the polished billet stand-off with 3/8-16 socket set screw into the passenger side bracket. Tighten firmly.

**[E]** Attach the tensioner assembly to the lower passenger side standoff with the 5/16-18 x 1-1/4" socket head cap screw. Tighten firmly enough to allow tensioner to remain upright in the proper position on its own.



**Figure 6: Install Bridge Bracket**

Apply anti-seize to the following:

- (3) 5/16-18 x 1" flat head cap screws
- (1) 8mm-1.25 x 25mm ARP 12-point cap screw

**[A]** Place the bridge bracket on motor and install the bottom driver side flathead screw through the bridge bracket and into the stand-off, finger tighten.

**[B]** Follow by aligning the bridge bracket with the tensioner housing and install the remaining two 5/16-18 x 1" flat head screws, finger tighten.

**[C]** Finish by threading the 8mm-1.25 x 25mm ARP 12-point cap screw through the bridge bracket and into the polished billet standoff as shown.



**Figure 7: Install Alternator**

Apply anti-seize to the following:

- (1) 10mm-1.5 x 70mm ARP 12-point cap screw
- (1) 8mm-1.25 x 25mm ARP 12-point cap screw

Place alternator between the alternator bracket and bridge bracket aligning the bottom bridge bracket hole with the lower alternator boss.

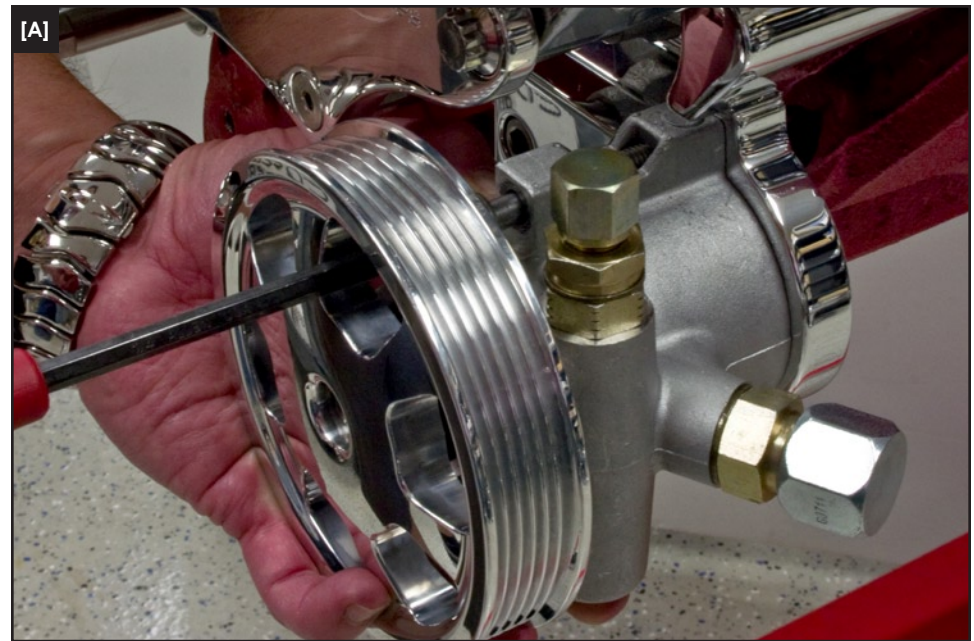
**[A]** Thread the 10mm-1.5 x 70mm ARP 12-point cap screw through the bridge bracket, alternator and into the alternator bracket.

**[B]** Thread the 8mm-1.25 x 25mm ARP 12-point cap screw through the bridge bracket and into the top alternator boss.

**Tighten fasteners at this time** including the three 5/16" flat head screws, the polished billet stand-off, and ARP 12-point cap screw, leave lower alternator bolt loose and check if shim washers are needed\*.

**\*Note:** The alternator mounting boss may vary in thickness due to the polishing process. 10mm shim washers are provided to shim alternator to bridge bracket; washers may or may not be needed.

Tighten lower alternator bolt after inspection.



**Figure 8: Install Power Steering Pump**

For kits without power steering continue to Figure 11.

Apply anti-seize to the following:

- (2) 5/16-18 x 2-3/4" socket head cap screws

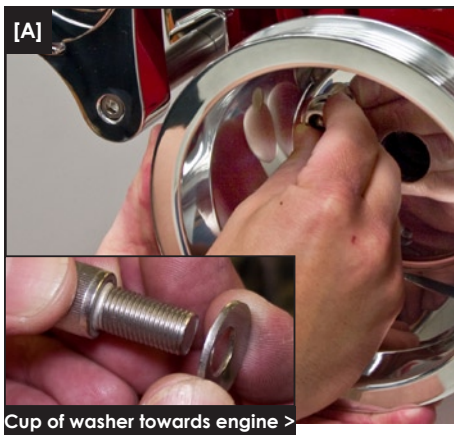
**[A]** Place power steering pump to bracket and thread the two 5/16-18 x 2-3/4" socket head screws with 5/16" split washers through the power steering pump bosses and into the power steering bracket and tighten firmly (26 ft/lbs).

### IMPORTANT

**DO NOT START MOTOR** until you have completely installed **ALL** power steering hoses, reservoir, and added power steering fluid to the system. A bleeding procedure sheet is included with this kit.

- Power steering fluid is the lubricant for the pump.
- **Serious Damage will occur to power steering pumps if they are run dry.**
- **Pumps that have been run dry are not warrantable.**

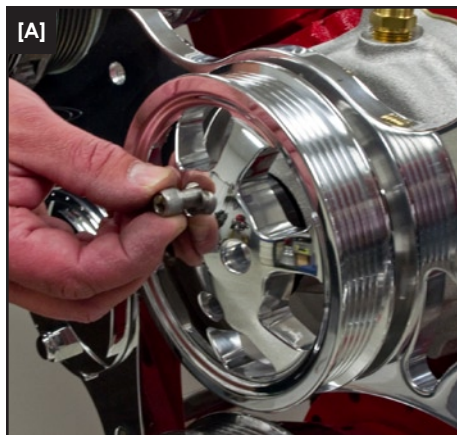
**NOTE:** Automatic Transmission Fluid (ATF) should never be used in place of a quality brand name power steering fluid.



**Figure 9: Install Crankshaft Pulley**

Apply Loctite to the following:  
 (3) 3/8-24 x 3/4" socket head cap screws

**[A]** Place the crank pulley on the damper, thread the three 3/8-24 x 3/4" socket head screws with bellville washers (cup facing pulley) through pulley and into damper, tighten firmly (46ft/lbs).



**Figure 10: Install Water Pump Pulley**

Apply Loctite to the following:  
 (4) 5/16-24 x 3/4" socket head cap screws

**[A]** Place water pump pulley on water pump shaft, thread the four 5/16-24 x 3/4" socket head cap screws through the pulley and into the water pump flange, tighten firmly (28 ft/lbs).

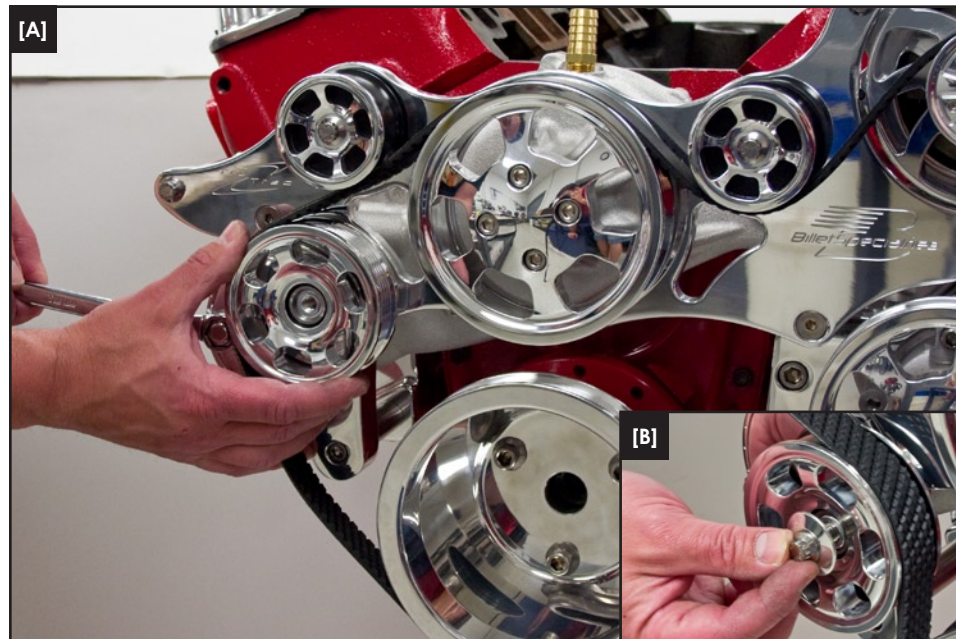


**Figure 11: Install Idler Pulleys**

Apply anti-seize to the following:  
 (3) 3/8-16 x 1-3/4" ARP 12-point cap screws

**[A]** Install the first pulley by threading the ARP 12-point cap screw through the pulley cover, pulley and boss into the bridge bracket, tighten firmly (46 ft/lbs).

**[B]** Install the second idler pulley by following the instructions described in step **[A]**.



**Figure 12: Install Tensioner Pulley & Belt**

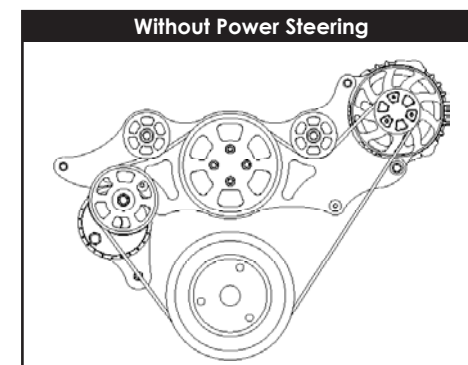
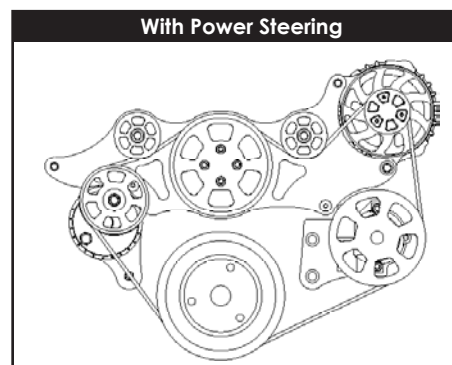
Route belt as shown below minus tensioner pulley.

Place a 5/8" box end wrench on tensioner, align belt onto groove of tensioner pulley.

**[A]** Pull box end up/clockwise until tensioner boss lines up with hole in tensioner pulley, slide pulley onto boss and slowly return wrench to starting position, applying tension to the belt.

Apply anti-seize to the following:  
 (1) 3/8-16 x 3/4" ARP 12-point cap screw

**[B]** Thread ARP 12pt. cap screw with aluminum washer onto tensioner boss and tighten firmly (46 ft/lbs.).





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