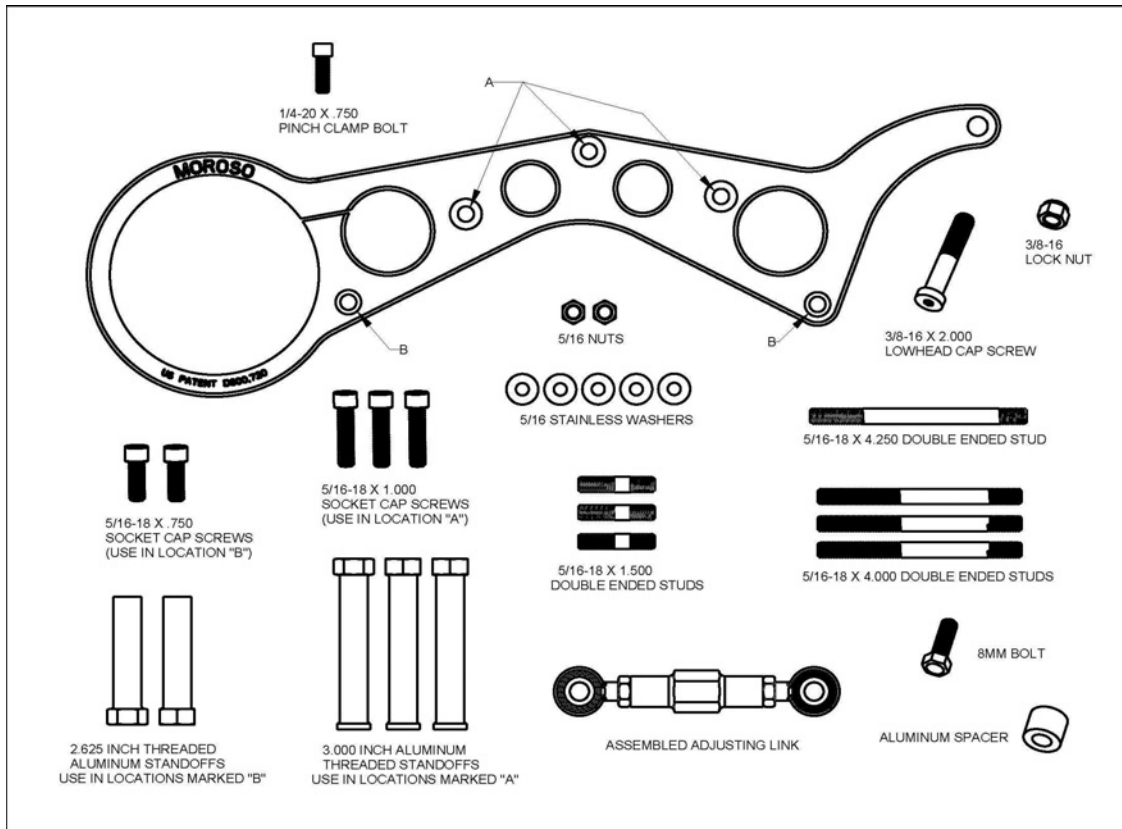


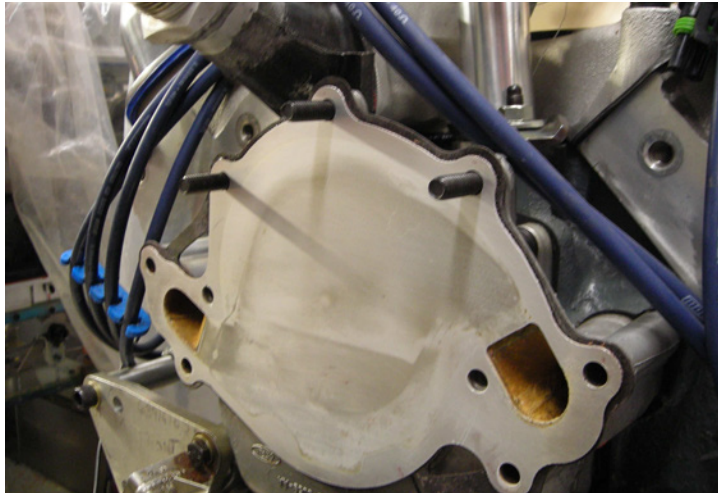


## 63824 Ford Combination Vacuum Pump/Alternator Mount

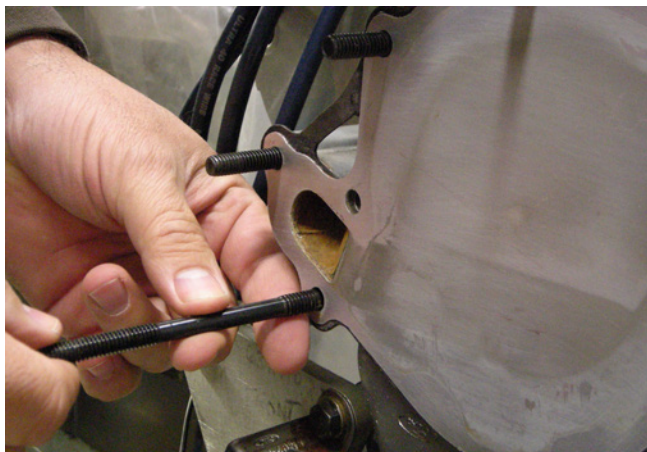
This kit is engineered to mount a Moroso enhanced style vacuum pump (22642) and a Nippon Denso 93MM alternator to a Ford small block engine equipped with the new design **C.S.R.** electric water pump. It will **not** work with other vacuum pumps, larger alternators or, engines equipped with aftermarket camshaft belt drives. Take a few moments to unpack the contents of the kit and familiarize yourself with its components, (refer to the Parts List illustration below). Read the instructions through completely before attempting installation.



To begin, you must remove the water pump and back plate. Clean all surfaces and replace gaskets if necessary. The original mounting bolts for the water pump are to be replaced with the long 5/16 studs found in your kit. Two 4.000" studs go on the passenger's side and one 4.000" stud goes on the upper water pump mounting location on the driver's side. The 4.250" long stud goes on the lower, driver's side mounting location. The three 1.500" studs go into the factory timing cover, above the pump. All studs go in short threads toward the motor, longer threads facing out. A removable locking compound such as Loctite 242 can be used on these threads where they go into the block / timing cover.

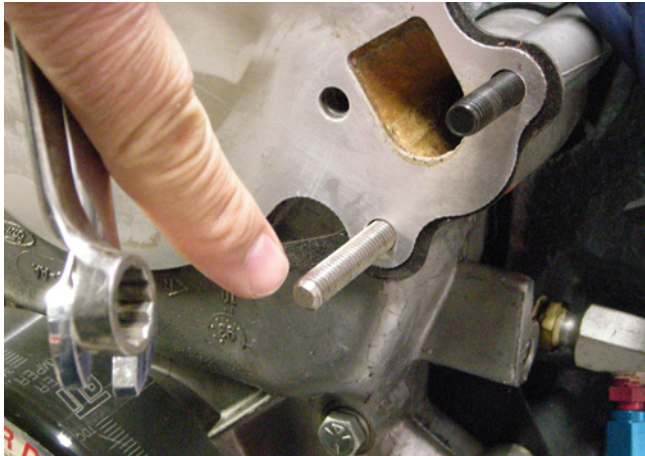


Water pump removed and gasket surface cleaned.  
Short, 1.500" studs installed in top three bolt locations.

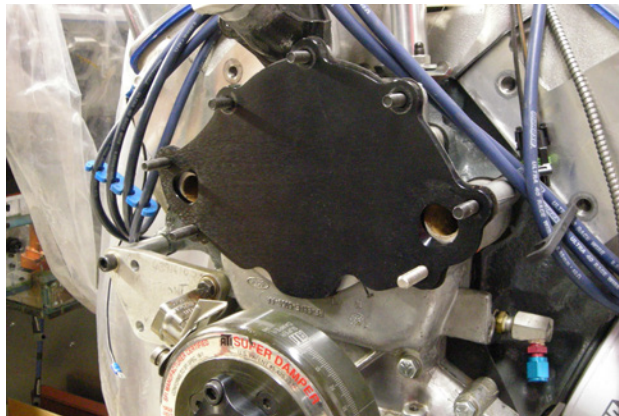


Long studs shown being installed in the water pump mounting holes, short threads in.  
Studs can be tightened by using the double-nut method

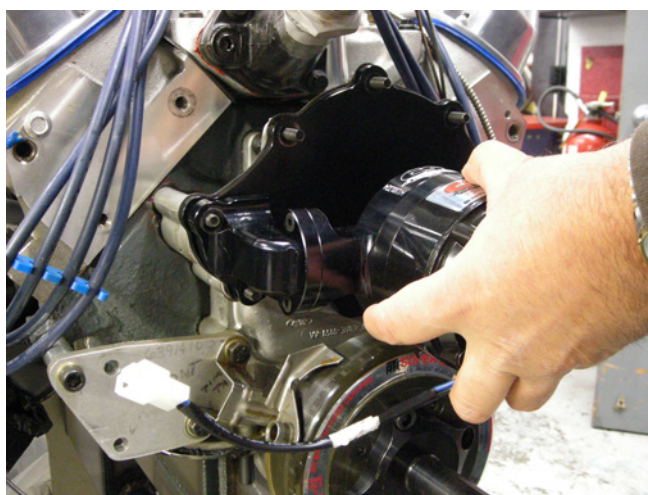




Longest stud (4.250") goes in here, lower driver's side.

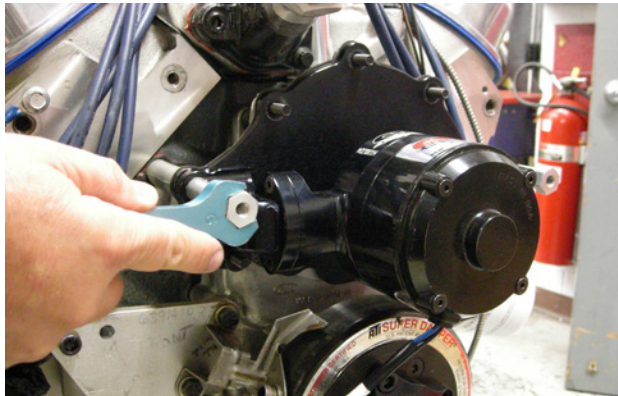


The plate can now be installed with a new gasket



Mount the pump over the studs.

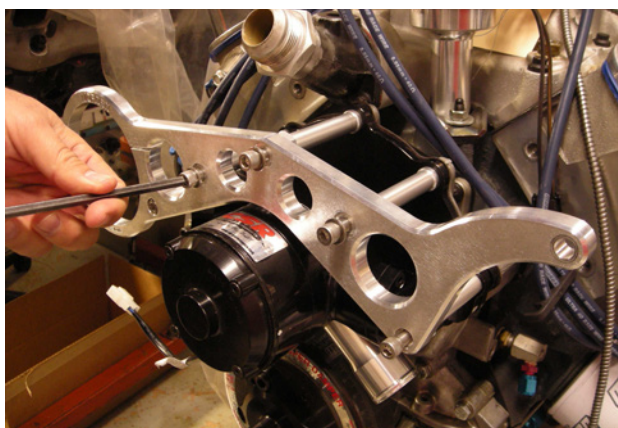




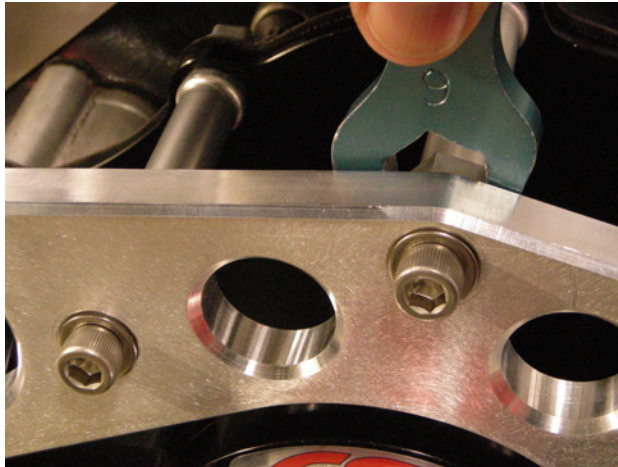
Using two 2.625" Threaded Aluminum Standoffs, fasten the pump through its two upper mounting holes on either side. The lower, passenger's side takes a 5/16" nut and washer. Leave the lower, driver's side unfastened for now.



Fasten the top of the plate using three 3.000" Threaded Aluminum Standoffs as shown above. Leave them hand-tight at this time.

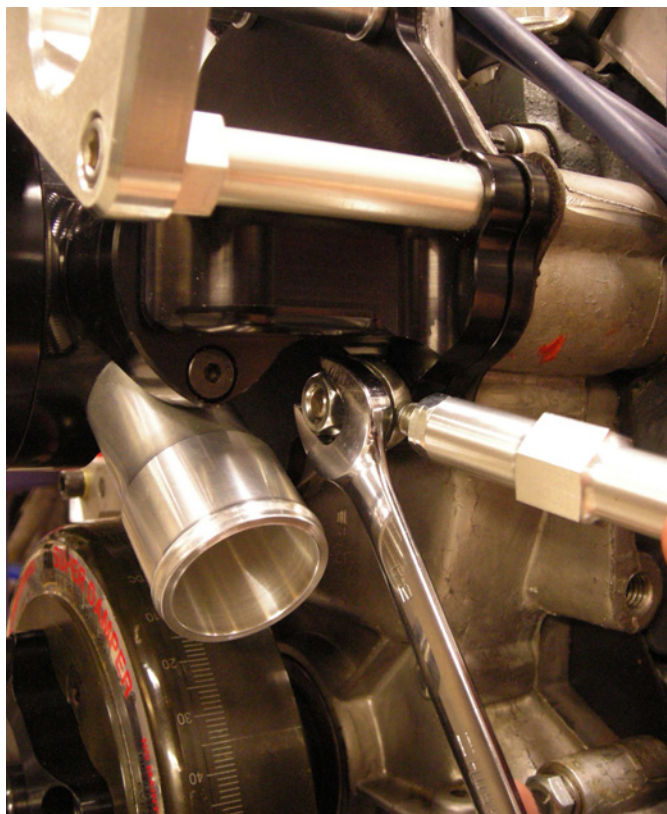


The main bracket can be installed now. Three 1.000" long 5/16 socket cap screws and stainless washers are used in the top three locations shown above. For the two outermost locations, use the .750" long socket cap screws in the counter-bored holes.

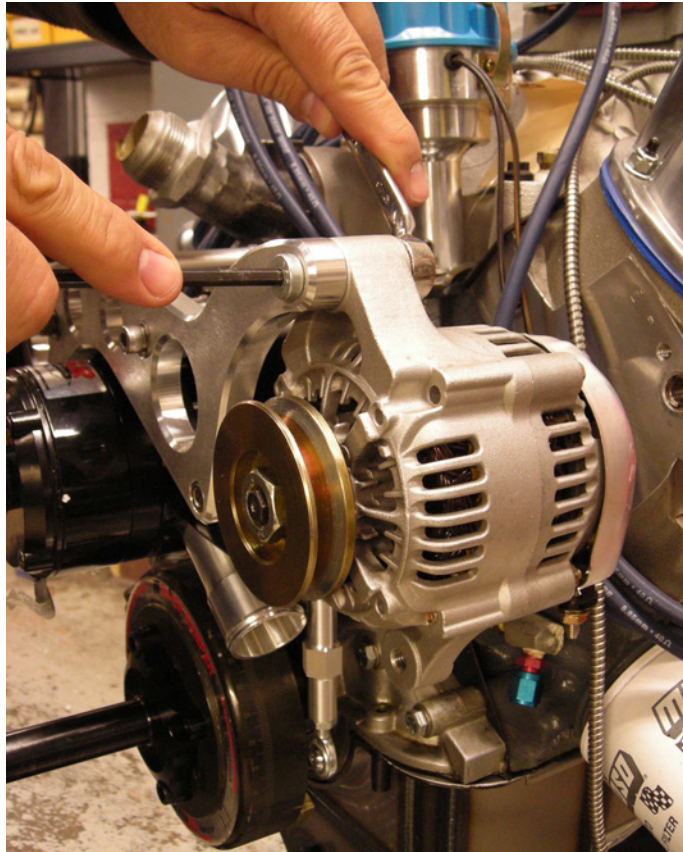


Tighten up all five standoffs at this time, followed this by tightening up the five socket cap screws holding the plate on.

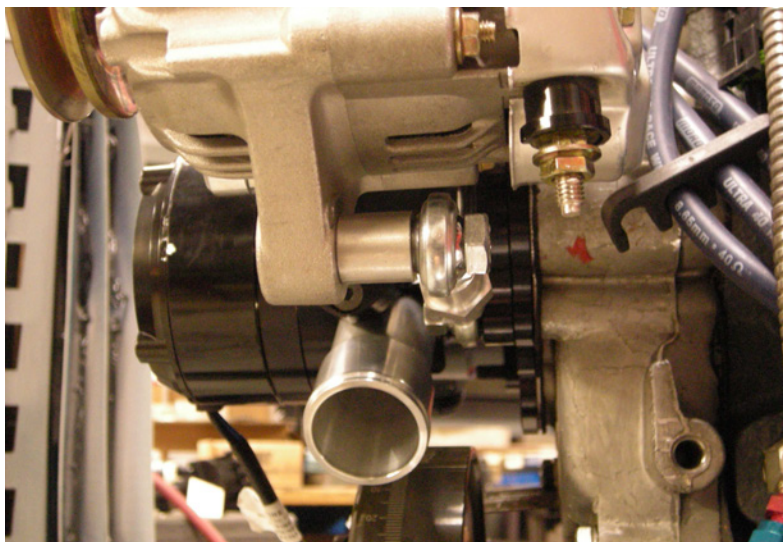
Assemble the alternator-adjusting link, as shown in the parts diagram, taking note of the left-hand threads in one end. Place one end of the link over the lower water pump mounting stud on the driver's side. Fasten the link with a 5/16 nut.

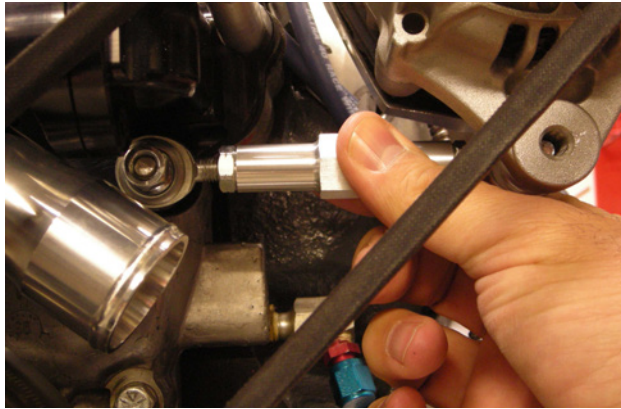




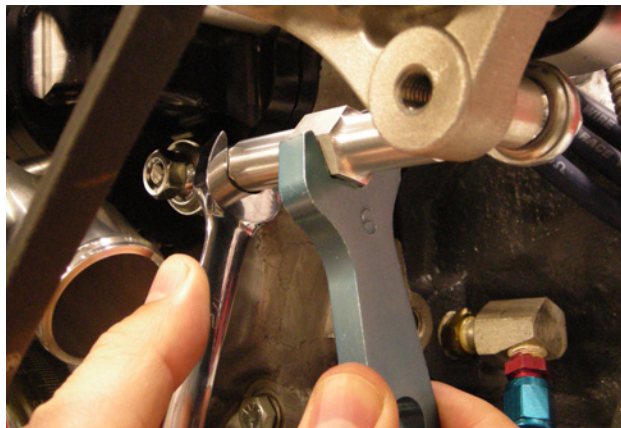


**Mounting the Alternator.** Using the 3/8 cap screw and lock nut, hang the alternator from the large mounting foot to the uppermost hole in the bracket. Attach the free end of the adjusting link to the lower lug on the alternator using the 8MM bolt and aluminum spacer.

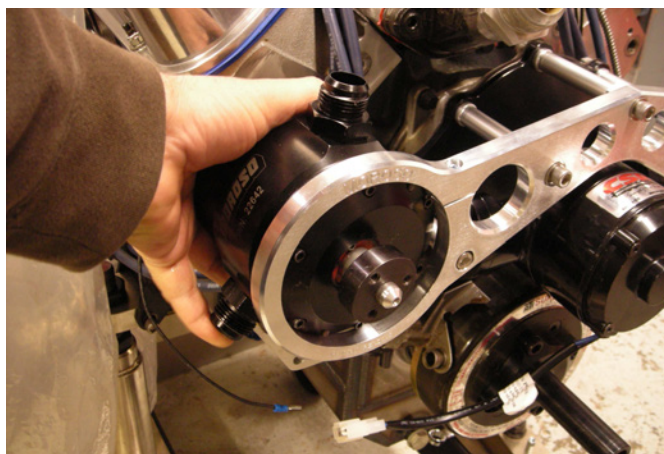




Turn the adjuster to its shortest length. Using a 4.000" V-belt drive pulley (Moroso part 23523) and the original alternator pulley, install a 4L320, (1/2" X 32") belt. Adjust the link for proper belt tension and tighten both jam nuts.



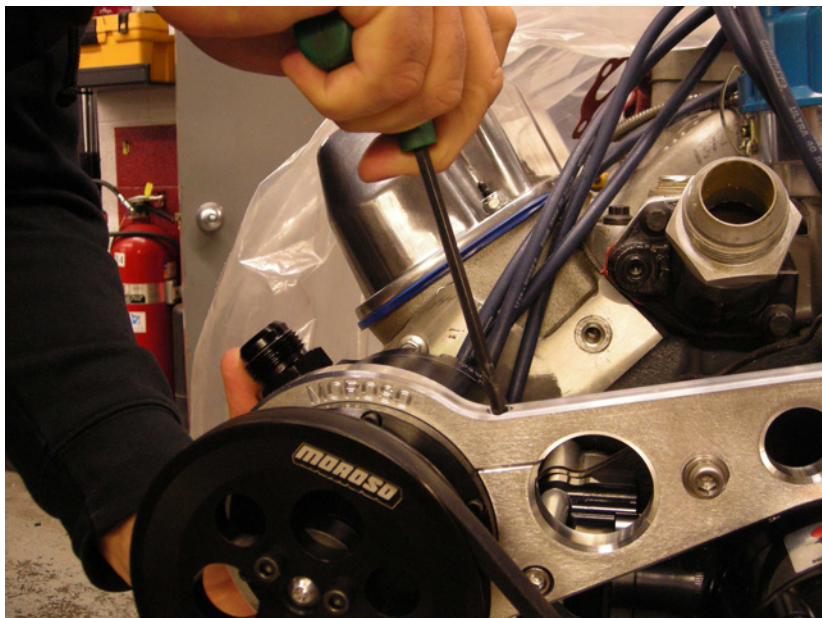
**Mounting the Vacuum Pump.** Insert the vacuum pump through the back of the plate. The pump should go into the plate with only a slight press and should rotate with minor effort without the pinch clamp bolt.





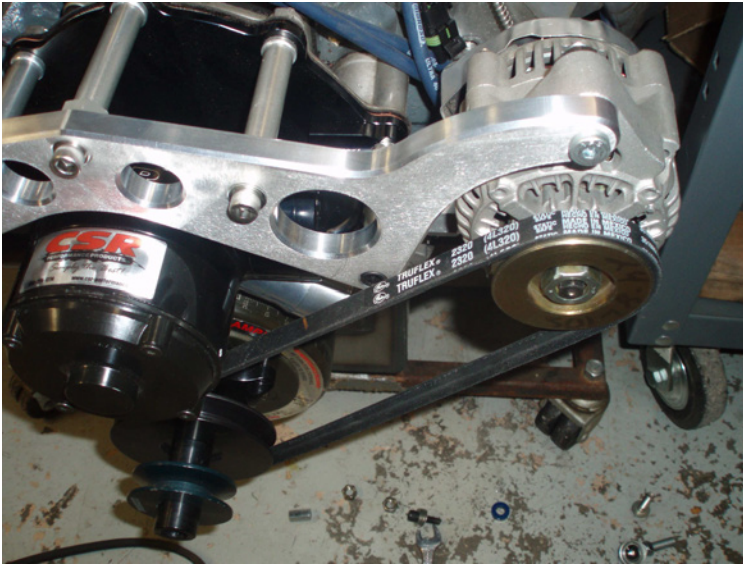


Install the vacuum pump pulley (Moroso part 64885 or 64887). Belt tensioning is accomplished by rotating the pump. Using the recommended 2 ½" drive pulley, a 5" pump pulley, and a 4L320, (1/2" X 32"), V-belt, correct tension will occur with the inlet and outlet ports at 7:00 and 11:00 o'clock on the pump. Complete the installation by tightening up the ¼-20 pinch-clamp cap screw. Use anti-seize compound on the threads.



At this point, check the belt alignment on both the vacuum pump and the alternator. Adjustments of ¼" or more can be made by swapping the position of spacers on the drive mandrel. Minor adjustments can be accomplished by moving the vacuum pump within the bracket.





## NOTES.

- Double check belt alignment before starting motor.
- Make certain that all standoffs and cap screws are tight.
- Use a removable locking compound on all studs where they enter the engine block or timing cover
- It is recommended that an anti-seize compound be used on all aluminum threads.
- Do not attempt to install larger / heavier alternators in this bracket.
- Re-check all bolts & standoffs after motor has been run.