

BELT ADJUSTING TIPS:

NOTE: Due to the limited adjustment range of the belt when the Alternator is put between the valve covers and the intake manifold, you may have to do one or both of the following steps to get a belt to adjust properly.

- If the belts you try are too short on the pulleys, but the next size is too long, try a narrower belt first. If that does not work, proceed to the next step.
- Take the top bolt out of the Alternator that holds the adjustment arm to the Alternator. Slip the belt over the crank pulley FIRST, then over the water pump pulley, and then into the Alternator pulley, then pull the unit up to where you can put in the bolt for the adjusting arm and snug up. Then proceed to use the adjusting arm as normal to get the proper tension. This works well for use when there are no alternate belt lengths or widths to try, but are close to one of them so adjustment can be achieved.

TROUBLE SHOOTING:

If the brackets are **NOT** aligning properly to the belt groove in the pulleys, check to see that:

- The water pump pulley is aligned with the crank pulley, since there are variations on the water pump flange spacing. If this is not correct, you will either have to push or pull the flange to align, or change the pulley to get the proper alignment.
- The intake manifold to bracket thickness is 3/4" or as close as possible (plus or minus 1/16").
- The adjusting plate is set at the 1 3/4" distance. Too far out will push the bracket alignment up; too much will pull the bracket down and can also cause the bracket to rotate a little and cause misalignment on the horizontal plane.

NOTICE

TO PROTECT & PRESERVE YOUR BLACK POWDER PAINTED OR CHROME PLATED BRACKETS' FINISH, BE SURE AND APPLY A GOOD QUALITY WAX SUCH AS CARNAUBA, AS NEEDED.



INSTALLATION INSTRUCTIONS

**916-67924
401 / 402 / 403**

Alternator bracket for the Big Block Chevy.

Bracket will work with Chevy Big Block 396 to 520 Engines with the
SHORT WATER PUMP ONLY

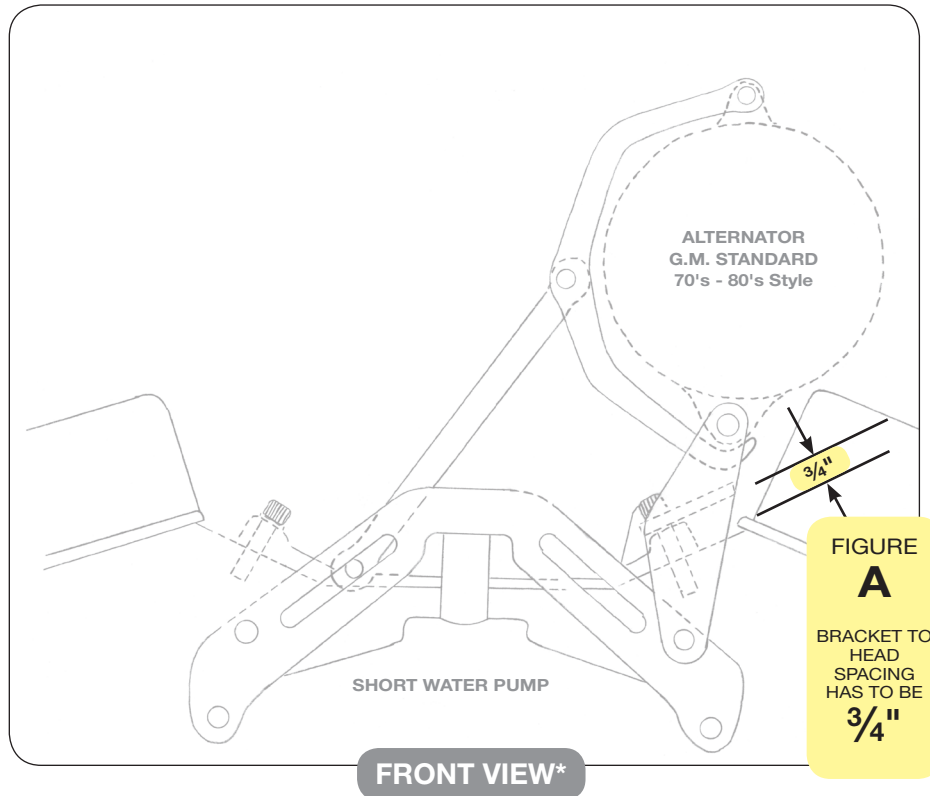
Positions the alternator unit over the intake manifold and just to the inside edge of the valve covers

Mounting is achieved using **ONLY** the water pump and intake manifold bolts

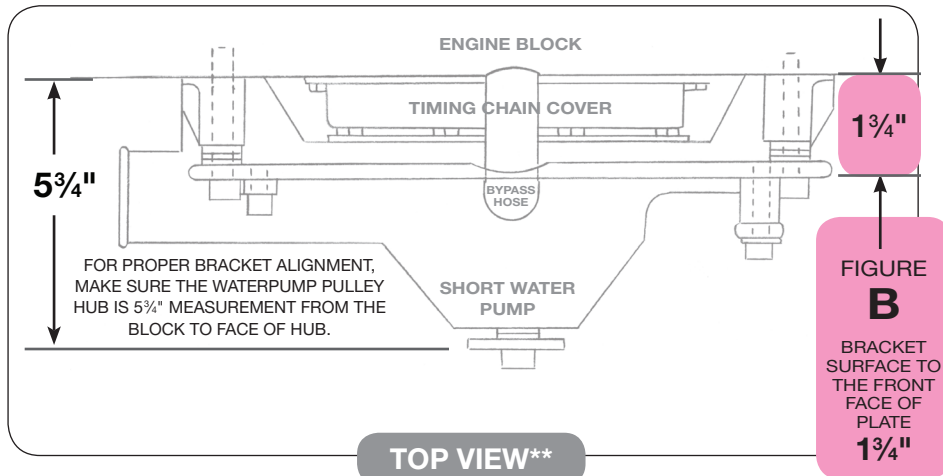
phone **800.979.0122** fax **800.736.3733**

340 Victory Lane • Lincoln, NE 68528

www.SpeedwayMotors.com



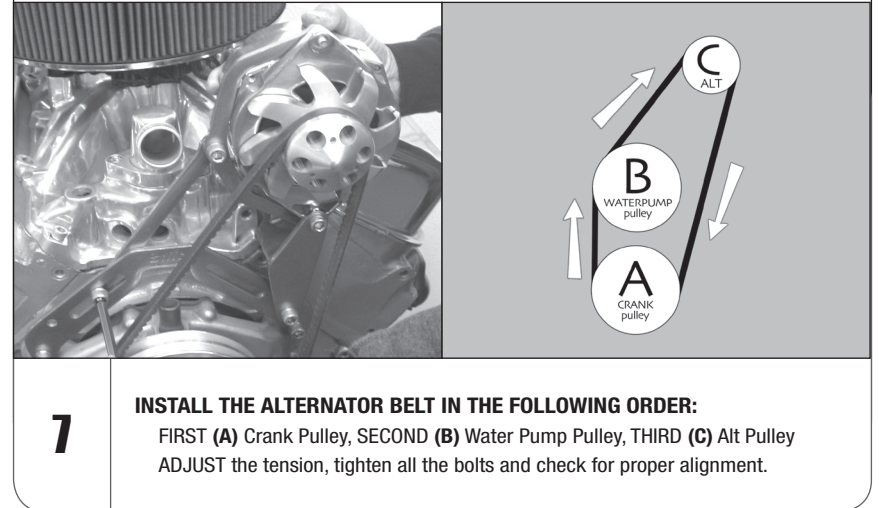
* VIEW LOOKING AT BRACKET FROM FRONT OF ENGINE COMPARTMENT

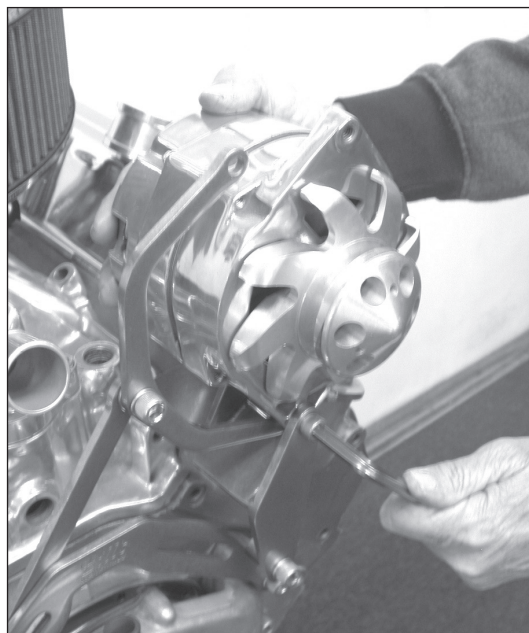


** VIEW LOOKING FROM ABOVE ENGINE COMPARTMENT DOWNWARD

ALTERNATOR BELT INSTALLATION

TRY GATES BELT # 7516 or 7520





6

MOUNT the Alternator to the bracket. Make sure the hook on the bottom of the C-Brace is under the alternator.

Next, BOLT the top of the C-Brace to the top of the alternator as shown below.



TO MAKE INSTALLATION EASIER, PLEASE READ ALL THE INSTRUCTIONS BEFORE INSTALLING THE BRACKETS

6 STEPS FOR EASY INSTALLATION:

• **TOOLS REQUIRED:** 1/4" Allen Wrench, 5/16" Allen Wrench

• **COMPONENTS NEEDED:**

- **ALTERNATOR** - Use a G.M. Alternator (70's-80's Style) Internal or External Regulator.

• **PRE-ASSEMBLED:**

The brackets come pre-assembled with all the bolts and spacers in the positions they will be in when installed on the engine. This, along with the drawings and photos to refer to, will make assembly easier.

When installing the bracket, leave all the bolts slightly loose until alignment of the belt, belt length and bracket positioning have been verified. If it looks good, go ahead and tighten the bolts and adjust the belt tension.

• **ALIGNMENT:**

For proper bracket alignment, there are 2 dimensions that must be as close as possible to the ones shown on the diagrams on page 2.

*First set the adjusting plate 1³/₄" from the block surface (at water pump base) to the front face of the plate, see **FIGURE B.***

*Second, the bracket to the head surface spacing is ³/₄" see **FIGURE A.***

• **WASHERS:**

All washers are ¹/₁₆" thick stainless steel washers, except for 2, which are ¹/₈" thick steel washers. Simply add or subtract as needed to achieve the required dimensions.

• **FINAL ASSEMBLY OF BRACKETS ON ENGINE:**

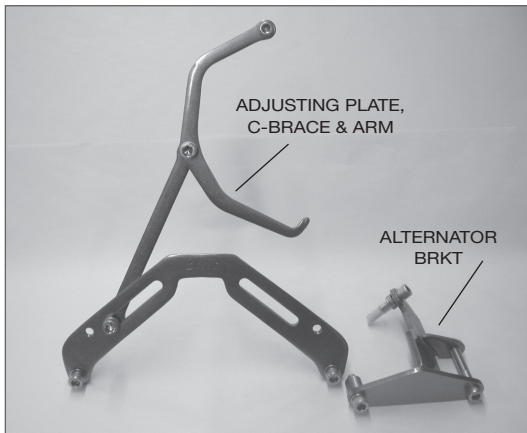
*Use **LOCTITE #242 (Blue)** on all bolts to prevent bolt loosening.*

PRE-PREP FOR INSTALLATION



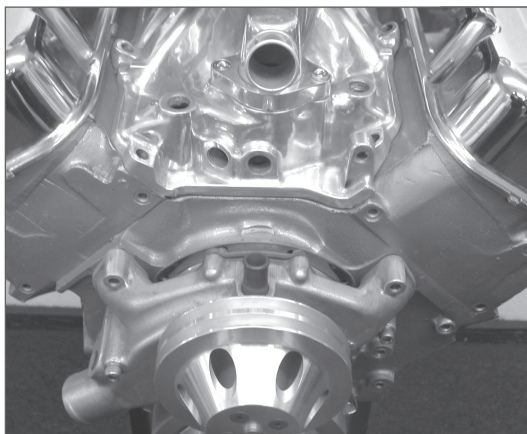
1

STRAIGHT OUT OF THE BOX you will find your brackets are PRE-ASSEMBLED and ready for you to be installed.



2

REMOVE the alternator bracket and set to the side, keeping the Adjusting Plate, C-Brace and Arm together, as shown in the photo.

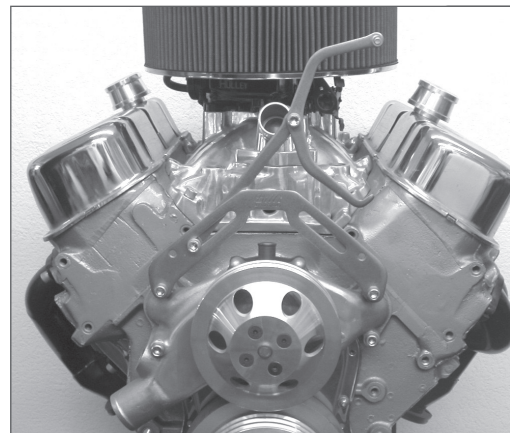


3

REMOVE the 2 upper water pump bolts.

REMOVE the left front (drivers side) intake manifold bolt.

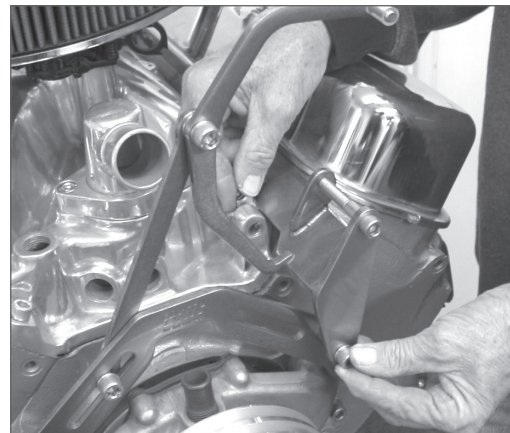
BRACKET INSTALLATION



4

INSTALL the Adjusting Plate Arm and C-Brace to the Water Pump with the bolts provided.

Be sure and achieve the required 1 3/4" Spacing. **FIGURE B** on the dimension diagram chart on page 2.



5

ATTACH the Alternator Bracket to the Adjusting Plate and add washes as needed to achieve the 3/4" total thickness needed from the manifold gasket surface to the bracket base.

FIGURE A on the dimension diagram chart on page 2.