## **GM Internal Alternator Installation on a T-Bird**

- 1. Remover battery ground cable from battery.
- 2. Remove generator and generator adjusting bracket. This original bracket will be used later.
- 3. Use alternator and pulley as supplied. Note: all items identified as new are included.

<u>DO NOT TIGHTED THESE NEW BOLTS AT THIS TIME.</u> Orient the new bracket with the squared corners closest to the engine and the hump up. See <u>PICTURE # 1.</u> Install 3 bolts, spacers, lock washers, and lock nuts as shown in **PICTURE # 2**, into the new bracket as follows:

- A. Install the new bracket using the left hole, closest to the engine, with the 5/16" x 2 ¼" bolt with lock washer, through the new bracket, then a ½" thick spacer, and through the new lower stabilizer support bracket and the original upper support bracket into the threaded hole in the original generator bracket. The lower and upper stabilizers bolt to the water pump, you will need to remove these existing bolts, then reinstall through the respective support brackets.
- B. Through the center new bracket hole, using the bolt  $7/16'' \times 2 \cdot 1/4''$ , then add a new  $\frac{1}{2}$ '' thick spacer. Use a new lock nut to hold all in place.
- C. Through the left hole in the new bracket insert the new 3/8" x 3 ¼" bolt, then the alternator. Use the new washer and lock nut to secure. See <u>PICTURES # 3 and 3a</u>. <u>NOTE:</u> Alternator electrical plug should be clocked to 9 o'clock.
- 4. Install the original adjusting arm, removed in step 2 above, using the new 3/8" x 1 ¼" bolt through the adjusting arm, then through the 3/16" thick spacer and through the unused right side front motor mount (center) hole. See <u>PICTURES #4 and 4a.</u> Use lock nut to secure. The slotted adjustment arm is attached to the back of the new alternator, from the backside with the bolt in the alternator threaded hole. See <u>PICTURES # 5 and 5a. Do Not Tighten.</u>
- 5. Install belt and tighten adjusting bolts. A tight belt is necessary to prevent slippage.
- 6. Wiring the new alternator as follows:
  - A. Install GM plug to alternator. Attach red wire to alternator output stud on rear of alternator.
  - B. Attach original (heavy) 'generator armature' wire from generator to the alternator output stud.
  - C. Next remove 'ARM' wire from regulator and attach to 'BAT' terminal of regulator for tie point.
  - D. Remove indicator light wire from 'ARM' terminal of the regulator and attach to the 'FLD' wire removed from regulator, and tape together. This wire then connects to the white wire on the alternator plug, tape these two wires together. Do not use 'ARM' or 'FLD' terminals for tie points on the original regulator.
  - E. The original wire from regulator ground to the generator can be attached to any bolt on the new alternator case. See <u>Diagram on last page of pictures for wiring.</u>
- 7. Reattach the battery ground.

## **GM INTERNAL ALTERNATOR INSTALLATION ON A T-BIRD**

PICTURE # 1.

NOTE: New bracket, squared corners mount closest to the engine and hump up.

Original stabilizer bracket-New stabilizer bracket • Left bolt and hardware — Center hole bolt and hardware '

Original generator bracket -

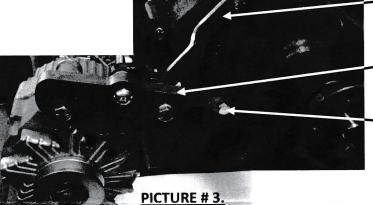
New bracket -

PICTURE # 2.

Original stabilizer to upper water pump bolt and hole.

New bracket with square corners closest to engine.

New lower stabilizer to lower water pump bolt and hole.

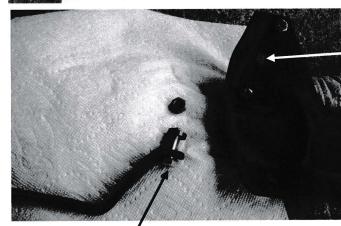


**Front View** 

PICTURE #3a **SIDE VIEW** 

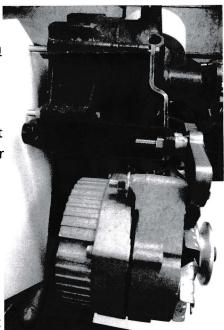
Motor mount removed from motor for clarity.

Use center hole.



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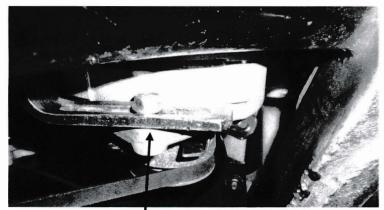
Original adjusting arm with bolt, 3/16" spacer, & nut





PICTURE # 4a.

View from front of original adjusting arm bolted to front motor mount.



PICTURE # 5.

Original adjusting arm bolt/nut on back side of motor mount.

PICTURE # 5a.

Original adjusting arm bolted through the backside of the adjusting arm and into alternator threaded hole. This is from under the car.

