

# FORD 6-G

The purpose of this modification is to allow the MOBI-ARC's PWM regulator to control the alternator. The Ford's original regulator/brush-holder module will be removed and replaced with a dummy regulator/brush-holder module. This will allow the alternator to be regulated externally by either the MOBI-ARC Control Unit, or by the external regulator provided with the BRUSHES ISOLATED BYPASS KIT. The Brushes Isolated Bypass Kit allows for regulation of the alternator without the control unit being present. Read through these pages before undertaking modification. People not mechanically inclined may choose to have a local alternator re-builder facilitate this modification.



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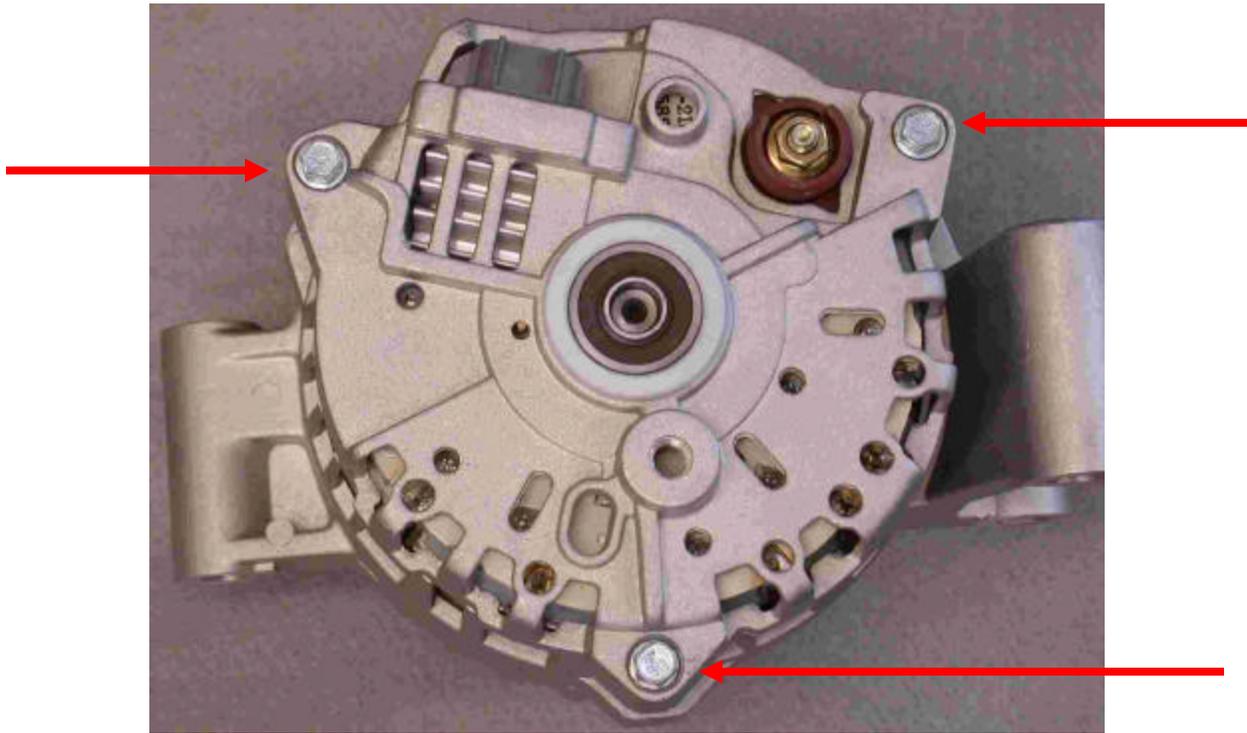
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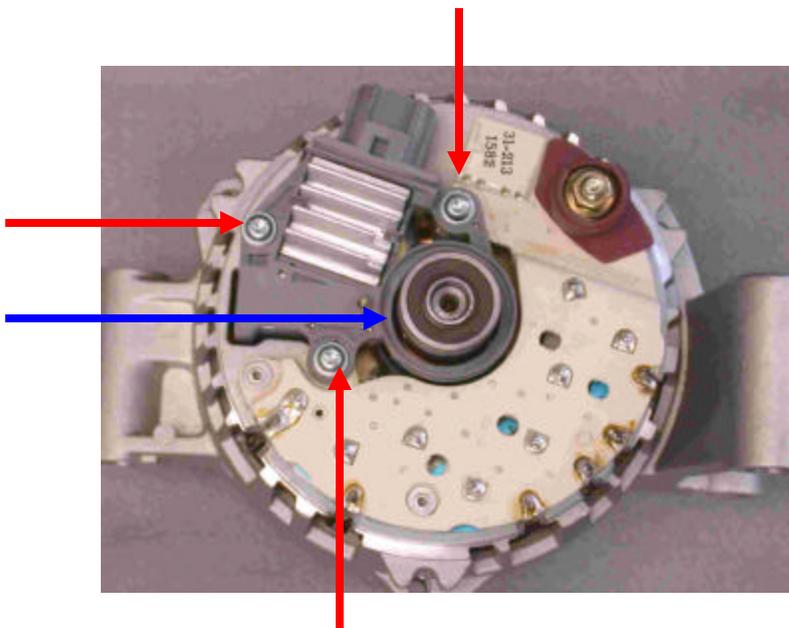
Dummy Regulator/Brush-holder



Original Voltage Regulator



With the alternator removed from the vehicle, remove the three (3) thru-bolts identified by the **arrows** above.

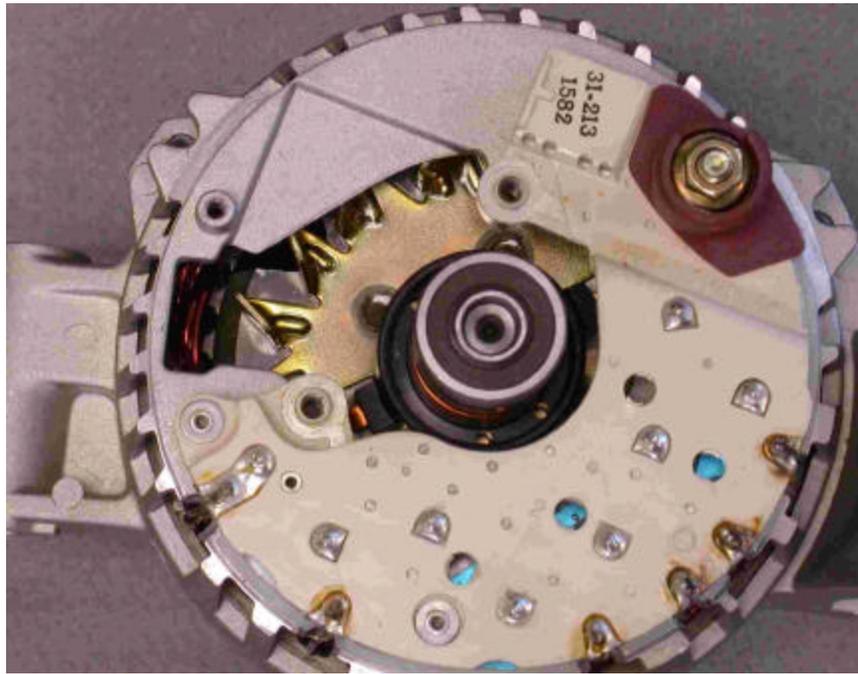


With a blade screw-driver, carefully pry the rear housing from the alternator. Be sure to apply equal pressure in the removal process; do not crack the rear housing or damage the bearing sleeve.

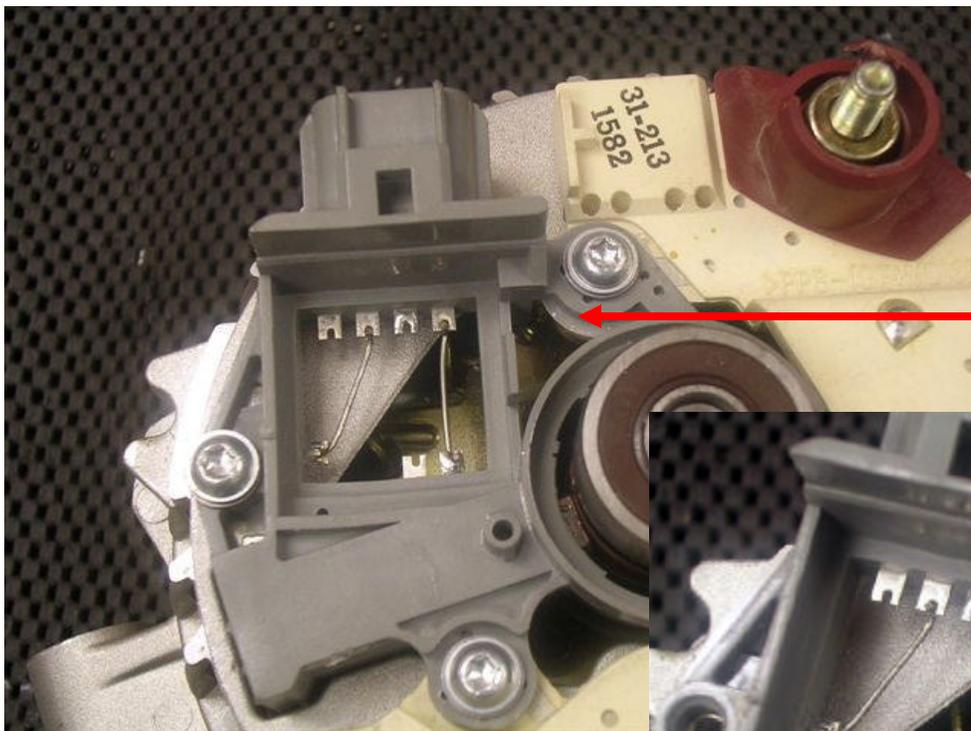
Once the rear housing is removed, the alternator will look like the picture to the left. The regulator is the grey plastic molded unit.

Use a T-20 Torx bit to remove the three (3) screws identified by the **red arrows** above. The regulator has two (2) spring-loaded brushes that compress against the slip-rings (location identified by the **blue arrow**). The brushes must be compressed slightly in order to slip past the bearing.

Remove the regulator. Once removed, the alternator will look like the picture on the following page.

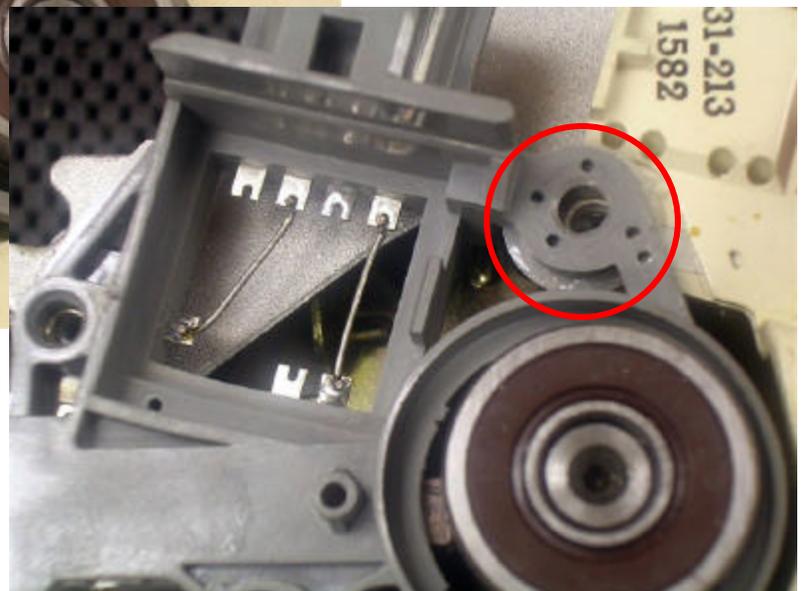


Regulator removed



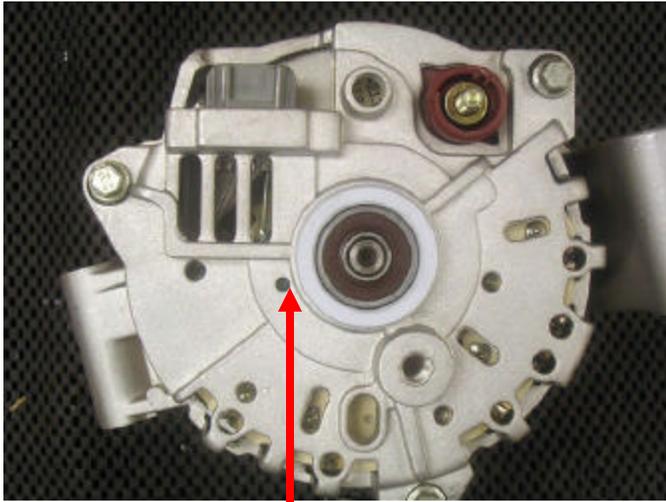
**Note:**

**Mylar washer sits here to insulate this connection.**

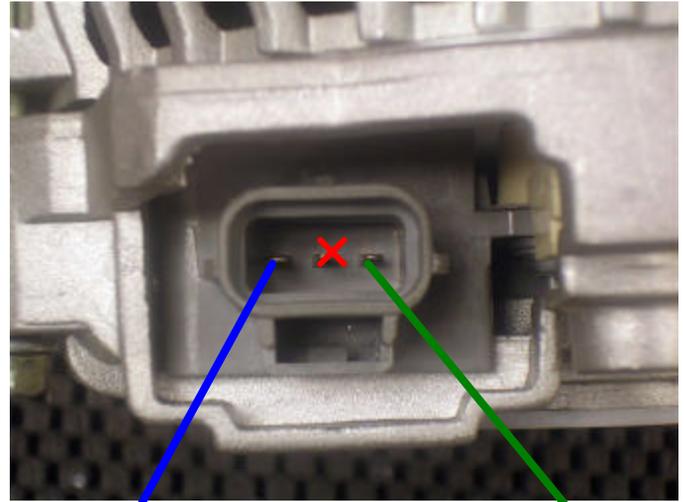


**Install modified 6-G regulator module provided by the manufacturer. Note that the brushes are spring loaded and held in position by a retention wire.**

**Replace three (3) Torx screws and tighten.**



Brush retention wire



Connect **BLUE** Wires through in-line fuse from the 10-pin wire harness.

Connect **GREEN** Wires through in-line fuse from the 10-pin wire harness.

Carefully align the rear bearing, battery output post, regulator harness, and brush retention wire. Be sure you can easily access the brush retention wire, as the wire will be removed as the final step in this procedure.

Once everything is lined up, replace the three (3) thru-bolts and tighten alternator smartly. Spin the alternator using the pulley and both listen and feel for any sort of conflict with moving parts. Lastly, remove the brush retention wire and give the alternator one last spin to verify no conflict with moving parts.

Modification is complete

Diagram #6020

NOTE: Not all wires from the 10-pin harness will be used.

