

## GENERATOR-TO-ALTERNATOR CONVERSION

Several articles and letters have appeared in Stress Cracks concerning the replacement of older TwinCam's Lucas generator with an alternator. (Ref. SC 2/73, 12/75, 1/76, 6/76; L/W Tech Manual OOMCO73) It is hoped that this article will be of assistance in making such a conversion. Although the original conversion was performed on a 1967 Lotus Cortina, the instructions should apply equally to the earlier Elans.

When the bearings in my generator failed, causing the armature to self destruct and the voltage regulator to fry, I became painfully aware of the cost of a rebuilt generator and a regulator: \$74.40 in total! This led me to undertake the conversion to a late-model Ford alternator and a negative ground electrical system. Although this sounds complicated it is actually very simple and quite worthwhile. The Parts required are:

Ford Alternator (preferably a '71-'73 Pinto 1600), used	\$20.00
Lower Alternator Bracket (Block Mount) '71-'73 Pinto 1600	\$ 7.50
Ford Voltage Regulator and Plug, used	\$ 4.00
Toyota Upper Adjusting Alternator Bracket*, Part #16381-24011	\$ 1.25
Gates Fanbelt #8351 or 31.2" x 3/8" x 38	\$ 3.50
	<u>\$36.25</u>

\* File adjustment slot to fit alternator bolt.

First, remove the stock generator, its brackets, the stock regulator, and fan belt. Install alternator and regulator. Next, it will be necessary to fabricate a wiring loom between the alternator and regulator, as shown in the schematic, below. Alternatively, buy an "alternator test lead kit" with snap in leads. Remember, that, unless you have the alternator converted to positive ground, this is now a negative ground system. You will have to modify several other items: Reverse leads to battery terminals, reverse wires on ammeter and ignition coil. Have tachometer polarity reversed and, if you have a radio, reverse the power leads. Your starter should work fine on negative ground.

