Alternator Conversion - by Frank Clarici

Items needed:
1 Mitsubitshi alternator
1 GM swoop alt. bracket
6" of 3/8 id steel pipe
3/8 X 8" bolt and nut
3/8 drill bit

This conversion allows the use of halogen headlamps, cd players, and ends your generator worries for good it also eliminates your Lucas voltage regulator. 2 hours is all the time it should take after you aquire all the needed items.

- 1st pick up a good used mitsubisi alternator from your local bone yard, be sure it has a vee belt pulley and not a drive belt pulley, the pulley should look like the one on your generator. Late 80s mazda or mitsubitshi.
- Next, while at the bone yard pick up an alternator bracket from a GM car or truck, it is curved, not straight like your generator bracket.
- Stop at a hardware store and pick up a 3/8 X 8 inch long bolt, nut, and lock washer. Also ask the clerk for a 3/8 ID X 6 inch long galvanized pipe nipple, and a new sharp 3/8 drill bit if you do not own one.
- Back at the Sprite, remove the generator and bracket from the front of the engine.
- Hold the alternator up into position and site the curved bracket for length, you may have to cut it down. Keep the slotted part towards the alternator, cut the other end where it bolts to the engine.
- Now you may have to drill a 3/8 hole in the bracket to fit your mounting point on the front of the engine, be sure your stock size fan belt will fit before you drill. Now drill out the 5/16 " hole on the waterpump ear to 3/8". Also drill out the rear mounting bracket hole to 3/8".
- Insert the 8" long bolt through the rear bracket into the alternator and through the waterpump ear. (this replaces the 2 5/16 " bolts from the gen.) do not put the nut on yet.
- With the long bolt in place measure the space between the rear bracket and the alt., cut a piece of pipe to take up the space, this is better then a lot of washers, next cut another piece of pipe to fit in between the alternator. Run the 3/8 drill bit through the pipes so that the bolt fits snug inside the pipe.
- Mount the alternator tighten the fan belt check clearance at the right shock it should be close but not touching it.

Now for the wiring

- The large wire from the generator now goes to the large lead of the alternator.
- The small (field) wire goes on one of the small terminals, this will be your indicator warning lamp wire.
- At the voltage regulator remove the wire from terminal (F) remove both wires from terminal (D) connect the smaller of the (D) wires to the wire from (F).
- Connect the larger of the (D) wires to the wires from terminals (A) and (A!) The only wire left on your regulator should be (E) the ground , it's not needed.
- Start up the car and check for smoke leaking out of your wiring harness, if no smoke you are successful.

You can remove your regulator or use it as a junction box for the new wiring . If you use it as a Junction box you will have to cut out the guts, just be sure that the large brown, brown with blue, and brown with yellow wires are connected together, and that the small brown with yellow is connected to the small brown with green (field to indicator lamp.)

If you do NOT agree with these ideas, if you are "mechanically challenged" or are just down right "stupid" I suggest you perchase New parts from a supplier of your choice and have a local shop do this work for you.
Frank Clarici (may be copied)