

Wiring Questions for a 62 Morris Mini –

I'm wondering if I need any more or any different parts.

I am doing a custom wiring of a 62 Morris Mini because I didn't want to return to a 2 or 4 fuse wiring harness. I suppose I should say sorry for making this decision, but it is a decision never-the-less that I've made, and have progressed with the wiring reasonably well, I think, up to the question(s) in this document. The challenge has been that the car was put together from parts, and may not be an exact 62 Morris Special as indicated by the information on the car body. The wiring was 50 years old, of course, and terribly deteriorated, to include painted over, and faded beyond recognition. I've used a couple wiring diagrams to make judgments about the original wiring of the car. I've gotten to the point involving the wiring of the Starter Switch/Solenoid to the starter and to the LRA100 Alternator GXE8211. I've tried to illustrate the wiring as I have presently planned it, and am wondering if I'm on the right path, or am I going to burn everything up? The car was positive ground, and I'm now going to have it negative ground. A new alternator is used in place of the positive ground generator, the positive ground radio is not being converted and a radio is not presently planned. Ammeter is not being used. Other original gauges and sending units will be used.

First, I'll ask a brief version of my question on this page. Then I've subsequently, via the rest of this document, tried to provide some diagrams and detailed explanations of the question as it applies to my custom wiring.

The question is: What is the purpose of each of the spades on the LRA 100 Alternator GXE8211?

Small top spade: alternator excitor?

Middle large spade: power to alternator?

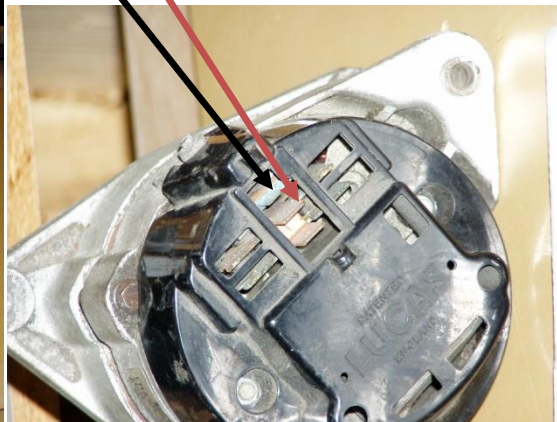
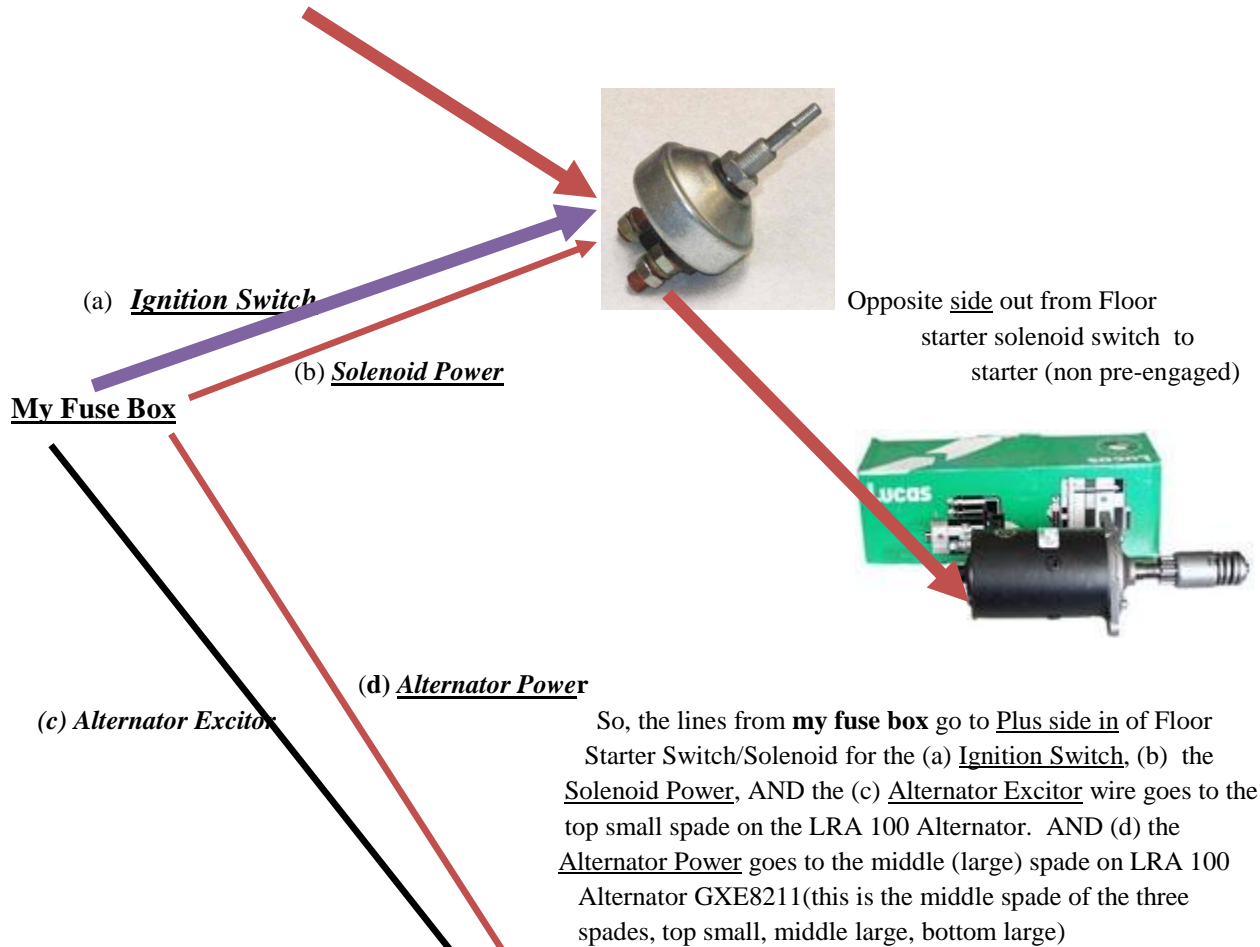
Bottom large spade: ????

In the following pages, I have identified the detail questions with the following format: **Q??**

See next page please.....



Positive battery terminal to **Pos side in** of Floor Starter/Solenoid switch, which looks like this..



Again, The top small spade I plan to use for the Alternator Excitor wire. And the middle spade I plan to use for the Alternator Power.

Q1: My plan for the top “small” spade is for the alternator excitor wire. Does this make sense?

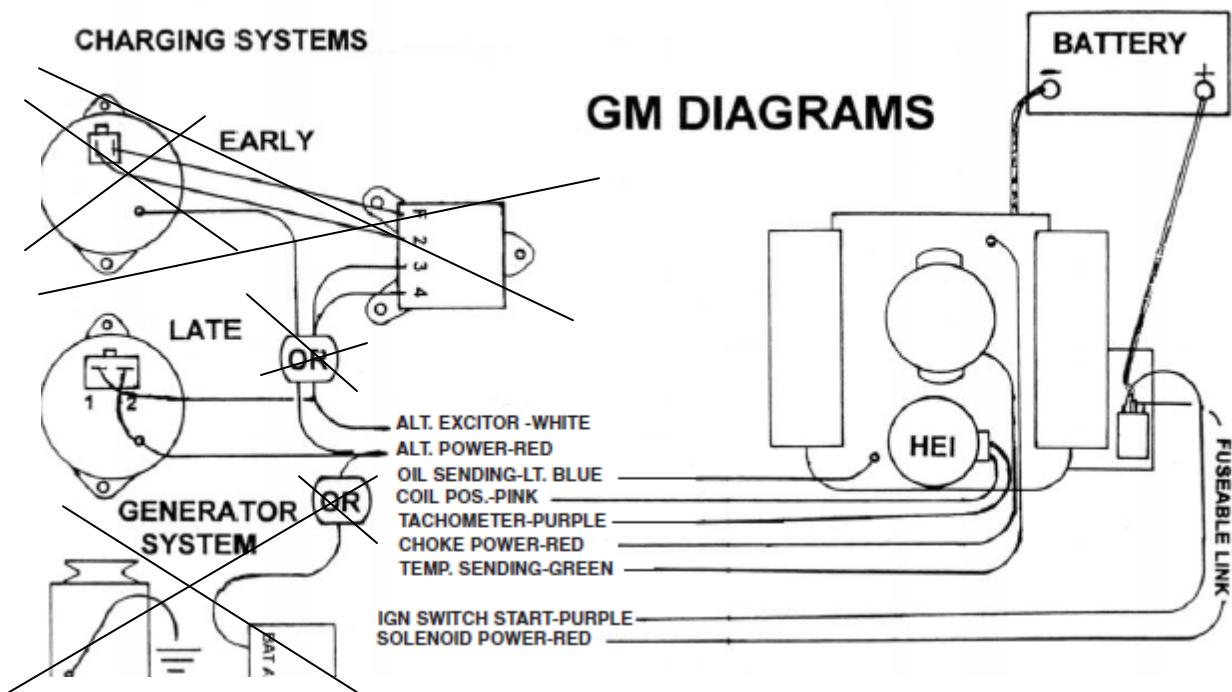
Q2: The primary Question, again, is what is the intent of the middle and bottom large spades on this LRA100 alternator?

Q3: Do I have the middle large spade connected properly, the plan I'm following indicates "alternator power" from the fuse box to this spade?

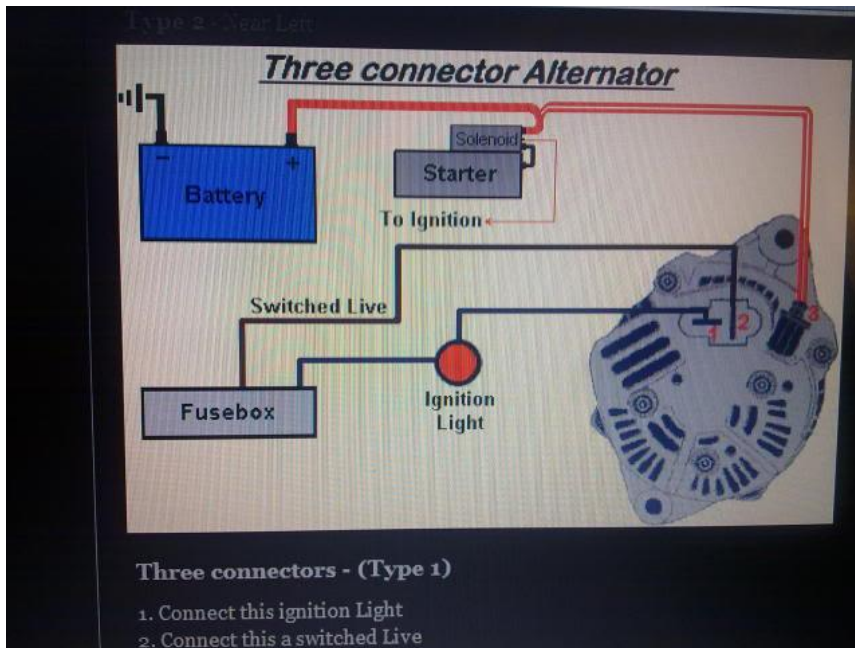
Q4: The plan I'm following indicates a "solenoid power" from the fuse box, which I'm thinking will go to the Positive ("in") side of the Starter/Solenoid switch, as I've self drawn above; (and see diagram below), would you agree?

Q5: I'm not sure how to wire the lower spade on the Alternator. Looking at several wiring diagrams suggest to me that the two large spades can simply be wired together, would you agree? Again, this goes back to the intent of the two large spades on the Alternator, what is each designed for? See additional about this question on page 4 below.

Here is a diagram I've been referring to, but is it logical to use this diagram for this application? I've "x'd" out those charging systems that I believe do not apply, (i.e the early alternator system, and the generator system), and thus only the middle "LATE" system applies. I will not have an external regulator as the alternator, I understand, has an internal regulator. And my system does not have an electronic ignition, nor a tachometer presently, so I'm ignoring those two items.

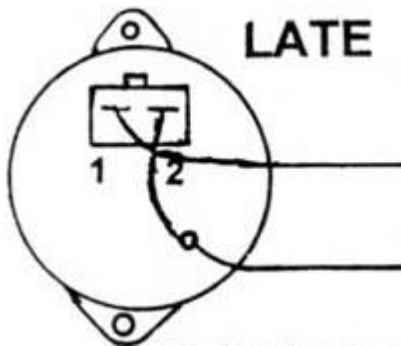


So, the third Spade (bottom) on the Alternator is connected how? Same question as Q5.
See this diagram; see notes below this diagram with questions, that causes me to question my initial sketch above on page 2:

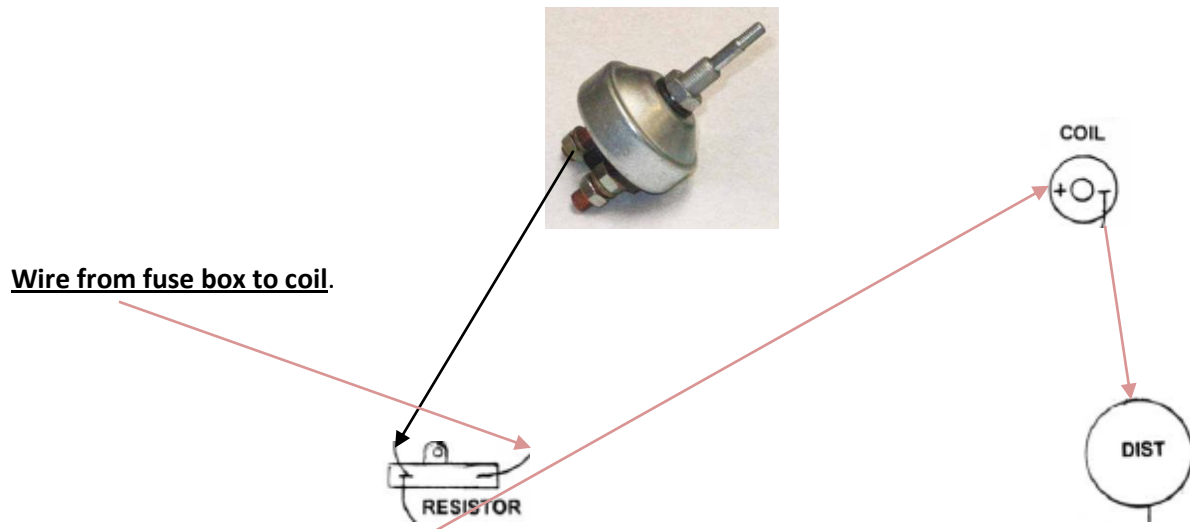


My conclusion is that this is not the same type of alternator connections, since it appears that the bottom Spade is connected to the Solenoid. In my harness plan, as discussed on page 2 above, the middle Spade is connected between the Fuse Box and this middle Spade on the alternator. And in my harness plan, as discussed above the Solenoid power wire goes directly to the Solenoid, also page 2 above. Thus the bottom Spade on the Alternator is not connected, in my plan, to anything but the other large Spade, thus leading to the diagram below.

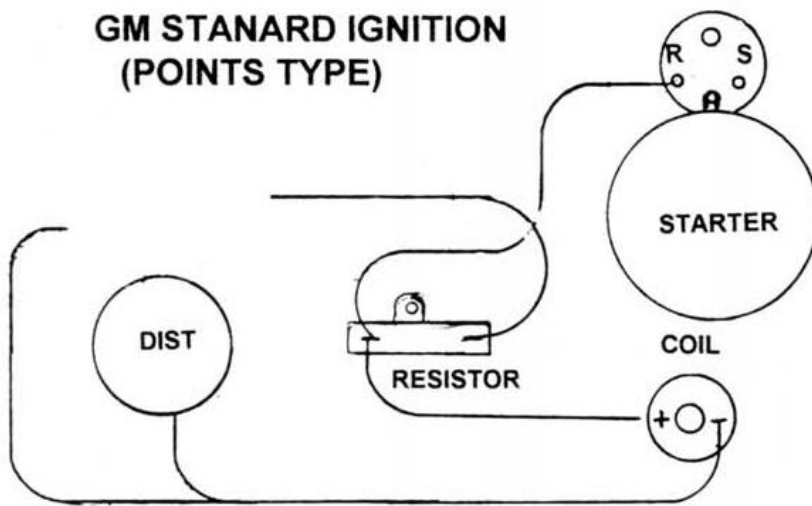
This diagram, that shows the two large Spades connected together.



This leads to a question regarding the coil and distributor wiring in relation to the above sketch/plan.



This is the diagram from the wiring harness I'm using/following for the above self drawn sketch:



So, if I understand this correctly, there should be a wire out from the Positive Side of the Starter Switch/Solenoid to the resistor. And the resistor also receives power from the coil wire supply out of the fuse box.

Q5. Do you think this is correct for my application?

Q6. Finally, again, the reason I ask these questions is that I'm wondering if the combination Starter Switch/Solenoid is the best item for my project, or would a separate Solenoid and separate Starter Switch make more sense?