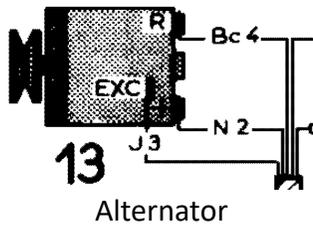


## How to read early Citroen D wiring diagrams

Mark L. Bardenwerper, Sr. August, 2025

Most of the wiring diagrams in the Citroen manuals look impossible to decipher. There are tiny pictures of the car's electrical components scattered around the page. Little black lines emerge then duck into greyish "tubes" going who-knows-where. If you only see those diagrams, there is little wonder that you will be stymied. These diagrams are quite useless to most of us without the charts and legends. I will try to make sense of this for you.

I have chosen to examine the charging system, as it seems to be a very common source of trouble. Its main components are the alternator, the voltage regulator and the charge warning light. We'll begin with the alternator. For any component that you can't find, they provide a page called, "marking of parts" just following the diagram page. Each one has a number. In the one we are working with, the alternator, is assigned the number 13.



| Colour | code |
|--------|------|
| White  | Bc   |
| Blue   | Bl   |
| Grey   | Gr   |
| Yellow | J    |
| Brown  | Mr   |
| Mauve  | Mv   |
| Black  | N    |
| Red    | R    |
| Green  | Ve   |
| Violet | Vi   |

Color legend

Each wire has a code with letters and a number. Here we see three wires, Bc 4, N 2 and J 3. The letters denote the colors of the ends. Citroen used colored ends to differentiate their purpose. They were not concerned with the entire diagram, only at the particular component. That is how they were able to use such a limited number of colors to perform so many tasks. When you replace parts, they will tell you which wire connects where. Naturally they are in French. To the right is a list of the abbreviations and their colors, in English.

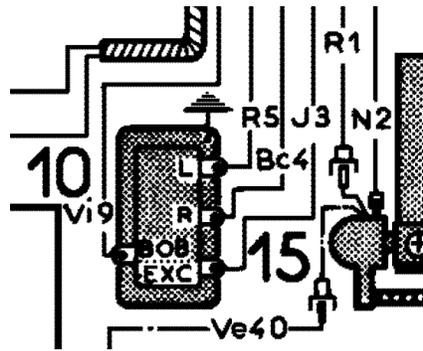
Each wire also has a number. This is where the Wiring Schedules come into play. They are on pages directly following the diagram. Every wire in the car is listed there. Wires with the same numbers are electrically connected. So here, we can look up the numbers 2, 3 and 4. Here is the portion the page with those numbers on it.

|       |   |   |   |
|-------|---|---|---|
| Front | 2 | Black<br>Black<br>Yellow<br>White<br>Red<br>Black<br>Black<br>Black | Starter relay ( 10 ) ( not disconnectible )<br>To Alternator + terminal ( 13 )<br>To R.H. fuse box ( 17 ) ( fuse box n°2 )<br>To R.H. fuse box ( 17 ) ( fuse n°1 )<br>To ignition switch ( 30 )<br>To switch for lighting and horns ( 39 )<br>To relay ( 19 ) for R.H.. Q.I. headlamp ( terminal 1 )<br>To relay ( 20 ) for L.H. Q.I. headlamp ( terminal 1 ) |
| Front | 3 | Yellow<br>Yellow  | Alternator ( 13 ) ( terminal « EXC » )<br>To voltage regulator relay ( 9 ) ( terminal « EXC » )   |
| Front | 4 | White<br>White  | Alternator ( 13 ) ( terminal R )<br>To voltage regulator relay ( 9 ) ( terminal R )   |

Portion of wiring schedules

Starting with wire #2, the starter relay is at the top of the list, the source of DC power. It is connected to the + terminal at the alternator, the one we are concerned about. Wire 2 is very busy. It also feeds another six locations.

Wire 3 has only two points, at the alternator EXC terminal and at the EXC terminal at the voltage regulator. Again, Realizing that we are working with DC current, the source is at the top of the list. Wire 4 also runs just between the alternator R terminal and voltage regulator terminal R.



Voltage regulator and portion of battery, with starter relay

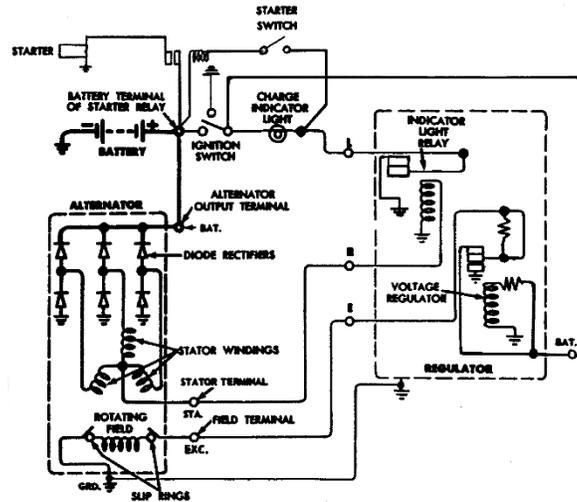
Now let's have a look at the voltage regulator. The voltage regulator is component number 10 (confusingly termed, "relay for voltage regulator"). Here you see two of the wires are accounted for, but note again the change in the end colors. Remember, Citroen only wants you to concern yourself with the colors being used at the individual component. You see the regulator has two more connections Vi 9 and R5. Note also that we have found the originating end of wire number 2, over at component 15, the starter motor relay, which on these cars is mounted on the battery + terminal. Here are the entries in the wiring schedule for wires 5 and 9.

|       |   |  |  |
|-------|---|--|--|
| Front | 5 | Red<br>Red   | Voltage regulator relay ( 9 ) ( terminal L)<br>To charge warning lamp ( 34 )   |
| Front | 6 | Yellow<br>Black<br>Black<br>Green  | R.H. fuse box ( 17 ) ( fuse n°2 )<br>To windscreen wiper motor ( 16 ) ( automatic stop )<br>To accessories terminal ( 18 )<br>To windscreen wiper switch ( 32 )  |
| Front | 7 | White<br>Black<br>Red<br>Black<br>Black<br>Black                                 | R.H. fuse box ( 17 ) ( fuse n° 1 )<br>To rear junction<br>To stop lamp switch ( 24 )<br>To ignition switch ( 30 )<br>To switch ( 35 ) for parking lamp<br>To clock ( 36 )  |
| Front | 8 | Red<br>Violet  | Ignition switch ( 30 )<br>To ignition coil ( 25 )  |
| Front | 9 | Violet<br>Violet<br><br>Violet<br>Violet<br>Violet<br>Violet<br>Violet<br>Violet | Ignition switch ( 30 )<br>To charge warning lamp ( 34 ) and engine oil pressure warning lamp ( 33 )<br>To front heating switch ( 29 )<br>To thermometer ( 40 )<br>To fuel gauge ( 44 )<br>To brake pressure switch warning lamp ( 43 )<br>To direction indicator switch ( 46 )<br>To rear heating ( - 59°F ) switch ( 56 )<br>To fresh air blower motor switch ( 60 )<br>To voltage regulator relay ( 9 ) ( terminal « BOB » ) |

Portion of wiring schedules

Wire 5 goes from the regulator "L" terminal to the charge warning lamp. Wire 9 starts at the ignition switch. Looking down the list of destinations, we find that it not only powers the charge warning lamp, but it also sends voltage to the BOB terminal on the voltage regulator.

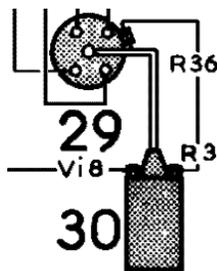
I know that the purpose of this article is about how to use the component layout wiring diagrams, but I thought you might get a better idea just how much information you can get from them without a lot of searching for other sources. Here's a diagram of the charging system of a typical Citroen D model.



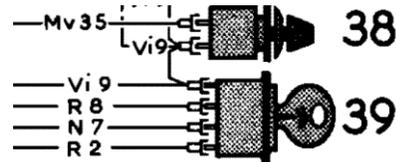
Typical Citroen D charging system diagram

Note that on some models, the voltage regulator not only controls the ground for charging warning lamp by opening it once the engine starts and the regulator sees voltage from the alternator, but it also disconnects the ground for the starter relay, preventing the starter motor from operating while the engine is running. When this is not present, the ground for the starter switch goes straight to the frame.

Let's try one more wire tracing project. Let's say that your car cranks but won't start. You discover that the coil + is not getting power with the ignition switch on. We must trace the path of the electricity from its source to the coil. You will find your issue somewhere along that path. We will start from the coil end with a picture of the coil in the diagram. But first, we consult the page, "marking of parts" to determine the component number, which is 30. We will later find that the ignition switch is 39.



Coil and distributor



Ignition switch

We see R 36 going to the distributor and Vi 8 going elsewhere. Let's now go the Schedule of Wiring for more information. Wire 8 happens to be included in the second portion of the wiring schedule, above. We learn that it goes to only one place, the ignition switch. There you see your wire 8, but there are others. You are only concerned with the one that carries the current through the switch to the coil. To find out which one you need to concentrate on, we go back the Schedule and look up the other wire numbers one at a time. We see R2, N7 and Vi9. Hmm...we recall that we saw one of those numbers before...let's look again at wire 2 in our Schedule, above. Bingo! Wire 2, as we already know, begins at the starter relay and is constantly hot. And sure enough, it is listed as going to the ignition switch. There you are. You have traced the path. Your problem lies along it.

I hope this article will make you more comfortable with working with these diagrams. Find the one in your manuals that coincides with your car, make paper copies and keep them handy. Remember that without the supporting text pages, these diagrams can be almost useless. You will surely find situations where you will trace through multiple components to find your path, but just know that if you keep them in a line, you will ultimately find your way and you can plot out your course of action. At your leisure, examine your diagram, choose a component you are curious about and go at locating the wires. The more you study, the more comfortable you will be with them and the faster you will solve an electrical problem when one crops up. I did not delve here into other processes of electrical diagnosis. We know that electricity is not always invisible and we have tools to help with that. It's not "electrickery!"