

# **Advanced Engine Performance Research Project:**

## **Article by Jorge Menchu: Color Coding Wiring Diagrams**

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## **Introduction:**

When I first started at ATC I never would have thought I would be writing an article on the importance of coloring. Never in a million years would I have thought I would be waiting eagerly for that back to school special on markers so I can stock up on them.

Little did I know because the markers would be one of the most important tools that I would need to help me understand and see clearly through a wiring diagram?

I am very happy I choose this article by Jorge Menchu, it helped to put in perspective what we are learning in the classroom about color coding wiring diagrams.

## **Color coding wire diagrams:**

In this article Mr. Menchu breaks it down so simple for us to understand.

He explains that color coding is an approach to learning it helps you to see how well you know the circuit, how to gather information about how the circuit works and also how to analyze the information you get.

Something our teacher Mr. Morton has been always emphasizing on since the first day of class is to know your opponent.

Mr. Mechu mentions that the most important part of information is the wiring diagram itself.

Some of his key concepts are:

- Complex wiring diagrams are made up of many individual circuits, some are directly interrelated some are not
- There will always be a B+ ( power source) and there will always be a ground side for every load
- In every circuit there is a load, a load performs work.

Jorge Menchu says something in this article that I have been already exposed to by my teacher Mr. Morton, is to keep it simple breaking down the complex to simplicity, when

you look at something you can be intimidated by it or you can learn how it works and break it down and actually understand how it works.

Another very important step to color coding the wiring diagram is a color code legend, telling you what each color means, extremely important to have it on the wiring diagram.

Reading the article Mr. Menchu mentions to make a list of possible readings, which I think is brilliant because then you are really showing yourself how well you know the system and how electricity works, therefore you already know what you should be getting before you even touch the vehicle, so in the moment that you do the actual work and you get a reading you know why you are getting that or why not.

Mr. Menchu mentions that we should start the color coding of the wiring diagram with the easiest color which is green for ground which every wiring diagram has the universal symbol for ground at all times.

Then move on to the next easiest which is red for power at all times not to be confused with power when key on or power when accessory on etc.. Power at all times.

Then use color that you want for the loads and ground when switched on and power when switched on and varying voltage, so on and so forth always use the same colors

for the same condition that way you get used to seeing those colors and knowing what they represent.

**Conclusion:**

What an article, it supported everything I was taught in class and then some. I enjoyed reading it and came out with some good techniques for when I have to pull a wiring diagram and ask myself how I know the system and what my plan of attack will be, which will definitely take some markers and or crayons to help me with the problem.

## **Bibliography**

- ATC L1 Class. Instructor Mr. Morton
- “Color Coding Wiring Diagrams” by Jorge Menchu, Motor Magazine, Dec 2008

Additional articles by Jorge: <http://www.aeswave.com/Articles-by-Jorge-Menchu-17.html>