



## Automotive Electrical Troubleshooting Basics

Checking the function and operational preconditions of an electrical component is applying electrical engineering knowledge at its finest. In addition to electrical engineering you should be able to “read” electrical circuit diagrams and perform measurements with the correct equipment. Being successful in the troubleshooting requires, amongst other things, proper use and understanding of the oscilloscope.



- Electrical Circuit Diagrams and Markings
- Oscilloscope Operating Principle and Connections
- Settings, Accuracy and Measuring Probes
- Electrical Operational Preconditions of a Component
- Checking the Operational Preconditions
- Short Circuit Troubleshooting
- Battery Discharge Current Troubleshooting

Language: English

SKU: SKU 040.0150.009.000.EN

## LEARNING OUTCOMES

After this study you will have the skills to apply your knowledge in electrical engineering in system-specific studies, measuring technology and troubleshooting. These skills will develop the more you practice and use your measuring equipment.

### Certificate

After completing your module of study and approved completion of the exercises, you will be allowed to take the final exam. After completing the final exam, you can print a Prodiags certificate from your attainments register as proof of your expertise.



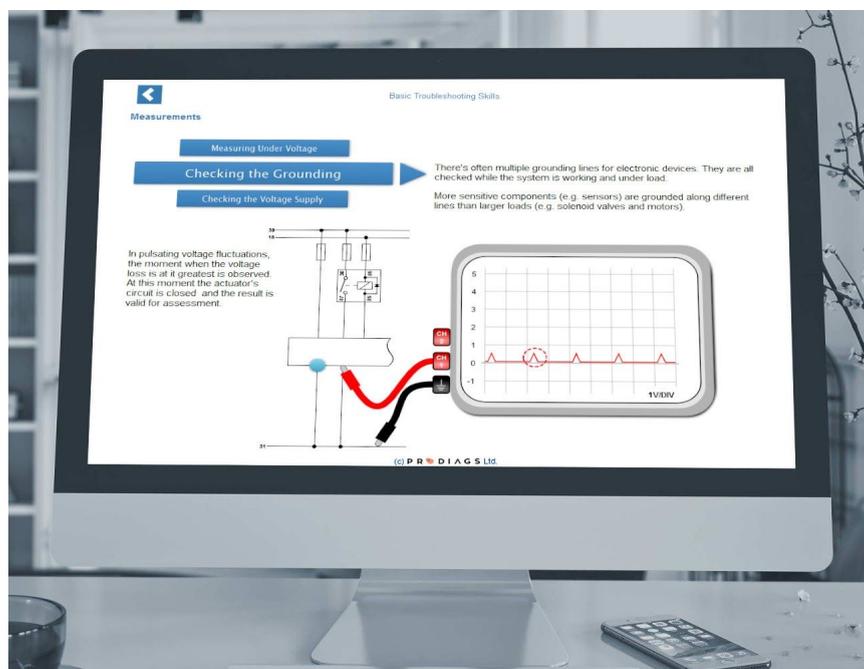
## INTRODUCTION

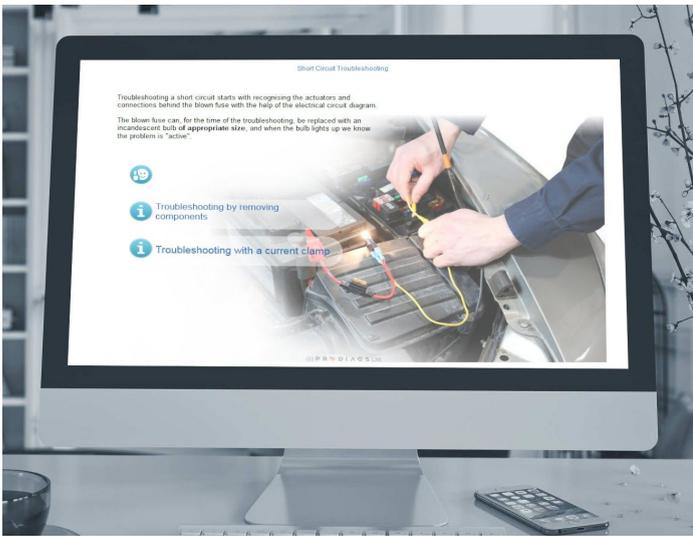
### Why this module?

The switch from theoretical knowledge of electrical engineering to practical know-how in the workshop requires a good understanding about the basic skills of troubleshooting. Utilising circuit diagrams, and being familiar with the properties and use of your own measuring equipment, such as the oscilloscope, is a basic requirement for the troubleshooting work for a mechanic.

### What will you learn?

This study will help you understand the required equipment and its properties, and challenge you to start using it. You will deepen your knowledge in electrical engineering through measuring technology and you will reach a level where you can apply your knowledge about voltage drop and electrical operational preconditions.





## PREREQUISITES

To get the best possible learning outcome, we hope that you have a basic knowledge in electricity and electronics. For studying these subjects, we recommend the modules:

- Electricity
- Electronics

## System Requirements

Internet connection and PC or laptop with browser.  
Recommended screen resolution 1024 x 768 or higher.

## Updates

We want to make sure that you always have the latest version of our product. Prodiags reserves the right to make real time updates and changes. This way you'll always have the best version, without extra fees.

## Content Equivalence

This module's topics and objectives correspond in scope to a conventional 2 - 3 day training event.

Once you have made your payment, you get immediate access to the content. You'll save time and money by not needing to travel.

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