

Learn automotive technology online with practical training modules. Online training modules designed by automotive professionals, for developing mechanics and people who dream about becoming a mechanic. All products and purchases come with a 100 % money back guarantee.



## Product Sheet - Prodiags Automotive Online Training Module

# EV Scheduled Maintenance

Scheduled maintenance on EVs involves less parts being regularly replaced than cars with internal combustion engines. Due to this, the time the service takes is normally reduced.

Observing defects and identifying the need for additional work during the short workshop visit has become even harder than before. The service technician is required to be exceptionally methodical and have great observational skills.

This training module is a unique compilation of the special characteristics electric vehicle scheduled maintenance. It can be used as a basic material benefiting all mechanics and technicians, no matter what electric car make or model they are specialising in.

With this training you will ensure that you are ready to complete wider training courses and model specific training programmes.



- Work safety and qualification requirements
- Service points and inspections:
  - When retrieving the car
  - When driving onto the lift
  - In the engine bay
  - With the car lifted
  - With the car lowered back down
  - During the test drive
- Practice exam
- Final exam

Language: English

SKU: 050.0190.210.000.EN

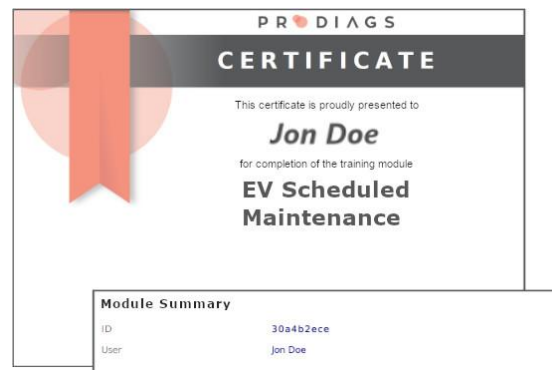
## LEARNING OUTCOMES

This training gives you a good basic understanding of typical service points on electric cars and their assessment.

After passing this training you will have a great base for getting the maximum benefit from manufacturer and model specific training and becoming a top-tier electric car maintenance professional.

### 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

Scheduled maintenance is not only changing parts. It is a promise to the customer that the car is professionally inspected and its use until the next service is carefree.

A common conception is that the service need of electric cars is very low. Regarding regularly replaced parts and fluids, this is true, but on the other hand there are plenty of new service and inspection points.

From the workshop's point of view, electric cars are not a threat. Professional and customer service oriented workshops will also succeed in the future.

In this training module, we take a look at typical points of service and inspection in the scheduled maintenance for electric vehicles. The practical examples create a base for observing possible defects and need for additional work efficiently utilising the entire work process, starting with retrieving the car from the parking lot and ending with finishing touches after the test drive. Customer service and additional sales are carried alongside automotive technology as a natural process.



Self-diagnostics



Driving Onto The Lift

Checking for trouble codes (DTCs)

High-voltage battery status

Follow-up on the high-voltage battery's operation and condition is a part of the scheduled maintenance. The goal of this is to identify a decrease in battery capacity in time, so that it does not cause surprises for the customer in regards to the car's reliability and range. The battery's control system analyses the battery's function based on its internal voltage, current and temperature data. With this data, parameters portraying the battery status, can be read in connection to the service via the battery control diagnostics.



Typical parameters portraying the battery status



From a customer service point of view, what should be kept in mind when assessing the battery's condition?



This training gives you a good basic understanding of typical service points on electric cars and their assessment.

After passing this training you will have a great base for getting the maximum benefit from manufacturer and model specific training and becoming a top-tier electric car maintenance professional.

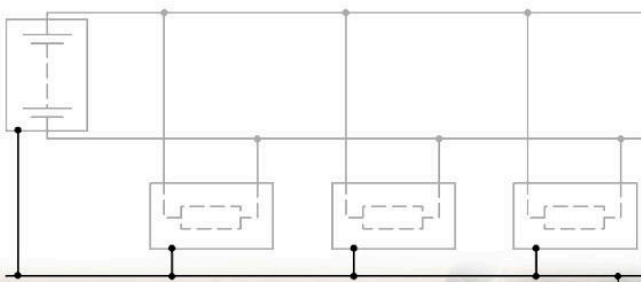
This training module is suitable for all service mechanics and technicians, regardless of their “own” manufacturer brand. We recommend this to all service technicians before continuing on to manufacturer and model specific training. Good basic knowledge helps with getting the most out of further training programmes.

This training could also benefit service advisors and workshop managers. The presentation following the service work process gives broader thoughts and ideas for developing your own workshop and staff.



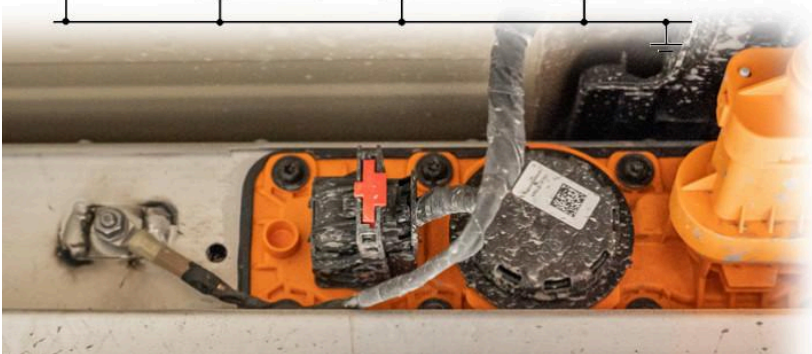
## Potential Equalisation Line

Inspections In The Engine Bay



Potential equalisation lines are grounding conductors that connect the housings of high-voltage components together via the car's chassis. From a perspective of electrical safety, their condition is very important, and the fact that they are in place. Without the equalisation of differences in potential, dangerous voltage-differences might arise between the housings of the electrical powertrain components or the chassis. In some car manufacturers' service instructions the inspection is a separate point, and in others' it's part of the entity: "Visual inspections of the condition of high-voltage components".

There are typically multiple potential equalisation lines. Depending on the structure, some of the lines might be accessible for inspection only when the car is lifted up.



In the scheduled maintenance, you notice a loose potential equalisation line, what do you do?



## PREREQUISITES

Before this training, we recommend the following training modules:

- Hybrid & Electric Vehicle Technology
- Brake Service and Maintenance

### 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.

[www.prodiags.com](http://www.prodiags.com)

### Content Equivalence

This module's topics and objectives correspond in scope to a conventional 2 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.