

Overview

This **standard** is suitable for any person that needs to review and understand manufacturer's data and wiring diagrams. This can cover any vehicle electrical system and could be equally relevant to a technical helpline operative or a technician based within a workshop or operating at the roadside.

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Performance

Criteria

- You must be able to:
- P1 source and use up-to-date, accurate and relevant technical information
 - P2 ensure you have sufficient data to complete the required task
 - P3 identify the relevant data contained within your acquired information
 - P4 locate and understand wiring diagram symbols and colour codes
 - P5 recognise the systems installed on the vehicle you are working on
 - P6 describe the correct operation of the system being investigated
 - P7 identify and deal promptly and effectively with any problems encountered
 - P8 inform the relevant person(s) of any delays/problems
 - P9 ask the relevant person to gain additional information or technical data

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Knowledge and understanding

You must know and understand:

Legislative and organisational requirements and procedures

- K1 where to source relevant technical information and wiring diagrams for the type of vehicle being worked on
- K2 the symbols and abbreviations used within electrical circuit diagrams
- K3 the difference between a wiring diagram and a system schematic
- K4 the principles of current flow relating to automotive electrical systems
- K5 the importance of ensuring the technical data is correct for the vehicle and vehicle system being worked upon
- K6 the documentation care and control procedures in line with the company and manufacturer's procedures
- K7 the standards and regulations that relate to the maintenance of electric/hybrid vehicles
- K8 the consequences of misinterpreting technical data and wiring diagrams for:
 - K8.1 the system being worked on
 - K8.2 other related vehicle systems
 - K8.3 other non related vehicle systems
 - K8.4 the test equipment being used
 - K8.5 yourself and work colleagues
- K9 the limits of your responsibilities with regard to the reporting lines and procedures in your environment

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