
Overview

This standard is about the removal, renewal and refitting of electrical components where the procedure is straightforward and where items are not directly linked to vehicle safety systems. This standard does not cover working on high voltage battery systems.

Performance criteria

- You must be able to:*
1. use the appropriate personal protective equipment when removing and refitting electrical components
 2. protect the vehicle and its contents effectively when removing and refitting electrical components
 3. support your removal and replacement activities by referring to:
 - 3.1 vehicle technical data
 - 3.2 removal and replacement procedures
 - 3.3 legal requirements
 4. ensure that the **tools and equipment** you require are calibrated and in a safe working condition to meet manufacturer's and legal requirements
 5. select and use the correct tools and equipment for the components you are going to remove or refit
 6. remove and refit electrical components following:
 - 6.1 recognised research methods
 - 6.2 removal and refitting procedures
 - 6.3 manufacturers' instructions
 - 6.4 your workplace procedures
 - 6.5 health, safety and legal requirements
 7. work in a way which reduces the risk of damaging other components and units on the vehicle
 8. adapt your work techniques safely to suit the needs of the job when necessary
 9. store all removed components safely in the correct location
 10. check that the components you have fitted operate correctly following the manufacturer's specification
 11. report any additional faults or defects you find during the course of your work to the relevant person(s) promptly
 12. report any delays in completing your work to the relevant person(s) promptly in the format required
 13. remove and refit electrical components within the agreed timescale
 14. complete work records accurately, in the format required and pass them to the relevant person(s) promptly

Knowledge and understanding

You need to know and understand: **Legislative and organisation requirements and procedures**

1. the health, safety and legal requirements relating to the removal and refitting of electrical components
2. how the vehicle is powered and the associated health and safety risks
3. your workplace procedures for:
 - 3.1 the referral of problems
 - 3.2 reporting of delays to the completion of work
 - 3.3 completion of work records
4. the work that needs to be done and the standard required
5. the requirements for protecting the vehicle and contents from damage before, during and after removing and refitting activities
6. the importance of selecting, using and maintaining the appropriate personal protective equipment when removing and refitting electrical components

Equipment

7. how to select, check and use all the tools and equipment required to remove and refit electrical components

Removal, renewal and refitting of electrical components

8. the types of common vehicle **electrical systems** components
9. the construction and operation of common vehicle electrical systems
10. how electrical systems and their components work and their function
11. where to find and how to interpret and use sources of information applicable to the removal and refitting of electrical components
12. the procedures for removing and refitting electrical components
13. the methods of storing removed parts and the importance of storing them correctly
14. the different types of fastenings and the reasons for their use
15. the need for correct alignment of components and the methods used to achieve this
16. the types of quality checks that can be used to ensure correct alignment and operation of components to manufacturer's specification and their purpose

IMIMET02

Remove, Renew and Refit Electrical Components Following Accident
Damage



Scope/range

1. Electrical Systems are:
 - 1.1 engine (air, fuel and exhaust)
 - 1.2 transmission
 - 1.3 chassis (covers steering, suspension and brakes)
 - 1.4 body electrics (e.g lighting, wipers)
 - 1.5 Advanced Driver Assistance Systems (passive and active)

2. Tools and equipment required for:
 - 2.1 removal and refitting of engine electrical systems
 - 2.2 removal and refitting of transmission electrical systems
 - 2.3 removal and refitting of chassis electrical systems
 - 2.4 specialist electrical work
 - 2.5 general workshop activities

Glossary

Vehicles

These can be light vehicles or commercial vehicles.

Vehicle Safety Systems

This is a generic term which includes, for example, supplemental restraint systems (SRS), engine management systems, assisted braking systems (ABS) and any equipment related to safety.

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Remove, Renew and Refit Electrical Components Following Accident Damage



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Relevant Occupations Mechanical, Electrical and Trim Assistant Technician (Automotive);
Mechanical, Electrical and Trim Technician (Automotive)

Suite Accident Repair - Mechanical, Electrical and Trim

Keywords Remove, Renew, Refit Electrical Components Following Accident Damage
