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| Overview | This standard covers the diagnosis and rectification of technical problems, i.e. those problems that require a high degree of problem solving. Often the location of a technical problem is not immediately apparent, and the candidate will have to investigate the location of the problem and identify its nature. Once the location and nature of the fault is identified, it is necessary to identify what is actually causing it: this might be a component, technologies, or faulty materials, or even faulty design. The candidate will then have to work through a number of solutions before determining the right one |

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| **Performance criteria**  You must be able to: | 1. access all relevant information on the technical problem 2. select the appropriate action to identify the technical problem 3. investigate thoroughly the indications of a technical problem and identify its possible location 4. isolate the technical problem to determine its actual location 5. seek alternative solutions where technical problems have not been located, and suggest them to the appropriate people 6. inform the relevant people of the consequences of technical problems being located in difficult locations 7. investigate thoroughly the technical problem and identify its possible causes using appropriate diagnostic methods and technical information 8. evaluate the likelihood of each possible cause being responsible for the technical problem, and prioritise work accordingly 9. diagnose correctly the causes of the technical problem 10. refer the technical problem to a specialist when the cause cannot be identified 11. rectify the technical problem using appropriate equipment, materials, and work procedures 12. ensure that the rectification meets all specifications and requirements 13. verify that the technical problem has been rectified and monitor it over a suitable period 14. inform the relevant people that the technical problem has been rectified or referred to a specialist 15. record information on the rectification in the appropriate information systems |

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| Knowledge and understanding  You need to know and understand:  You need to know and understand:  You need to know and understand: | **Technical problems**   1. what are the types of technical problem that could occur 2. what actions are required to identify different types of technical problem 3. what are the likely locations of different technical problems 4. what locations are difficult or non-accessible 5. when it is advisable to escalate attempts to find a technical problem, and what other actions could be pursued 6. what are the most appropriate diagnostic methods and equipment for identifying the causes of technical problems, including dashboard warning lights 7. what diagnostic methods should be used for different types of technical problems 8. what are the possible causes of technical problems 9. what type of problems can occur with the diagnostic process, and what are the standard operating procedures for dealing with them   **Rectification work**   1. what work has to be done to meet different requirements 2. what equipment, materials, and work procedures should be used for different jobs 3. how has similar work turned out previously 4. what type of problems can occur with the rectification work, and what are the standard operating procedures for dealing with them   **Information recording**   1. what information systems should be used 2. why it is important to use the information systems |

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| **Scope/Range** | **Technologies:**  Washers and wipers  Sensors  ADAS  Heated glass  Head up displays  Cameras  Radars  LIDARs  Locking systems  Speakers  Air bags  Winding mechanisms  Locks  Antenna |

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| **Developed by** | IMI |
| **Version number** | 2 |
| Date approved |  |
| Indicative review date |  |
| Validity | Under consultation |
| Status | Tailored |
| Originating organisation | Proskills |
| Original URN | PROAG13 |
| Relevant occupations | Tyre exhaust and windscreen fitters |
| Suite | Automotive glazing |
| Key words | glass; automotive; glazing; cars; vans; mobile plant; buses; coaches |