
Overview

This standard is about preparing a range of plastic and composite components to accept foundation materials and top coats.

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**Performance
criteria**

- You must be able to:
- P1 identify the correct preparation method as per the vehicle manufacturer's specification
 - P2 use the appropriate personal protective equipment when carrying out all surface preparation activities
 - P3 protect the vehicle and its contents effectively when carrying out all surface preparation activities
 - P4 select, check and use the correct tools and equipment for the type of surface preparation activities you are carrying out
 - P5 ensure that the tools and equipment you require are in a safe working condition
 - P6 identify the **plastic**/composite components accurately and check compatibility for refinishing prior to undertaking any preparation work
 - P7 ensure the finished surface is suitable to accept the next process
 - P8 follow the work instructions given for the job correctly
 - P9 clean and protect all surfaces adjacent to those being prepared using the specified method
 - P10 report any unrecorded damage to surfaces and ancillary fittings to the relevant person(s) promptly and accurately
 - P11 remove and store safely any components likely to be affected by the preparation process (where appropriate) referring to manufacturer's methods
 - P12 keep your work area clean and tidy throughout all preparation activities
 - P13 prepare all the panel surfaces required following health and safety requirements and using:
 - P13.1 suitable materials for the type of surface
 - P13.2 the approved method and technique
 - P13.3 the approved tools and equipment
 - P14 Ensure all prepared areas are free from contamination and ready for the application of foundation and top coat materials
 - P15 dispose of waste materials to conform with legal, environmental and workplace requirements
 - P16 clean and make good tools and the work environment as appropriate

P17 complete all vehicle preparation activities within the agreed timescale and to an agreed quality control process

P18 report any anticipated delays in completion to the relevant person(s) promptly

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Knowledge and understanding

You need to know and understand:

- K1 the health, safety and legal requirements relating to the preparation of **plastic** surfaces for foundation and top coats
- K2 the implications of static when working with **plastic/composite** components
- K3 your workplace procedures for:
 - K3.1 the referral of problems
 - K3.2 the reporting of delays to the completion of work
 - K3.3 the completion of work records
 - K3.4 the use of personal protection
- K4 the work that needs to be done and the standard required
- K5 the importance of reporting anticipated delays to the relevant person(s) promptly
- K6 the requirements for protecting the vehicle and contents from damage before, during and after foundation and top coat preparation activities
- K7 the importance of selecting, using and maintaining the appropriate personal and vehicle protective equipment when preparing **plastic** surfaces for foundation and top coats
- K8 the relationship between time, cost and productivity
- K9 how to select, adjust and use the correct tools and equipment within the **plastic/composite** preparation process
- K10 how to recognise damage to surfaces and ancillary fittings
- K11 how to test and recognise **plastics** and assess suitability for repair
- K12 how to rectify substrate defects
- K13 how the substrate affects the preparation process
- K14 how to source, use and understand the vehicle manufacturer's methods and limitations
- K15 how to prepare new and repaired **plastics** using the correct techniques
- K16 how to carry out repair procedures to avoid materials wastage and vehicle contamination for each stage of the preparation process
- K17 how to prepare and protect panels and parts adjacent to the area being painted

- K18 the factors governing the choice of panel preparation methods for substrate materials
- K19 the types and grades of available abrasives and the factors governing their use for different **plastics**
- K20 the importance of following manufacturer's methods and using their approved techniques of working (including use of materials and equipment)
- K21 the consequences of failing to follow manufacturer's methods and processes
- K22 the importance of working to agreed timescales and keeping others informed
- K23 how to work safely avoiding damage to vehicles, personal injury and injury to colleagues
- K24 how to dispose of waste materials in compliance with any environmental requirements/legislation and workplace procedures
- K25 the importance of disposing of waste safely and the consequences of not doing so to the business, others and the environment
- K26 the implications of rectification identified by an agreed quality control process

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Scope/range

1. **Plastic** include:
 - 1.1. thermoplastic
 - 1.2. thermosetting plastics
 - 1.3. plastic components
 - 1.4. composite components
 - 1.5.

2. **Preparation activities** include:
 - 2.1. abrasives
 - 2.2. feathering out
 - 2.3. de-greasing
 - 2.4. conditioning
 - 2.5. flattening
 - 2.6. using guide coats
 - 2.7. masking for foundation and top coats
 - 2.8. tack off techniques

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IMIARPO3
Work with plastic components in an automotive
environment



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