Overview

This NOS is about the removal and fitting of complex mechanical, electrical and trim (MET) components to vehicles whilst carrying out a cosmetic repair. It also includes verifying the operation and carrying out adjustments to components once fitted.
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Remove and fit complex Mechanical, Electrical and Trim (MET) components and non permanently fixed body panels

Performance criteria

You must be able to:

P1 use the appropriate personal protective equipment when removing and fitting complex MET components and non welded non-structural body panels

P2 protect the vehicle and its contents effectively when removing and fitting complex MET components and non welded non-structural body panels

P3 accurately assess the vehicle for pre existing damage and serviceability of systems and components prior to work commencing

P4 isolate/disarm complex MET components prior to removal from the vehicle in accordance with vehicle manufacturer's procedures and in line with any appropriate legislation and legal requirements (where applicable)

P5 select, check and use the correct tools and equipment for the panels or components you are going to remove or fit

P6 remove and fit complex MET components and non welded non-structural body panels following:

P6.1 removal and fitting instructions
P6.2 manufacturer’s instructions
P6.3 your workplace procedures
P6.4 health, safety and legal requirements

P7 protect other components, units and panels on the vehicle whilst carrying out the removal and fitting activity

P8 store all removed panels and components safely in the correct location

P9 realign the panels and components you have fitted correctly in a way which regains their original manufactured gaps and manufacturer's specification

P10 check that the components you have fitted operate correctly following the manufacturer’s specification

P11 check there are no faults stored in any system control units following the refitting activity (where applicable)

P12 programme the relevant vehicle system(s) following the fitting activity

P13 report any additional faults you find during the course of your work to the relevant person(s) promptly

P14 complete all removal and fitting activities within the agreed timescale

P15 complete work records accurately, in the format required and pass them to the
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relevant person(s) promptly
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Knowledge and understanding

Legislative and organisational requirements and procedures

You need to know and understand:

K1 the health, safety, environmental and legal requirements relating to the removal and fitting of complex MET components and non welded non-structural body panels

K2 your workplace procedures for:
  K2.1 the referral of problems
  K2.2 reporting of delays to the completion of work
  K2.3 completion of work records

K3 the work that needs to be done and the standard required

K4 the requirements for protecting the vehicle and contents from damage before, during and after removing and fitting activities

K5 the importance of selecting, using and maintaining the appropriate personal protective equipment when removing and fitting complex MET components and non welded non-structural body panels

Removing and fitting complex MET components

You need to know and understand:

K6 how to find, interpret and use sources of information applicable to the removal and fitting of complex MET components and non welded non-structural body panels

K7 how to select, check and use all the tools and equipment required to remove and fit complex MET components and non welded non-structural body panels

K8 the correct procedures for removing and fitting complex MET components and non welded non-structural body panels

K9 the correct procedures for working with supplementary safety systems when removing and fitting complex MET components and non welded non-structural body panels

K10 the correct procedures for working with Gas Discharge headlight systems and when removing and fitting complex MET components and non welded non-structural body panels

K11 the methods of storing removed panels and components, including
supplementary safety system components, and the importance of storing them correctly

K12 the different types of vehicle systems and the affects an incorrect repair could have on their operation

K13 the different types of fastenings and fixings and the reasons for their use

K14 the need for correct alignment of panels and components and the correct methods used to achieve this

K15 the importance of carrying out the correct programming procedure/method to vehicle systems following removal and fitting of complex MET components and non welded non-structural body panels

K16 the types of quality checks that can be used to ensure correct alignment of panels and operation of components and systems to manufacturer's specification and their purpose

K17 the implications of rectification work highlighted during the quality check process
Additional information

Scope/range

1 Complex MET components include:
   1.1. bumpers containing proximity sensors
   1.2. gas discharge headlamp units
   1.3. SRS airbags
   1.4. SRS air curtains
   1.5. SRS passenger restraints
   1.6. key reading/detecting sensors
   1.7. panels and trims containing cameras
   1.8. panels and trims containing infrared and radar equipment

2 Non welded non-structural body panels are:
   2.1. wings
   2.2. doors
   2.3. bonnets
   2.4. boot lids and tailgates
   2.5. bumper bars, covers and components

3 Tools and equipment are:
   3.1. spanners
   3.2. socket set
   3.3. screwdrivers
   3.4. manufacturer’s special tools
   3.5. pliers and self locking grips
   3.6. power drill and drill bits
   3.7. vehicle lifting equipment
   3.8. axle stands
   3.9. torque wrench
   3.10. diagnostic scan tool/code reader

4 Systems are:
   4.1. lane departure warning systems
   4.2. rear view cameras
4.3. reverse backup sensors
4.4. automatic braking
4.5. forward collision avoidance system
4.6. adaptive cruise control
4.7. side view assist
4.8. parking assist
4.9. airbag systems
4.10. enhanced visibility systems (infrared night vision, adaptive headlights)
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