
Overview

This NOS is about devising and implementing strategies to diagnose faults when the application of standard manufacturer diagnostic procedures has failed to reveal the source and cause of problems. You are also required to identify the best course of action to be taken to correct problems.

Performance criteria

You must be able to:

P1 use suitable personal and vehicle protective equipment throughout all diagnostic related activities in the workshop

P2 confirm with the relevant people that all standard diagnostic procedures and techniques have been systematically and correctly applied to the vehicle prior to undertaking further work

P3 prepare the vehicle systems and work area for safe working procedures as appropriate to the vehicle

P4 analyse all previous system fault information, diagnostic test methods and results correctly to verify the inconclusive results prior to undertaking further work

P5 liaise with the relevant manufacturer's representative to obtain up to date information, advice and guidance relevant to the identified fault, when necessary

P6 use **diagnostic methods** which are relevant to the symptoms presented

P7 collect diagnostic information in a logical, systematic and structured way which progressively eliminates all possible **causes of the fault**

P8 apply the checks and tests that are most likely to be effective in revealing the **cause of the fault**

P9 carry out all diagnostic activities following:

P9.1 your workplace procedures

P9.2 health, safety and environmental requirements

P9.3 environmental requirements

P10 work in a way which minimises the risk of:

P10.1 damage to other vehicle systems

P10.2 damage to other components and units

P10.3 contact with leakages

P10.4 contact with hazardous substances

P11 use any **equipment** required, correctly and safely throughout all diagnostic and rectification activities

P12 collect sufficient diagnostic information to enable an accurate diagnosis of the fault

P13 correctly identify the **cause(s) of the fault**

P14 identify and record any system deviation from acceptable limits accurately

P15 accurately ensure your assessment of dismantled sub-assemblies, components and units identifies their condition and suitability for repair or replacement

P16 make clear recommendations for a suitable course of action to rectify the fault

P17 inform the relevant person(s) promptly where repairs are uneconomic or unsatisfactory to perform

P18 complete all system checks and tests in the most cost and time effective way for the fault presented

P19 complete all system diagnostic activities within the agreed timescale

P20 ensure your records are accurate, complete and passed to the relevant person(s) within the agreed timescale and in the format required

P21 report any anticipated delays in completion to the relevant person(s) promptly

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Diagnose faults where no prescribed process or format is available in light vehicle environments



Knowledge and understanding

You need to know and understand: