

IMILV15

Provide technical support and advice to colleagues in light vehicle environments



Overview

This NOS is about providing a range of technical support to other workshop colleagues. It includes ensuring technical information is up to date and giving technical advice, instruction and briefings to colleagues.

Performance criteria

You must be able to:

P1check vehicle technical **information** is up to date and accessible to workshop staff

P2check colleagues have the correct technical resources to carry out their work

P3identify any additional resources required correctly and promptly

P4report any problems affecting the operation of the workshop to your manager promptly

P5respond to requests for technical help and **advice** promptly and positively

P6provide colleagues with clear instruction on:

P6.1product updates

P6.2technical tasks

P6.3what the results should be

P6.4how they should perform tasks

P6.5the standard that must be achieved

P7deliver technical instruction and demonstrations in a manner and at a speed that is appropriate to the individual(s) concerned

P8give on-going technical support and **advice** to colleagues

P9ensure your support and **advice** is technically accurate and in line with manufacturers' instructions and your organisation's requirements

P10give colleagues time to consider your response and give further explanation when appropriate, checking they have fully understood

P11identify and correct mistakes in a way that supports your colleagues' self confidence and praise them when they perform tasks correctly

P12check the work of colleagues at regular intervals and take prompt action to resolve problems

P13suggest possible methods for improving the work of colleagues to your manager, when necessary

P14carry out your checks in a cost effective and efficient manner that is not detrimental to the smooth running of the workshop

Knowledge and understanding

You need to know and understand:

Legislative and organisational requirements and procedures

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K1 the legislation and workplace procedures relevant to:

K1.1 health and safety

K1.2 the environment (including waste disposal)

K1.3 appropriate personal and vehicle protective equipment

K2 legal requirements relating to the vehicle (including road safety requirements)

K3 your workplace procedures for:

K3.1 recording fault location and correction activities

K3.2 reporting the results of tests

K3.3 the referral of problems

K3.4 reporting delays to the completion of work

K3.5 gaining up to date technical **information** and repair methods

K4 the importance of working to recognised diagnostic procedures and processes and obtaining the correct **information** for diagnostic activities to proceed and how to formulate and construct your own diagnostic procedures and processes in order for diagnostic activities to proceed

K5 the importance of documenting diagnostic and rectification **information**

K6 the importance of working to agreed timescales and keeping others informed

K7 the relationship between time, costs and profitability

K8 the importance of reporting anticipated delays to the relevant person(s) promptly

Electrical and electronic principles

K9 electrical and electronic principles including types of sensors and actuators, their application and operation

K10 how electrical and electronic vehicle systems operate, including electrical component function, electrical inputs, outputs, voltages and oscilloscope patterns, digital and fibre optics principles

K11 the interaction between electrical, electronic, mechanical and hydraulic components and systems within a vehicle, including multiplexing

K12 electrical symbols, units and terms

K13 electrical safety procedures

K14 the hazards associated with working on or near high energy electrical vehicle components

Use of diagnostic and rectification equipment

K15 how to prepare and check the accuracy of diagnostic testing equipment
 K16 how to use diagnostic and rectification equipment for mechanical, electrical, hydraulic/pneumatic and fluid systems, specialist repair tools and general workshop equipment

Vehicle system faults, their diagnosis and correction

K17 how vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid systems are constructed and operate
 K18 how vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid systems are dismantled, reassembled and adjusted to manufacturers' specifications
 K19 the types and causes of vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid system, component and unit faults and failures
 K20 vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid component and unit replacement procedures, the circumstances which will necessitate replacement and other possible courses of action
 K21 how to find, interpret and use sources of **information** on vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid system operating specifications, diagnostic test procedures, repair procedures and legal requirements
 K22 how to select the most appropriate diagnostic testing method for the symptoms presented
 K23 how to carry out systematic diagnostic testing of vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid systems
 K24 how to interpret, evaluate and analyse test results and vehicle data in order to identify the location and cause of vehicle system faults
 K25 how to carry out the rectification activities in order to correct faults in the vehicle mechanical, electrical, electronic, hydraulic/pneumatic and fluid systems

K26 your workplace policy and procedure for:

K26.1 work carried out under warranty
 K26.2 liaising with manufacturers and outside agencies
 K27 the relationship between test methodology and the faults repaired – the use of appropriate testing methods
 K28 how to make cost effective recommendations for rectification

Personal Skills

K29 how to give straightforward presentations on technical matters
 K30 how to file and store technical **information**
 K31 how to instruct colleagues and demonstrate tasks clearly and correctly
 K32 how to conduct effective checks of your colleague's work
 K33 how to choose the best action to take when work is not in line with requirements
 K34 how to discuss colleagues' work with them in a way that will encourage them to be positive and not lead to conflict
 K35 how to give **advice** and **guidance** in a way that is appropriate to the colleague you

are supporting

K36how to recognise a training need

K37what might happen if you undermine colleagues' self confidence when correcting mistakes

K38the importance of liaising with your manager when evaluating others' work and giving feedback

K39the importance of continuous development and learning

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Scope/range