
Overview

This standard is about diagnosing and rectifying faults occurring within heavy goods and public service vehicle gearboxes, axles and bearings, driveline, final drive and clutches, including those which incorporate electric and hybrid driveline systems.

Performance criteria

You must be able to:

P1 use suitable personal and vehicle protective equipment when using **diagnostic methods** and carrying out **rectification activities**

P2 support the identification of faults, by reviewing vehicle:

P2.1 technical data

P2.2 diagnostic test procedures

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

P4 prepare, connect and check all the required **equipment** following manufacturers' instructions prior to use

P5 use **diagnostic methods** which are relevant to the symptoms presented

P6 collect diagnostic information in a systematic way relevant to the **diagnostic methods** used

P7 collect sufficient diagnostic information to enable an accurate diagnosis of transmission and driveline system **faults**

P8 identify and record any system deviation from acceptable limits

P9 ensure your assessment of dismantled sub-assemblies, units and components identifies their condition and suitability for repair or replacement

P10 promptly inform the relevant person(s) where repairs are uneconomic or unsatisfactory to perform

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

P12 carry out all **rectification activities** following:

P12.1 manufacturer's instructions

P12.2 industry recognised repair methods

P12.3 your workplace procedures

P12.4 health, safety and environmental requirements

P13 work in a way which minimises the risk of :

P13.1 damage to other vehicle systems, units and components

P13.2 contact with leakages and hazardous substances

P13.3 damage to your working environment

P13.4 injury to self and others

P14 ensure all repaired and replaced units and components conform to the vehicle operating specification and any legal requirements

P15 adjust units and components correctly to ensure that they operate to meet system requirements, when necessary

P16 promptly record and report any additional **faults** you notice during the course of work

P17 use testing methods which are suitable for assessing the performance of the

system rectified

P18 ensure the transmission and driveline system rectified performs to the vehicle operating specification and any legal requirements prior to return to the customer

P19 ensure your records are accurate, complete and promptly passed to the relevant person(s) in the format required

P20 complete all system diagnostic activities within the agreed timescale

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

IMIHGPSV13

Diagnose and rectify heavy goods and public service vehicle transmission and driveline system faults



Knowledge and understanding

You need to know and understand: