

PHASE 1

1

Have a full awareness of relevant workplace health and safety policies and procedures. Be fully operationally trained on safe working practices for relevant equipment and machinery relating to their day-to-day responsibilities.

2

Understand workplace roles & responsibilities, in relation to colleagues and communication within the workplace. Carry out a range of vehicle inspections.

Complete a range of routine inspections including:

- ▶ Pre work inspections
- ▶ Health checks
- ▶ PDI
- ▶ Pre purchase inspections

3

Demonstrate basic competence when undertaking routine servicing & maintenance on light vehicles.

Complete a range of routine services including:

- ▶ Minor servicing
- ▶ Major servicing
- ▶ Obtain technical data & service information
- ▶ Resetting service indicators
- ▶ Basic remove & replace procedures for all parts associated with general vehicle maintenance

4

Develop electrical knowledge & skills through testing & measurement of a range of electrical circuits and components.

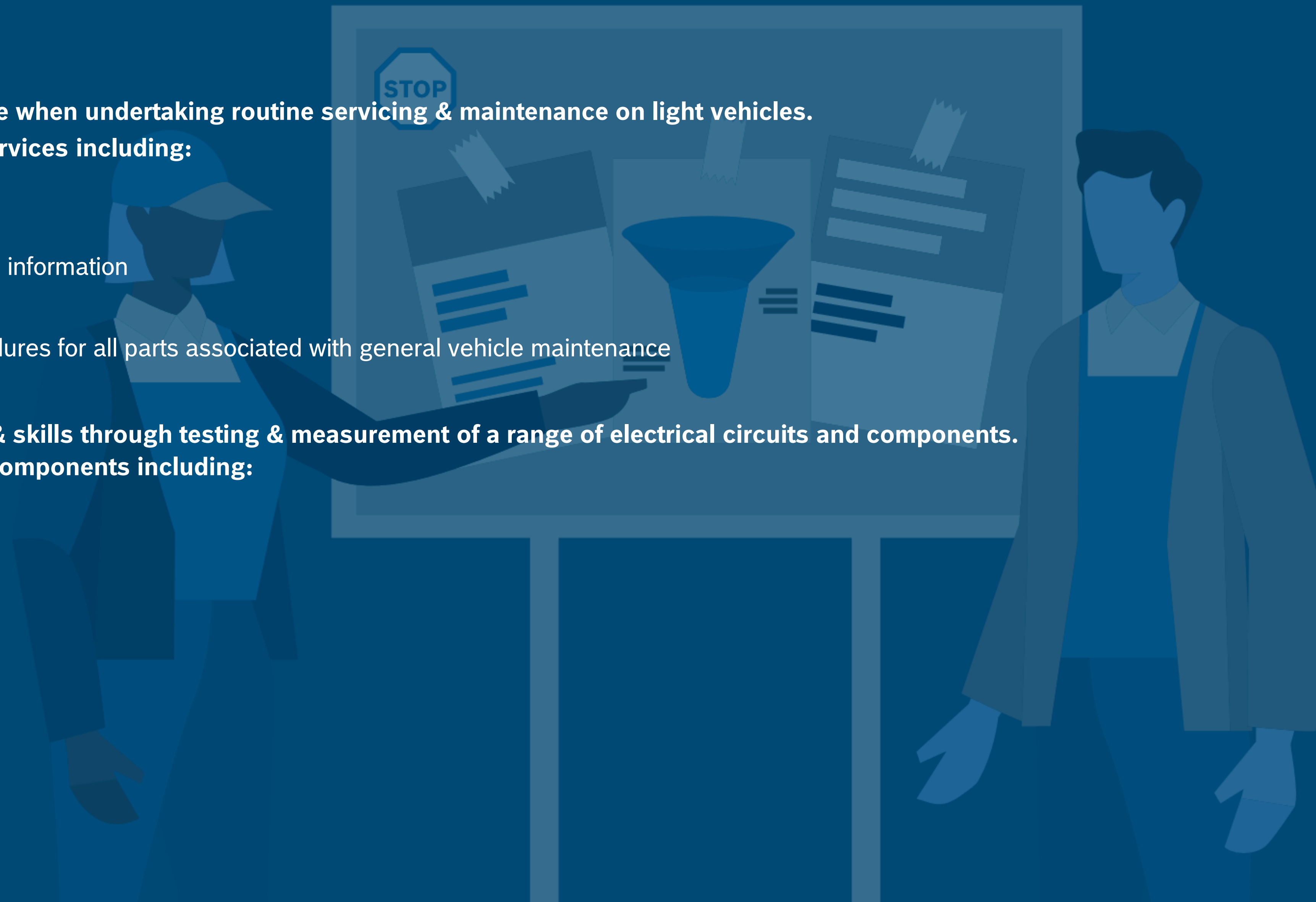
Electrical measurements and components including:

- ▶ Volts
- ▶ Ohms
- ▶ Amps
- ▶ Fuses
- ▶ Relays
- ▶ Lighting
- ▶ Alternators
- ▶ Starter motors

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End of Phase 1 Assessment.

- ▶ Theory assessment covering health & safety, foundation skills & routine servicing & maintenance
- ▶ Professional discussion on inspection & servicing evidence collected throughout Phase 1
- ▶ Carrying out a vehicle inspection and health check
- ▶ Carrying out a brake disassembly & serviceability inspection



Phase 1 Overview



PHASE 2

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Obtain & interpret chassis systems technical data. Demonstrate correct use of specialist tools and diagnostic equipment. Demonstrate correct procedures for removal, refitting, inspection, and intermediate diagnosis of chassis systems, including 4-wheel alignment procedures & processes.

- ▶ Remove & refit a front suspension strut
- ▶ Remove & refit control arm
- ▶ Remove & refit steering rack
- ▶ Remove & refit leaf spring



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Obtain & interpret transmission and driveline systems technical data. Demonstrate correct use of specialist tools and diagnostic equipment. Demonstrate correct procedures for removal, refitting, inspection, and intermediate diagnosis of transmission and driveline systems.

- ▶ Remove & refit a drive/prop shaft
- ▶ Remove & refit a manual gearbox
- ▶ Remove & refit a clutch



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Obtain & interpret electrical systems technical data. Demonstrate correct use of specialist tools and diagnostic equipment. Demonstrate correct procedures for removal, refitting, inspection, and intermediate diagnosis of electrical systems.

- ▶ Remove & refit door latch mechanism
- ▶ Remove & refit alternator
- ▶ Remove & refit starter motor



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Obtain & interpret engine systems technical data. Demonstrate correct use of specialist tools and diagnostic equipment. Demonstrate correct procedures for removal, refitting, inspection, and intermediate diagnosis of engine systems, including cooling, lubrication and HVAC systems.

- ▶ Remove & refit a camshaft timing belt
- ▶ Remove & refit a cylinder head gasket
- ▶ Remove & refit a water pump
- ▶ Remove & refit radiator



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Obtain & interpret engine systems technical data. Demonstrate correct use of specialist tools and diagnostic equipment. Demonstrate correct procedures for removal, refitting, inspection, and intermediate diagnosis of engine systems, including ignition, fuel and emissions systems.

- ▶ Remove & refit pistons & crankshaft
- ▶ Remove & refit a fuel injector
- ▶ Remove & refit DPF
- ▶ Remove & refit catalytic converter



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End of Phase 2 Assessment.

- ▶ Theory assessment covering component function and operation, intermediate diagnosis & repair
- ▶ Professional discussion on 2 step remove & refit evidence collected throughout Phase 2



- ▶ Carrying out a timing belt replacement
- ▶ Carrying out a 4-wheel alignment
- ▶ Diagnose & rectify engine management fault



Phase 2 Overview



PHASE 3

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Select, prepare & use diagnostic & rectification equipment for automotive electrical systems. Able to diagnose & rectify complex symptoms & faults with electrical & electronic systems.

Use of:

- ▶ Voltmeters, Ammeters, Ohmmeters, Multi-meters
- ▶ Battery testing equipment
- ▶ Dedicated & computer based diagnostic equipment
- ▶ Oscilloscopes
- ▶ Interpret detailed wiring diagrams

Fault symptoms:

- ▶ High resistance
- ▶ Loose & corroded connections
- ▶ Short circuit
- ▶ Excessive current consumption
- ▶ Open circuit

Diagnostic procedures:

- ▶ Repair brake light circuit
- ▶ Repair SRS fault
- ▶ Repair wash/wipe fault
- ▶ Repair electric window fault
- ▶ Repair electric mirror fault

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Select, prepare & use diagnostic & rectification equipment for engine systems. Able to diagnose & rectify complex symptoms & faults with engine systems.

Use of:

- ▶ Engine testing equipment (Fuel, compression, oil etc.)
- ▶ Emissions analysis equipment
- ▶ Interpret fault codes/live data
- ▶ Use of guided diagnostic procedures

Fault symptoms:

- ▶ Failing to start
- ▶ Engine management lights
- ▶ Excessive smoke
- ▶ Excessive fuel consumption

Diagnostic procedures:

- ▶ Repair starter motor fault
- ▶ Repair battery charging fault
- ▶ Repair engine management fault
- ▶ Repair ignition fault
- ▶ Repair emission system fault

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Select, prepare & use diagnostic & rectification equipment for advanced chassis systems. Able to diagnose & rectify complex symptoms & faults with chassis systems.

Use of:

- ▶ ADAS calibration equipment
- ▶ 4-wheel alignment equipment
- ▶ Brake roller testing equipment
- ▶ Interpretation of technical/live data

Diagnostic procedures:

- ▶ Repair ADAS fault
- ▶ Repair SRS fault
- ▶ Repair ABS/ESP fault
- ▶ Carry out 4-wheel alignment

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Select, prepare & use diagnostic & rectification equipment for advanced transmission and driveline systems. Able to diagnose & rectify complex symptoms & faults with transmission and driveline systems.

Use of:

- ▶ Transmission measuring equipment
- ▶ Interpretation of technical/live data
- ▶ Use of guided diagnostic procedures
- ▶ Automatic, dual clutch and CVT system inspection and repair

Diagnostic procedures:

- ▶ Repair manual transmission fault
- ▶ Repair automatic transmission fault
- ▶ Repair hydraulic clutch fault
- ▶ Repair clutch slip/judder/disengagement fault

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Obtain and follow manufacturers logical fault-finding procedures on the following systems.

- | | | | |
|--|---------------------------------------|--|--|
| ▶ Engine management <input type="checkbox"/> | ▶ Drive line <input type="checkbox"/> | ▶ Steering & suspension <input type="checkbox"/> | ▶ Starting & charging <input type="checkbox"/> |
| ▶ Transmission <input type="checkbox"/> | ▶ Braking <input type="checkbox"/> | ▶ Auxiliary electrical <input type="checkbox"/> | ▶ Engine mechanical <input type="checkbox"/> |

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EPA Assessment: Two online knowledge assessments for Phases 1, 2 & 3. Practical skills assessment. Professional Discussion.

- | | | |
|--|--|--|
| ▶ EPA online test A <input type="checkbox"/> | 2 day (10 hours) practical skills assessments, comprising: | 2 Part Professional Discussion based upon: |
| ▶ EPA online test B <input type="checkbox"/> | ▶ Chassis, drive line, engine & electrical fault diagnosis & repair <input type="checkbox"/> | ▶ One selected piece of Phase 3 evidence <input type="checkbox"/> |
| | ▶ Safe & effective use of diagnostic tools/equipment <input type="checkbox"/> | ▶ Existing workplace & off the job evidence <input type="checkbox"/> |
| | | ▶ 360 behaviour assessment <input type="checkbox"/> |

Phase 3 Overview

