Our Apprenticeship Programme

Motor Vehicle

Associated qualifications	Level 2 IMI Diploma in Light Vehicle Maintenance and Repair Principles
	Level 3 IMI Diploma in Light Vehicle Maintenance and Repair Principles
Duration	4 years

Off-the-job training, assessment and apprentice reviews:

This details what training the apprentice will receive, principally through qualification unit delivery with the learner outcomes attached.
It also includes estimated assessment dates.

On-the-job support for learning, competency and behaviour:

This summarises the broad timetable of tasks that can take place in the workplace, where possible, to support the off-the-job training.
It should focus on duties that include:
- Competencies - activities and practical tasks gained through on-the-job exercises with opportunities to practise
- Behaviours - actions, attitudes and beliefs embedded through the employer's organisational code of conduct

Key:

Training to be delivered	
Assessments	

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
Year 1	Level 2 IMI Diploma in Light Vehicle Maintenance and Repair Principles	
September	**Knowledge of and skills in removing and replacing light vehicle chassis units and components (LV04K and LV04S)** **Knowledge of and skills in Health and Safety and good Housekeeping in the automotive environment (G0102K G0102S)** *Outcomes:* Understand how: -light vehicle steering and suspension systems operate -light vehicle braking systems operate -light vehicle wheel and tyres systems operate -check, replace and test light vehicle chassis units and components Be able to: -work safely when carrying out removal and replacement activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out removal and replacement of light vehicle chassis units and components. -record information and make suitable recommendations	- Understand and adhere to H&S requirements in the workplace - Identify risks and hazards in the work area - Basic workshop tool & equipment identification - Key vehicle component identification - Tyre inspection and defect notification - Tread wear measurement, pressures, construction and where possible removal / refit / balance - Brakes identification of types, inspection, defect reporting, checking against acceptable service limits / measuring run out - Remove and replace defective components to include bleeding system and testing fluid - Use of measuring equipment (DTI, Vernier, and Micrometer) - Brake testing where possible in line with MOT requirements - Steering geometry - tracking
October	**Skills in Removing and Replacing Light Vehicle Chassis Units and Components (LV04S) Knowledge and skills of Health and Safety and good housekeeping in the automotive environment (G0102 K G0102S)** Brakes - Practical assessment	
November	**Skills in Removing and Replacing Light Vehicle Chassis Units and Components (LV04S)** Steering - Practical assessment	
November	**Knowledge of Health, Safety and Good Housekeeping in the Automotive Environment (G0102K)** Written assessment	
November	**Knowledge of Health, Safety and Good Housekeeping in the Automotive Environment (G0102K)** On-line test	
December	**Knowledge of and skills in Materials, Fabrication, Tools and Measuring Devices used in the Automotive Environment (G4K and G4S)** *Outcomes:* To understand and be able to ... -select, use and care for hand tools and measuring devices -prepare and use common workshop equipment -select materials when fabricating, modifying and repairing vehicles and fitting components	- Steering geometry - tracking / 4 wheel alignment - Removal and refit of steering ball joint - Service checks on steering system and component identification for all steering types - Suspension - type identification, faults, strut removal and refit to include spring removal and refit

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
	-apply automotive engineering, fabrication and fitting principles when modifying and repairing vehicles and components	
January	**Skills in Removing and Replacing Light Vehicle Chassis Units and Components (LV04S)** Suspension - Practical assessment	
February	**Knowledge of Materials, Fabrication, Tools and Measuring Devices used in the Automotive Environment (G4K)** Written assessment	
February	**Knowledge of Materials, Fabrication, Tools and Measuring Devices used in the Automotive Environment (G4K)** On-line test	
February	**Skills in Materials, Fabrication, Tools and Measuring Devices used in the Automotive Environment (G4S)** Practical assessment	
March	**Knowledge of and skills in Routine Light Vehicle Maintenance (LV01K and LV01S)** *Outcomes*: Understand how to and be able to carry out safely routine light vehicle maintenance Understand the importance of carrying out light vehicle maintenance Be able to: -use relevant information to carry out the task -use appropriate tools and equipment -carry out light vehicle routine maintenance -record information and make suitable recommendations	- Engine component identification - Ignition systems - component identification - Remove and refit spark plugs - Valve clearances, firing orders, battery testing - Basic multimeter use - Following basic service schedules and routine service procedures (oil, filters, tyres, fluid levels and checks, lighting, warning lights, brakes, steering, suspension, chassis checks)
March	**Knowledge of Removing and Replacing Light Vehicle Chassis Units and Components (LV04K)** Written assessment	
March	**Knowledge of Removing and Replacing Light Vehicle Chassis Units and Components (LV04K)** On-line test	
April	**Skills in Routine Light Vehicle Maintenance (LV01S)** Practical assessment Live service assessments	
May	**Knowledge of Routine Light Vehicle Maintenance (LV01K)** Written assessment	
June	**Knowledge of Routine Light Vehicle Maintenance (LV01K)** On-line test	

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
Year 2	Level 2 IMI Diploma in Light Vehicle Maintenance and Repair Principles	
September	**Knowledge of and skills in removing and replacing light vehicle transmission and driveline units and components (LV12K and LV12S)** *Outcomes:* Understand how: -light vehicle clutch systems operate -light vehicle manual gearbox systems operate -light vehicle driveline systems operate -to check, replace and test transmission and driveline units and components Be able to: -work safely when carrying out removal and replacement activities -use relevant information to carry out the task -use appropriate tools and equipment -record information and make suitable recommendations	- Clutch inspection and replacement (slip, drag and judder), gearbox operation and basic diagnosis - Removal and replacement of transmission components, to include: - Gear box - Drive shafts and universal joints/CV joints - Replacement of joints and bearings - Removal and inspection of final drive units - Understanding of gear ratios - Potential to strip and inspect gearbox
October	**Skills in Removing and Replacing Light Vehicle Driveline Units and Components (LV12S)** Practical assessment	
November	**Knowledge of Removing and Replacing Light Vehicle Transmission and Driveline Units and Components (LV12K)** Written assessment	
November	**Knowledge of Removing and Replacing Light Vehicle Transmission and Driveline Units and Components (LV12K)** On-line test	
January	**Knowledge of and skills in removing and replacing light vehicle electrical units and components (LV03K and LV03S)** *Outcomes:* Understand: -light vehicle electrical and electronic principles -how light vehicle batteries, starting and charging systems operate -how light vehicle auxiliary electrical systems operate -how to check, replace and test light vehicle electrical systems and components Be able to: -work safely when carrying out removal and replacement activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out removal and replacement of light vehicle electrical units and	Remove and refit electrical components to include: - starter motor - alternator - wiper motors - light units - electric windows - door locking systems Practise the basic use of a multimeter - voltage, resistance and current checks

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
	components -record information and make suitable recommendations	
January	**Skills in Removing and Replacing Light Vehicle Electrical Units and Components (LV03S)** Practical assessment	
March	**Knowledge of Removing and Replacing Light Vehicle Electrical Units and Components (LV03K)** Written assessment	
March	**Knowledge of Removing and Replacing Light Vehicle Electrical Units and Components (LV03K)** On-line test	
April	**Knowledge of Light Vehicle Fuel, Ignition, Air and Exhaust System Units and Component (LV02.2K)** *Outcomes:* Understand how: -light vehicle engine fuel systems operate -light vehicle engine ignition systems operate -light vehicle engine air supply and exhaust systems operate -to check, replace and test light vehicle engine fuel system units and components **Skills in Removing and Replacing Light Vehicle Engine Units and Components (LV02S)** *Outcomes:* Be able to: -work safely when carrying out removal and replacement activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out removal and replacement of light vehicle engine mechanical, lubrication and cooling units and components. -record information and make suitable recommendations	Fuel - remove/replace fuel pumps/sender units (in the fuel tank), replacement of fuel filters, fuel system pressure testing, fuel injector tests (resistance and pulsing), safe working practices around fuel systems, awareness of fuel pump timing on diesel engines and precautions regarding high fuel pressure systems, as well as fuel system bleeding procedures Ignition- remove and refit spark plugs, coils/coil packs, magnetic pick up crank sensors and/or cam sensors Air - remove and refit air filters and housings/pollen filters, testing and replacement of airflow meters and air temperature sensors Exhaust - remove and refit exhaust system components including catalytic convertors and oxygen sensors
April	**Skills in Removing and Replacing Light Vehicle Engine Units and Components (LV02S)** Practical assessment	
June	**Skills in Health, Safety and Good Housekeeping in the Automotive Environment (G0102S)** Practical assessment	
June	**Knowledge of Light Vehicle Fuel, Ignition, air and Exhaust System Units and Component (LV02.2K)** Written assessment	
June	**Knowledge of Light Vehicle Fuel, Ignition, air and Exhaust System Units and Component (LV02.2K)**	

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
	On-line test	
Year 3	Level 3 IMI Diploma in Light Vehicle Maintenance and Repair Principles	
September	**Knowledge of Light Vehicle Engine Mechanical, Lubrication and Cooling System Units and Components (LV02.1K)** *Outcomes:* Understand how: -the main light vehicle engine mechanical systems operate -light vehicle engine Lubrication systems operate -light vehicle engine cooling, heating and ventilation systems operate -to check, replace and test light vehicle engine mechanical, lubrication and cooling systems system units and components	**(Level 2 unit)** - Remove and refit radiator/water pump/thermostat and associated hoses and fittings - Pressure testing cooling system and correct refilling and bleeding of cooling system - Remove, refit and inspect oil pump - Servicing of crank case breather systems - Oil and oil filter servicing - Replacement and timing of cam belts/chains - Adjustment/servicing of valve opening systems (potential to include removal and refit of cam shaft and valve followers) - Carry out compression tests and cylinder leakage tests
September	**Knowledge of and skills in overhauling light vehicle engine mechanical units (LV11.1K and LV11.1S)** **Full engine strip and rebuild Sep 2021 - Jan 2022** *Outcomes:* Understand how to overhaul light vehicle engine units Be able to -work safely when overhauling light vehicle engine mechanical units -use relevant information to carry out the task -use appropriate tools and equipment -carry out the overhauling of light vehicle engine mechanical units -record information and make suitable recommendations	Opportunity to get involved with an engine overhaul or a project/practice engine to strip and rebuild in the workplace
December	**Skills in Overhauling Light Vehicle Engine Mechanical Units (LV11.1S)** Practical assessment	
December	**Knowledge of Light Vehicle Engine Mechanical, Lubrication and Cooling System Units and Components (LV02.1K)** Written assessment	
December	**Knowledge of Light Vehicle Engine Mechanical, Lubrication and Cooling System Units and Components (LV02.1K)** On-line test	
January	**Knowledge of Overhauling Light Vehicle Engine Mechanical Units (LV11.1K)** On-line test	
January	**Knowledge of Overhauling Light Vehicle Engine Mechanical Units (LV11.1K)**	

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
	Written assessment	
February	**Knowledge of and skills in support for job roles in the automotive environment (G3K and G3S)** *Outcomes:* Understand within the automotive work environment: -key organisational structures, functions and roles -the importance of obtaining, interpreting and using information in order to support their job role -the importance of different types of communication -communication requirements when carrying out vehicle repairs -how to develop good working relationships with colleagues and customers Be able to, within the automotive work environment: -work effectively within the organisational structure -obtain and use information in order to support their job role -communicate with and support colleagues and customers effectively -develop and keep good working relationships	- Opportunity for the apprentice to work in different areas/departments of the business to better their understanding of the business as a whole and encourage good working relationships - Embedding of unit outcomes
March	**Knowledge of Support for Job Roles in the Automotive Environment (G3K)** Written assessment	
March	**Skills in Supporting Job Roles in the Automotive Environment (G3S)** Practical assessment	
March	**Knowledge of Support for Job Roles in the Automotive Environment (G3K)** On-line Test	
April	**Knowledge of and skills in diagnosis and rectification of light vehicle engine faults (LV07K and LV07S)** *Outcomes:* Understand how: -the light vehicle engine systems operate -to diagnose and rectify faults in light vehicle engine systems Be able to: -work safely when carrying out light vehicle engine diagnostic and rectification activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out light vehicle engine diagnosis, rectification and test activities -record information and make suitable recommendations	Basic diagnostic skills for both mechanical and electrical/electronic engine faults - diagnostic fault code reading - use of wiring diagrams and technical information - use of electrical test equipment to include multimeter and oscilloscope Types of faults to include: - misfires and hesitations - overheating - abnormal noise - excessive fuel and/or oil consumption

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
May	**Skills in Diagnosing and Rectifying Light Vehicle Engine Faults (LV07S)** Practical assessments x 3	
May	**Knowledge of Diagnosis and Rectification of Light Vehicle Engine Faults (LV07K)** Written assessment	
June	**Knowledge of Diagnosis and Rectification of Light Vehicle Engine Faults (LV07K)** On-line test	
Year 4	Level 3 IMI Diploma in Light Vehicle Maintenance and Repair Principles	
September	**Knowledge of and skills in diagnosis and rectification of light vehicle chassis system faults (LV08K and LV08S)** *Outcomes:* Understand how: -the light vehicle chassis systems operate -to diagnose and rectify faults in light vehicle chassis systems Be able to: -work safely when carrying out light vehicle chassis diagnostic and rectification activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out light vehicle chassis diagnosis, rectification and test activities -record information and make suitable recommendations	Diagnose and rectify faults on braking, steering and suspension systems, to include: electrical control (where possible) Experience of working on: - ABS braking systems -active suspension systems - electronic stability programs - electric power assisted steering systems
November	**Skills in Diagnosing and Rectifying Light Vehicle Chassis System Faults (LV08S)** Practical assessments x 3	
November	**Knowledge of Diagnosis and Rectification of Light Vehicle Chassis System Faults (LV08K)** Written assessment	
December	**Knowledge of Diagnosis and Rectification of Light Vehicle Chassis System Faults (LV08K)** On-line test	
January	**Knowledge of and skills in diagnosis and rectification of vehicle auxiliary electrical faults (AE06K and AE06S)** *Outcomes:* Understand: -vehicle electrical and electronic principles -how light vehicle auxiliary electrical systems operate -how to diagnose and rectify faults in auxiliary electrical systems Be able to: -work safely when carrying out automotive vehicle auxiliary electrical	Practical electrical diagnosis on all auxiliary systems - heating/climate control systems - central locking and alarm systems - SRS systems - wipers and electric window/mirror systems - electric and heated seats - in-car entertainment systems (radios, SAT NAV systems, etc.) -lighting systems

Estimated Start date Month	Off-the-job training, assessment and apprentice reviews	On-the-job support for learning, competency and behaviour
	diagnostic and rectification activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out automotive vehicle auxiliary electrical diagnosis, rectification and test activities -record information and make suitable recommendations	
February	**Skills in Diagnosing and Rectifying Vehicle Auxiliary Electrical Faults (AE06S)** Practical assessments x 4	
March	**Knowledge of Diagnosis and Rectification of Vehicle Auxiliary Electrical Faults (AE06K)** Written assessment	
March	**Knowledge of Diagnosis and Rectification of Vehicle Auxiliary Electrical Faults (AE06K)** On-line test	
April	**Knowledge of and skills in diagnosis and rectification of light vehicle transmission and driveline faults (LV13K and LV13S)** *Outcomes:* Understand how: -the light vehicle transmission and driveline systems operate -to diagnose and rectify faults in light vehicle transmission and driveline systems Be able to: -work safely when carrying out light vehicle transmission and driveline diagnostic and rectification activities -use relevant information to carry out the task -use appropriate tools and equipment -carry out light vehicle transmission and driveline diagnosis, rectification and test activities -record information and make suitable recommendations	Be able to recognise transmission and driveline symptoms in all types of transmissions and to diagnose and rectify faults found, to include: - diagnosis of electrical (electrical / Hydraulic or Electrical Mechanical) control of transmission systems
May	**Knowledge of Diagnosis and Rectification of Light Vehicle Transmission and Driveline Faults (LV13K)** Written assessment	
May	**Skills in Diagnosing and Rectifying Light Vehicle Transmission and Driveline Faults (LV13S)** Practical assessments x 3	
June	**Knowledge of Diagnosis and Rectification of Light Vehicle Transmission and Driveline Faults (LV13K)** On-line test	
End	Successful completion of the attached qualifications	