



#	CODE	ELEMENTS
1	3.1.1	Performing straight sawing
2	3.1.2	Carrying out angular sawing
3	3.1.3	Performing chiseling

UNIT #: 3.2

UNIT TITLE: PERFORMING FILING

#	CODE	ELEMENTS
1	3.2.1	Carrying out flat filing
2	3.2.2	Performing radii filing
3	3.2.3	Performing angle filing

UNIT #: 3.3

UNIT TITLE: PERFORMING DRILLING

#	CODE	ELEMENTS
1	3.3.1	Performing hand drilling on plate
2	3.3.2	Carrying out drilling on bench drilling machine
3	3.3.3	Counter bore drilled holes

UNIT #: 3.4

UNIT TITLE: PERFORMING RIVETING

#	CODE	ELEMENTS
1	3.4.1	Carrying out manual riveting
2	3.4.2	Performing pop riveting
3	3.4.3	Performing pneumatic riveting

UNIT #: 3.5

UNIT TITLE: PERFORMING THREADING

#	CODE	ELEMENTS
1	3.5.1	Carrying out dieing
2	3.5.2	Carrying out taping

UNIT #: 3.6

UNIT TITLE: PERFORMING METAL FORMING

#	CODE	ELEMENTS
1	3.6.1	Bending flat materials
2	3.6.2	Bending round materials

MODULE #: MVM 104

MODULE TITLE: PERFORMING WELDING PROCESSES

UNIT #: 4.1

UNIT TITLE: PERFORMING ARC WELDING

#	CODE	ELEMENTS
1	4.1.1	Performing down hand arc welding bead
2	4.1.2	Performing down hand V joint
3	4.1.3	Carrying out down hand butt joint
4	4.1.4	Performing down hand tee joint welding

UNIT #: 4.2

UNIT TITLE: PERFORMING GAS WELDING

#	CODE	ELEMENTS
1	4.2.1	Using gas welding tools and equipment

2	4.2.2	Performing down hand butt joint
3	4.2.3	Performing down hand lap joint
4	4.2.4	Performing brazing

UNIT #: 4.3

UNIT TITLE: PERFORMING SOLDERING

#	CODE	ELEMENTS
1	4.3.1	Carrying out thin metal soldering

MODULE #: MVM 105

MODULE TITLE: BUILDING SIMPLE ELECTRIC CIRCUITS

UNIT #: 5.1

UNIT TITLE: CONSTRUCTING RESISTIVE CIRCUITS

#	CODE	ELEMENTS
1	5.1.1	Building single resistor circuit
2	5.1.2	Building series circuit
3	5.1.3	Building parallel circuit
4	5.1.4	Building combination circuit

UNIT #: 5.2

UNIT TITLE: CONSTRUCTING CAPACITIVE CIRCUIT

#	CODE	ELEMENTS
1	5.2.1	Building single capacitor circuit
2	5.2.2	Building series circuit
3	5.2.3	Constructing parallel circuit
4	5.2.4	Building combination circuit

UNIT #: 5.3

UNIT TITLE: CONSTRUCTING INDUCTIVE CIRCUIT

#	CODE	ELEMENTS
1	5.3.1	Building a single inductor circuit
2	5.3.2	Building a series circuit
3	5.3.3	Building a parallel circuit
4	5.3.4	Building combination circuit

UNIT #: 5.4

UNIT TITLE: CONSTRUCTING (RLC) CIRCUIT

#	CODE	ELEMENTS
1	5.4.1	Building a resistance and capacitance circuit
2	5.4.2	Building a resistance and inductance circuit
3	5.4.3	Building a resistance, capacitance and inductance circuit

UNIT #: 5.5

UNIT TITLE: MEASURING ELECTRICAL QUANTITIES

#	CODE	ELEMENTS
1	5.5.1	Measuring voltage in the circuit
2	5.5.2	Measuring current in the circuit
3	5.5.3	Measuring resistance in the circuit
4	5.5.4	Measuring power in the circuit

#	CODE	ELEMENTS
1	6.1.1	Testing characteristics of diode
2	6.1.2	Testing characteristics of transistors
3	6.1.3	Testing characteristics of thyristors
4	6.1.4	Testing characteristics of opto-electronic devices
5	6.1.5	Testing characteristics of integrated circuits

#	CODE	ELEMENTS
1	6.2.1	Building half-wave rectifier
2	6.2.2	Building full-wave rectifier (center tapped)
3	6.2.3	Building bridge rectifier
4	6.2.4	Building smoothing circuits

#	CODE	ELEMENTS
1	6.3.1	Testing low frequency circuit
2	6.3.2	Testing high frequency circuit

#	CODE	ELEMENTS
1	6.4.1	Troubleshooting stabilized power supply
2	6.4.2	Troubleshooting single stage transistor amplifier
3	6.4.3	Troubleshooting multi-stage transistor amplifier

#	CODE	ELEMENTS
1	7.1.1	Changing engine oil
2	7.1.2	Carrying out valve adjustment

#	CODE	ELEMENTS
1	7.2.1	Servicing engine cooling components
2	7.2.2	Replacing engine cooling system components and parts

#	CODE	ELEMENTS
1	7.3.1	Performing carburetor service
2	7.3.2	Carrying out air filter service
3	7.3.3	Carrying out fuel lines service

MODULE #: MVM 108

MODULE TITLE: CARRYING OUT REPAIRING OF WHEEL AND TYRES.

UNIT #: 8.1

UNIT TITLE: PERFORMING TYRES SERVICE

#	CODE	ELEMENTS
1	8.1.1	Replacing worn tyres
2	8.1.2	Repairing punctures
3	8.1.3	Refilling tyres pressure

UNIT #: 8.2

UNIT TITLE: REPAIRING TUBE AND TUBELESS TYRES

#	CODE	ELEMENTS
1	8.2.1	Repairing tube tyres
2	8.2.2	Repairing tubeless tyres

UNIT #: 8.3

UNIT TITLE: PERFORMING WHEEL BALANCE

#	CODE	ELEMENTS
1	8.3.1	Carrying out static balance
2	8.3.2	Carrying out dynamic balance

UNIT #: 8.4

UNIT TITLE: ALIGNING WHEEL

#	CODE	ELEMENTS
1	8.4.1	Adjusting wheel sprocket
2	8.4.2	Performing wheel rim Alignment

UNIT #: 8.5

UNIT TITLE: SERVICING WHEEL HUBS

#	CODE	ELEMENTS
1	8.5.1	Servicing wheel hub components
2	8.5.2	Adjust wheel bearing taps play

MODULE #: MVM 109

MODULE TITLE: PERFORMING STEERING AND SUSPENSION SYSTEM

UNIT #: 9.1

UNIT TITLE: PERFORMING STEERING SYSTEM SERVICE

#	CODE	ELEMENTS
1	9.1.1	Servicing steering column
2	9.1.2	Adjusting steering bearings

UNIT #: 9.2

UNIT TITLE: PERFORMING SUSPENSION SYSTEM SERVICE

#	CODE	ELEMENTS
1	9.2.1	Servicing front suspension
2	9.2.2	Servicing rear suspension

**Level Two**

MODULE #: MVM 201 MODULE TITLE: MAINTAINING SUSPENSION SYSTEM

UNIT #: 1.1 UNIT TITLE: REPLACE SUSPENSION BUSHES

#	CODE	ELEMENTS
1	1.1.1	Replace spring bushes
2	1.1.2	Replace stabilizer bushes

UNIT #: 1.2

UNIT TITLE: REPLACE SUSPENSION SHOCKABSORBERS

#	CODE	ELEMENTS
1	1.2.1	Replace telescopic shock absorber
2	1.2.2	Replace McPherson strut shock absorber.

MODULE #: MVM 202

MODULE TITLE: CARRYING OUT ENGINE MAINTENANCE

UNIT #: 2.1

UNIT TITLE: PERFORM ENGINE NON DESTRUCTION TESTS

#	CODE	ELEMENTS
1	2.1.1	Perform engine compression test
2	2.1.2	Perform cylinder leakage test

UNIT #: 2.2

UNIT TITLE: ADJUST VALVE CLEARANCE

#	CODE	ELEMENTS
1	2.2.1	Perform valve overlap adjustment method.
2	2.2.2	Perform one to one valve adjustment method

UNIT #: 2.3

UNIT TITLE: CARRY OUT IGNITION TIMING

#	CODE	ELEMENTS
1	2.3.1	Perform spark ignition timing
2	2.3.2	Perform compression ignition timing

MODULE #: MVM 203

MODULE TITLE: OVERHAULING ENGINES

UNIT #: 3.1

UNIT TITLE: DISMANTLE ENGINES

#	CODE	ELEMENTS
1	3.1.1	Dismantle cylinder head
2	3.1.2	Dismantle oil sump
3	3.1.3	Dismantle cylinder block

UNIT #: 3.2

UNIT TITLE: SERVICE CYLINDER HEADS

#	CODE	ELEMENTS
1	3.2.1	Reface cylinder head
2	3.2.2	Perform valve lapping
3	3.2.3	Assemble cylinder head

UNIT #: 3.3

UNIT TITLE: PERFORM CYLINDER BLOCK MEASUREMENTS

#	CODE	ELEMENTS
1	3.3.1	Check cylinder block warpage
2	3.3.2	Perform cylinder bore measurement
3	3.3.3	Check camshaft journal bores

UNIT #: 3.4

UNIT TITLE: PERFORM CRANKSHAFT MEASUREMENTS

#	CODE	ELEMENTS
1	3.4.1	Check bearing oil clearance
2	3.4.2	Check crankshaft straightness
3	3.4.3	Check crankshaft journals

UNIT #: 3.5

UNIT TITLE: PERFORM CAMSHAFT MEASUREMENTS

#	CODE	ELEMENTS
1	3.5.1	Check camshaft for wear
2	3.5.2	Check camshaft straightness

UNIT #: 3.6

UNIT TITLE: CHECK CONNECTING RODS

#	CODE	ELEMENTS
1	3.6.1	Check condition of connecting rod

2	3.6.2	Check connecting rod straightness
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UNIT #: 3.7

UNIT TITLE: CHECK PISTON WEAR

#	CODE	ELEMENTS
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1	3.7.1	Check piston measurements
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UNIT #: 3.8

UNIT TITLE: ASSEMBLE ENGINES

#	CODE	ELEMENTS
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1	3.8.1	Assemble engine components
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MODULE #: MVM 204

MODULE TITLE: SERVICING FUEL SYSTEMS

UNIT #: 4.1

UNIT TITLE: SERVICE PETROL FUEL SYSTEM

#	CODE	ELEMENTS
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1	4.1.1	Service carburetion fuel system
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2	4.1.2	Service electronic fuel injection system
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UNIT #: 4.2

UNIT TITLE: REPAIR NATURAL GAS FUEL SYSTEMS

#	CODE	ELEMENTS
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1	4.2.1	Service LPG system components
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2	4.2.2	Service CNG system components
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UNIT #: 4.3

UNIT TITLE: REPAIR DIESEL FUEL SYSTEMS

#	CODE	ELEMENTS
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1	4.3.1	Service diesel supply system
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2	4.3.2	Carry out diesel smoke test
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MODULE #: MVM 205

MODULE TITLE: SERVICING IGNITION SYSTEMS

UNIT #: 5.1

UNIT TITLE: SERVICE ELECTRONIC IGNITION SYSTEMS

#	CODE	ELEMENTS
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1	5.1.1	Service electronic ignition components.
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MODULE #: MVM 206

MODULE TITLE: SERVICING TRANSMISSION SYSTEMS

UNIT #: 6.1

UNIT TITLE: SERVICE CLUTCHES

#	CODE	ELEMENTS
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1	6.1.1	Service clutch components
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UNIT #: 6.2

UNIT TITLE: OVERHAUL MANUAL GEARBOXES

#	CODE	ELEMENTS
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1	6.2.1	Overhaul main gearbox
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2	6.2.2	Overhaul auxiliary gearbox
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UNIT #: 6.3

UNIT TITLE: SERVICE FINAL DRIVE UNIT

#	CODE	ELEMENTS
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1	6.3.1	Service final drive components
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2	6.3.2	Test crown wheel and pinion backlash
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UNIT #: 6.4

UNIT TITLE: SERVICE AUTOMATIC TRANSMISSIONS

#	CODE	ELEMENTS
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1	6.4.1	Change automatic transmission fluid (ATF).
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2	6.4.2	Change (ATF) filter
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MODULE #: MVM 207

MODULE TITLE: SERVICING STEERING SYSTEMS

UNIT #: 7.1

UNIT TITLE: PERFORM WHEEL ALIGNMENT

#	CODE	ELEMENTS
1	7.1.1	Replace steering joints and linkages
2	7.1.2	Perform wheel alignment

UNIT #: 7.2

UNIT TITLE: SERVICE STEERING BOXES

#	CODE	ELEMENTS
1	7.2.1	Overhaul steering box
2	7.2.2	Adjust steering box back-lash

UNIT #: 7.3

UNIT TITLE: SERVICE POWER STEERING SYSTEMS

#	CODE	ELEMENTS
1	7.3.1	Overhaul power steering pump
2	7.3.2	Service power steering components

MODULE #: MVM 208

MODULE TITLE: OVERHAUL POWER STEERING PUMP

UNIT #: 8.1

UNIT TITLE: TROUBLE-SHOOT AIR SUSPENSIONS

#	CODE	ELEMENTS
1	8.1.1	Trouble-shoot pneumatic suspension components
2	8.1.2	Diagnose electronic suspension components
3	8.1.3	Test electronic suspension system

UNIT #: 8.2

UNIT TITLE: SERVICE AIR SUSPENSION COMPONENTS

#	CODE	ELEMENTS
1	8.2.1	Repair pneumatic suspension components
2	8.2.2	Repair electronic suspension components
3	8.2.3	Perform chassis alignment

MODULE #: MVM 209

MODULE TITLE: REPAIRING BRAKES

UNIT #: 9.1

UNIT TITLE: SERVICE PNEUMATIC BRAKES

#	CODE	ELEMENTS
1	9.1.1	Service brake pads
2	9.1.2	Service brake linings

UNIT #: 9.2

UNIT TITLE: SERVICE ANTILOCK BRAKE SYSTEM (ABS)

#	CODE	ELEMENTS
1	9.2.1	Troubleshoot antilock brake system (ABS)
2	9.2.2	Service ABS

MODULE #: MVM 210

MODULE TITLE: SERVICING HYDRAULIC SYSTEMS

UNIT #: 10.1

UNIT TITLE: REPAIR HYDRAULIC PIPES

#	CODE	ELEMENTS
1	10.1.1	Service hydraulic pipes
2	10.1.2	Flush hydraulic systems
3	10.1.3	Remove air from the system

UNIT #: 10.2

UNIT TITLE: SERVICE HYDRAULIC ACTUATORS

#	CODE	ELEMENTS
1	10.2.1	Service hydraulic cylinders
2	10.2.2	Service hydraulic gear type motor



MODULE #: MVM 211

MODULE TITLE: CARRY OUT WELDING PROCESSES

UNIT #: 11.1

UNIT TITLE: PERFORM TIG AND MIG WELDING

#	CODE	ELEMENTS
1	11.1.1	Perform TIG welding
2	11.1.2	Perform MIG welding

UNIT #: 11.2

UNIT TITLE: PERFORM RESISTANCE WELDING

#	CODE	ELEMENTS
1	11.2.1	Perform resistance welding

MODULE #: MVM 212

MODULE TITLE: MAINTAINING EMISSION CONTROL SYSTEM

UNIT #: 12.1

UNIT TITLE: SERVICING CATALYTIC CONVERTER

#	CODE	ELEMENTS
1	12.1.1	Inspecting catalytic converter
2	12.1.2	Repairing catalytic converter

UNIT #: 12.2

UNIT TITLE: SERVICING OXYGEN SENSOR

#	CODE	ELEMENTS
1	12.2.1	Inspecting oxygen sensor
2	12.2.2	Replacing an oxygen sensor

UNIT #: 12.3

UNIT TITLE: REPAIRING MUFFLER AND PIPES

#	CODE	ELEMENTS
1	12.3.1	Repairing exhaust system components
2	12.3.2	Replacing exhaust system components