

AUTOMOTIVE WORKBOOKS 2020-LEVEL 2

Last date for assessment:
December 2020

No	Unit	Title	Level	Credit	Ver	Theory/ Practical
1	229	Identify the general locations and functions of motor vehicle systems and main components	2	4	10	T
2	231	Explain the operation of two and four stroke petrol and diesel engines	2	4	11	T
3	21675	Demonstrate knowledge of automotive batteries	2	2	3	T
4	233	Service an automotive battery.	2	2	10	P
	21675	Demonstrate knowledge of automotive batteries	2	2	3	T
5	234	Describe automotive starting and charging systems and their operation.	2	4	10	T
6	235	Describe automotive ignition systems and their operation.	2	4	10	T
7	239	Demonstrate knowledge of automotive manual transmissions.	2	3	10	T
8	21687	Demonstrate knowledge of a basic engine tune up	2	3	3	T
9	243	Carry out basic engine tuning on a four stroke engine.	2	4	9	P
	21687	Demonstrate knowledge of a basic engine tune up	2	3	3	T
10	21688	Demonstrate knowledge of disassemble and reassemble of a 4 stroke engine	2	3	2	T
11	21691	Disassemble and reassemble a single cylinder	1	2	2	P
12	244	Disassemble and assemble a four stroke engine.	2	6	10	P
	21691	Disassemble and reassemble a single cylinder	1	2	2	P
13	21688	Demonstrate knowledge of disassemble and reassemble of a 4 stroke engine	2	3	2	T
	21691	Disassemble and reassemble a single cylinder	1	2	2	P
14	247	Prepare a vehicle and/or a machine for use and shut down after use.	2	2	9	P
15	247	Prepare a vehicle and/or a machine for use and shut down after use.	2	2	9	P
	21690	Perform general servicing checks on a motor vehicle	2	3	2	P
16	248	Describe an apprenticeship employment contract for the automotive industry.	2	1	9	T
17	249	Carry out automotive industry personal workplace requirements.	2	5	11	P
18	21668	Demonstrate knowledge of cleaning automotive components	2	2	2	T
19	924	Clean automotive components and maintain equipment.	2	1	6	P
	21668	Demonstrate knowledge of cleaning automotive components	2	2	2	T
20	30514	Carry out minor servicing tasks on an ignition system	2	3	1	P

No	Unit	Title	Level	Credit	Ver	Theory/ Practical
21	3877	Protect vehicle electronics	2	2	8	T
22	4261	Identify legal rights and obligations in relation to owning and operating a private motor vehicle	2	3	6	T
23	12349	Demonstrate knowledge of time management	2	3	6	T
24	15408	Describe motor vehicle safe motoring requirements and general locations of systems and components	2	4	6	T
25	30476	Demonstrate knowledge of tools and equipment used in the motor industry	2	2	2	T
26	30476	Demonstrate knowledge of tools and equipment used in the motor industry	2	2	2	T
	21858	Select and use hand tools and workshop equipment for an automotive application	2	2	1	P
27	21669	Demonstrate knowledge of hand tools and workshop equipment for motor industry applications	2	2	4	T
28	21669	Demonstrate knowledge of hand tools and workshop equipment	2	2	4	T
	21859	Select and use hand tools and workshop equipment for an automotive application	2	2	1	P
29	30475	Demonstrate knowledge of motor industry engineering tasks	2	2	1	T
30	30475	Demonstrate knowledge of motor industry engineering tasks	2	2	1	T
	21671	Carry out general engineering tasks in the Motor Industry	2	4	2	P
31	21670	Demonstrate knowledge of general engineering tasks in the Motor Industry	2	3	4	T
32	21670	Demonstrate knowledge of general engineering tasks in the Motor Industry	2	3	4	T
	21671	Carry out general engineering tasks in the Motor Industry	2	4	2	P
33	21672	Demonstrate knowledge of new and emerging technology	2	5	2	T
34	21674	Demonstrate knowledge of terminology used in the motor industry	2	2	2	T
35	21677	Demonstrate knowledge of a diesel fuel system	2	2	3	T
36	21677	Demonstrate knowledge of a diesel fuel system	2	2	3	T
	21692	Perform minor servicing tasks on a diesel fuel system	2	2	1	P
37	21686	Demonstrate knowledge of automotive cooling systems.	2	2	4	T
38	21686	Demonstrate knowledge of automotive cooling systems.	2	2	4	T
	21717	Service automotive cooling systems	2	3	4	P

No	Unit	Title	Level	Credit	Ver	Theory/ Practical
39	21679	Demonstrate knowledge of interchanging and balancing road wheels in the motor industry	2	2	2	T
40	21869	Remove and replace road wheels in the motor industry	2	1	4	p
41	21869	Remove and replace road wheels in the motor industry	2	1	4	P
	21722	Balance wheels off a vehicle in the motor industry	2	2	1	P
	21679	Demonstrate knowledge of interchanging and balancing road wheels in the motor industry	2	2	2	T
42	21682	Demonstrate knowledge of an oxy-acetylene welding plant in the motor industry	2	2	2	T
43	21682	Demonstrate knowledge of an oxy-acetylene welding plant in the motor industry	2	2	2	T
	21685	Use an oxy-acetylene welding plant in the motor industry	2	3	1	P
44	21689	Demonstrate knowledge of hydraulic brake fluid, fluid replacement, and brake bleeding procedures	2	2	3	T
45	21689	Demonstrate knowledge of hydraulic brake fluid, fluid replacement, and brake bleeding procedures	2	2	2	T
	242	Change the fluid and bleed a brake hydraulic system.	2	2	10	P
46	21701	Demonstrate knowledge of motor body parts and trim	2	2	3	T
47	21716	Select and apply lubricants and sealants for automotive and related industry applications	2	1	2	P
48	30478	Demonstrate knowledge of automotive lubricants	2	2	1	T
49	30478	Demonstrate knowledge of automotive lubricants	2	2	1	T
	21716	Select and apply lubricants and sealants for automotive and related industry applications	2	1	2	P
50	21718	Demonstrate knowledge of hazardous materials used in the motor industry	2	2	2	T
51	21720	Demonstrate knowledge of vehicle braking systems	2	3	3	T
52	21721	Demonstrate knowledge of vehicle steering and suspension systems	2	2	3	T
53	21857	Identify the occupational areas and structures of the New Zealand automotive industry.	2	2	3	T
54	29579	Demonstrate knowledge of good work habits and safe working practices in the automotive industry	2	4	1	T
55	29579	Demonstrate knowledge of good work habits and safe working practices in the automotive industry	2	4	1	T
	29580	Demonstrate good work habits and safe work practices in the automotive industry	2	4	2	P
56	30572	Demonstrate knowledge of vehicle or machine batteries	2	3	1	T
57	21719	Remove and replace motor vehicle lamps	2	3	2	P

AUTOMOTIVE WORKBOOKS 2020-LEVEL 3

No	Unit	Title	Level	Credit	Ver	Theory/ Practical
58	240	Demonstrate knowledge of petrol fuel systems	3	3	10	T
59	898	Identify a wiring diagram and translate information into a circuit	3	3	4	P
60	918	Demonstrate knowledge of light vehicle final drive assembly operation	3	4	5	T
61	920	Describe the construction and operation of manual and semi automatic transmissions used on light vehicles	3	4	4	T
62	3856	Demonstrate emergency procedures in the motor and related trades.	3	2	9	T
63	5461	Demonstrate knowledge of fuel emissions, and vehicle emission controls	3	4	4	T
64	5766	Demonstrate knowledge of motor vehicle safety systems	3	4	5	T
65	15373	Demonstrate knowledge of automotive air conditioning	3	4	6	T
66	21680	Demonstrate knowledge of automotive lubricants and sealants	3	3	4	T
	21716	Select and apply lubricants and sealants for automotive and related industry applications	2	1	2	P
67	21683	Demonstrate knowledge of MIG welding the motor industry	3	2	3	T
	21684	Use a MIG welding plant in the Motor Industry	3	3	2	P
68	22799	Demonstrate safety precautions fitted with air bags and/or pre-tensioners	3	1	1	P
69	23817	Demonstrate knowledge of braking principles and system component operation for light vehicles	3	5	2	T
70	23818	Demonstrate knowledge of braking system fault diagnosis and repair requirements for light vehicles	3	3	2	T
71	23743	Demonstrate knowledge of general legislation and regulations	3	2	3	T
72	30570	Demonstrate knowledge of welding	3	3	1	T
73	24275	Disassemble, inspect and reassemble an engine short block	3	3	1	P
74	30435	Demonstrate knowledge of vehicle emissions	3	4	1	T
75	30436	Demonstrate knowledge of an EFI system	3	2	1	T
76	30437	Demonstrate knowledge of a diesel fuel system	3	2	1	T
77	30477	Demonstrate knowledge of petrol and diesel engines	3	4	1	T

No	Unit	Title	Level	Credit	Ver	Theory/ Practical
78	30479	Service and automotive cooling systems	3	3	1	P
79	30515	Remove and refit intake and exhaust system components	3	3	1	P
80	5742	Protect electronics when servicing vehicles	3	2	5	P
81	21719	Remove and replace motor vehicle lamps	2	3	2	P
	24093	Rectify simple lighting faults and adjust lamps	3	3	2	P
82	30572	Demonstrate knowledge of vehicle or machine batteries	2	3	1	T
	30556	Service an automotive battery	3	3	1	P
83	30571	Demonstrate knowledge of principles and testing automotive electrical circuits	3	6	1	T
84	30571	Demonstrate knowledge of principles and testing automotive electrical circuits	3	6	1	T
	30558	Test and repair automotive electrical circuits	3	5	1	P
85	30565	Demonstrate knowledge of an automotive air conditioning system	3	4	1	T
86	30574	Demonstrate knowledge of ignition systems	3	3	1	T
87	30434	Service a vehicle and or machine	3	3	1	P
88	30517	Service a brake system on a vehicle	3	4	1	P
89	30518	Bleed a hydraulic brake system	3	2	1	P
90	30519	Service steering and suspension systems	3	4	1	P
91	30566	Demonstrate knowledge of steering and suspension systems	3	2	1	T
92	30568	Demonstrate knowledge of brake systems	3	4	1	T
93	30568	Demonstrate knowledge of brake systems	3	4	1	T
	31063	Demonstrate knowledge of hydraulic brake system fault diagnosis	4	2	1	T
94	30480	Demonstrate knowledge of cooling systems and coolant	3	2	1	T
95	30561	Demonstrate knowledge of drivelines and final drives	3	4	1	T
96	30563	Demonstrate knowledge of charging and starting systems	3	4	1	T