

OCCUPATIONAL TOOL AND EQUIPMENT LIST

Automotive Service Technician



Government of Newfoundland Labrador
Department of Advanced Education & Skills
Apprenticeship and Trades Certification Division

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Preface

This document is intended as a companion to the October 2014 Plan of Training for the Automotive Service Technician occupation. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeships.

Acknowledgements

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We offer you a sincere thank you.

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Note:

The numbers suggested in the following Tool and Equipment List represent the required minimum. Please verify this list with your selected training institution.

Tools and Equipment List
Automotive Service Technician

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT			
Item	Units for individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
Hand Tools			
Basic Brake service tools	1	B	
Blow Gun	1	B	
Chisels, punches	1	B	
Crimping Tool	1	B	
Flashlight	1	B	
Feeler gauge (standard / metric)	1	B	
Hacksaw	1	B	
Hammers (ballpeen / plastic)	1 of each	B	
Hex key (standard / metric) set	1 of each	B	
Inspection Mirror	1	B	
Johnson Bar	1	B	
Locking Pliers, set	1	B	
Mechanic Pick Set	1	B	
Multimeter (DVOM)	1	B	
Pliers, set	1	B	
Pry Bar, set	1	B	
Ratchet and socks – 1/4, 3/8, 2 drive (standard / metric)	1	B	
Ruler, 12"	1	B	

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT

Item	Units for individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
Scraper (Gasket and Carbon)	1	B	
Screwdrivers	1	B	
Tape, 12' minimum	1	B	
Test lamp	1	B	
Tire pressure gauge	1	B	
Tool box	1	B	
Torx bits, set	1	B	
Tread Depth Gauge (for tires and brakes)	1	B	
Utility knife	1	B	
Vernier Caliper-SAE and Metric	1 of each	B	
Wire brush	1	B	
Wire strippers	1	B	
Wrench set (standard / metric)	1	B	
PPE and Safety Equipment			
CSA approved safety footwear	1	B	
Coveralls	1	B	
Eye protection- goggles/safety glasses/ welding goggles	1 of each	B	
Hearing Protection-ear muffs/ ear plugs	1 of each	B	
Welding Gloves	1 pair	B	

Note: If identifying sets, please include specific information.

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Safety Equipment				
Disposable Earplugs		As required	B	
Dust and Particle Masks		As required	B	
Eye Wash Station	1	15	B	
Fire Extinguishers		As required by OHS regulations	B	
First Aid Station		As required by OHS regulations	B	
Hand protection- disposable gloves		As required	B	
Hand protection- Gloves for Hybrid Vehicles	1	15	B	
Safety Hook and Pylons (for Hybrid Vehicles)	1	15	B	
Safety Shields	1	15	B	
Standard Tool Kit				
Air Hammer	1	15	B	
Air Ratchet	1	15	B	
Anti-freeze Tester	1	15	B	
Axle Boot Clamp Tool	1	15	B	
Battery Post Service Tool	1	15	B	
Belt Tensioning Release Tool	1	15	B	
Blow Gun	1	15	B	
Caulking Gun	1	15	B	
Compression Tester	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Creeper / Fender Cover	3 of each	5	B	
Crow Foot Wrenches, Set, metric / SAE	1 of each	15	B	
Dial Indicator	1	15	B	
Die Grinder	1	15	B	
Drill - ½", and Bits	1 set	15	B	
Drill Gauge	1	15	B	
Easy Out, set	1	15	B	
Files, set of 5	1	15	B	
Filter Wrench (universal)	1	15	B	
Flarenut Wrench	1 set	15	B	
Flaring Tool	1	15	B	
Fuel Injection Noid Light Kit	1	15	B	
Fuel line/Transmission/ Air Conditioning line Disconnect Set	1 of each	15	B	
Hole Gauge	1	15	B	
Infrared Temperature Gun	1	15	B	
Impact Driver and Bits, set	1	15	B	
Impact Wrench, ½"	1	15	B	
Impact Socket Set, ½"	1	15	B	
Inspection Mirror	1	15	B	
Magnetic Pick-up Tool	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Mechanic Pick Set	1	15	B	
Multimeter (DVOM)	1	15	B	
Nut Driver Set	1	15	B	
Pullers, set	1	15	B	
Pyrometer	1	15	B	
Refractometer	1	15	B	
Rivet Gun	1	15	B	
Scraper set	1	15	B	
Seal Drivers and Extractor	1	15	B	
Soldering Equipment	1	15	B	
Spark Tester	1	15	B	
Standard Test Leads and Probe	1	15	B	
Stethoscope	1	15	B	
Straight Edge	1	15	B	
Stud Extractor set	1	15	B	
Tap and Die Set (Standard / Metric)	1	15	B	
Terminal Remover Tool Set	1	15	B	
Thread Files	1	15	B	
Timing Light	1	15	B	
Tin Snips (Left and Right), set	1	15	B	
Torque Angle Meter	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Torque Sticks	1	15	B	
Torque Wrenches (1/4, 3/8, 1/2)	1	15	B	
Tread Depth Gauge	1	15	B	
Trouble Light	5	3	B	
Tube Bending Tool	1	15	B	
Tube Cutters	2	8	B	
Upholstery Tools, set	1	15	B	
Vacuum Pump	1	15	B	
Vacuum / Pressure Gauge	1	15	B	
Vernier Caliper (Standard / SAE)	3	15	B	
Shop Tools and Equipment				
Air compressor – hoses – inline filter and water separators	1	15	B	
Air bag simulator	1	15	B	
Air conditioning flushing equipment	1	15	A	
Air conditioning leak detection and inspection equipment	1	15	A	
Air conditioning recovery / recycle / recharge station	1	15	A	
Air conditioning service and repair tools, kit	1	15	A	
Alignment equipment	1	15	A	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Airbag Removal Tools	1 set	15	B	
Anti-static devices	1 kit	15	B	
Ball joint press and adapters	1	15	B	
Battery charger / boosting equipment	1	15	B	
Battery tester / alternator and starter tester (AVR)	1	15	B	
Bearing remover	1	15	B	
Belt tension gauge	1	15	B	
Bench grinders	1	15	B	
Bench vises	5	3	B	
Black light	1	15	B	
Borescope	1	15	A	
Brake Cylinder hone	1	15	B	
Brake Pressure Tester	1	15	B	
Brake System Bleeder	1	15	B	
Brake drum gauge / micrometer	1	15	E	
Brake lathe	1	15	E	
Brake rotor gauge / micrometer	1	15	E	
Break-out box	1	15	A	
Camshaft bearing tools (removal and installation), kit	1	15	A	
CAT-IV meter(for hybrid vehicles)	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Clutch Alignment tools	1 set	15	B	
Chassis ears	1	15	A	
Compression leak down tester	1	15	A	
Coolant drain pans	5	3	B	
Cooling system pressure tester	1	15	B	
Cooling system recovery and flushing station	1	15	E	
Core plug / expansion plug installation tool	1	15	E	
Cylinder ridge reamer	1	15	A	
Drill press, $\frac{1}{2}$ "	1	15	B	
Electrical Short Detector	1	15	B	
Engine and transmission support	1	15	B	
Engine cylinder hone	1	15	A	
Engine hoist and hydraulic lift	1	15	B	
Engine stand – portable	3	5	B	
EVAP test equipment	1	15	A	
Exhaust fan	1	15	B	
Exhaust ventilation (hoses)	5	3	B	
Flashlights	1	15	B	
Floor jack, 2 ton minimum	3	5	B	
Fuel Quality Tester	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Fuel injector flushing kit	1	15	A	
Fuel recovery and storage station	1	15	B	
Funnel	5	3	B	
Gear puller set	1	15	B	
Grease gun – oil dispensing system, fluid suction pump	1	15	B	
Hydraulic press	1	15	B	
Hydraulic transmission jack	1	15	B	
Jack stands, set of 2	6	3	B	
Jumper Lead set	1	15	B	
Leak detection equipment (refrigerants)	1	15	A	
Leak detection tank (tires)	1	15	E	
Monometer	1	15	B	
Oil drain barrels and disposal system	6	3	B	
Parts cleaner	1	15	B	
Piston ring installer	1	15	B	
Pressure washer	1	15	B	
Piston ring compressor	1	15	B	
Shop vacuum	1	15	B	
Shop PC – desktop or laptop	3	5	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Slide hammer	1	15	B	
Spark plug Gapper	2	15	B	
Specialized tools for engines and transmission, kit	1	15	A	
Spring compressor – coil spring and strut spring	1	15	E	
Tire balancing equipment	1	15	E	
Tire changing machine	1	15	E	
Tire repairing equipment, kit	1	15	E	
Valve grinding equipment	1	15	A	
Valve spring compressor	1	15	A	
Vehicle hoist	2	8	B	
Vehicle Service Information System	1	15	B	
Vibration Analyzer	1	15	B	
Welding equipment - GMAW welder and oxy	1	15	B	
Water Hose	1	15	B	
Wheel chocks, set of 4	1	15	B	
Wheel ramps, set of 2	6	3	B	
Measuring Tools and Equipment				
Back pressure gauge	1	15	B	
Ball joint dial indicator set	1	15	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 students	Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Coolant system pressure tester	1	15	B	
Cylinder bore gauges - small bore gauge, telescoping gauge	1 of each	15	B	
Fuel pressure gauge kit	1	15	B	
Headlamp aiming equipment	1	15	B	
Inclinometer	1	15	B	
Micrometer - SAE / metric	1	15	B	
Oil pressure gauge set - engine / transmission	1	15	B	
Plastic gauge	As Required		B	
Power steering pressure tester	1	15	A	
Pressure gauge	1	15	B	
Scan tool	1	15	B	
Spring scale	1	15	B	
Torque angle meter / indicator	1	15	B	

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