

# OCCUPATIONAL TOOL AND EQUIPMENT LIST

## **Automotive Service Technician**



Government of Newfoundland Labrador  
Department of Education and Early Childhood Development  
Apprenticeship and Trades Certification Division

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## **Preface**

This document is intended as a companion to the March 2019 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)<br>Advanced (A)<br>Both (B) | Comments |
| <b>Hand Tools</b>   |                               |  |          |
| Basic Brake Service Tools                                 | 1                             | B  |          |
| Blow Gun  | 1                             | B  |          |
| Chisels, Punches  | 1                             | B  |          |
| Electrical Terminal Crimping Tool                         | 1                             | B  |          |
| Flaring Tool (Double/Bubble)                              | 1 of each                     | 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  |          |
| Measuring Tape (12' minimum)                              | 1                             | B  |          |
| Multimeter (DVOM)   | 1                             | B  |          |
| Pliers, Set   | 1                             | B  |          |
| Pry Bar, Set  | 1                             | B  |          |
| Ratchet and Sockets – ¼, 3/8, ½ Drive (Standard / Metric) | 1                             | B  |          |

| SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT       |                               |  |                      |
|--|-------------------------------|--|----------------------|
| Item   | Units for individual Students | Required for Entry (E) Advanced (A) Both (B) | Comments             |
| Ruler, 12"   | 1                             | B  |                      |
| Scraper (Gasket and Carbon)                              | 1                             | B  |                      |
| Screwdrivers   | 1                             | B  |                      |
| Tap and Die Set (ISO and SAE)                            | 1 of each                     | B  |                      |
| Test Lamp  | 1                             | B  |                      |
| Tire Pressure Gauge                                      | 1                             | B  |                      |
| Tool Box   | 1                             | B  |                      |
| Torx Bits, Set   | 1                             | B  |                      |
| Tread Depth Gauge  | 1                             | B  | For tires and brakes |
| 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<br>per<br>15<br>students    | Students<br>per Unit | Required<br>for<br>Entry (E)<br>Advanced<br>(A)<br>Both (B) | Comments                |
| <b>Safety Equipment</b>   |                                   |                      |   |                         |
| Disposable Earplugs   | As required                       |                      | B   |                         |
| Dust and Particle Masks   | As required                       |                      | B   |                         |
| Eye Wash Station  | As required by OHS<br>regulations |                      | B   |                         |
| Fire Blanket  | 1                                 |                      | B   |                         |
| Fire Extinguisher   | As required by OHS<br>regulations |                      | B   |                         |
| First Aid Station   | As required by OHS<br>regulations |                      | B   | Including First Aid Kit |
| Hand Protection - Disposable<br>Gloves                          | As required                       |                      | B   |                         |
| Safety Shields  | 1                                 | 15                   | B   |                         |
| <b>Standard Tool Kit</b>  |                                   |                      |   |                         |
| 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   |                         |
| Creeper / Fender Cover  | 3 of<br>each                      | 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 |
| 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  |          |
| Mechanic Pick Set   | 1                     | 15                | B  |          |

**SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION**

| Item                                   | Units<br>per<br>15<br>students | Students<br>per Unit | Required<br>for<br>Entry (E)<br>Advanced<br>(A)<br>Both (B) | Comments |
|--|--------------------------------|----------------------|---|----------|
| Multimeter (DVOM)                      | 1                              | 15                   | B   |          |
| Nut Driver Set                         | 1                              | 15                   | B   |          |
| Pullers, Set                           | 1                              | 15                   | B   |          |
| Pyrometer                              | 1                              | 15                   | B   |          |
| Refractormeter                         | 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 /<br>Metric) | 1                              | 15                   | B   |          |
| Terminal Remover Tool Set              | 1                              | 15                   | B   |          |
| Thread Files                           | 1                              | 15                   | B   |          |
| Timing Light                           | 1                              | 15                   | B   |          |
| Torque Angle Meter                     | 1                              | 15                   | B   |          |
| Torque Sticks                          | 1                              | 15                   | B   |          |
| Torque Wrenches (1/4, 3/8, ½)          | 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 |
| 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 (Metric / SAE)                                  | 3                     | 15                | B  |          |
| Shop Tools and Equipment  |                       |                   |  |          |
| Air Compressor – Hoses – Inline Filter and Water Separators     | 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  |          |
| Airbag Removal Tools  | 1 set                 | 15                | B  |          |
| Anti-Static Devices   | 1 kit                 | 15                | B  |          |
| Ball Joint Press and Adapters                                   | 1                     | 15                | B  |          |



**SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION**

| Item   | Units<br>per<br>15<br>students | Students<br>per Unit | Required<br>for<br>Entry (E)<br>Advanced<br>(A)<br>Both (B) | Comments |
|--|--------------------------------|----------------------|---|----------|
| Battery Charger / Boosting Equipment                   | 1                              | 15                   | B   |          |
| Battery Tester / Alternator and Starter Tester (AVR)   | 1                              | 15                   | B   |          |
| Bearing Remover  | 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   |          |
| Camshaft Bearing Tools (Removal and Installation), Kit | 1                              | 15                   | A   |          |
| CAT-IV Meter   | 1                              | 15                   | B   |          |
| Clutch Alignment Tools                                 | 1 set                          | 15                   | B   |          |
| Chassis Ears   | 1                              | 15                   | A   |          |
| Cylinder Leakage Tester                                | 1                              | 15                   | A   |          |
| Coolant Drain Pans                                     | 5                              | 3                    | B   |          |
| Cooling System Pressure 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 |
| Cylinder Ridge Reamer   | 1                     | 15                | A  |          |
| Drill Press, ½"   | 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 Injector Cleaning Kit                                      | 1                     | 15                | A  |          |
| Fuel Recovery and Storage Station                               | 1                     | 15                | B  |          |
| Funnel  | 5                     | 3                 | B  |          |
| Gear Puller Set   | 1                     | 15                | B  |          |
| Grease Gun  | 1                     | 15                | B  |          |
| Hand Held Suction Pump  | 1                     | 15                | B  |          |
| Hydraulic Press   | 1                     | 15                | B  |          |
| Hydraulic Transmission Jack                                     | 1                     | 15                | B  |          |

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| Item   | Units<br>per<br>15<br>students | Students<br>per Unit | Required<br>for<br>Entry (E)<br>Advanced<br>(A)<br>Both (B) | Comments |
|--|--------------------------------|----------------------|---|----------|
| Jack Stands, Set of 2                                  | 6                              | 3                    | B   |          |
| Jumper Lead Set  | 1                              | 15                   | B   |          |
| Leak Detection Equipment<br>(Refrigerants)             | 1                              | 15                   | A   |          |
| Leak Detection Tank (Tires)                            | 1                              | 15                   | E   |          |
| Oil Drain Barrels and Disposal<br>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   |          |
| Slide Hammer   | 1                              | 15                   | B   |          |
| Spark Plug Gapper                                      | 2                              | 15                   | B   |          |
| Specialized Tools for Engines and<br>Transmission, Kit | 1                              | 15                   | A   |          |
| Spring Compressor – Coil Spring<br>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 Spring Compressor                                | 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 |
| Vehicle Hoist   | 2                     | 8                 | B  |          |
| Vehicle Service Information System                              | 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  |          |
| Measuring Tools and Equipment                                   |                       |                   |  |          |
| Exhaust Back Pressure Gauge                                     | 1                     | 15                | B  |          |
| Ball Joint Dial Indicator Set                                   | 1                     | 15                | B  |          |
| 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  |          |

**SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION**

| Item                           | Units<br>per<br>15<br>students | Students<br>per Unit | Required<br>for<br>Entry (E)<br>Advanced<br>(A)<br>Both (B) | Comments |
|--------------------------------|--------------------------------|----------------------|---|----------|
| Scan Tool                      | 1                              | 15                   | B   |          |
| Spring Gauge                   | 1                              | 15                   | B   |          |
| Torque Angle Meter / Indicator | 1                              | 15                   | B   |          |

Note: If identifying sets, please include specific information.