



Provincial Scope Document

AUTOMOTIVE SERVICE (Secondary) 2009

Contest Length: 8 hours

Check in time: 7:45

Contest Start: 8:00

Purpose of the Challenge:

Assess the contestant's skills in correctly inspecting, repairing and adjusting detached and/or mounted auto parts, as compared to industry standards

Skills & Knowledge to be Tested:

Safety:

- Proper eye protection and clothing **MUST** be worn at all times during the competition
- CSA approved/goggles
- Coveralls/shop coats
- All competitors must follow safety standards as per competition area

Service Information Retrieval:

- Electronic system use
- Traditional manual use

Customer Relations:

- Satisfy customer inquiries
- Interpret customer information to convey diagnostic approach
- Explanation of service work performed

Theory:

- Examination of questions regarding all aspects of the repair and diagnosis of automobiles

Fabrication:

- Select and operate appropriate fabricating hand tools

Manual Transmissions/Manual Transaxles:

- Identify components
- Analyze gear ratios
- Power flow
- Clutch operation
- Assembly/disassembly procedures

- Routine maintenance/adjustments
- Component fault diagnosis

Automatic Transmissions/Automatic Transaxles

- Identify components
- Routine maintenance/adjustments
- Assembly/disassembly procedures
- Electrical/hydraulic diagnosis
- Power flow
- Component fault diagnosis

Differentials/Driveshafts/Driveaxles

- Identify components
- Assembly/disassembly
- Inspecting and testing
- Inspection and adjustment of operating angles
- Power flow
- Adjustments

Engine Mechanical

- Assembly/disassembly
- Identify components
- Component fault diagnosis
- Inspection and testing
- Diagnosis and service of cylinder heads and blocks
- Measurements

Turbochargers/Superchargers

- Identify components
- Inspection and testing

Heating/Cooling Systems (excluding A/C)

- Identify components
- Inspection and testing
- Assembly/disassembly

Fuel Systems

- Identify components
- Inspection and testing

Engine Management

- Identify components
- Driveability diagnostics
- Test equipment usage
 - Scan Tool
 - Multi-meter

- Lab-scope
- Exhaust gas analyzer
- Component operation and testing

Ignition Systems

- Identify components
- Inspection and testing
- Diagnostics
- Adjustments

Vehicle Emissions

- Exhaust gas analysis
- Identify components
- System inspection and testing

Electrical Accessories

- Testing and diagnosis of electrical accessories

Electrical

- Starting systems
- Charging systems
- Batteries
- Testing and diagnosis

Braking Systems (excluding air brake systems)

- Identify components
- Inspection and testing
- Assembly/disassembly
- Basic systems
- ABS
- Routine maintenance/adjustments
- Diagnostics

Suspension and Steering

- Identify components
- Inspection and testing
- Assembly/disassembly
- Routine maintenance/adjustments
- Diagnostics

Component Identification

- Purpose, operation and testing of identified components

Judges

Judging will be done by qualified industry representatives, wherever possible.

