



12th TERRITORIAL SKILLS COMPETITION - SCOPE DOCUMENT

33 - AUTOMOTIVE MAINTENANCE Secondary Level/Post-Secondary Level

PURPOSE OF THE CHALLENGE

DURATION: 6 HOURS

Assess the competitor skills in correctly inspecting, repairing and adjusting detached and/or mounted auto parts, as compared to industry standards. Practical assignments will be based on selected areas of the scope document.

SKILLS AND KNOWLEDGE THAT MAY BE TESTED

Safety

Proper eye protection and clothing **MUST** be worn at all times during the competition.

- CSA approved footwear
- Safety glasses / goggles
- Appropriate work apparel must be worn (coveralls, shop coat, pants and shirt).

All competitors must follow safety standards as per competition area.

Service Information Retrieval

- Electronic system use
- Traditional manual use

Theory

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

Fabrication

- Select and operate appropriate fabricating hand tools.

Engine Mechanical

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

Fuel Systems

- Identify components
- Inspection and testing

Engine Management

- Identify components
- Driveability diagnostics
- Test equipment usage – Scan tool, Multimeter
- Component operation and testing

Ignition Systems

- Identify components
- Inspection and testing
- Diagnostics
- Adjustments

Electrical

- Starting systems
- Charging systems
- Batteries
- Testing and diagnosis of vehicle electrical equipment

Braking Systems (excluding air brakes)

- 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 and adjustments
- Diagnostics

EQUIPMENT, TOOLS, AND SUPPLIES

- Competitors must supply their own safety boots, safety glasses, clothing and hearing protection.
- Safety boots and eye protection must be worn at all times.
- All tools and equipment will be supplied and will be generic in nature whenever possible.
- Competitors are not required to supply any tools or equipment.

SAFETY REQUIREMENTS

Failure to comply with safety regulations may result in disqualification or removal of the competitor from competition.

SCORING / POINT BREAKDOWN

Each competition station will have a stated maximum available point score. The actual point

scores from each station will be added up to calculate an individual competitor's final total score for the competition. In the event of a tie, the written exam mark will be used to determine the winner.

TECHNICAL COMMITTEE MEMBERS - JUDGES

Brent Currie / Technical Chair

Judging will be by qualified industry representatives, wherever possible.