

Skills Canada National Competition

SCOPE DOCUMENT

SCOPE DOCUMENT	
Competition Year	2012
Competition location	Edmonton, AB
Trade Number	94
Trade Name	Heavy Equipment Service
Level	Post-Secondary

1. INTRODUCTION

1.1 Purpose of the Challenge.

Assess the contestant's skills in correctly inspecting, repairing and adjusting detached and / or mounted heavy-duty equipment components, as compared to industry standards. Practical assignments will be based on selected areas of the scope document.

1.2 Duration of contest.

12 hours

1.3 Skills and Knowledge to be tested.

Competitors will be tested on Diesel Engine Overhaul, Hydraulic Systems, Electrical Systems, Shop Practices, Drive Train, and Theory Examination/Component Identification.

2. CONTEST DESCRIPTION

2.1 List of documents produced and timeline for when competitors have access to the documents.

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
No other documents will be posted prior to the competition	

2.2 Tasks that may be performed during the contest

- **Diesel Engine Overhaul and electronic diagnosis**
 - Component identification
 - Component measurement
 - Component assessment
 - Engine electronic-control system diagnosis

- **Hydraulic systems**
 - Component identification
 - Component measurement
 - Component assessment
 - System testing and adjusting
 - Diagnosis and repair
 - Schematic interpretation
- **Electrical systems**
 - Component identification
 - Component measurement
 - Component assessment
 - System testing and adjusting
 - Diagnosis and repair
 - Schematic interpretation
- **Shop Practice**
 - Hand and Power tools
 - Precision Measurement
- **Drive Train**
 - Component identification
 - Component measurement
 - Component assessment
 - System testing and adjusting
 - Diagnosis and repair Drive axle service
 - Driveshaft service
- **Component identification**
 - Engine components
 - Hydraulic components
 - Electrical components
 - Drive train components
 - Tools and supplies
- **Written Examination**
 - Engine systems
 - Hydraulic systems
 - Electrical systems
 - Drive train systems
 - Tools and materials

3. EQUIPMENT, MATERIAL, CLOTHING

3.1 Equipment and material provided by Skills/Compétences Canada

- A variety of manufactures equipment will be used along with the appropriate service information.

3.2 Equipment and material provided by the competitor

- Optional: Competitors are allowed to bring their own multimeter and flashlight.

3.3 Required clothing (Provided by competitor)

- Appropriate work apparel must be worn. (Clean coveralls or shop-coats in excellent condition, pants & shirts)

4. SAFETY REQUIREMENTS

4.1 List of required personal protective equipment(PPE) provided by competitors

Note: Competitors will not be allowed to compete if the above items are not brought and used

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Safety Glasses | <input checked="" type="checkbox"/> CSA approved Safety shoes | <input type="checkbox"/> Latex gloves |
| <input type="checkbox"/> Safety Gloves | <input type="checkbox"/> Welding helmet | <input type="checkbox"/> Dust Mask |
| <input type="checkbox"/> Hard Hat | <input type="checkbox"/> Welding gloves | <input type="checkbox"/> Leather gloves |
| <input type="checkbox"/> Hearing protection | <input type="checkbox"/> Respiratory protection | <input type="checkbox"/> No PPE required |

4.2 List of required personal protective equipment(PPE) provided by Skills/Compétences Canada (SCC)

- No additional PPE will be supplied by SCC

5. ASSESSMENT

5.1 Point breakdown

POINT BREAKDOWN
Work Practices (use of safety equipment, safe and clean workspace)
Proper use of tools
Proper use of service manuals
Logical order of repair
Interpretation, identification and reasoning
Writing a report
Precision and accuracy

6. ADDITIONAL INFORMATION

6.1 Consecutive translation

If consecutive translation is required on site, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

6.2 Tie (No ties are allowed)

In the event of a TIE, the competitor with the higher safety related marks will be awarded the higher rank.

6.3 Competition rules

Please refer to the competition rules for all general SCNC information.

7. NATIONAL TECHNICAL COMMITTEE MEMBERS

Region	Name	Email address
Pacific Region	Bobby Haraba	bharaba@nait.ca
Western Region	Wayne Bobychuk	wbobychuck@rrc.mb.ca
Ontario	Robert Huzij	robert.huzij@cambriancollege.ca
Quebec	Carl Bouffard	bouffardca@hotmail.com
Atlantic Region	Bud Murphy	budd.murphy@nsc.ca
Atlantic Region	Harry McCosh	harry.mccosh@gnb.ca
Workshop Supervisor	Bobby Haraba	bharaba@nait.ca