

SCOPE DOCUMENT

Competition year	2024
Competition Location	Abbotsford, BC
Trade Number	94
Trade Name	Heavy Equipment Technology
Level	Post-Secondary

1 INTRODUCTION

1.1 Purpose of the challenge.

Provide competitors the opportunity to display their skills, knowledge and professionalism as they safely and efficiently diagnose, repair and maintain any part of the power train, including its control systems, in mobile and stationary industrial equipment.

1.2 Duration of Contest: 8 hours April 17th, 2024

Schedule			
Orientation	7:30am - 8:00am	Competition (4 of 6)	12:30pm - 1:30pm
Competition (1 of 6)	8:00am - 9:00am	Break	1:30pm - 1:45pm
Break	9:00am - 9:15am	Competition (5 of 6)	1:45pm - 2:45pm
Competition (2 of 6)	9:15am - 10:15am	Break	2:45pm - 3:00pm
Break	10:15am - 10:30am	Competition (6 of 6)	3:00pm - 4:00pm
Competition (3 of 6)	10:30am - 11:30am	Debrief / Photos	4:00pm - 4:30pm
Lunch	11:30am - 12:30pm		

1.3 Skills and knowledge to be tested.

Use hand, power and diagnostic tools to safely and competently carry out repairs according to manufacturer's specifications.

Read and understand work orders, interpret technical manuals and keep service records.

2 CONTEST DESCRIPTION

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

Document	
Equipment models	
Cummins ISX engines and Insite software	
Hydraulic training board	
Cat Model 262D3 skid steer loaders	
Case New Holland axle assembly	

2.2 Tasks that may be performed during the contest.

Competitors will complete practical tasks in the following categories relating to on-road, off-road, mobile and stationary equipment. The tasks are designed to evaluate the competitor's ability to safely and efficiently maintain, diagnose and repair heavy equipment (on-road and off-road, mobile and stationary)

Diesel Engines	1 hour
Hydraulic Systems	1 hour
Electrical Systems	1 hour
Drive-Train Systems	1 hour
Work Place Practices	1 hour
Component measurement, ID & Fluid Analysis	1 hour

3 EQUIPMENT, MATERIAL, CLOTHING

3.1 Equipment and material provided by Skills/Competences British Columbia

A variety of manufacturers 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 and 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 these items are not brought and used.

PPE Equipment
Safety Glasses
CSA approved Safety shoes

4.2 List of required personal protective equipment (PPE) provided by Skills/Competences British Columbia.

No Additional PPE will be supplied by Skills/Competences British Columbia

5 ASSESSMENT

5.1 Point Breakdown

POINT BREAKDOWN
Use of safety equipment and safe and clean workspace
Use and interpretation of service manuals & schematic diagrams
Logical order of repair
Proper use of tools
Precise adjustment of components
Accurate measurements
Superior workmanship
Identification of faults, codes or components

6 ADDITIONAL INFORMATION

6.1 Consecutive translation

If consecutive translation is required on site, the Skills/Competences British Columbia Provincial/Territorial offices must advise Skills/Competences 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 of the Skills British Columbia Competition.

7 BRITISH COLUMBIA PROVINCIAL TECHNICAL COMMITTEE MEMBERS

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