



Cariboo Regional Skills Competition

Scope Document

*Heavy Mechanical Service
(Post-Secondary) (2023)*

Thompson Rivers University
March 3, 2023



Heavy Mechanical Service (2023)

Purpose of the Challenge:

The purpose of the challenge is to provide the 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 the control systems, in mobile and stationary industrial equipment.

Skills and Knowledge to Be Tested:

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

Tasks That May Be Performed During the Challenge:

Competitors will complete practical tasks in the following categories relating to on-road, off-road, mobile and stationary equipment. The categories are

- Diesel Engines
- Hydraulic Systems
- Electrical Systems
- Drive-train Systems
- Fuel Systems
- Steering, Suspension and Brake Systems
- Metal Project and Precision Measurement
- Component Identification

Equipment and Material Provided By the Competitor:

- Safety glasses
- CSA approved safety shoes
- Clean coveralls or shop-coats in excellent condition.
- Optional: Multimeter and flashlight.

Equipment and Material Provided By the Committee:

All required documentation and equipment. Please see the attached list.

Assessment:

Points will be awarded on the following basis:

- Use of safety equipment and safe and clean workspace. TBD
- Use and interpretation of service manuals and schematic diagrams TBD
- Logical order of repair TBD



- Proper use of tools TBD
- Precise adjustment of components TBD
- Accurate measurements TBD
- Superior workmanship TBD
- Identification of faults, codes or components TBD

Additional Information:

Technical Committee:

Technical Committee Members

Darren Watt dwatt@tru.ca (Chair)

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