

Contest Description Heavy Duty Technology Post-Secondary

DATE April 12, 2024

LOCATION NSCC Akerley Campus

Time	Task
8:00 am	Orientation
8:30 am - 3:30 pm	Competition
	There will be a one-hour lunch
12:00 pm – 1:00 pm (LUNCH)	break (lunch is provided).
	 There are six (6) stations.
	 Each station is a maximum of 1
	hour long.

1. Purpose of the Contest

To challenge aspiring Heavy Duty / Truck and Transport repair technicians with common trade related tasks.

2. Number of Stations / Allocations

There will be six (6) stations.

3. Skills & Knowledge to be tested

Station 1 - Shop Fundamentals

- Measuring
- Tool Selection and preparation
- Layout build to drawing

Station 2 – Welding & Cutting

- Oxy fuel set up and disassembly
- Oxy acetylene cutting
- SMAW welding
- Measuring and Layout
- Fastener Torquing



Station 3 – Electrical

- Design, construct and test an electrical circuit
- Part identification
- Schematic Interpretation
- Diagnostic Tool Usage
- Test questions

Station 4 – Engines

- Engine Adjustments
- Measurements
- Engine component identification
- Online and Printed Manuals

Station 5 – Hydraulics

- Diagnose hydraulic faults
- ISO schematic interpretation
- Write a service report and record measurements
- Online and Printed Manuals

Station 6 - Under carriage, Steering & Braking

- Diagnose mechanical faults
- Write a service report
- Perform measurements
- OEM procedure based
- Online and printed manuals

4. Prerequisites

Contest-Specific Prerequisites

- Participants must be presently enrolled in either Certificate, Diploma or as a Registered Apprentice in the Heavy Duty/Truck and Transport program.
- The competition is based on first- and second-year curriculum.



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SCNS Prerequisites

- Post-Secondary competitors must meet the following criteria in the current school year:
- Be enrolled in a community college, university, private school OR be a registered apprentice with the Department of Labour and Advanced Education (Apprenticeship Agency);
- Be registered as a competitor with Skills Canada Nova Scotia;
- The competitor cannot be a certified journey-person;
- Possess Canadian citizenship or Permanent Resident (Landed Immigrant) status and be a resident of Nova Scotia; or be a registered International Student. Competitors are responsible for verifying this information if requested;
- Have been earning post-secondary credits in a sector relevant to the one in which they wish to compete (i.e. to compete in carpentry, the student would be earning credits in any construction-related trade) at any time during the academic school year (September to June);
- All competitors must be able to show either current apprenticeship status and/or proof of enrollment in a post-secondary institution upon request of the Provincial Technical Committee (PTC) or Skills Canada Nova Scotia.
- Have completed and submitted a signed release form

5. Equipment & Clothing

What Will Be Supplied

Equipment and all necessary tools to do the required tasks.

What Competitors Must Supply

- PPE;
- Personal Covid required items PPE (masks)
- Clear safety glasses, no tints;
- 6-inch-high (cover ankle) CSA work boots;
- Coveralls, long sleeve
- Competitors may bring their own welding PPE, if desired.

6. Evaluation & Judging Criteria

- Judging will be performed by industry experts;
- Evaluation will be based on performance, ability, knowledge and time;
- Competitor ties will be settled by total tasks completion time.

skillsns.ca



10. PTC Contact Information

Name	Employer	Email
Gerry Brymer (NTC)	Toromont Cat	GBrymer@toromont.com
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