

**Date:** April 24, 2021, 8:00 A.M.

**Location:** Yukon University HET shop (T030)

**Duration of contest:** 4 Hours

## CONTEST INTRODUCTION

*Provide competitors an opportunity to display their skills, knowledge and professionalism as they safely and efficiently diagnose, repair, and maintain mobile and stationary industrial equipment.*

## SKILLS AND KNOWLEDGE TO BE TESTED

- *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*

## PROJECT DESCRIPTION

*Task 1: Steering, Braking and Undercarriage Systems*

*Task 2: Engine Systems*

*Task 3: Electrical Systems*

*Task 4: Electronic Engine Diagnostics*

## EQUIPMENT, MATERIAL, CLOTHING

*Equipment and material provided by Skills Canada Yukon:*

- *Face shield*
- *Nitrile gloves*
- *Safety glasses (clear)*
- *Hearing protection*

*Equipment and material provided by the competitor:*

- *CSA-approved safety footwear*
- *Coveralls or appropriate work wear*
- *Mechanics gloves*

## SAFETY REQUIREMENTS

- *Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any competitor breaking any health, safety and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.*
- *Competitors must wear pants and a shirt plus either coveralls or a shop coat. All must be clean and in good condition. Clothing must not be loose-fitting and must not have drawstrings or dangling pieces.*

## EVALUATION CRITERIA

*Example:*

<b>Skills evaluated</b>	<b>Task 1</b>
a. Use of safety equipment & maintaining a safe and clean workspace	<b>5.50</b>
b. Use and interpretation of service manuals & schematic diagrams	<b>2.00</b>
c. Logical order of operations	<b>4.50</b>
d. Proper use of tools	<b>6.00</b>
e. Accurate measurements	<b>3.50</b>

f. Superior Workmanship	3.50
<b>Total</b>	<b>25.00</b>

## TECHNICAL COMMITTEE INFORMATION

### National Technical Committee Yukon Representative:

Doug McRae – Instructor, Yukon University, [dmcrae@yukonu.ca](mailto:dmcrae@yukonu.ca)

### Technical Advisors:

Nathan Peterson – Mechanic, Yukon Energy Corp., [Nathan.Peterson@yec.yk.ca](mailto:Nathan.Peterson@yec.yk.ca)

Riley Hildebrand – Mechanic, Yukon Energy Corp., [Riley.Hildebrand@yec.yk.ca](mailto:Riley.Hildebrand@yec.yk.ca)