

# 2024 26th ANNUAL SKILLS MANITOBA COMPETITION CONTEST DESCRIPTION

**CONTEST NAME: Outdoor Power and Recreation Equipment** 

**CONTEST NO: 53** 

**LEVEL:** Secondary and Post-Secondary. Maximum 12 Contestants

NOTE: Schools are encouraged to apply for a second contestant to be placed on the waiting list. The names will be drawn by ballot and the schools will be notified within five business days of the deadline for registration.

### **CONTEST LOCATION:**

Red River College - Notre Dame Campus - Heavy Equipment Transportation Center - Building Z

# **CONTEST START TIME AND DURATION:**

Report to the contest site before 7:45 am.

Contest duration: 6 hours.

Contest Orientation 7;45 am SHARP at contest site in Building Z. Participants are allowed to ask for clarifications on any aspect of the competition.

Contest starts at the end of orientation.

Lunch approximately 45 minutes between 11:00 and 12:00. Contest will be over by 2:00.

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## **PURPOSE OF CHALLENGE:**

To assess the participant's knowledge and ability to properly diagnose, repair, and maintain Outdoor Power and Recreation Equipment in accordance with industry standards and specifications.

# SKILLS AND KNOWLEDGE TO BE TESTED:

The following may be tested and/or assessed during the contest.

- Safety.
  - o Demonstrate and maintain proper safety awareness and behavior.
  - CSA approved footwear
  - Safety glasses / goggles
  - Shop coats / coveralls

# \*\*A participant MUST at all times, maintain proper safety standards or they could be disqualified for being unsafe.

- Service and parts information retrieval.
  - Use of traditional and /or electronic manual
- Customer Relations,
  - o Interpret customer information to justify diagnostic approach.
  - Satisfy customer inquiries.
  - Explanation of service work performed.
- Engine Mechanical Two and Four Cycle
  - Disassemble and reassemble engines
  - Identification of components/parts
  - o Component operation.
  - Testing and diagnosis
  - Measurement and adjustment.
- Engine Management Two and Four Cycle
  - Ignition system
  - Air/Fuel system theory and adjustment (no raw fuel)
  - Identification of components/parts
  - Component operation.
  - Testing and diagnosis
  - Measurement and adjustment.
- Electrical system and accessories
  - o Fundamentals of electricity and Ohm's Law
  - o Testing and diagnosis of electrical components
  - Starting systems
  - Charging systems

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- Lights and wiring.
- Power Trains and Brakes
  - Theory and power flow
  - Drivability diagnostics
  - o Failure analysis
  - Measurement and adjustment.
- General Knowledge
  - o Theory on all aspects of the above
  - o Tool and test equipment usage
  - o Technical competence and Failure Analysis

# ASSESSMENT: TOTAL POINTS 1000

| POINT BREAKDOWN   |     | /1000 |
|---|-----|-------|
| Time management   | 25  |       |
| Safety regulations (unsafe participants will be disqualified)** | **  |       |
| Tool and equipment use/care                                     | 25  |       |
| Theory  | 100 |       |
| Practical   | 850 |       |
|   |     |       |

# **EQUIPMENT, TOOLS, MATERIALS TO BE PROVIDED BY COMMITTEE:**

All assemblies, tools, and manuals.

# **EQUIPMENT, TOOLS, MATERIALS TO BE SUPPLIED BY COMPETITOR:**

Personal Protective Equipment:

- CSA approved footwear
- Safety glasses/Goggles
- Coveralls/Shop coats

Branded or promotional apparel that is not representative of the exclusive partnership agreements endorsed by Skills Canada at the time of the competition cannot be worn during the competition.

All tools will be provided by Skills Manitoba.

# **WORKSITE SAFETY RULES / REQUIREMENTS:**

Personal Safety Equipment must be worn at all times during the competition.

- CSA approved footwear
- Safety glasses/Goggles
- Coveralls/Shop coats

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Competitors will be expected to maintain proper safety standards and follow all safety regulations as set out in the orientation. Failure to comply could result in penalties or disqualification.

#### SPECIAL CONDITIONS / ADDITIONAL INFORMATION:

None

# THE IMPORTANCE OF THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY:

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (former Essential Skills) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are absolutely crucial for success in Trade and Technology careers. Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents. The following 9 skills have been identified and validated as key skills for success for the workplace: 1.Numeracy, 2.Communication, 3.Collaboration, 4.Adaptability, 5.Reading, 6.Writing, 7.Problem Solving, 8.Creativity and Innovation, 9.Digital

### **TECHNICAL COMMITTEE MEMBERS CONTACT INFORMATION:**

Eric Wood – Provincial Technical Committee Chair RRC Polytech 204-697-5953 Ewood30@rrc.ca

Rick Groff - National Technical Committee Co-Chair RRC Polytech 1-204-697-5942 rgroff@rrc.ca

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