

## 2012 Provincial Skills Canada Competition

### *Scope Document*

Edmonton Expo Centre, Edmonton

May 10 & 11, 2012

<b>EVENT:</b> Outdoor Power and Recreation Equipment	<b>LEVEL:</b> Secondary
<b>COMPETITION START TIMES:</b> May 10: Orientation 8:15 am Competition 9:00 am May 11: Competition 8:30 am	<b>LOCATION:</b> , HALL C, Edmonton Expo Centre, Edmonton
<b>DURATION:</b> 10 Hours.(Two days)	<b>REGIONALIZED:</b> No
<b>WORLDSKILLS TRADE #:</b> 53	

#### GENERAL DESCRIPTION

Competitors explore the world of small engine and recreation vehicle repair by completing relevant projects. The competition involves both a theory exam and practical test. The practical component will cover diagnostics to maintenance by having competitors cycle through various workstations.

This event is composed of 7 stations covering the following areas:

- Written theory exam
- Electrical diagnostics and repair (knowledge of basic electrical, use of test light, DVOM)
- Fabrication/basic hand skills (cutting, drilling, flaring, filing etc.)
- Component measurement and part identification (Briggs and Stratton 1 cylinder engines)
- Engine disassembly and reassembly (torque bolts to specifications)
- Equipment malfunction diagnosis and repair
- Equipment maintenance (electronic data retrieval, adjustments on: ATV, outboard motor, snowmobile, and lawn and garden equipment)

#### Purpose of the Challenge:

To test each student's skill and knowledge in the areas of inspection, measurement, maintenance and repair of small engines and recreational vehicles.

# SKILLS20

## EQUIPMENT & MATERIALS

### Equipment and Materials Competitors Must Supply:

- CSA Approved Safety glasses,
- Lab coat/overalls
- CSA Approved Steel toed boots/shoes

### Equipment and Materials Supplied by the Committee:

All the necessary tools will be supplied to perform the various tasks.

Please note that competitors may bring additional tools if they wish e.g. preferred engine assembly tools (piston ring compressor) or digital volt ohm meter. Competitors are responsible for the security of their possessions.

### Clothing Requirement

Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts will not be permitted. No loose fitting clothes or jewelry.

## SAFETY

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

## JUDGING CRITERIA

Students will perform tasks that will be judged using a rubric compiled by the committee.

Students will record findings based on measurements using specialized tools, such as multi-meters, and precision measuring tools.

## TIE BREAKING PROCESS

The highest score on written exam will determine the tie.



20th ANNUAL PROVINCIAL SKILLS CANADA COMPETITION

# SKILLS20

## RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website:

<http://education.alberta.ca/teachers/program/cts.aspx>

MEC 1010 Modes and Mechanisms  
MEC 1020 Vehicle Service and Care  
MEC 1040 Engine Fundamentals  
MEC 1090 Electrical Fundamentals  
MEC 1110 Surface Preparation 1  
MEC1130 Mechanical Systems  
MEC 1150 Ride and Control Systems

All competitors must be able to use the following equipment:

- Multimeter
- Test light
- Soldering iron
- Micrometer (metric and imperial)
- Telescoping bore gauges
- Tap and dies
- Tube bending and flaring tools
- Specialized engine assembly tools (i.e. piston ring compressor, flywheel puller)

## ADDITIONAL INFORMATION

### Competitor Registration

The Provincial Skills Canada Competition (PSCC) registration will open online [www.skillsalberta.com](http://www.skillsalberta.com) on February 27<sup>th</sup>, 2012 at 8:00 am.

### Lunch

Lunch for accredited competitors only will be provided by Skills Canada Alberta. Teacher accreditation can be purchased online at [www.skillsalberta.com](http://www.skillsalberta.com) . Registration opens on February 27, 2012 at 8:00 am.

### Parking & Venue Maps

<http://www.edmontonexpocentre.com/attend/parking/>

### Awards Ceremony

The Awards Ceremony will take place on Friday May 11, 2012 at 5:30pm in Hall D of the Edmonton Expo Center. Admission is free and everyone is welcome to attend. The Awards Ceremony will be shown live at [www.skillsalberta.com](http://www.skillsalberta.com) .



### **Team Alberta Information**

Team Alberta will be selected at the Provincial Skills Canada Competition (PSCC) on May 10-11, 2012. Then two days later the gold medalists from PSCC will compete at the Skills Canada National Competition (SCNC) in Edmonton, Alberta. It is recommended that competitors review the SCNC scope documents to be familiar with the national scope and project. <http://www.skillscanada.com>

During the PSCC Awards Ceremony on May 11 all students who earn a medal will be escorted backstage after we photograph their onstage moments of success. Gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC.

Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next top ranking individuals will be asked to participate.

Please prepare your students in advance to accept a position on Team Alberta and how your school will support their participation.

If a student is not able to attend the Awards Ceremony a letter confirming the student's interest in Team Alberta participation can be emailed to [kariz@skillscanada.com](mailto:kariz@skillscanada.com), otherwise the Team Alberta position will be offered to the silver medalist.

### **COMMITTEE MEMBERS**

\*Chris Yeo Bishop O'Byrne high school Calgary  
Robert Nash St. Francis high school Calgary  
Rob Dawson NAIT  
Gary Piller NAIT  
Bruce Taskey NAIT