

2010 North West Regional Skills Canada Competition

Scope Document
 GPRC Fairview Campus
 April 22 and 23, 2010

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| EVENT: Outdoor Power and Recreation Equipment Repair (small engine repair) | LEVEL: Secondary |
| START TIME ORIENTATION: APRIL 22 8:00 – 8:45 PM COMPETITION: APRIL 23 8:00 AM | LOCATION: GPRC Fairview Campus |
| THEORY EXAM: No | DURATION: 5 Hours |
| WORLDSKILLS TRADE | SPACES: 10 |

GENERAL DESCRIPTION

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

Prepare each student for employment in the industry.

Safety Requirements:

Competitors are required to follow all industry safety standards during the competition

RELATED CAREER AND TECHNOLOGY STUDIES MODULES:

| PRIMARY MODULES | ADVANCED MODULES | |
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| MEC 1020 (Vehicle service and Care) <ul style="list-style-type: none"> • Safe use of tools • Preventative maintenance of motors • Inspect and service using shop manuals MEC 1040 (Engine Fundamentals) <ul style="list-style-type: none"> • Compare 2 and 4-cycle • Determine conditions of engine MEC 1090 (Electrical Fundamentals) Apply electrical principles | MEC 1130 - Mechanical systems MEC 2020 –Vehicle Maintenance MEC 3030 – Engine Diagnostic MEC 3040 – Engine Tune-up MEC 2030- Lubrication & Cooling MEC 2040 –Fuel & Exhaust Systems | MEC3060 & 3070 Engine Reconditioning I and II MEC 2060 Ignition System MEC 2090 Electrical Components |

<http://www.education.gov.ab.ca/cts/mechanics/>

SKILLS AND KNOWLEDGE TO BE EVALUATED:

All phases of measurement will deal exclusively with metric.

- To demonstrate the skill and knowledge involved with the Air/ Liquid cooled engine, disassemble and reassemble engines
- Carburetor theory and adjustments, measuring and identifying parts.
- Use of repair manuals.
- Electrical theory and diagnosis
- Technical competence and Safe work place practices/procedures.
- Tool handling and recognition.
- General knowledge of 4 cycle theory.

Equipment and Materials supplied by Committee:

All necessary equipment and engines that will be tested.

Equipment and Materials competitors must supply:

- Lab coats
- Work boots
- Students may bring their own Digital Volt Ohm Meter (DVOM)
- Safety Glasses

Competitors are expected to be dressed in a clean and appropriate manner including safety glasses, Work boots and shop coat.

TIE BREAKING PROCEDURE

COMPETITOR COMPLETING THE COMPETITION IN THE SHORTEST TIME FRAME.