

2012 Central Regional Skills Canada Competition

Scope Document

Red Deer College

April 14, 2012

EVENT: Auto Service	LEVEL: Secondary
TIMES: Registration: 7:30 AM Orientation: 7:45 AM Competition Start Time: 8:00 AM Lunch: 12:00 PM – 12:30 PM	LOCATION: Red Deer College Orientation Rm. 829
DURATION: 6 Hours	REGIONALIZED: Yes
Number of Competitors That Will Qualify for the 2012 Provincial Skills Canada Competition: 2	

GENERAL DESCRIPTION

Practical testing to identify and evaluate a student's performance of Automotive Service technology, while demonstrating the skills required for maintaining and repairing automobiles.

SKILLS AND KNOWLEDGE TO BE TESTED

Practical Demonstrations 100%

SENIOR COMPETITION TOPICS – Practical Demonstrations 100%

Component Identification

- The students will be identifying automotive components, both on and off the vehicle.

Drivability & Scan Tools

- The students will be able to diagnose a drivability concern on a Pontiac Pursuit. GM Tech 2 scanners will be used for this competition.

Body Electrical

- The students will be diagnosing basic electrical circuits and components using a DVOM. These could include series circuits, parallel circuits and series-parallel circuits. Relay operation may be incorporated into the circuits. DVOM use for making voltage measurements, voltage drops, amperage and resistance measurements.

Brakes and Stability

- The student may be required to identify components of the brake and stability systems. Component removal, inspection, measurement and replacement of the above systems may be tested.

Engine Measurement

- The students will be required to correctly identify various engine components. The engine measurements may include crankshaft or connecting rod bore measurements, camshaft measurements, piston measurements and valve train measurements. The student may also be tested on basic engine timing concepts.

Manual Transmissions

- The students will be required to identify paths of power through a manual transmission. Service checks such as endplay measurements may be tested as well as component descriptions.

Steering and Suspension

- The students will be required to correctly inspect a suspension and steering system. Component identification and system identification may be tested. Adjustments and service procedures for these systems may be tested also.

EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

The committee will supply all necessary hand tools, materials and electrical test equipment required to perform the tasks.

Equipment and Materials Supplied by the Committee:

HB Pencil
Calculator

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.

COMPETITORS MUST SUPPLY AND WEAR THE FOLLOWING:

CSA Approved Safety Glasses
CSA Approved steel toed shoes/boots
Smock or Coverall

JUDGING CRITERIA

Each student will be scored for their ability to comprehend written instructions, interpret and perform tasks related to each practical test, and demonstrate common safety practices.

RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website:

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

(ANY OF THESE MODULES THAT PERTAIN TO THE SEVEN COMPETITION AREAS LISTED ABOVE)

MEC 1040: Engine Fundamentals	MEC 2150: Suspension Systems
MEC 1090: Electrical Fundamentals	MEC 2160: Steering Systems
MEC 2030: Lubrication & Cooling	MEC 3030: Engine Diagnosis
MEC 2040: Fuel & Exhaust Systems	MEC 3040: Engine Tune Up
MEC 2060: Ignition Systems	MEC 3060: Engine Reconditioning – Head
MEC 2070: Emission Controls	MEC 3070: Engine Reconditioning – Block
MEC 2090: Electrical Components	MEC 3090: Computer Systems
MEC 2110: Braking Systems	MEC 3130: Automatic Transmissions
MEC 2130: Drive Line	MEC: 3150: Wheel Alignment
MEC 2140: Transmissions/Transaxles	

ADDITIONAL INFORMATION

- Lunch will be provide to competitors
- Parking Information & Venue Maps
http://www.rdc.ab.ca/contact/campus_maps/Documents/Wayfind%20Fall%202009%20main.pdf
http://www.rdc.ab.ca/contact/campus_maps/Documents/Site%20Fall%202009.pdf
- The Awards Ceremony will be held the NCLC (Nova Chemical Learning Common) at 4:00 PM

COMMITTEE MEMBERS

Barry Baitnger
Brad Gabrielson
Jim Peden
Gilbert Renaud
Kelly Schropfer
Tim Wiebe