

Automotive Service 2011 SCOPE DOCUMENT

Medicine Hat College
April 14, 2011



Event:	Automotive Service (Team of 2)	Location:	T143
Registration:	7:00-7:45 a.m.	Contest Start Time:	8:30 a.m.
Orientation:	7:45-8:30 a.m.	Contest End Time:	2:30 p.m.
Contest Duration:	5 hours	Awards Program:	4:30 p.m.

GENERAL DESCRIPTION:

The Auto Service competition involves written and practical testing to identify and evaluate a student's performance of Automotive Service technology, while demonstrating the skills required for maintaining and repairing automobiles.

RELATED CAREER AND TECHNOLOGY STUDIES MODULES:

Module descriptions are available through the following website:

Government of Alberta/ Education/ Career and Technology Studies/ Trades and Manufacturing

<http://education.alberta.ca/teachers/program/cts/program-of-studies/tmt.aspx>

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	

SKILLS AND KNOWLEDGE TO BE EVALUATED:

Practical Demonstrations (85%)

- 1) Power Train – Differential Assembly
- 2) Braking Systems – Drum Brake Assembly
- 3) Piston Removal and Cylinder Measurement
- 4) Cylinder Head Disassembly and Measurement
- 5) Electronic Service Information Retrieval
- 6) Drivability and Scan Tools
- 7) Electrical Systems
- 8) Hand Skills
- 9) Component Identification
- 10) Theory Exam

THEORY EXAM: (15%)

This is a broad based Theory Examination (multiply-choice) where competitors will be tested on the following systems of a modern automobile: basic materials tools and skills, power train and drivelines, suspension and steering, brakes, electrical, gasoline and diesel engines, manual transmissions, rear axle assemblies, basic automatic transmissions and power accessories. The exam will test the competitor's knowledge of specific items or systems, problem solving and application of automotive theory.

Details of this trade's theory section can be found at <http://www.tradesecrets.org>.

CLOTHING AND SAFETY REQUIREMENTS:

All competitors are expected to wear protective apparel including safety glasses, CSA approved footwear and suitable clothing. Competitors are required to follow all safety standards during the competition.

EQUIPMENT AND MATERIALS:

Supplied by the Competitor:

All competitors are encouraged to bring their own coveralls or shop coats, safety glasses, and scan tools.

Supplied by the Committee:

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

JUDGING CRITERIA:

Judging criteria will be based upon the contest objectives listed in this document. Each student will be scored on their ability to comprehend written instructions, interpret and perform tasks related to each practical test, and demonstrate common safety practices. In addition, each student will be evaluated for performance on theory exam performance.

TECHNICAL JUDGES:

Ray Shannon	MHC – AST
Lee Eiserman	MHC – AST
Corey Rogers	MHC – AST
Nelson Haas	MHC – HET
Keon Clift	MHC – HET
Chad Schulz	MHC – HET
Kerry Buss	Action Auto Parts

COMMITTEE MEMBERS:

Ray Shannon	MHC - Automotives Coordinator
Jerry Friesen	Brooks Composite High School
Aaron Biro	Crescent Heights High School
Russ Kenschuh	Medicine Hat High School
Susan Feeney	Project Manager, Southeast Alberta Regional Skills Competition