

**2010 MICHIGAN SKILLS USA CHAMPIONSHIPS  
TASK & MATERIALS LIST**

**Contest Day – Saturday, April 17, 2010**

**SKILL OR LEADERSHIP AREA:** Power Equipment Technology

**TASKS TO BE PERFORMED:**

- Written test on parts identification using repair parts manual and/or microfiche
- Written technical test concerning basic engine theory, diagnosis, and repair procedures, electrical testing, preventive maintenance and troubleshooting.
- Diagnose problems with fuel, governor, and electrical systems; start and adjust running engine.
- Measure various engine components and diagnose condition. Metric and English standards will be used.
- Repair or replace various engine parts such as piston rings, valves, connecting rod and piston.
- Disassemble and re-assemble an engine using proper tools and procedures. Identify various engine defects.
- Written Tests (Technical and SkillsUSA professional development) (given on Friday afternoon)

**TIME WILL BE A SIGNIFICANT SCORING FACTOR.**

**STUDENTS MUST SUPPLY:**

- Hand tools, sufficient to disassemble and reassemble an engine along with any special tools recommended by an engine manufacturer.
- Measuring tools including a Torque wrench (inch pound and foot pound)
- Personal protective gear (ALL participants must wear safety glasses with side shields or goggles, and approved work shoes, (no Tennis Shoes).
- Clothing considered appropriate for the industry (no T-shirts).
- # 2 pencils and shop towels
- 1-page resume

Non compliance with clothing or safety gear will result in points deducted.

Engines used may be 2 or 4 cycle Kawasaki & Stihl.

Electrical tests may be performed with any suitable tester furnished by contestant.

Starting Time: Be at the test site at 8:20 a.m., orientation at 8:30 a.m. (3 hour test)

Revised 1/27/10

# SCORECARD Power Equipment Technology

Contestant Number

Items Evaluated	Possible Points								
Station # 1 - Written Test	100								
Station # 2 - Parts Id	75								
Station # 3 - Customer Service	100								
Station # 4 - Starter Repair	75								
Station # 5 – Ignition Service	95								
Station # 6 - Failure Analysis	75								
Station # 7 – Internal Service	95								
Station # 8 – Measurements	70								
Station # 9 – Running Adjustments	75								
Station # 10 - 2-Cycle Service	90								
Station # 11 – Carburetion Service	75								
Station # 12 – Wild-card Station	75								
Résumé Penalty	0 or -50 only								
Clothing Penalty	0 to -50								
<b>Total Possible Points</b>	<b>1000</b>								

Date: \_\_\_\_\_

Judges' Signatures: \_\_\_\_\_

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