

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

**SKILL OR LEADERSHIP AREA: MOTORCYCLE SERVICE TECHNOLOGY**

**TASKS TO BE PERFORMED:**

- Written test on parts identification using parts manual or Internet.
- Precision measurement of engine components
- Cylinder leakage test
- Proper tool usage
- Identification of components on a motorcycle
- Diagnose problems with electrical systems
- Measure various engine components and diagnosis condition. i.e.: cylinder block, pistons, etc.

**STUDENTS MUST SUPPLY:**

- 1 page resume
- Safety glasses with side shields or goggles
- **Leather work shoes**
- Set of regular and Phillips Screwdrivers
- 3/8" metric and standard socket sets
- DVOM
- Metric and standard open and box end wrench sets
- Pliers (needle nose, slip joint utility, hose clamp and diagonal cutters)
- Dial Calipers (0-6")
- Outside Micrometers (standard and metric) 1"-2", and 2"-3"
- Standard set of Telescoping Gauges

***Note: Non compliance with clothing or safety gear requirements will result in points being deducted from the contestants score. THIS WILL BE STRICTLY ENFORCED!***

Note: Engines could be Kawasaki, Yamaha, Honda or Briggs & Stratton.

Revised 1/13/10

# **Skills USA States Competition**

## **Motorcycle Service Technology Contest**

### **2010 Workstation Objectives**

#### **Objective: Honda Engine Bench Workstation #1**

Given the tools, Honda engine, and Honda service manual, participants will demonstrate the necessary skills to correctly identify the manufactures component names and torque specifications.

#### **Objective: Yamaha Electrical Diagnostics Motorcycle Workstation #2**

Given the tools, motorcycle, and Yamaha service manual, participants will correctly diagnose a system fault in the starter circuit for a Yamaha “V-Star 1100” following the service procedures in the service manual.

#### **Objective: Harley Davidson Service Manual Test Bench Workstation #3**

Given the Harley Davidson service and parts manuals, participants will demonstrate the necessary skills to locate specific information to correctly answer questions on service procedures and specifications.

#### **Objective: Precision Measurement Bench Workstation #4**

Given the tools, various engine components, and service manual, participants will demonstrate the necessary skills to correctly identify and measure engine components with the appropriate measuring tools.

#### **Objective: Harley Davidson Brake Inspection Motorcycle Workstation #5**

Given the tools, motorcycle, and Harley Davidson service manual, participants will demonstrate the necessary skills to correctly remove and inspect the brake caliper and brake pads on a Harley Davidson “Fatboy” motorcycle to meet H-D manufacturing specifications by following the service procedures listed in the service manual and the instructions provided.

# SCORECARD Motorcycle Service Technology

Contestant Number

Items Evaluated	Possible Points					
<b>Carburetor Inspection - Yamaha</b>	<b>150</b>					
<b>Brake System Inspection - Yamaha</b>	<b>150</b>					
<b>Remove &amp; Replace Front Brake Pads - Harley Davidson</b>	<b>150</b>					
<b>Precision Measurement Harley-Davidson</b>	<b>150</b>					
<b>Troubleshooting Electrical Circuit - Buell</b>	<b>150</b>					
<b>DDFI Component Identification - Buell</b>	<b>100</b>					
<b>Yamaha Written Test - MMI</b>	<b>120</b>					
<b>Industry Essay</b>	<b>30</b>					
<b>Résumé Penalty</b>	<b>0 or -50 only</b>					
<b>Clothing Penalty</b>	<b>0 to -50</b>					
<b>Total Possible Points</b>	<b>1000</b>					

**Date:**

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**Judges' Signatures:**

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