

# Automotive Maintenance & Light Repair

#### ELIGIBILITY

Open to active SkillsUSA members enrolled in technical education programs with automotive technology as the occupational objective

### **CLOTHING/PPE REQUIREMENTS**

- Blue/Black Dickies style work pants
- Non slip work boots
- Button up dickies style work shirt
- Z-87 Safety Glasses
- \* Clothing should not have your school or name printed on them.

Note: At the district level if a student is not able to wear the official SkillsUSA attire he/she may wear an outfit that would be acceptable in their specific field of study. Please keep in mind that official SkillsUSA attire will be required at the state and national level.

## EQUIPMENT AND MATERIALS: SUPPLIED BY HOST

- Autel Maxibas BT609
- Shopkey Pro
- Hunter TC39
- Hunter RoadForce Elite
- Various hand tools
- Storm brake micrometer (.300" 1.300")
- Fowler dial indicator magnetic base 0-1" in .001" increments.
- Tire tread depth gauge (1/32" increments)
- Tekton torque wrench
- Thread pitch/diameter gauge

#### EQUIPMENT AND MATERIALS: SUPPLIED BY CONTESTANT

- one page typed resume
- Pen

#### **SAFETY REQUIREMENTS:**

Further they agree that SkillsUSA, WMCTC and responsibility relating to personal injuries resulting from their use. Contestants will be removed from competition if proper training has not been provided and/or they are using the equipment in an unsafe manner.

### **SCOPE OF THE CONTEST: (Defined by the National Competition Regulations)**

(District Competitions are meant to be a scaled down version of National Competition. It is important for the students to participate in a competition that will reflect a cross-section of the industry skills needed to prepare them for the state and national levels)



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# KNOWLEDGE PERFORMANCE

MLR 4.0 The contestant will complete a twenty five question test based on health, safety, and EPA requirements. *15 min* 

## SKILL PERFORMANCE

- MLR 3.0, G1 The contestant will perform a starting, charging, and battery test using the Autel diagnostic tool. Specifications will be provided. *15 min*
- MLR 10.0, 3.0, 6.0, 8.0, G1 The contestant will use Shopkey Pro to locate wiring diagrams, service procedures, specifications, and technical service bulletins. *15 min*
- MLR 6.0, G1 The contestant will need to perform an alignment pre inspection. 15 min
- MLR 6.0, G1 The contestant will need to dismount and mount a tire with a tire pressure sensor. Additionally, the contestant will need to balance the tire. *15 min*
- MLR 8.0, G1 The contestant will remove disc brakes. Additionally, the contestant will need to perform various brake measurements and compare them to specifications. Also the contestant will need to determine necessary action. *15 min*
- MLR 10.0, G1 The contestant will need to be able to identify fasteners. 15 min
- MLR 10.0, 3.0, 6.0, 8.0, G1 The contestant will need to identify 20 automotive parts from the steering and suspension, engine electrical, electrical, and brake systems. *15 min*
- MLR 10.0, 3.0, 6.0, 8.0, G1 The contestant will perform a maintenance check on a vehicle. It will include checking all fluid levels and conditions. *15 min*



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## Automotive Maintenance & Light Repair Competition Scoring Sheet

Worksations	Descriptions		Possible Points
Starting, Charging and Battery Test			39
Service Information			30
Tire Service			40
Brake Service			47
Fastener ID			41
Parts ID			20
EPA/Safety Test			25
Maintenance Check			30
Alignment Pre Inspection			58
	S	UBTOTAL = 330	
No Resume	Deduction	-10	
Safety Penalty	Deduction	-10	
Clothing Penalty	Deduction	-5	
		TOTAL	

Note: No cell phones or other electronic devices may be used at any time during a competition; this includes using a calculator function on a cell phone for competitions in which calculators are permitted.

Note:Scorecards should only be used as guidance. Changes may occur.