



Total Points: _____

Name: _____

School: _____

2019 Area IV & VIII Ag.
Technology & Mechanical Systems CDE

Electrical Motor and Control Skill Area

Points are based on your performance of proper procedures as well as skill activities. Please practice safe methods while completing these activities as some points may be allocated to safety. If you need any clarifications please ask for assistance. Read instructions carefully and thoroughly before completing each question or section.

Part 1 Directions- For this skill area you will need to install a 110 volt replacement plug (male end) onto a 16 ga. cord. Please use your tools to correctly install the replacement plug according to best practices.

Materials Needed:

- 16 ga. cord
- Wire stripper
- Screwdriver
- Replacement plug

Evaluation Criteria	Points Possible	Points Earned
Cord covering properly removed	3	_____
Wire properly stripped	3	_____
Wire connected correctly	3	_____
Plug assembled correctly	3	_____
	Total	_____

Part 2 Directions: Please look at the components or parts and respond to the questions with the most appropriate answers. (2 points each)

1. Which of the motors at station 1 have a TEFC enclosure?

Answer: _____

2. Which of the breakers would be the correct choice to use with the electrical motor when using low voltage 2?

Answer: _____

3. What terminal should the incoming neutral be connected to? Answer:

Answer: _____

4. Which of the receptacles are suitable for use on a 110 volt circuit in a wet location? **Answer:** _____

5. Of the motors at station 5, which contains both start and run windings?

Answer: _____

6. Of the rotors at station 6, which one is a wound rotor Answer:

Answer: _____

7. What type of bearings does the shaft at station 7 have Answer:

Answer: _____

8. What is the maximum full load amp capacity of the contactor at station 8?

Answer: _____

9. Which of the devices at station 9 provides overload protection?

Answer: _____