

Competition Rules



Rules

Teams consist of four members from one high school. Team score is determined by combining the scores of all four students of the Written Exam and Component Identification from each team. That score is combined with the team score for Locating Issues in Agricultural Tractors.

Qualifications of a team member:

- a. Each team member must be a current member of the FFA chapter of the school they represent.
- b. The FFA Advisor must certify the eligibility of each team member at registration.

The contest will be judged by industry professionals from the agricultural and construction industries.

Decisions of the judges will be final.

In the event of a tie:

- a. Team tie breaker will be decided by the highest individual score
- b. Individual tiebreaker will be decided by the highest team score

Each team member will participate individually in Part 1 and 2 of the contest, and work as a member of the team in Part 3 of the contest.

The time limit for each part of the contest is 30 minutes.

Contestants are required to wear industrial quality eye protection during Parts 2 and 3.

Event Format

Part 1 – Written Exam

Contestants will complete up to 80 objective type questions, true or false and multiple choice.

Multiple choice questions may have one or more correct answers

Part 2 – Component Identification

Contestants will appraise 10 or more components or parts from agricultural tractors/machines.

Service data from manufacturer's service manuals or IT service manuals will be provided where specifications are needed to make the evaluations.

Measuring devices for the component evaluation will be provided if needed.

Contestants will complete a review of electrical circuits on electrical training boards and answer questions based on components of the circuits and/or potential issues with the circuits.

- a. Proper use of a Digital Volt Ohm Meter (DVOM) will be required to answer the questions.
- b. Fluke Digital Volt Meters will be provided.

Part 3 - Locating issues in Agricultural Tractors

A school team of four contestants, working as a group, will compete with the teams from the other schools in locating and correcting three deliberately placed malfunctions in diesel fueled tractors.

All tractors will have the same malfunctions and service work orders listing owner/operator comments on issues needing resolved will be provided.

There will be a maximum of three malfunctions, repairs, or safety issues per tractor, and all tractors will have the same malfunctions, repairs, safety issues.

Systems of the tractor that may be considered during the selection of malfunctions: engine, powertrain system, hydraulic system, chassis, and safety.



The malfunctions may or may not have an immediate detriment to the starting or performance of the tractor.

Any needed tools or test equipment will be provided along with manuals or other resources.

Contestants are to notify judges of any deficiencies concerning: transmission and/or hydraulic fluid, coolant, and or crankcase oil.

Service Work orders will be graded for completion of information on the tractor, customer, and issues.

Event Contacts

Company	Name	Contact Information
 The logo for the Western Farm Show, featuring a stylized green 'W' with a leaf-like shape on the left and the text 'WESTERN FARM SHOW' in bold black letters to the right.	<p>Jami Applegate Western Farm Show Manager</p>	<p>+816-412-6118 japplegate@naeda.com</p>
 The logo for the American Royal in Kansas City, featuring a circular emblem with 'AMERICAN ROYAL' at the top and 'KANSAS CITY' at the bottom. Inside the circle is a crown with the letters 'AR' in red and blue.	<p>Nathan Laudan Director of Education</p>	<p>+816-569-4019 nathanl@americanroyal.com</p>