

CATA Curricular Code Change Proposal

Submission Instructions, please read in full before submitting your proposal:

1. Fill in all the below information.
2. Download the current code from the CATA Website: [Curricular Activities Code](#)
 1. Do not delete anything from the code. Strikethrough parts to delete. Any new wording, type into the code and highlight in yellow.
 2. Upload "Proposed Code" below.
 3. Upload any additional documents if needed
 4. Scroll all the way to the bottom and sign the form.
3. **IMPORTANT - Answering "Yes" to any of the questions requires the Host Site's Contest Coordinator's signature.**
 1. After all information is filled out, codes are updated and you have signed the form, hit "Save" on the bottom right-hand corner. **DO NOT** hit "SUBMIT".
 2. Once you hit "Save" a box will appear with a link. This link is specific to your proposal. You can email the link to yourself and also copy from this box.
 3. Email this link to the Host Site coordinator to review your proposal. When emailing the Host Site, request that they review your proposal and sign in the "Host Site Coordinator's" Signature box. Request that they hit "Save" after signing the document and let you know that the signature is complete.
 4. Using the link, pull up your proposal and confirm that the signatures are complete and hit "Submit". Once you hit "Submit", you will no longer be able to make any changes to your submission.

Name of Contest:

Farm Power and Machinery

Curricular Codes Open - List A

Farm Power and Machinery

Out of Rotation Curricular Codes

Revive a Contest: Please enter the name of the contest below and contact the CATA office for a copy of the Code.

Proposed by:

Amanda Lester

School:

Wheatland Union High School

Email:

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Issue:

Throughout this year's contests, many contestants expressed concerns that they were not provided enough time to complete the Parts/Tool Identification, General Information Test, and Troubleshooting portions of the contest. At many field days, contestants were typically given only 35–40 minutes, which often was not enough time to fully complete these sections. This concern was not limited to my team, but was consistently shared among numerous contestants from multiple schools. Many contestants also became discouraged because they were unable to finish the contest sections within the allotted time. In many cases, the issue was not a lack of knowledge or preparation, but simply not having enough time to complete the tasks required. In comparison, the Tractor Safety and Operation portion of the contest has

consistently allowed adequate time for completion. Additionally, many other contests that include identification and general knowledge test components commonly provide approximately 50 minutes for completion.

This proposal will require a contest to open out of rotation: (Please note: It is highly recommended that you, or a representative, attend the pre-conference governing board meeting to answer any questions regarding proposed curricular code changes to contests that are requested to be opened out of rotation.)

No

The change will affect General Rules:

No

The change will affect the awards needed:

No

The proposed change will affect contest forms:

No

The proposed change will affect contest hosting site (e.g. additional facilities, new sections, additional scoring, etc.)

No

If you answered YES to any of the above questions, please explain:

Which JudgingCard scorecard will be used for tabulations?

Is this a New Contest Proposal?

No

If you answered YES to this being a New Contest Proposal, please indicate who will be sponsoring the contest. New Contest Proposals require a 3-year sponsor. Contact information for Sponsor:

If you answered yes to any of the above questions, you need to include the following signature:

Host Site Contest Coordinator's Name:

CDE Host Site Contest Coordinator's Signature (agreeing that changes are able to be accommodated by the host site.)

Upload code with tracked changes:
Farm Power Curricular Code_ Proposed Changes.docx (1).pdf

Upload any additional information you would like:

Please sign below:

Amanda Lester

FARM POWER AND MACHINERY

Revised 6/2025

Purpose and Standards

The contest shall be designed to test a student's mechanical skills and abilities relating to power equipment used in agriculture and shall serve as a training forum for students interested in pursuing a career as an equipment technician.

Foundation Standards: Mathematics Algebra 10, 12, 13, 15 and Geometry 8, 10, 11, Listening and Speaking 1.8, 2.3, Technology 4.1, 4.2, 4.6, Problem Solving and Critical Thinking 5.1, 5.2, 5.3, Health and Safety 6.2, 6.4, 6.5, Ethics and Legal Responsibilities 8.3, Leadership and Teamwork 9.1, 9.2, 9.3.

Ag Mechanics Pathway Standards: Safety B 1.0, Engines and Machinery B 11.0.

Contestants

Teams consist of three members, with all three individual scores counting as the team score. All team members are eligible for individual awards.

Classes

| | | Individual Points | Team Points |
|----|--|-------------------|-------------|
| A. | Parts & Tool Identification | 100 | 300 |
| B. | General Information Test | 100 | 300 |
| C. | Tractor Operation and Safety | 100 | 300 |
| D. | Trouble Shooting of Tractors and Machinery | 100 | 300 |
| | TOTAL | 400 | 1200 |

Tie Breaker

1. In the Farm Power and Machinery Contest ties will be broken on the basis of the highest individual or team score(s) using the general information test portion of the contest. Individual scores will be used to break individual ties and team scores will be used to break team scores.
2. If a tie still exists, the Parts and Tool Identification score of the individual or team will be used to determine the high individual or team. Individual scores will be used to break individual ties and team scores will be used to break team ties.
3. If a tie still exists, the Trouble Shooting of Tractors and Machinery score of the individual or team will be used to determine the high individual or team. Individual scores will be used to break individual ties and team scores will be used to break team ties.
4. If a tie still exists, the total score of the individual or team will be used to determine the high individual or team.

Sub-contest Awards

Sub-contest awards will be given for high teams and individuals in the following areas: Parts & Tool Identification, General Information Test, Tractor Operation and Safety, and Trouble Shooting of Tractors and Machinery.

Host School Requirements

The sponsoring school shall determine which area in the Tractor Driving section it will offer and then inform schools in their letter of invitation for the contest.

Rules

- I. Each area of competition may have several methods of presentation. The selection of the method to use for competition is to be made by the organizing group who is sponsoring the contest.
- II. The sponsoring agency will select four pieces of equipment to be used for identification and/or trouble shooting from the list of equipment below:

| | | |
|----------------------|-------------------|--------------------|
| Disc Harrows | Moldboard Plows | Cultivators |
| Swathers/Mowers | Rakes | Balers |
| Planters/Drills | Combines | Spray Equipment |
| Wheel/Track Tractors | Forage Harvesters | Nut Sweeper |
| Tree Shaker | Shuttle Cart | Nut Pickup Machine |

- III. Written materials will be returned; Scantron score sheets could be returned.

- IV. The references to be used for the contest are listed below:

- FMO Tractors
- FOS Engines
- FOS Hydraulics
- FOS Electrical Systems
- FOS Shop Tools
- FMO Books pertaining to EQUIPMENT listed above.

Various operator's manuals related to the listed equipment may be used for contest sections A, C and D. Deere and Company publishes many of the resources. All equipment dealers provide equivalent materials.

- V. Contest Area Descriptions

- A. Parts & Tool Identification – This area shall consist of the identification of parts and tools that are commonly found and currently used in the area of power equipment.

The references listed above shall establish the common name of parts and tools used in the contest and provide consistency from contest to contest. There may, however, be variations of the parts as they are shown in the references.

The testing format for this area is at the discretion of the sponsoring school, which could be name identification, purpose or function identification, or problems associated with those parts used.

Tool ID, Engine ID, and Hydraulic ID 40 pts.

Tractor and Machinery ID 60 pts.

- B. General Information Test – The written test for this contest shall be designed to test the contestants on their knowledge in the area of farm power and machinery.

The test format can be true/false, multiple choice, short answer, fill in, matching, math problems, or any combination of testing systems. The subject areas to be included on the test are as follows:

Diesel Engines 10 pts.

Gasoline Engines 10 pts.

Hydraulics 10 pts.

| | |
|-----------------------|----------|
| Electrical Systems | 10 pts. |
| Equipment Maintenance | 10 pts. |
| Field Operation | 15 pts. |
| Implements | 15 pts. |
| Power Transmission | 20 pts. |
| TOTAL | 100 pts. |

C. Tractor Operation and Safety – This area shall consist of a Safety Test, one Tractor Driving section, and one Tractor Controls section to test the contestants' ability to safely and accurately operate modern farm tractors and machinery.

Safety Test – 20 pts.

Consists of written questions on safety procedures when operating, servicing, and working around tractors and farm machinery.

Tractor Driving – 40 pts.

The sponsoring agency will devise a course to test contestants' driving skills in one of three areas:

Backing – trailer shall be of the two-wheel variety only.

Precision – tractor mounted implement.

Hitching – 3 pt. Mounted Implement.

Scoring in all events will have a balance between time and safety. Standardized score sheets shall be developed for this area. Only wheel tractors will be used and when possible, like types of tractors and implements will be provided for each area.

Tractor Controls – 40 pts.

The sponsoring agency will develop an operation procedure to test contestants' knowledge and skills in correctly adjusting and operating tractor and implement controls.

Note: Possible Operation Control Examples are as follows, hosting schools are not limited to this list.

Draft/Position Control Setting

Lower/Response Setting

Height Adjustment – three point

Remote Hydraulic Operation

Differential Lock Usage

Turning Brake Usage

Mechanical Front Wheel Drive Operation

Seat Adjustment

Light System

Instrument Panel Check

Pre-operational Check

Safety Check

Tire Setup

Functional Explanation of Transmission

Use of Hydraulic Pressure Test Gauge

Use of Volt/Ohm Meter

C. Trouble Shooting of Tractors and Machinery – This area will test the contestants' ability to inspect Tractors, Implements, or Machinery and determine maintenance needs, adjustment

problems, and visible faults and safety hazards. Common and visible faults are to be used. Implements may be set on the ground, in transport position, or in working field position.

Time:**A. Parts & Tool Identification**

This section shall have a minimum time limit of **50 minutes**.

B. General Information Test

This section shall have a minimum time limit of **50 minutes**.

C. Trouble Shooting of Tractors and Machinery

This section shall have a minimum time limit of **50 minutes**.

VI. Post - Contest Procedures

- A. Critique – a review of each area of the contest, open to all Agricultural Teachers and contestants, will be held after the contest.