

# TRACTOR OPERATOR CONTEST

## 2024 State 4-H Roundup

### Contest Superintendent:

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### Basic Guidelines

A county will be permitted to enter individual(s) from the county, provided they have been selected in a county operator's driving program and have demonstrated a *high degree* of competency in the tractor program. Make entry on the Roundup Youth Registration Form.

### Eligibility

- Enrollment: Members competing in county or state 4-H contests *must be* enrolled in the 4-H Tractor Program and have reviewed the material provided for this activity.
- Grade divisions: Entries for Intermediate Division are 4-H members in grades 7 & 8 and entries in the Senior Division are 4-H members in grades 9-12.
- State Contest: Each county is permitted a maximum of three entries in the intermediate section and three entries in the senior section for the state contest held at the annual 4-H Roundup.
- Authorization: Each contestant must be certified by their representative County Extension Educator. Certification denotes that they have personally observed the operational skills of the prospective contestant and the contestant is competent in operating a tractor and implement of husbandry in a safe manner.

### Contest Information

The state contest at 4-H Roundup will consist of three parts, as follows:

**Part 1:** Fifty question written exam. Each question missed or omitted will result in a 5-point penalty. The written exam will contain multiple choice or true/false questions, based on the 4-H Tractor Program literature, including the first-, second-, third-, and fourth-year manuals.

**Part 2:** Tractor Inspection (5-minute time limit). This event will consist of the inspection of a tractor to see if it is properly serviced and safe for the day's operations. Judges will prepare the faulty items ahead of time. Each item missed or incorrectly listed will result in a 20- point penalty.

**Part 3:** Two-wheel driving event

## Scoring

Instructions, diagrams, and score sheets for different parts of the contest are given on the following pages. Safety will be a factor in contestant's scores throughout the entire contest.

Scoring in the various parts of the contest will be on a "penalty" system which means the contestant with fewest total points wins.

**Scoring of Two-Wheel Driving Event:** A 6-minute time limit will be used on the two-wheel driving event. Total score will be the summation of points assessed for course violations, time required to drive the course, and position of the tractor and implement at the completion of the drive. Time penalty score is 1 point for each second used. 300 points will be added to the score after 4 minutes.

## Safety

Rules for safe tractor operation listed under "safe driving rules" will apply in this event. Each contestant will be scored on safety any time he/she is involved with tractor operation. This applies to the practical examination and the practice period as well as the time before, during, and after the driving events. Safety judges will be on hand to record violations during these periods.

## Two-Wheel Driving Event

The judges will be available for each part of the event, including practice driving, checking safety violations, timing the two-wheel course, recording scores, and measuring and observing operation.

Contest personnel will have the equipment in the correct position and proper location for each contestant.

**Starting Tractor Engine** - Upon mounting, contestants will be responsible for seeing that

(1) brakes are set (if the tractor is equipped with a power shift transmission, the gear shift is placed in park position in lieu of setting the brakes); (2) gear shift is in neutral or park position and; (3) PTO is disengaged. The tractor is then started and run at idling speed until ready to start driving.

**Driving the Course** - Notify the starting officials when ready to begin driving (tractor in neutral, clutch engaged, brakes set, PTO disengaged and engine idling). On a signal from the judge, drive the contest course. *Timing will begin when the tractor breaks the plain.*

**Stopping Procedure** - After backing the implement into the shed as near the stopping stakes as possible, without touching them, contestant will signal judge (timing ends), shift into neutral or park, set brakes (if the tractor is equipped with a power shift transmission, the gear shift is placed in park position in lieu of setting the brakes), engage clutch, and shut off engine. The sequence of this operation does not necessarily need to be followed, so long as all operations are accomplished in a safe manner.

## SAFE TRACTOR DRIVING RULES

1. Before starting the tractor, be sure the brakes are set (or transmission is in park position), gear shift lever is in neutral or park position, and PTO is disengaged.
2. Disengage clutch while starting the engine.
3. Release brakes before attempting to move the tractor.
4. Engage clutch gently. Avoid careless or sudden starts and stops.
5. Avoid unnecessary slipping of the clutch. The operator's foot may remain on the clutch, but "riding" the clutch is to be avoided.
6. Keep tractor in gear when driving. Never shift into neutral or disengage clutch to coast part of the way.
7. Ride on tractor seat or stand on platform. Never ride on drawbar or hitch of implement being drawn.
8. Reduce speed to a safe level before making a turn or applying brake.
9. Avoid short turns which will foul implement against tractor wheels.
10. Drive at speeds slow enough to ensure safety, both for yourself and for others near the tractor.
11. Do not permit extra riders on the tractor at any time.
12. Bring tractor to a complete stop before dismounting.
13. Mount and dismount tractor properly. Use steps, if provided by the manufacturer.
14. When leaving tractor, shift into neutral or park, set brakes, engage clutch, and shut off engine. The sequence of this operation does not necessarily need to be followed, so long as all operations are accomplished in a safe manner. (Locking one brake or moving gear shift to park position will be considered adequate.)

# **INSTRUCTIONS FOR TRACTOR INSPECTION**

(5 minute time limit)

This event will consist of the inspection of a tractor to see if it is properly serviced and in good condition for safe and efficient operation. The tractor used for this event will be fairly new with problems created ahead of time by the judges.

## **RULES:**

1. The tractor will not be started during this inspection.
2. This event will be conducted where other contestants cannot see or hear what is said or done.
3. The contestant will be given a clip board with a sheet of paper on which he/she will list the items needing correction, based on good tractor maintenance and safety.
4. Timekeeper will inform contestant when to start and when to stop; also when 1 (one) minute of time remains.

## **SCORING:**

1. Twenty (20) points will be added to the contestant's score for each item missed or incorrectly listed.
2. The judge will grade the contestant according to score sheet on the next page.

## TRACTOR & MACHINERY OPERATION SAFETY INSPECTION

Note: There are several things which require attention on this tractor, some are obvious, some are not. A perfect score on this inspection will be 0. You will be assessed a 20-point penalty for each item missed up to 10.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Score

# SCORE SHEET GRAIN DRILL

## Mounting and Starting Safely

|                                       |     |  |
|---------------------------------------|-----|--|
| 1. Failure to check neutral position  | x50 |  |
| 2. Failure to depress clutch          | x50 |  |
| 3. Failure to check PTO disengagement | x50 |  |
| 4. Failure to use seatbelt            | x50 |  |

## Driving Safely

|   |      |  |
|---|------|--|
| 1. Failure to release clutch pedal smoothly             | x50  |  |
| 2. Grating gears  | x50  |  |
| 3. Failure to operate tractor in a safe manner          | x50  |  |
| 4. Running in low gear with high engine speed           | x50  |  |
| 5. Skidding or spinning wheels                          | x100 |  |
| 6. Turning too short and fouling implement              | x100 |  |
| 7. Moving tractor with brakes set                       | x50  |  |
| 8. Number of stakes or markers touched (golf balls off) | x50  |  |
| 9. Change directions to better position                 | x10  |  |
| 10. Number of stakes or markers removed                 | x100 |  |

## Grain Drill

Time:        minutes        seconds

Add 300 points to score if time is over 4 minutes        x1

## Stopping and Dismounting Safely

|   |     |  |
|---|-----|--|
| 1. Failure to check neutral position of gearshift | x50 |  |
| 2. Failure to set brake                           | x50 |  |
| 3. Jumping on or off of tractor                   | x50 |  |
| 4. Failure to bring tractor to a complete stop    | x50 |  |

Total:

Contestant #:

Judge #: