

SAFE TRACTOR OPERATIONS AND MAINTENANCE CDE

PURPOSE

The Safe Tractor Operation and Maintenance Contest is designed to develop the ability of all FFA members to demonstrate the knowledge and ability as related to the maintenance and safe operation skills of tractors.

ELIGIBILITY

The participant must be an active member of a chartered Florida FFA Chapter and enrolled in grades 9, 10, 11 or 12.

EVENT PROCEDURES

1. At each level a contest coordinator and three judges will be in charge of this event with the State FFA Association providing contest materials.
2. Contestants must provide their own pens, pencils, erasers, and other necessary items for contest competition.
3. FFA members must be in official dress, appropriate to the contest, and will be scored accordingly.

EVENT SCHEDULE

The contest will be held in three rounds: sub-district, district and state level competitions. Each chapter may enter one participant at the sub-district level with each sub-district forwarding their winners on to the district contest. The 12 district winners are then eligible to compete in the state contest.

EVENT PRACTICUMS

KNOWLEDGE PRACTICUM

WRITTEN EXAM

Contestants will complete a multiple choice written exam. The student must score 80% on the written exam safety portion (first ten questions of exam) in order to be allowed to compete in the remainder of the contest. The exam will be based on the subject of Safe Tractor Operations for Agricultural Employers.

ORAL QUESTIONS

Contestants will answer oral questions related to tractor safety, operations, and/or maintenance and related jobs; and tractor operation.

PERFORMANCE PRACTICUM

TRACTOR OPERATION

- The student is to drive the tractor to the implement, stop tractor, turn off tractor, dismount and attach implement to the tractor drawbar. The student will then drive through

the course layout, returning implement to its starting point and then the tractor to the starting line.

- A two wheeled trailer will be the used (not a farming implement)
- Each student may take a 2 minute test drive with the implement, but not through the course
- Safety belts must be worn by the student, only if the tractor is equipped with a ROPS.
- Time begins when the operator releases the clutch after the warm-up and is signaled from the judge in charge
- No assistance will be allowed in spotting
- No running or jumping on the tractor is allowed
- Three safety violations result in disqualification of the contestant at the discretion of the judges
- Time ends when the tractor is unhitched and returned to the starting point with the engine stopped.

SCORING

Practicum	Activity	Individual
Knowledge	Safe Tractor Operations	100
Skills	Tractor Operation	
Knowledge	Oral Questions	
Official Dress		50
Total		

The student with the lowest score sheet wins. Participants shall be ranked in numerical order on the basis of the final score to be determined by each judge without consultation. The judges' ranking of each participant shall then be added, and the winner will be that whose total of rankings is the lowest. Other placings shall be determined in the same manner. (low point method of selection)

TIE BREAKERS

Ties will be broken at the discretion of the CDE Coordinator.

AWARDS

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a special project and/or by the general fund of the Florida FFA Foundation.

REFERENCES

- Safer Tractor Operations for Agricultural Employers, CIR1249, <http://edis.ifas.ufl.edu>.



Safe Tractor Operation and Maintenance CDE Scorecard

Tractor Operation Scoring:

Number of
Infractions Total Points
Off

PRE-WARM-UP:

- | | | | |
|---------------------------|-------|-------|-------|
| 1. Failure to check water | _____ | x 7 = | _____ |
| 2. Failure to check oil | _____ | x 7 = | _____ |
| 3. Failure to check fuel | _____ | x 7 = | _____ |

STARTING ENGINE:

- | | | | |
|--|-------|--------|-------|
| 1. Failure to check neutral position | _____ | x 10 = | _____ |
| 2. Failure to disengage clutch while starting engine | _____ | x 10 = | _____ |
| 3. Switch not turned on | _____ | x 3 = | _____ |

WARM-UP AND CLUTCH OPERATION:

- | | | | |
|---|-------|-------|-------|
| 1. Failure to warm-up engine for period specified | _____ | x 7 = | _____ |
|---|-------|-------|-------|

DRIVING: (No points deducted for the first three and one half minutes, however, seconds more than three and one half will be multiplied by one-fifth.)

- | | | | |
|--|-------|---------|-------|
| 1. Time: _____ minutes. _____ seconds
Total Seconds | _____ | x 1/5 = | _____ |
| 2. Number of pull ups to improve position
(While backing into the shed or through the course. | _____ | x 2 = | _____ |
| 3. Markers scraped (number) | _____ | x 4 = | _____ |
| 4. Markers moved or upset (number) | _____ | x 5 = | _____ |
| 5. Killed engine (number times) | _____ | x 2 = | _____ |
| 6. Grated gears (number times) | _____ | x 1 = | _____ |
| 7. Rough clutch engagement (number times) | _____ | x 1 = | _____ |
| 8. Failure to disengage clutch (number times) | _____ | x 2 = | _____ |
| 9. Number of inches wheel off center | _____ | x 2 = | _____ |
| 10. Number of inches trailer is + or - 4 inches from rear boundary | _____ | x 2 = | _____ |
| 11. Out of bounds (number times) | _____ | x 5 = | _____ |

SAFETY:

- | | | | |
|--|-------|-------|-------|
| 1. Skidding or spinning wheels when starting (number of violations) | _____ | x 2 = | _____ |
| 2. Turning too short and fouling implement (number of violations) | _____ | x 2 = | _____ |
| 3. Operation of tractor at unsafe speed (number of violations) | _____ | x 4 = | _____ |
| 4. Moving tractor with brake set (number of violations) | _____ | x 1 = | _____ |
| 5. Failure to dismount to insert or remove drawbar pin | _____ | x 2 = | _____ |
| 6. Failure to bring tractor to complete stop and / or turn tractor off before dismounting | _____ | x 5 = | _____ |
| 7. Failure to lock brakes before dismounting to hook-up or unhook implement at finish line | _____ | x 5 = | _____ |
| 8. Excessive use of brakes (number of violations) | _____ | x 2 = | _____ |
| 9. Failure to wear safety belts (only if equipped with ROPS) | _____ | x 2 = | _____ |

GRAND TOTAL (TRACTOR OPERATIONS)

FIGURING FINAL SCORE

- | | | |
|---|-------|--|
| 1. Written Exam (number missed x four) | _____ | |
| 2. Tractor Operation (number missed) | _____ | |
| 3. Oral Exam and / or Demonstration (number missed) | _____ | |

GRAND TOTAL _____

THE LOW SCORE WINS!