

# **EASTERN REGIONAL FFA SAFE TRACTOR/EQUIPMENT OPERATING CAREER DEVELOPMENT EVENT**

## **EVENT RULES AND REGULATIONS:**

1. **Each Contestant must wear their FFA Jacket. A 100 point penalty will be added to any contestant not wearing an Official FFA Jacket.**
2. Only the FFA State Tractor/Equipment Operating Representative that is certified by the respective State Supervisor is eligible to compete in this contest.
3. Appropriate Dress-Comfortable shirt and pants and work shoes.
4. **Any contestant who does not report on time shall be disqualified!**
5. Only members with previous tractor driving experience will be allowed in the contest.
6. Liability and accident insurance will be provided by the Big E. Tractor Operators must send or have with them a signed waiver form. **NO WAIVER-NO DRIVE!**
7. **Each contestant must complete all events.**

## **EVENT FORMAT**

1. In case any situation occurs that is not covered in the rules, the decision of the judges and Superintendents will be final.
2. The contest will consist of five parts, each of which will be scored separately. A written test, tools/tractor parts ID, a two-wheeled manure spreader event, a four-wheeled trailer event, and a skid-loader event.
3. Tractors and equipment will be provided for each event. All contestants will use the same tractor and piece of equipment for each event.
4. All persons other than the judges, the scorers and the contestants will be barred from the contest area during the contest.
5. The Superintendents in charge of this contest will select judges and scorers.
6. Meet at Gate 1 - Saturday 8 am. Contestants will have time to FAMILIARIZE themselves with the tractors and equipment on the off-site Fair contest.
7. The contestant with the lowest deductions will be the winner.

## **PART I TEST**

1. The written test will include fifty (50) questions involve but not limited to skill, safe operation and operator maintenance of tractors, skid loaders and equipment.
2. Refer to **"SAFE OPERATION OF AGRICULTURAL EQUIPMENT"** ( Student Manual from **HOBAR PUBLICATIONS-** (800-846-7027) FOR POSSIBLE QUESTIONS.
3. The test will include true-false, completion and/or multiple-choice questions.
  - a. T\_\_\_F \_\_\_
  - b. Check the \_\_\_ in air cleaners once daily.
  - c. All grease fittings should be 1. Well-oiled \_\_\_, 2. Painted periodically\_\_\_, 3. Greased on schedule \_\_\_.
4. Each question answered incorrectly or left unanswered will be valued at ten points.

## **PART II Tools/ Tractor Parts ID**

1. Each contestant will identify mechanic tools and tractor parts from a gas or diesel tractor. A total of 30 tools and parts will be identified. They may include but not limited to a torque wrench, open-end wrench, flywheel, piston, or starter etc. Contestants will choose from a bank of answers.
2. Each correct answer missed or left unanswered will be valued at ten points.
3. Refer to [www.snap-on.com](http://www.snap-on.com), [www.valu-bilt.com](http://www.valu-bilt.com) or [www.craftsman.com](http://www.craftsman.com).
4. Text books: Agricultural Mechanics. Cooper-3rd Edition
5. General Knowledge Test/Tool ID= 20 Minute Time Period

### **PART III-VI OPERATING SKILLS EVENTS**

The next 3 events will test the skill and ability of the contestant to operate Skid-loaders, tractors, and equipment safely.

#### **Part III Two-Wheel Manure Spreader Event**

#### **Part IV - 4 Wheel Wagon Event**

#### **Part V - Skid-Steer Event**

1. Each contestant will start off with a visual inspection of Skid-loader, tractors and equipment. Judges will expect a verbal response.
2. The contestant will follow the course outlined by the judge (see attached illustrations.)
3. Time starts on a signal from the judge and stops when the contestant returns to original point.
4. The contestant will be allowed a maximum of ten minutes for each event. Less time used equals less deductions. The contestant will be notified at eight minutes that two minutes are left. If the contestant does not finish the event in ten minutes, the judge will stop the contestant and an additional 500-point deduction will be added to their score.
5. Excessive tractor brake steering will disqualify the contestant from that event.
6. Contestants may be disqualified if they are observed not following safety standards, which may endanger themselves, the judges or the public.
7. See scorecard for deductions.
8. The Skid-Steer event will use pallet forks to move loaded pallets around a course. One pallet will have four five-gallon buckets of sand, while the other has a five-gallon bucket of water!
9. Pinning of the 4 wheel wagon will be done by the operator.

**NOTE \*\*\* CONTESTANTS WILL BE STOPPED BY THE JUDGE WAVING A RED FLAG IF IT IS FELT THAT THE CONTESTANT IS NOT IN FULL CONTROL OF THE SKID-LOADER OR TRACTOR AND SAFETY OF THE OPERATOR AND JUDGES ARE JEOPARDIZED! CONTESTANTS WILL RECEIVE AN ADDITIONAL 500 POINT DEDUCTION!**

**Note- We hope to use John Deere Tractors and a Bobcat Skid-Loader. Go to [www.bobcat.com](http://www.bobcat.com) for a Safety Video. A local dealer supplies John Deere tractors. Check out [www.johndeere.com](http://www.johndeere.com) for tractor sizes and descriptions. We usually have 30-60 hp tractors to use.**

## Score Sheet - Two Wheeled Manure Spreader Event

Contestant \_\_\_\_\_ State \_\_\_\_\_

### TRACTOR SAFETY RESPONSE (verbal response to Judges)

### Deductions

#### **After walk-around and starting tractor**

Check fuel and oil gauge	___ X	10
Check brakes - depress brake pedal with engine running, tractor in gear	___ X	10
Check tires - by sight only	___ X	10
Check hazards - dirt, grease, tools, improper attachments, etc	___ X	10
Check safety belts	___ X	10
Check ROPS	___ X	25

### STARTING

Transmission not in Neutral/ Park	___ X	25
Brakes not set	___ X	25
Clutch not disengaged	___ X	15

### OBSTACLE COURSE

For each time tractor or manure spreader touches obstacles or lines	___ X	50
For each time tractor or manure spreader knocks down obstacles or crosses lines	___ X	100
For each unnecessary change of direction (forward or backward)	___ X	25
Going out the wrong gate	___ X	200

### BACKING MANURE SPREADER INTO THE ALLEY

Number of inches over three (3) inches from the back of the stall	___ X	10
Number of inches off center in the front	___ X	10
Number of inches off center in the rear	___ X	10
For each time tractor or manure spreader touches obstacles or lines	___ X	50
For each time tractor or manure spreader knocks down obstacles or crosses lines	___ X	100
For each unnecessary change of direction (forward or backward)	___ X	50

### JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Improper mount / dismount	___ X	50
Failure to use seat belt	___ X	25
Failure to set brakes when getting off/or put in Park	___ X	50
Sliding or spinning tires, brake steering	___ X	100
Rough clutch engagement	___ X	25
Clashing of gears when shifting	___ X	25
Excessive engine speed	___ X	25
Excessive tractor speed	___ X	50
Standing while tractor is moving	___ X	100
Moving tractor with brakes on	___ X	25
Failure to put in gear or park when getting off with engine stopped	___ X	50
Riding the clutch	___ X	25
Any unsafe conduct while on or around tractor	___ X	25
Fouling equipment (touching spreader w/tractor wheel)	___ X	50
Rubbing hard	___ X	75

**Subtotal of Deductions** \_\_\_\_\_

If the contestant does not finish within the ten-minute time period, they will be given an additional **500-point deduction**. Time deduction - convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3. To this add the subtotal for deductions to get the final score of the contestant.

**TIME** \_\_\_\_\_ **Deduction** \_\_\_\_\_ **+Sub Total** \_\_\_\_\_ **= TOTAL** \_\_\_\_\_

# Score Sheet - Four Wheel Trailer Event

Contestant \_\_\_\_\_ State \_\_\_\_\_

## TRACTOR SAFETY RESPONSE (verbal response to Judges)

## Deductions

### **After walk-around and starting tractor**

Check fuel and oil gauge	_____ X	10
Check brakes - depress brake pedal with engine running, tractor in gear	_____ X	10
Check tires - by sight only	_____ X	10
Check hazards - dirt, grease, tools, improper attachments, etc	_____ X	10
Check safety belts	_____ X	10
Check ROPS	_____ X	25

## STARTING

Transmission not in Neutral/ Park	_____ X	25
Brakes not set	_____ X	25
Clutch not disengaged	_____ X	15

## HITCHING TRACTOR TO FOUR WHEEL WAGON

Failure to put transmission in neutral or park	_____ X	50
Failure to set brakes	_____ X	50
For each inch over one(1) the wagon is moved	_____ X	25

## TRAILER HANDLING

For touching line or obstacle	_____ X	50
For crossing or knocking down obstacles	_____ X	100
For each unnecessary change of direction (forward or backwards)	_____ X	50
For fouling equipment (touching trailer tongue with tractor tire, sliding trailer wheels sideways)	_____ X	50

## TRAILER PLACEMENT IN SHED

For each inch off center at the front of trailer	_____ X	10
For each inch off center at the rear of trailer	_____ X	10
For each inch off from rear of stall over three (3) inches	_____ X	10
Failing to put trailer in shed/barn	_____ X	300

## PARKING TRACTOR AT FINISH LINE

Failure to set brakes	_____ X	50
Failure to place transmission in gear or park	_____ X	50
Failure to reduce throttle	_____ X	10
Failure to return tractor to start/finish line	_____ X	50

## JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Improper mount / dismount	_____ X	50
Failure to use seat belt	_____ X	25
Failure to set brakes when getting off/or put in Park	_____ X	50
Sliding or spinning tires, brake steering	_____ X	100
Rough clutch engagement	_____ X	25
Clashing of gears when shifting	_____ X	25
Excessive engine speed	_____ X	25
Excessive tractor speed	_____ X	50
Standing while tractor is moving	_____ X	100
Moving tractor with brakes on	_____ X	25
Failure to put in gear or park when getting off with engine stopped	_____ X	50
Riding the clutch	_____ X	25
Any unsafe conduct while on or around tractor	_____ X	25
Fouling equipment (touching trailer w/tractor wheel)	_____ X	50
Rubbing hard	_____ X	75

**Sub Total of Deductions** \_\_\_\_\_

If the contestant does not finish within the ten-minute time period, they will be given an additional **500-point deduction**.  
 Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

**TIME** \_\_\_\_\_ **Deduction** \_\_\_\_\_ **+Sub Total** \_\_\_\_\_ **= TOTAL** \_\_\_\_\_

## Score Sheet - Skid-Steer Event

Contestant \_\_\_\_\_ State \_\_\_\_\_

### SKID LOADER SAFETY RESPONSE (verbal response to Judges)

### Deductions

#### **After walk-around and starting tractor**

Check fuel and oil gauge	___	X	10
Check foot pedals and steering handles	___	X	10
Check tires - by sight only	___	X	10
Check hazards - dirt, grease, tools, improper attachments, etc	___	X	10
Check for seat belts/harness	___	X	10

### STARTING

Improper mount / dismount	___	X	50
Seat belts or safety harness not on	___	X	50
Throttle set to high	___	X	25
Starts course with the parking break on	___	X	50

**NOTE \*\*\* CONTESTANTS WILL BE STOPPED BY THE JUDGE WAVING A RED FLAG IF IT IS FELT THAT THE CONTESTANT IS NOT IN FULL CONTROL OF THE SKID-LOADER AND SAFETY OF THE OPERATOR AND JUDGE ARE JEOPARDIZED! CONTESTANTS WILL RECEIVE AN ADDITIONAL 500 POINT DEDUCTION!**

### LOADING

For touching line or obstacle (with skid-steer or forks)	___	X	50
For crossing or knocking down obstacles	___	X	100
For each unnecessary change of direction (forward or backwards)	___	X	50
Traveling with forks too high	___	X	50
Excessive speed going into pallets	___	X	50
Moving pallets (more than four inches)	___	X	50
Improper use of forks while loading	___	X	50

### NAVIGATING COURSE

Excessive water loss from bucket (more than three inches)	___	X	50
Tipping bucket of water off pallet	___	X	300
<b>*** Operator must return to bucket station to get a new full bucket!</b>			
Carrying load at unsafe height	___	X	50
Pallet #1 not squarely on pallet #2	___	X	25
Excessive speed over obstacle	___	X	50
Excessive bucking on turns and going over obstacle	___	X	50
Pallets not squarely on platform	___	X	25
Unsafe speed approaching platform	___	X	50

### PARKING SKID-LOADER AT FINISH LINE

Failure to reduce throttle	___	X	10
Forks not completely down	___	X	50
Failure to shut off Skid Loader (set parking break when exiting machine)	___	X	100

### JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Failure to operate skid-loader safely`	___	X	100
Excessive skid-steer speed	___	X	50

**Sub Total of Deductions** \_\_\_\_\_

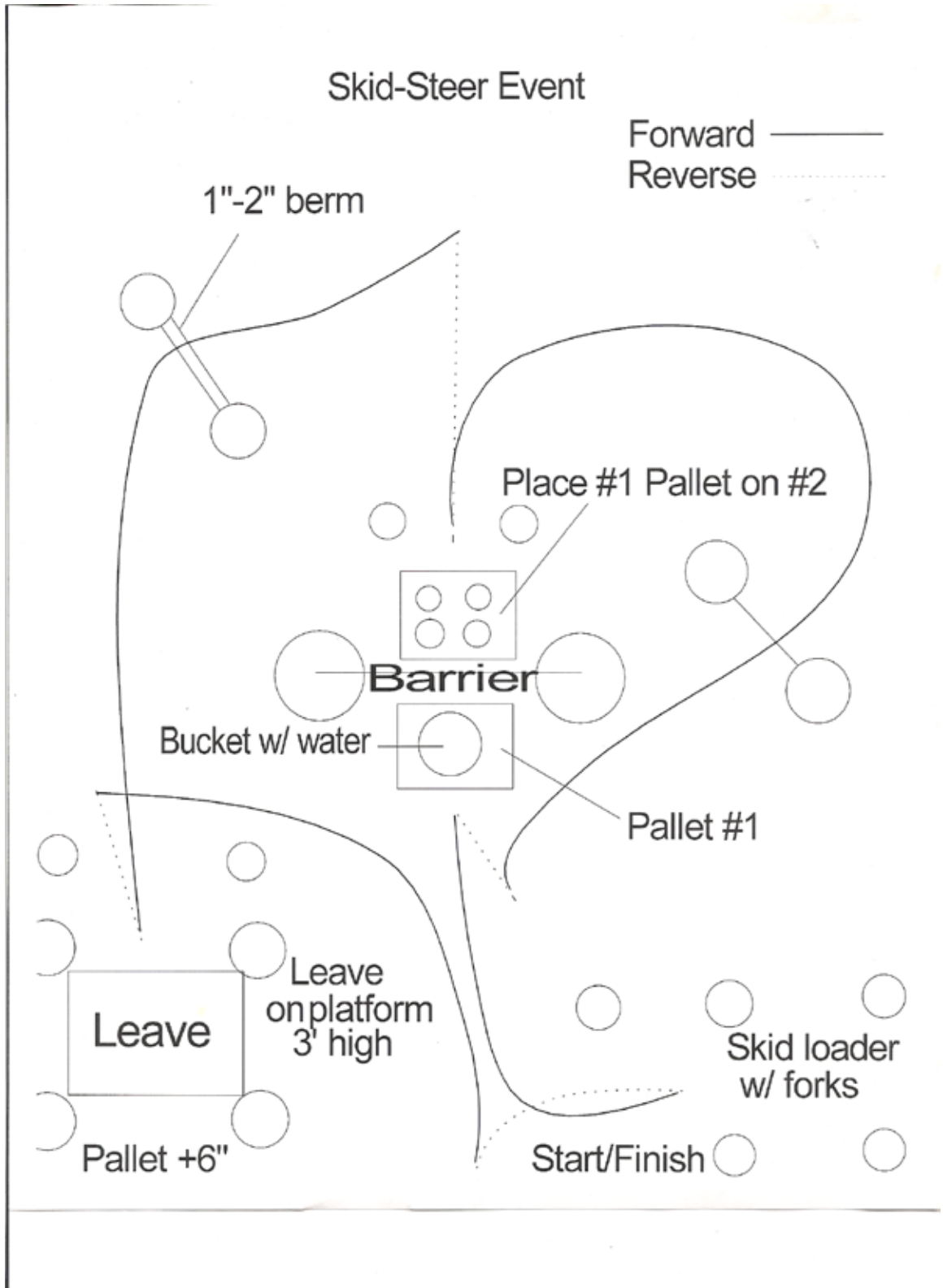
If the contestant does not finish within the ten-minute time period, they will be given an additional **500-point deduction**. Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

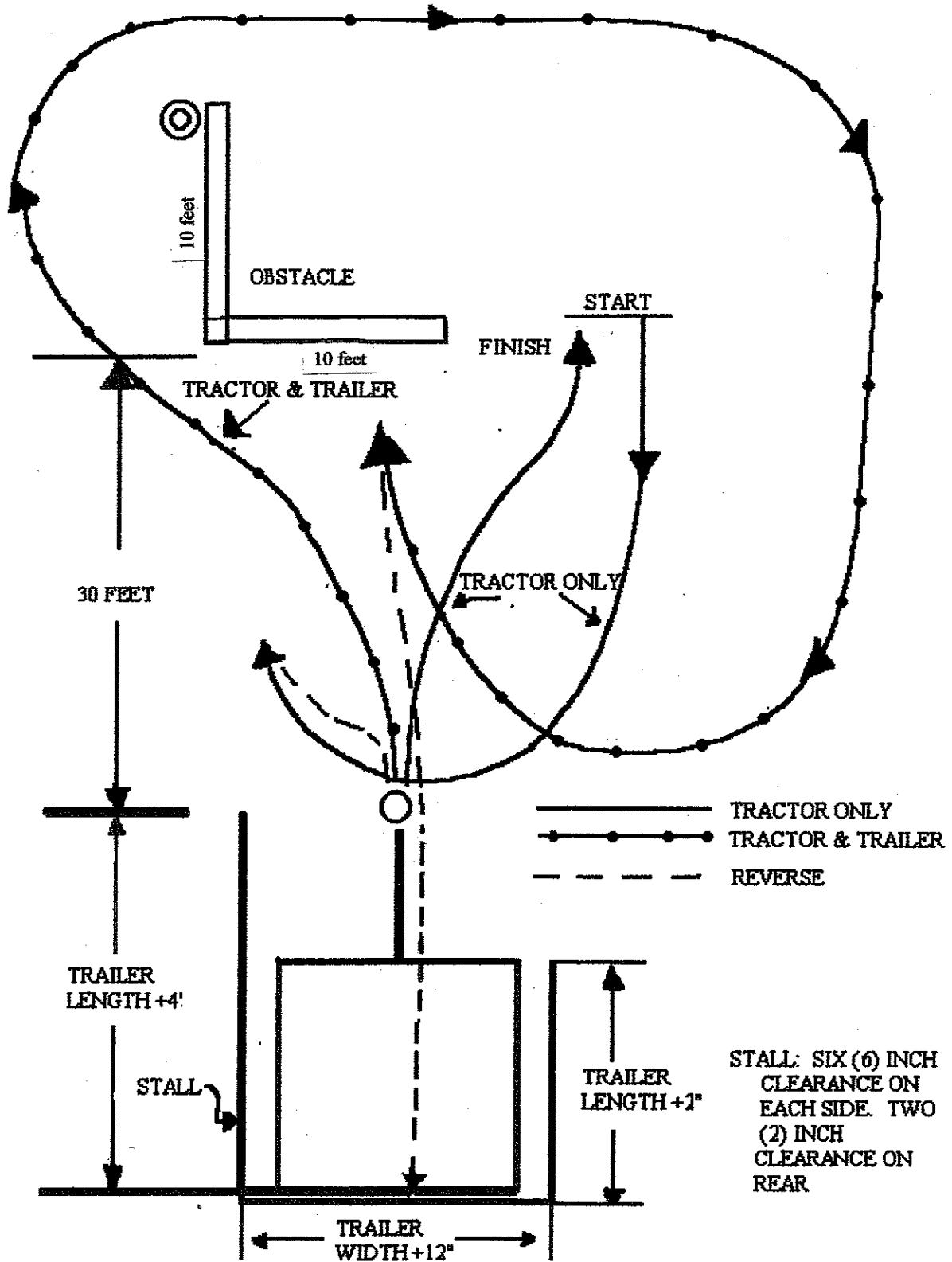
TIME \_\_\_\_\_ Deduction \_\_\_\_\_ +Sub Total \_\_\_\_\_ = TOTAL \_\_\_\_\_

# Skid-Steer Event

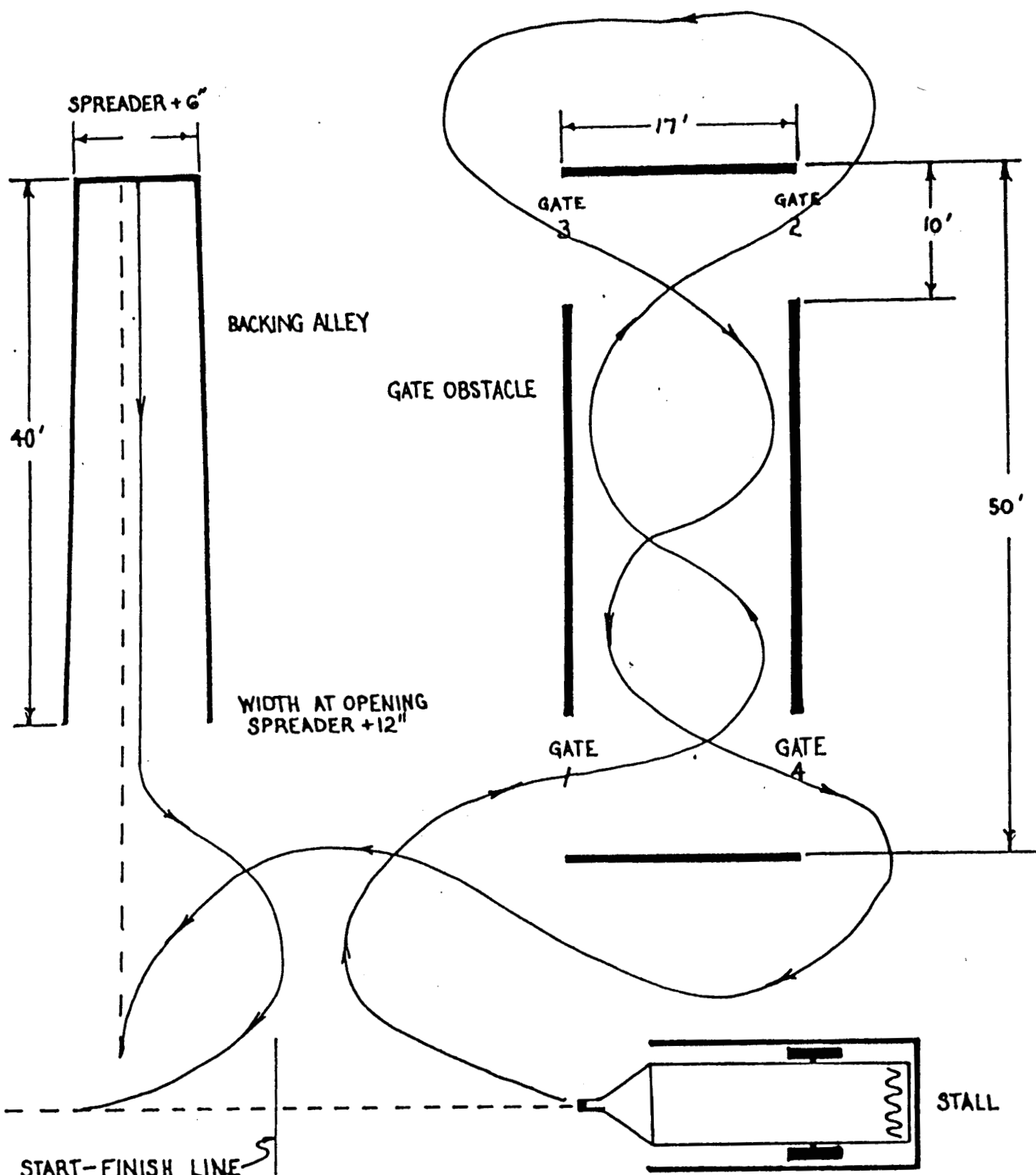
Forward ———  
Reverse ·····



# COURSE LAYOUT - FOUR WHEEL TRAILER EVENT



# COURSE LAYOUT - TWO WHEEL MANURE SPREADER EVENT



1, 2, 3 AND 4 - GATES 10 FEET WIDE  
 BOARD ACROSS END OF STALL  
 AT BEATER HEIGHT  
 DOTTED LINES INDICATE  
 REVERSE MOVEMENT

3" CLEARANCE ON ALL  
 SIDES & THE END OF STALL