

**2003 State Competition**  
**FFA Agricultural Mechanics Contest**  
**University of Missouri**  
**50 points**

Name \_\_\_\_\_  
Contestant Number \_\_\_\_\_  
Chapter \_\_\_\_\_

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## ***MACHINERY***

### **Parts ID:**

Instructions: Determine the name of the part labeled and record your answer in the blank provided.  
Each correct answer is worth 2 points.

Questions 1 thru 5 Baler Parts ID

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Questions 6 thru 10 Planter Parts ID

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

### **Manual Problems**

Instructions: Use the manual provided to determine the answer to the following questions. Write or circle the correct answer for each question. Each correct answer is worth 3 points.

11. Determine the correct sprocket combination for the seeding rate of 41,200 on 30" rows.

Driver # \_\_\_\_\_

Driven # \_\_\_\_\_

12. Determine the correct sprocket combination for the seeding rate of 19,100 on 38" rows.

Driver # \_\_\_\_\_

Driven # \_\_\_\_\_

13. Determine the correct sprocket combination for the seeding rate of 18,200 on 40" rows.

Driver # \_\_\_\_\_

Driven # \_\_\_\_\_

14. If part tagged # 14 moved too slowly, what is the most likely cause?

- A. Actuator is not lubricated
- B. Air in hydraulic system
- C. Improper valve adjustment
- D. All of the above

15. If the spacing for the item tagged #15 is irregular or incorrect, which of the following should be examined?

- A. Spring pressure too high
- B. Improper valve adjustment
- C. Wrong sprockets
- D. Drill is not aligned properly

For each of the parts tagged with the following numbers, determine if they are in proper operational condition.(3pts each)

16. Proper / Improper

17. Proper / Improper

18. Proper / Improper

19. Proper / Improper

20. Proper / Improper