



2002 State Competition
FFA Agricultural Mechanics Contest
University of Missouri
50 points

Contestant # _____
Contestant Name _____
Chapter _____

Ag. Machinery

Instructions: Select the correct answer and record your answer on the answer sheet provided.

467 John Deere Baler

1. The item tagged #1 is the:
 - a. Chain adjusting lever
 - b. Gate lock valve
 - c. Mega tooth Pickup lock-out
 - d. Baler hydraulic operating lever

2. What is the function of item # 1?
 - a. Lock up gate
 - b. Adjust main drive chain
 - c. Operate main baler hydraulic functions
 - d. Operate Mega Tooth Pickup

3. According to the manual what could be the problem if a bale sticks in the chamber?
 - a. Worn Belts
 - b. Lack of lubrication
 - c. Loose or worn bearings
 - d. New baler

4. How often should the pickup drive idler pivot be greased?
 - a. 10 hours
 - b. 20 hours
 - c. 30 hours
 - d. 40 hours

5. At what clearance width should the tires of the tractor be set at?
 - a. 30 to 40 inches
 - b. 61 to 73 inches
 - c. 54 to 60 inches

6. How many Selective Control Valves (SCV's) should the tractor have for this baler?
 - a. One double acting SCV
 - b. Two single acting SCV's
 - c. One single acting SCV
 - d. Two double acting SCV's

7. What pressure should the tires be inflated at for Hi-Flotation 31x15, 8PR?
 - a. 45 psi
 - b. 30 psi
 - c. 60 psi
 - d. 5 psi under preferred rating

8. What is the item tagged #8?
 - a. Main driveline slip clutch
 - b. PTO under load protector
 - c. Driveline balancer
 - d. Centrifugal hydraulic pump.

9. What attachment is used for repairing failed splices on a belt?
 - a. Belt fix all
 - b. Cover Edge Surface Wrap splicer
 - c. Belt lacing tool
 - d. Needle and thread

10. What is the function of item tagged #10?
 - a. To knot the twine
 - b. Uncurl the twine
 - c. Cut the twine
 - d. Keep tension on the twine.

9550 John Deere Combine

11. According to the operators manual, what is the grain tank capacity of this model combine?
 - a. 300 bu.
 - b. 315 bu.
 - c. 245 bu.
 - d. 215 bu

12. What is the tag number for the cylinder drive?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

13. What is the function of item tagged #5?
 - a. Illuminate stubble behind combine.
 - b. Warn driver of mechanical failure
 - c. Illuminate for backing machine
 - d. Illuminate cleaning shoe area for easier adjustment or maintenance

14. According to the manual, what should the fan speed be set at for Oats?
 - a. 700 rpm
 - b. 1000 rpm
 - c. 950 rpm
 - d. 600-850 rpm

15. When setting the cylinder access door to cylinder, how much distance should be between the seal and the rasp bar?
 - a. 2 in.
 - b. 1 in.
 - c. ½ in.
 - d. 5/32 in.

16. According to the manual, how often should the final drives be greased when running in normal conditions?
 - a. 10 hours
 - b. 40 hours
 - c. 35 hours
 - d. 50 hours

17. What is the tag number on the rotary screen?
 - a. 6
 - b. 7
 - c. 8
 - d. 9

18. According to the manual, what could be one problem if ground travel speed is erratic?
 - a. Low oil
 - b. Inconsistent throttle control
 - c. Uneven weight distribution
 - d. Rough terrain

19. According to the manual, how often should the beater bearing be greased?
 - a. 100 hours
 - b. 200 hours
 - c. 300 hours
 - d. 400 hours

20. What is the tag number for the concave clearance adjustment?
 - a. 10
 - b. 11
 - c. 12
 - d. 13