



**2004 State Competition**  
**FFA Agricultural Mechanics Contest**  
**University of Missouri**  
**50 points**

**Contestant #** \_\_\_\_\_  
**Contestant Name** \_\_\_\_\_  
**Chapter** \_\_\_\_\_

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## Tractor Power

**Farmall 560 (2 points each)**

1. What is the engine crankcase capacity of the tractor?
  - A. 3 qt.
  - B. 9 qt.
  - C. 10 qt.
  - D. 16.5 qt.
2. How often should item marked #2 be greased?
  - A. 10 hrs or daily
  - B. 150 hrs
  - C. 250 hrs
  - D. does not need to be greased
3. How many foot- pounds of torque should the rear wheel hub clamp bolts be tighten to?
  - A. 150-180
  - B. 240-280
  - C. 390-440
  - D. 450-475
4. What type of fuel system does this tractor have?
  - A. Gasoline
  - B. Diesel
  - C. Liquid Propane
  - D. Kerosene
5. What is the ground speed of this tractor in 5<sup>th</sup> gear with R-2 tires that are 12-38 and with the Torque Amplifier engaged?
  - A. 10.6 mph
  - B. 10.8 mph
  - C. 11.4 mph
  - D. 11.6 mph

6. How full should you fill the radiator on this tractor?  
A. Level full with the filler neck  
B. Running over the filler neck  
C. 1.5 in. below the filler neck  
D. 2.25 in. below the filler neck
7. At what temperature is this tractor's cooling system safe to? (Degrees F)

**John Deere B (2 points each)**

8. What type of fuel system does this tractor have?  
A. Gasoline  
B. Diesel  
C. Liquid Propane  
D. Kerosene

9. What is the name for the item marked #9?

\_\_\_\_\_

10. What type of oil should the magneto be lubricated with every 500 hours?  
A. SAE 10  
B. SAE 20  
C. SAE 5W-30  
D. SAE 10W-30

11. How many shots of grease does item marked #11 require?

\_\_\_\_\_

12. How often should item marked #11 be greased?

\_\_\_\_\_

13. What is the name for the item marked #13?

\_\_\_\_\_

14. What is the rated governed engine speed that this tractor is set at from the factory?  
A. 1000  
B. 1150  
C. 1500  
D. 2100

15. You have realized that the item in question #9 has gone bad. You have the repair part numbers and need to order a new one. What part number will you give your John Deere dealer so they can order a new one?

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**Oliver 1850**

**Students should identify the following items from the list given. (Answer only used once) (2 point each)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

- A. Starter
- B. Radiator
- C. Generator
- D. Alternator
- E. Injection pump
- F. Spark plug
- G. Inter cooler
- H. Hydraulic filter
- I. Fuel filter
- J. Engine Oil filter
- K. Water pump
- L. Fan clutch
- M. Crankcase dipstick
- N. Hydraulic reservoir dipstick
- O. Injector
- P. PTO Engage lever
- Q. Throttle
- R. Light switch
- S. SCV hydraulic lever