Insert the Service Advisor disc(DVD) for John Deere Backhoes into one of the classroom computers.

Click on Service Advisor icon

Figure out how to “Select a Model”

1) What are two different ways that you can select a specific model in Service ADVISOR?

For now select information for a John Deere 310D Backhoe.

In this class you will learn to access information from the service Manuals.
The headings under Manuals will look like this:

Look at either Operation and Test or Repair. Read the article titled Forward.

2) What is the difference between the Repair and Operation and tests technical manuals?
3) What does this symbol mean?

4) Explore the **CTM** section. What does CTM stand for? (circle the best answer)
   A) Cylinder Technical Manual
   B) Component Technical Manual
   C) Critical Technical Manual
   D) Crappy Technical Manual

5) When would you refer to the **Diagnostic Summary**?

6) What type of information is found under **Specifications, Tools and Other Materials**?

7) What type of information is found under **Supporting Manuals**?

A useful tool is the “**Search Manuals**” feature if you are careful how you use it.

Click on **Search Manuals** and enter **engine specifications** as shown.

Notice there are 1,250 records that have either engine, OR, specifications in them.

Try searching again to find records with both engine, AND, specifications in them.
(Hint look for the AND button)

8) How many records have both engine and specifications in them?
Search for records that have the Exact wording of “engine specifications” in them (select the Exact button)

9) How many records match this search?

Look through a few of the records you found for “engine specifications” using the EXACT search.

10) Can you tell which engine the 310d loader uses?

Open the Repair manual found in the left Menu bar.
It will state that this is TM1497 – 300D, 310D, 315D Backhoe Loader Repair.

11) What does TM stand for? (Read the Forward)

12) Which type (models) of backhoe does this technical manual cover?

When you are using the Search Manuals, it helps to specify the model you are working on when you enter your search term.

Go back and search the terms “310d loader engine specifications”.
Experiment with the OR, AND and EXACT.

13) Which gives the most useful results for this search? (circle one) OR AND EXACT

14) Which engine does the 310D Backhoe Loader use?

You have been asked to change the oil in the 310D loader.
To figure out the viscosity and type of oil go to the Repair, General Information, Fuels and Lubricants, Diesel Engine Oil.

Figure out how to view the Engine Oil Viscosity Chart, how to zoom in and out, and how to switch from the picture back to the text. Once you know how to do this…

…get the instructor to sign off here ___________________
15) When would you use the viscosity of SAE 5W 30 Diesel Engine Oil?

16) What is the preferred viscosity (weight) of engine oil?

17) What is the FIRST step to removing the engine in this 310D Backhoe Loader?

18) How tight should you torque the steering wheel nut (what is the torque) on the 310D Backhoe Loader?

19) You want to remove a powered rear wheel assembly. What is dangerous about this?

20) How can you make removing a powered rear wheel safer?

21) What is the first step to removing the rear axle?

22) You are removing the bucket from the loader.
Why should you put the bucket in dump position on floor?

Different Piece of Equipment…
Timberjack Harvester 608B (with Tracks and Saw)

23) What engine does this equipment use?
(hint) search “608B engine specifications”
or…look under Diagnosis and Tests – General
Information – General Specifications

24) How much oil is required for changing the engine oil and filter? (drain & refill capacities)

25) As the tracks wear you must measure and adjust the track sag. What is the specification for track sag?

26) What is the First Step for testing and adjusting the hydraulic pressure for the telescoping boom?

27) What engine is found in the John Deere 540E Cable Skidder
28) What is the recommended engine oil for the Deere 540E Cable Skidder?

29) How much oil do you need to change the engine oil and filter on a BELL B35C Articulated Dump Truck?

Select a different Machine…
Select the John Deere 482C Forklift
(find the CD with 4WD Loaders)

30) What engine does this forklift use?

31) How much engine oil does the crankcase hold (with filter)

32) How do you bleed the fuel system on this forklift?

33) What is the BCI Group number for the battery
(The BCI Group number lets you get a battery that fits the hold down brackets in the machine)

34) What is dangerous about batteries?
35) What is the first step to removing the battery from the 482C Forklift?

36) What is the first step to removing the Forks?

37) What is the first step to removing the power steering pump? (Vickers pump)

New Vehicle. Select the 455G Crawler Loader.

A new track roller has an outside diameter of 182.6 mm.

38) What is the minimum diameter (100% worn)

39) What is the first step to removing the torque converter?

40) What is the first step for removing the loader bucket?

41) You are replacing the Halogen Work Light Bulbs.

How do you ensure you get the correct lighting pattern?