Test Type: The apprenticeship level assessments are based on industry standards determined by Equipment Dealerships in the Northeast. Participants can earn certification and a digital badge.
Written Assessment

This written assessment consists of questions to measure an individual's factual theoretical knowledge.

**Administration Time:** 2 hours  
**Number of Questions:** 43  
**Number of Sessions:** This assessment may be administered in one session.

### Areas Covered

- **Engine Systems: 4-Stroke Gasoline** 26%  
- **Engine Systems: Diesel** 28%  
- **Hydraulic/Hydrostatic (Fluid Power) Systems** 28%  
- **Electrical Systems** 18%
Specific Competencies and Skills Tested in this Assessment

Engine Systems: 4-Stroke Gasoline
- Master diagnostic and engine analysis procedures and equipment

Engine Systems: Diesel
- Analyze, evaluate, and troubleshoot fuel injection systems
- Analyze, evaluate, and troubleshoot after-treatment systems
- Analyze, evaluate, and troubleshoot diesel engine

Hydraulic/Hydrostatic (Fluid Power) Systems
- Remove, inspect, and replace major components
- Troubleshoot hydrostatic systems

Electrical Systems
- Effectively use a laptop to diagnose and troubleshoot a problem on a unit
Sample Questions

What could cause a unit to regenerate excessively?
A. high operating temperature
B. fuel pressure fluctuating
C. plugged air filter
D. turbo leaking oil

The main purpose of an EGR system is to
A. boost horsepower
B. cool intake air
C. increase air volume
D. lower emissions

There is a PFC system on a tractor. All valves are at neutral. What pressure should be at the pump outlet?
A. same as signal line pressure
B. low pressure standby
C. max high pressure
D. zero psi

The voltage of a CAN BUS system should equal _____ volts.
A. 2.5
B. 5
C. 7
D. 12

What is a consequence of using low Sulphur fuel in a T4 final engine?
A. after-treatment system malfunction
B. there are no consequences
C. it will use more DEF
D. fuel injection system malfunction
NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

**Administration Time:** 2 hours and 30 minutes (6 hours and 40 minutes including preparation and evaluation time)

**Number of Jobs:** 3

**Areas Covered:**

32% **Electrical/Electronic Control Calibration and Setup**
Participants will calibrate transmission, EHR remote, hitch, and monitor settings.

32% **Upload Software**
Participants will determine if service software tool is correct, determine current software, and available software for all controllers, download software, re-verify the software version.

36% **Troubleshoot Agricultural Tractor Issues**
Participants must resolve customer complaints, the remote #1, front suspension, and 3 pt. hitch do not operate.
Sample Job

Upload Software

**Maximum Time:** 30 minutes

**Participant Activity:** Participants will determine if service software tool is correct, determine current software, and available software for all controllers. If updated software is available, download software or re-flash software. Re-verify the software version is the latest version.