



NOCTI
500 N Bronson Avenue
Big Rapids, MI 49307-9036
800.334.6283
www.nocti.org

Instructor Prep Pack

Pilot Testing 2026

Equipment, Materials, and Supplies

AGRICULTURE MECHANICS - PILOT (2302)

JOB 1: PRECISION MEASUREMENT (40 minutes)

- All necessary protective clothing and safety equipment:
 - Safety glasses/face shield
 - Hair tie, if appropriate
- OHV engine with repair manual (horizontal shaft 5 to 12 horsepower)
- Dial caliper (NO digital) or micrometer
- Feeler gauges
- Dial indicator kit with appropriate mounting device
- 2 SAE bolts of different size
- Thread pitch gauge
- Tool for prying crankshaft to test for endplay
- Marking device (e.g., sharpie, tape)

JOB 2: FRAMING STAIRS (30 minutes)

- All necessary protective clothing and safety equipment:
 - Safety glasses/face shield
 - Dust mask
 - Gloves
 - Leather close toed shoes
 - Hair tie, if appropriate
 - Hearing protection, if appropriate
- 1- 2- by 12-inch cut into 4-foot segments per participant
- Framing square or quick square
- Pencils
- Portable electric circular saw
- Sawhorses (or applicable)
- Tape measure
- Clamps, if applicable

JOB 3: ELECTRICAL DIAGNOSTICS (30 minutes)

- All necessary protective clothing and safety equipment:
 - Safety glasses/face shield
 - Hair tie, if appropriate
- Vehicle or equipment with a 12-to-24-volt battery source
- Multimeter with DC 0-to-500-amp with amp clamp
- Extra fuses for multimeter

AGRICULTURE MECHANICS - PILOT (2302) (continued)

JOB 4: METAL FABRICATION (1 hour)

- All necessary protective clothing and safety equipment
 - Face shield
 - Shade 5 glasses
 - Welding helmet shade 10-13
 - Gloves
 - Long cotton sleeve
 - Leather work boots
 - Long pants
 - Hair tie, if appropriate
- One piece of mild steel plate (per participant) 1/4-inch by 5-inch square
- Provide an oxyacetylene cutting rig with the proper tip for this job
- Soapstone
- Steel ruler
- Tool for measuring beveled edge
- MIG welder (gas shielded) with appropriate wire
- Grinder
- Slip joint pliers
- Striker or torch lighter
- Chipping hammer with wire brush
- Appropriate cutting table
- Appropriate welding table
- Appropriate ventilation

CARPENTRY - PILOT (4315)

JOB 1: INSTALLING BASEBOARD (30 minutes)

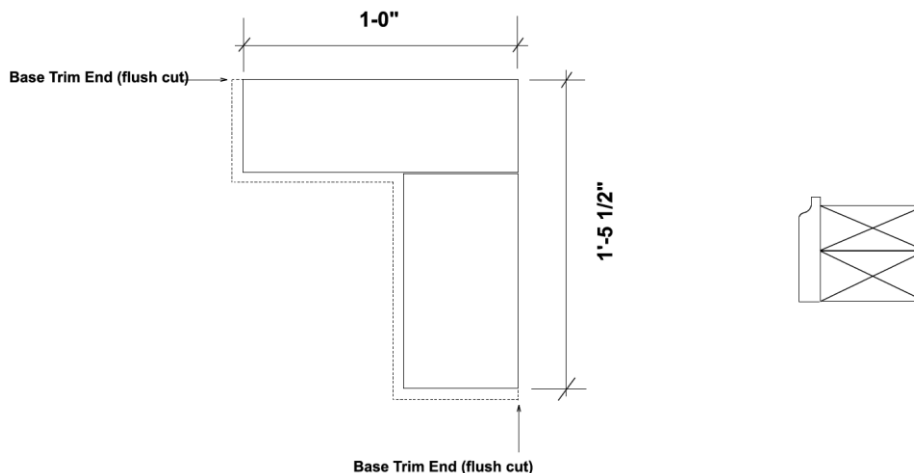
- Appropriate personal protective equipment:
 - Safety glasses
- Miter saw
- Coping saw
- Finish nail gun
- Brad nail gun
- 1-1/4" brad nails
- 2" finish nails
- Pencil
- Tape measure
- Speed square
- Hammer
- Nail set
- 1-8' - 3-1/4" colonial baseboard trim per student
- 100 grit sandpaper 1/4 sheet per student
- Trim bar or appropriate tool for removing trim after job

SET-UP INSTRUCTIONS FOR INSTRUCTOR:

Instructions for pre-built frame:

Build one frame for every five test takers before testing starts:

- 2 – 12" pieces of 2" x 6"
- 2 – 17-1/2" pieces of 2" x 6"
- 2-1/2" deck screws



CARPENTRY - PILOT (4315) (continued)

JOB 2: CABINET PLUMBING ROUGH-IN (30 minutes)

- Appropriate personal protective equipment
 - Safety glasses
- Sheet stock – 16" x 24" (1 per participant)
- Laser (If laser line is not easily visible, provide painters tape for the student to mark the line.)
- Drill
- 1" drill bit
- 2-3/4" drill bit
- Pencil
- Tape measure
- Framing square
- Speed square

SET-UP INSTRUCTIONS FOR INSTRUCTOR:

Instructions:

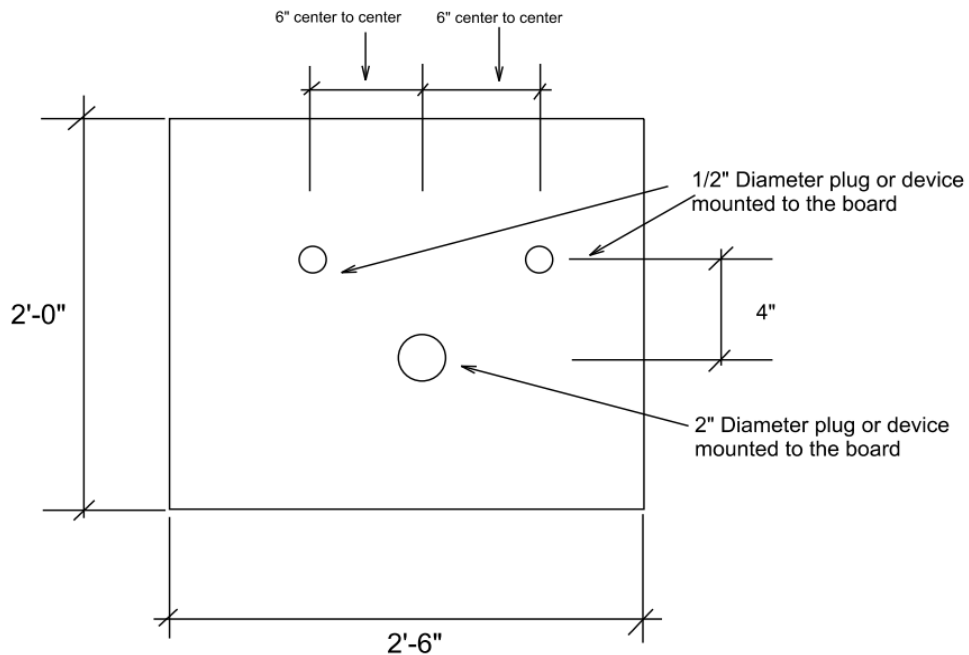
Each site should create a cabinet plumbing rough-in mock-up prior to evaluation. This mock-up should be mounted vertically on a wall and should be placed 1/4" out of level:

- 2'6" x 2'0" sheet stock
- Included on the mock-up are 2 copper stub outs and 1 drain that have been mounted.
- Follow specifications on graphic below exactly.
- Appropriate substitutions that protrude an equal distance off the mock-up are acceptable in place of stub-outs.

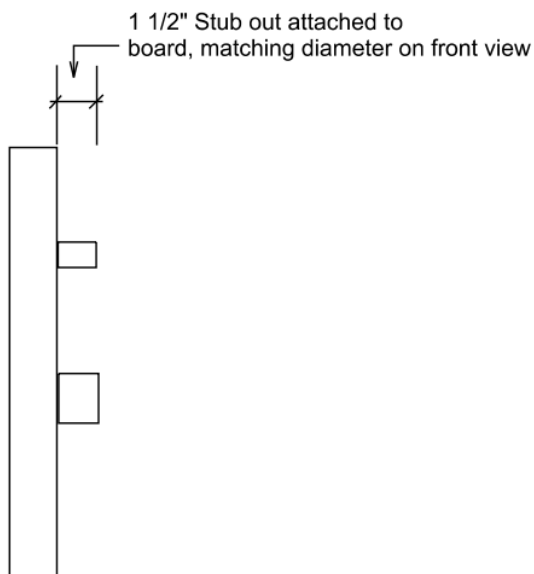
CARPENTRY - PILOT (4315) (continued)

JOB 2: CABINET PLUMBING ROUGH-IN (continued)

SET-UP INSTRUCTIONS FOR INSTRUCTOR: (continued)



Front View



Side View

CARPENTRY - PILOT (4315) (continued)

JOB 3: RAFTER LAYOUT (20 minutes)

- Appropriate personal protective equipment
- 1 piece of lumber: 2-inch by 6-inch by 8 feet (species does not matter)
- Roll of paper, 5-1/2 inch by 8 feet, per participant
- Rafter framing square or speed square with accompanying book
- Stair gauges/square clips
- Staples or masking tape
- Tape measure
- Non-programmable calculator
- Pencils

JOB 4: RECTANGLE LAYOUT (20 minutes)

- Appropriate personal protective equipment
- 4 concrete blocks, 8 inch by 8 inch by 16 inch
- Framing square
- 2 tape measures (for each workstation)
- Chalk line (including blue chalk)
- 2-inch masking tape (may be used to mark corners of square)
- Broom to sweep away chalk lines between participants
- Non-programmable calculator
- Pencils

JOB 5: STAIRWAY STRINGER (30 minutes)

- Appropriate personal protective equipment
- 1 piece of lumber: 2" by 12" by 48" (species does not matter)
- Roll of paper, 11-1/4" by 4', per participant
- Framing square or speed square (participant may use either)
- Stair gauges
- Staples or masking tape
- Tape measure
- Non-programmable calculator
- Pencils

NOTE: Substitutions may be made in the above list <u>only</u> if the item is not available. The substituted item must be similar to the one listed and must be of equivalent difficulty.
--

CARPENTRY - PILOT (4315) (continued)

JOB 6: BLUEPRINT READING AND EXTERIOR SOLE PLATE LAYOUT (30 minutes)

- Appropriate personal protective equipment
- 1 piece of lumber: 2 inch by 4 inch by 16 feet (species does not matter)
- Roll of paper, 3-1/2 inch by 16 feet, per participant
- 1-inch masking tape or staples
- Tape measure, at least 25 feet
- Framing square or speed square or combination square
- Non-programmable calculator
- Pencils

COMPUTER NETWORKING FUNDAMENTALS - PILOT (4714)

NOTE: All equipment for this performance assessment must be tested and in proper working condition (unless otherwise stated) prior to the testing date.

A disconnected private network should be used for this performance assessment. Evaluator will need to set up the local network ahead of time and make Kiosk 1 fully functional and connected. Instructor or Evaluator will need to assign IP addresses before participants begin assessment.

JOB 1: SET UP A SIMPLE LAN WITH TWO WORKSTATIONS AND HARDWARE INSTALLATION (1 hour)

Each participant will require TWO workstations for this job.

- **For each job, start with a fresh install of an Operating System.**
- **Kiosk #1 must be pre-configured.**
- **Workstation #X must have a NIC that is not functioning.**
- **Disable onboard NIC device or remove failed NIC in workstation #X**
- **A copy of the NIC driver needs to be available in case the participant needs to reinstall the driver.**
- **USB NICs are not permitted**

For each participant:

- Two PC workstations, with networkable operating systems, labeled Kiosk #1 and Workstation #X, with field-replaceable unit (FRU) NICs
- One standby unit for every 2 participants (in case of test unit failure)
- The NIC in Kiosk #1 is correctly configured
- The NIC in Workstation #X needs to be non-functioning
- Copies of the proper NIC drivers and
- Two (correctly terminated) Cat-5 or newer straight-through cables
- An Ethernet switch/router with minimum number of ports to support the participants (at 4- or 8-port) with appropriate AC adaptor
- NIC Adapter (PCI or PCI-E)
- Workstations booted, ready, and logged on with administrative access
- Screwdriver
- ESD safety strap or mat
- Nitrile or latex gloves
- LAN cables
- Writing utensils
- Paper

COMPUTER NETWORKING FUNDAMENTALS - PILOT (4714) (continued)

JOB 2: MAKING AND TESTING CABLES (35 minutes)

- 6 ft. CAT-5/6 cable (Riser and Plenum cable) per participant
- 2 – RJ-45 passthrough style terminals per participant
- RJ-45 EZ style crimpers per participant
- Continuity tester (ex. Fluke)
- Wire strippers/cutters
- Cable labels
- Cable labeler or pens for marking
- Premade cables (4 total)
 - 2 – straight through (1 good, 1 bad)
 - 2 – crossover (1 good, 1 bad)

Must have CAT-5/6 cables and RJ-45 EZ style terminals available for student use if student is unable to make cable correctly.

DENTAL ASSISTING - PILOT (4326)

PROCEDURE 1: TREAT A CONTAMINATED TRAY AND PREPARE INSTRUMENTS FOR STERILIZATION (10 minutes)

- Sink
- Hand soap/Hand sanitizer
- Personal protective equipment:
 - utility gloves
 - mask
 - gown
 - safety glasses
- Instruments for autoclave
 - basic setup (mouth mirror, explorer, cotton pliers)
 - high speed handpiece
- Ultrasonic and solution
- Autoclave/Nyclave bags/Autoclave wrap
- Autoclave tape
- Pencil or pen
- Paper towels
- Waste container
- Gauze (made to appear contaminated with blood)
- Other disposable items
- Biohazard bag

PROCEDURE 2: ORAL HYGIENE INSTRUCTIONS (10 minutes)

- Toothbrush
- Floss
- Typodont

PROCEDURE 3: MIXING IRM (20 minutes)

- Personal protective equipment:
 - lab coat
 - mask
 - goggles
 - gloves
- IRM
- Mixing pad
- Spatula

DENTAL ASSISTING - PILOT (4326) (continued)

PROCEDURE 4: ASSEMBLE AND DISASSEMBLE ASPIRATING SYRINGE (10 minutes)

- Sink
- Hand soap/Hand sanitizer
- Personal protective equipment:
 - gloves
 - mask
 - gown/lab coat
 - safety glasses
- Sharps container
- Aspirating syringe
- Disposable needles (long and short)
- Anesthetic cartridge
- Paper barrier
- Waste container

PROCEDURE 5: TAKE AN IMPRESSION (20 minutes)

- Sink
- Hand soap/Hand sanitizer
- Personal protective equipment:
 - gloves
 - mask
 - gown/lab coat
 - safety glasses
- Flexible rubber bowl
- Appropriate spatula
- Typodont
- Alginate powder (regular or fast-set)
- Water measurement tool supplied by manufacturer
- Measuring scoop supplied by manufacturer
- Mandibular impression tray
- Maxillary impression tray
- Room temperature water
- Paper towels or other products for placing impressions
- Disinfectant spray
- Waste container

DENTAL ASSISTING - PILOT (4326) (continued)

PROCEDURE 6: PREPARE A CLASS III (ANTERIOR) COMPOSITE TRAY (10 minutes)

- Mirror
- Explorer
- Cotton pliers
- Spoon excavator
- Liner placement instrument
- Mylar strip/wedge
- Etching gel
- Bonding agent
- Bonding brush
- Bonding well
- Composite material/composite gun
- Composite placement instrument
- Articulating paper holder and paper
- Assortment of instruments that are not applicable for this procedure

PROCEDURE 7: POSITION HVE AND AIR WATER SYRINGE AND TRANSFER INSTRUMENTS (20 minutes)

Tray set up in a dental unit setting:

- HVE
- Air Water syringe
- Typodont
- Mirror
- Explorer
- Condenser
- Burnisher
- Hemostat or scissors
- Personal protective equipment
 - gloves
 - mask
 - gown/lab coat
 - safety glasses

PROCEDURE 8: ASSEMBLE XCP (10 minutes)

Positioning instruments:

- anterior
- posterior
- bitewing