## **MOWER (ALL TYPES)**

This Evaluation Guide for Skills Demonstration is to be used in the evaluation of an operator for certification on the specific piece of equipment stated above. It is intended that this Guide be followed closely during an evaluation, and the operator is expected to demonstrate competency in each of the items listed. However, variances may be made in some situations when, in the opinion of an evaluator, site conditions, operational constraints or the demonstrated skill of the operator requires that an item(s) be deleted or added to ensure a comprehensive evaluation.

# 1. Performs a thorough pre-op inspection and routine preventive maintenance, as needed

- Visually inspects exterior of machine for loose, leaking, hanging, or broken parts
- Enters cab using steps and grab handles for safety (3 point climbing procedure)
- Removes keys from ignition for safety
- Ensures that parking brake is applied
- Ensures that transmission is in neutral or lowest forward gear or reverse, as per policy
- Ensures that battery disconnect is turned off
- Performs general safety checks including unsecured objects
- Inspects the following machine components
  - Engine: Checks Fluid Levels/filters
    - \* Radiator
    - \* Crank case
    - \* Battery
    - \* Fuel tank
    - \* Transmission
    - \* Hydraulic fluid (with all cylinders collapsed as much as possible)
    - \* Fuel/oil/hydraulic/air filters clean, not leaking
    - \* Differentials
    - \* Planetary axles
  - Steering & Suspension
    - \* Inspects king pins, drag link and tie rod ends for presence and condition

- \* Checks power steering assist cylinder and steering box for leaks and that it is secured to frame
- \* Checks tires for tread depth, proper inflation and obvious defects
- \* Checks wheels/rims for tightness, cracks valve stem alignment, slippage or any damaged, broken or missing parts
- Rear Axle
  - \* Checks tires for tread depth, proper inflation and obvious defects
  - \* Checks wheel/rims for tightness, cracks, valve stem alignment, slippage or any damaged, broken or missing parts
- Exterior
  - \* Checks fuel tank for damage or leaks and fuel levels
  - \* Checks lights, warning lights, reflectors, and slow moving vehicle emblem are clean and intact, properly attached and operating correctly
  - \* Checks exhaust system for presence and condition
  - \* Checks 3 point hitch arm for stabilizer chain, adjusts chain length or swing bar if needed
  - \* Checks roll over protection system (ROPS) for cracks, fatigue, loose bolts
  - \* Checks PTO overriding clutch for play
  - \* Greases fittings as per lubrication chart or Operator's Manual
  - \* Checks PTO shaft from tractor to mower for excessive play and condition of safety guards
  - \* Inspects gear box, output shaft to belts and drive pulley for damage, fluid level
  - \* Checks debris guards
  - \* Checks bearings
  - \* Checks flail knife retainers, pins, knives and bearings for damaged, loose or missing parts
  - \* Checks roller for proper cutting height so flail head will not dig ground
  - \* Greases fittings on PTO and drive mechanism daily, more frequently if needed
  - \* On sickle bar mowers, checks sickle bar assembly for proper adjustment and broken or missing parts according to Operator's Manual
  - \* On the over-the rail mowers, checks the boom assembly for chaffed or leaking hoses, cylinders, fittings and pins, lubricates as necessary
- Interior
  - \* Performs general safety check including unsecured objects
  - \* Inspects presence and condition of seat belts and other safety equipment, including horn, charged and secured fire extinguisher, first aid kit and emergency triangles
  - \* Inspects for excessive free play in the steering wheel
  - \* Inspects for 1-1/2" clutch free play
- Inspects for clean and undamaged glass and mirrors, working wipers/washers

and heater/defroster

- Checks that warning and safety decals are in place
- Verifies vehicle is safe to operate
- States all safety warnings for machine

#### 2. Starts vehicle properly

- Adjusts seat, mirrors, checks revolving lights and fastens seat belt
- Depresses clutch, places transmission in neutral, or in 'Start' position (as appropriate)
- Starts engine
- Allows engine to warm up, if necessary
- Checks that all gauges are in working order
- Engages PTO, according to Operator's Manual
- Listens for erratic sounds and watches for extreme vibration in mower head
- Turns PTO off, according to Operator's Manual
- Performs brake system check, ensures split brakes are locked

### 3. Transports the vehicle, prepares equipment for operation

- Raises mower heads and secures with safety chain or other device
- Turns on all safety lights
- Transports vehicle to work location
- Performs safety set-up
- Checks work location for mowing hazards
- Unlocks split brakes

### 4. Mows properly

- While mowing, constantly checks for mowing hazards
- Adjusts mowing speed for varying cutting conditions
- Uses split brakes in locked and unlocked positions correctly and under proper conditions
- Maintains efficient mowing pattern
- Uses differential lock when applicable
- Operates mower according to Operator's Manual

### 5. Parks and shuts down mower properly

- Locks split brakes together
- Shuts off mower
- Raises and secures mower head to transport position
- Transports to safe parking area
- Applies parking brake
- Lowers the mower heads
- Turns off all lights
- Uses proper engine shutdown procedure (Idles engine 3 5 minutes)

- Places transmission in low range low gear
- Shuts engine off
- Cleans and secures vehicle as appropriate
- Completes post operational check
- Completes all necessary paperwork
- Lubricates vehicle as needed

The below signatures indicate the operator has successfully completed the skills demonstration.

Signature of Evaluator:	Date:
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Signature of Operator:\_\_\_\_\_\_Date:\_\_\_\_\_

Reference: New York State Department of Transportation