
Powered Industrial Equipment Program

November 2018

Powered Industrial Equipment Program

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Ensure employee certifications are up to date and schedule refresher training every three years.

Retain completed inspection forms for a minimum of three years

Notify EHS of any accidents or near-misses involving any PIE.

*PPE should be checked daily to ensure it is in proper working condition

V. Inspections and Maintenance

The operator shall always perform complete pre-operational inspections of equipment prior to operation. Pre-operational inspections are conducted to identify equipment defects which could create hazardous conditions.

All equipment operators should receive proper training on how to conduct a thorough pre-operational inspection necessary to identify, correct and report equipment defects.

The Pre-Use Checklist (Appendix A) shall be turned into the department supervisor daily for each operational period throughout the work day. The Supervisor shall maintain inspections for a minimum of three years from the date of completion.

PIE's found to be unsafe shall be removed from service immediately. The equipment shall be tagged out, and a work request submitted to Facilities Management for repair.

VI. Operating Requirements

Only trained and authorized employees shall

- Avoid tight turns that pinch rotating shafts between the tractor and machine.

D. Roll Over Protection/ Falling Object Protection Systems (ROPS/FOPS)

ROPS/FOPS are installed for the safety of operators. They are designed to take the impact of a roll over or falling object to prevent injury or death.

Ensure the ROPS/FOPS is in proper working condition and clear of any damage.

Check bolts and other attaching devices.

Always wear a seat belt when equipment is equipped with ROPS/FOPS.

Use the designated draw bar (tow bar), Never attach ropes or chains to tow.

Report damage, to the supervisor to fix or replace equipment as needed.

E. Ground Guides

The ground guide is an essential component to the safe operation of moving PIE.

Slow down and utilize horns while crossing areas with obstructed views from oncoming pedestrians or other vehicles.
When operating in inclement weather or low light times utilize the auxiliary lighting system.

G. Power Lines

(Appendix A)

**PRE-OPERATION CHECKLIST
Powered Industrial Equipment**

Date: _____

Operator: _____

Equipment: _____

Shop: _____

Mile/Hour Reading: _____

Sign: _____

		OK	Description of defect	Date Reported	Date Corrected
1	Park Brake				
2	Service Brake				
3	Engine Brake				
4	Cab Condition				
5	Fire Hazards				
6	Fire Extinguisher				
7	Exhaust System				
8	Wipers/Windshield				
9	Lights				
10	Glass Windows				
11	Mirrors				
12	Controls				
13	Gauges/Instruments				
14	Back-up Alarm/ Horns				
15	Steps/Ladders/Rails				
16	Air Systems				
17	Seat Belts				

(Appendix B)

Pre-Operation Inspection Guidance

PRE-USE CHECKS SHALL BE PERFORMED PRIOR TO EQUIPMENT BEING OPERATED

1. PARK BRAKE

Stop vehicle on level ground in a secure area,

- a. Set the park brake and attempt to move the vehicle in a low gear based on gear characteristics. Manufacturer recommendations should always be followed

2. SERVICE BRAKE

Position unloaded vehicle on level ground in a secure area.

- a. Apply foot brake and observe air pressure gauge for normal pressure.
- b. Start the vehicle in motion and apply foot brake while traveling in both a forward and reverse direction to insure vehicle will stop under normal operating conditions.

3. ENGINE BRAKE

Stop vehicle on level ground in a secure area.

- a. Start vehicle and set park brake. Place transmission in neutral.
- b.

8. WIPERS/WINDSHIELD

- a. Conduct a visual examination of the wiper arms, blades and observe for proper operation.
- b. Check all mechanical components for deterioration of rubber and plastic parts.
- c. Check windshield glass for cracks, proper installation, condition and adequate visibility.

9. LIGHTS

Check lens, mounting and proper operation of all lights.

10. GLASS WINDOWS

Check for cracks, proper installation, condition, adequate visibility and proper operation.

11. MIRRORS

Check for secure installation, properly adjusted, and visibility.

12. HORN (FRONT)

Check for proper operation, audible above background noise.

13. GAUGES AND INSTRUMENTS

Check all gauges and instruments for proper operation.

14. BACK-UP ALARM

Check for proper operation:

- a. With ignition switch on, put transmission in reverse and listen for back-up alarm that must be audible above background noise
- b. If equipped with a strobe light for use during hours of darkness the light must be visible.

15. STEPS/LADDERS/RAILS

Check steps, ladders and rails for secure installation and slipping/falling hazards. (mud, ice, grease, etc.)

16. AIR SYSTEMS – PROPER OPERATION

- a. Start vehicle and allow air pressure to build to proper operating range.
- b. Check air gauges for proper operating range to insure the air system is charged properly and that the air compressor and governor are operating properly.
- c. Check all master control valves and all other control valves for leaks and proper position.
- d. Depress air brake pedal and keep depressed while observing air gauge for excessive loss of air pressure.
- e. Walk around the vehicle while looking and listening for air leaks in hoses, valves and all air connections.

17. SEAT BELTS

Check for proper installation, proper operation and check for worn/damaged parts.

18. BED PINS/SAFETY ROPS/CATCHES

Check for availability and substantial bracket installation

19. ROPS/FOPS

Check for proper installation, construction and design as required by the manufacturer.

20. GUARDS

Fan belts, pulleys, power take-off, sprockets and couplings

21. TIRES/TRACKS

- a. Check tires for proper mounting, cuts, broken beads and sidewalls, excessive wear and proper inflation.
- b. Check tracks for excessive wear, excessively worn or broken pads, defective idlers and pulleys, gear drives and improperly adjusted tracks.

22. FLUID LEVELS/LEAKS

Check around and under equipment for leaks. Always follow manufacturer recommendations with regard to proper fluid levels.

Powered Industrial Equipment Training Guide

I. Powered Industrial Equipment at UNC

Includes but not limited to the following:

1993 John Deere 5400 Tractor,	1978 Massey Ferguson 20C Tractor/Loader
1998 John Deere 5410 Tractor,	1994 Kelly Backhoe,
1980 Bison Satoh Tractor,	2000 Vermeer BC935 Auto-Feed Chipper
2000 Bobcat 773 Skid-Steer Loader	

Various Rental Equipment (as needed)

Attachments which include, but not limited to:

2007 Landpride All-Flex Mower	1996 Mill Creek Aerator 840
1980 Wood Dixie Mower M5-4	1985 Vicon Fertilizer applicator
1972 Jacobsen Aerator	1985 Continental Belton 3-point auger
1979 Jacobsen Turf Sweeper	1980 BER-VAC S-63 Snow Blower
1980 Howard 50-inch Rotavator	

II. Pre-Operation Training

- A. *Review the UNC Powered Industrial Equipment Program*
- B. *Review Operator's Manual or Manufacturer Training/Safety Videos*
Provided by Manager or Selected Trainer

III. Proper Start Up Operations and General Use

To include at a minimum:

- A. Start Up and Shut Down

Going Downhole

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Equipment Attachments

Proper Hook up procedures
PTO (Power -take-off) Safety
Components of
PTO
Hazards of Stub and drivelines
Entanglements
Guards and
Shields
Safety Practices

Op Initial	Train In	Comments

Transportation Methods with Attachments

Travel maneuvers / Terrain concerns

Op Initial	Train In	Comments

Trainer Signature _____

Date: _____

Operator
Signature _____

Date: _____

(Appendix E)

Operator Certification Cards

This Certificate Card Hereby Authorizes This Employee:
To Operate The Equipment Marked

Expiration Date: _____

Northwest Colorado Operator Certification Card University of _____

Steer Excavators Fork Truck Skid Steer

Backhoe

Authorizing Signature: Employee Signature: _____

This Certificate Card Hereby Authorizes This Employee:
To Operate The Equipment Marked

Expiration Date: _____

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