

Training Module

03-17

BACKPACK AND HAND HELD

LEAF BLOWERS

ALL EMPLOYEES ARE TO BE TRAINED PRIOR TO USING EQUIPMENT



Purpose

Providing clean, well-maintained facilities is an essential function of OPRD's mission and part of the Centennial Horizon goals for world-class visitor experiences. Backpack or hand held blowers help keep landscapes, trails and campsites clean, safe and well maintained. Gas-powered or electric blowers require an ability to walk over uneven surfaces, use job hazard analysis to identify worksite dangers, and use equipment and materials safely according to OPRD and manufacturer instructions. The purpose of operating any equipment in Oregon Parks is to accomplish the business of the State while protecting visitors, employees and volunteers.

Significant Environmental Aspects

OPRD has developed an Environmental Management System (EMS). Information about the EMS and other completed training modules included in the EMS can be located on the "R" Drive at: R:\Environmental Management System. Those activities and operations that may have significant environmental impact are identified and included in the EMS. Operation of gas-powered equipment, such as a backpack blower, has the potential for significant environmental impact involving: vehicle and engine use, non-hazardous waste, potentially hazardous waste, and air quality. Operators of gas-powered equipment should choose the most efficient equipment to perform the assigned tasks.

I. Pre-Operation

A. Operator's Manual – Read prior to using equipment.

B. Inspection/Service

- **Fill gas tank** with two-cycle gas at manufacturer's recommended ratio for gas/oil. **Do not fill tank in a bed of a pickup with a plastic bed liner. Static electricity may ignite the fuel.**
- **Check/Inspect** - Straps, guards, blower fittings and heat shield.
- **Pre-start** the blower prior to transporting it to the site of use. **If motor does not start by 10th pull, do not use. Tag it out for repair.** Once blower has started and is running smoothly, **turn the choke off.**



- **Electric blowers** - If using an electric leaf blower, make sure you use a three pronged cord, and the cord is serviceable.
- **Red tag** any tools or non-energized equipment requiring replacement or repair and remove from service.
- **Lockout/Tag-out (LO/TO)** any energized tools or equipment if repairs are needed, in accordance with Procedure Module 09-04, Lockout/Tag-out.



II. Sustainable Operation

- A. **Equipment Choice** – Look for alternatives to two-cycle engines. If a gas-powered engine is required, use the most efficient equipment.
- B. **Maintenance** – Proper maintenance of gas-powered equipment helps increase fuel efficiency and reduces air pollution.
- C. **Chemical Use** – Where possible use low-smoke oil and bio-based lubricants.
- D. **Waste Disposal** – Properly dispose of all petroleum-based waste according to park procedures or waste management plan.

III. Operation

A. Starting

- **Starting Switch** - Move to the “On” position.
- **Choke** - Move carburetor choke to the “On” position if engine is cold.
- **Pre-Prime** - Prime carburetor if blower has a priming bulb.
- **Starting Position** - Place backpack blower on the ground with the tube located where it will not blow towards people or property. **Set throttle to 1/4 on unless otherwise directed.**
- **Long pants are required.**
- **Avoid loose hair and clothing. They may be sucked into the blower intake.**
- **Putting on Backpack Blower** - Use a raised surface such as a tailgate or picnic table to lift the blower onto your back or get assistance from a fellow employee. Adjust harness fit before leaving the tailgate or your fellow employee!



B. Personal Protective Equipment (PPE)

- **Hearing Protection** – Use ear plugs/muffs.
- **Eye protection** – Wear safety goggles/glasses or a face shield.

C. Site Assessment - Backpack blowers are capable of up to 180 m ph wind velocity. Completing a Site Hazard Assessment prior to using a blower includes:

- **People/Personal Property/Vehicles** - Blow debris away from instead of toward people or property. If the chute is pointed toward people, turn off blower until they have passed.

Blower operation that results in personal injury or property damage may result in disciplinary action.

Take this process seriously.

- **Blower Angle** - Adjust blower angle to reduce airborne debris.
- **Dust** – Operators should use a particulate mask when the operation creates dust and flying debris.
- **Fatigue** - Blower use is limited to not more than 3 hours of continual use.



Edger, but operator uses similar PPE for a leaf blower

Blower Operation Includes:

- **Controlling it with** a slight side-to-side swing.
- **Blower angle** shall not be pointed towards persons or property.

IV. Post-Operation

A. Clean Up, Hazard Warnings, Storage

- Clean up work area.
- Place hazard signs/tape to identify any park hazard for the safety of staff and visitors.
- Clean and inspect tools and equipment for damage or needed maintenance.
- Red Tag any non-energized tools or equipment damaged during work project.
- Complete Lockout/Tag-out process for any energized tools or equipment damaged during work.
- Schedule repairs or replacement on damaged tools or equipment.

V. Demonstration of Proficiency

Anyone trained to use a backpack blower use is required to demonstrate proficiency prior to signing training ledger.

PROFICENCY TEST BACKPACK BLOWERS

03-17

I. Multiple Choice: (Pick One)

1. To place the backpack blower on your back, you should:
 - a) Initially lift the blower onto a raised surface such as a picnic table or pickup bed and then slide into the harness and adjust straps prior to leaving picnic table/ pickup.
 - b) Obtain help from a fellow employee.
 - c) Bend at the waist, lift it from the ground onto your back in one fluid motion, twisting into the straps while bouncing up and down to get it in a snug position.
 - d) a or b only.

2. A Site Hazard Assessment prior to operation includes:
 - a) Planning the task so you blow debris away from people and property.
 - b) Planning the task so the angle and direction of the blower reduces airborne debris and fall out.
 - c) Determining if a particulate mask should worn due to airborne dust and debris.
 - d) All of the above.

3. The blower is controlled by:
 - a) Up and down motion.
 - b) Circling motion.
 - c) Slight swing from side to side.
 - d) The Herky-Jerkie motion.
 - e) All of the above.

II. True/False:

4. _____ The fuel tank on gas blowers is filled with an oil and diesel mix prior to operating.
5. _____ Loose clothing and hair can be sucked into the blower intake.
6. _____ The blower should be pointed in anyway that is effective for debris removal.
7. _____ Straps, guards and heat shields **do not** need to be checked before operating.
8. _____ Backpack blowers can create wind velocity up to 180 mph.
9. _____ Hearing and eye protection are required for blower operations.

- 10. _____ If repairs are needed, return the blower back to the location where you found it and do nothing else.
- 11. _____ If a blower requires maintenance or needs repair when turning it in, repair it if you are authorized or lockout/tag out the equipment and report it to your supervisor.
- 12. _____ If you are a truly dedicated employee, you can use a backpack or hand held blower all day without taking any breaks.
- 13. _____ It's okay to use blowers to cool down your coworkers.
- 14. _____ Blower operations that result in personal injury or property damage may result in disciplinary action.

III. Discussion Questions:

- 1. What kind of personal hazards do backpack blowers present?
- 2. How do you use a backpack around people and property?

Employee Name: _____ Pass _____ No Pass _____

Date: _____

Take this test to your supervisor or trainer for sign off.