



# Safe Operating Procedure



## PowerBoss Armadillo Sweeper

### Potential Health or Safety Concerns

- > Damage to Equipment/Vehicles (Accidents, Flying Debris, Spills/Drips)
- > Injuries to workers and public (Flying Debris, Pinch Points, Crushing, Silica Exposure, Noise, Burns)

### Documentation

Complete and review a Hazard Assessment, Traffic Accommodation Plan (TAP) and Emergency Response Plan (ERP). Ensure you have an applicable road use permit (OSCAM, OSCP, etc.) and complete sign logs when required. Complete an equipment pre-trip inspection.

### Equipment, PPE, and Apparel Required

- > CSA Approved 6" footwear, hard hat, gloves, reflective vest (Class 2-3), ear protection, eye protection, CSA Type 2 small first aid kit, fire extinguisher, burn kit, and spill kit.
- > Respiratory protection and valid mask fit test are required due to silica exposure.
- > Coveralls are required due to silica exposure.

### Training Requirements

- > Employees must be deemed competent prior to operating the equipment.
- > If a flagger is required, they must be certified.

### Colas Lifesaving Icons

The following Health, Safety, or Environmental icons represent applicable risks to this procedure. Please see the **Lifesaving Icons** document for more information.



Hazard Evaluation and Control



Health Hazards



Impairment



Line of Fire



Safe Lifting



Energy Isolation



Competency



# Safe Operating Procedure



## Procedures and Precautions to Offset Hazards

1. **Inspection and preparation** > Check all fluid levels and visually check hoses, fittings, cables, and tires. Ensure the engine air filter and main sweeper filters are clean and free of debris. Check headlights, beacon light, main-broom, and side-broom (adjust height as required).
2. **Unloading** > Lower trailer ramps individually. Remove chains from machine. Perform inspection on the trailer prior to starting the engine. Start the engine and raise machine hopper 12-18 inches for clearance. Ensure truck/trailer hitch is in the closed and locked position. Reverse the machine in a slow and controlled manner, making sure to stay centered on the trailer and ramps. Return trailer ramps to their upright and secure position. Park the machine in a safe area on the jobsite.
3. **Installing or replacing broom heads** > Open both of the side gates to access the main broom. Raise the hopper to maximum height, place the safety arm in position, lower the hopper to rest on the safety arm. On the drivers side, remove the broom bracket by turning the hand screw. When replacing the main broom, the bristles must form a V when looking from the front of the machine. The side-broom is installed by aligning the 3 pegs on the broom with the 3 holes on the side-broom plate on the machine.
4. **Sweeping** > Ensure all traffic accommodation is in place according to the TAP. Turn on the headlights and beacon light. Check the main broom height, is appropriate. Commence the sweeping operation by engaging the hydraulic controls to activate the necessary brushes.
5. **Awareness** > You will be traveling with & against traffic flow while in the closed lane, always stay aware of all traffic and pedestrian movement, utilize flaggers when crossing into open lanes.
6. **Emptying the hopper** > Approach the one-ton dump box truck from either the back or the side, leaving approx. 2m of space between the sweeper and truck. With the sweeper engine at a high-idle speed, raise the hopper to the maximum height and slowly bring the sweeper within 6" of the truck, being careful not to contact the truck. Use the hydraulic controls to dump the hopper into the truck and engage the filter shaker. When empty and the shaker has completed its cycle, return the hopper to the normal position, and reverse the machine 2m away from the truck. Lower the hopper to the ground.
7. **Ongoing maintenance** > The engine air filters must be cleaned throughout the day, generally they should be cleaned once for every 2 hours of use. Clean the filters by removing them from the machine and using a blower to blow the dust away.
8. **Shut down** > Ensure the hopper is empty and there are no loose objects on the machine during transport. Turn off all lights.
9. **Loading** > Lower trailer ramps individually. Start the engine and raise machine hopper 12-18 inches for clearance. Ensure truck/trailer hitch is in the closed and locked position. Drive the machine onto the trailer in a slow and controlled manner, making sure to stay centered on the trailer and ramps. Return trailer ramps to their upright and secure position. Secure the machine as per the NSC regulations.
10. **Safe Keeping** > While the machine is not in use, always park in a safe area away from traffic and make sure the brake is set to prevent the machine from rolling. Place traffic cones around parked equipment.