

ELGIN[®]
Subsidiary of Federal Signal Corporation

WHIRLWIND1[®]



Improved Operator Experience • Ease of Maintenance • Saves Time/Cost

Whirlwind®

PROVEN SINGLE-ENGINE VACUUM SWEEPER

Searching for a solution that eliminates maintaining and servicing an auxiliary engine on a pure vacuum sweeper? Elgin® Sweeper Company has the answer. The Whirlwind1® eliminates all things associated with a diesel auxiliary engine, providing value to customers that extends beyond having one less engine. The Elgin Sweeper single-engine technology has undergone years of customer focused testing and validation; ensuring a design that exceeds expectations!



APPLICATION SOLUTIONS

Elgin Sweeper doesn't offer just one sweeping technology — we take an application-based approach to solving our customers' sweeping needs. Our team works with every customer to ensure they get a machine that fits their specifications, with the right truck, engine configuration, fuel requirements, and options.

POWERFUL SUPPORT

Elgin Sweepers are built for clean, backed for life. Throughout the life of the sweeper, we offer team training on proper use and maintenance. We have a world-wide network of experienced dealers with factory trained technicians and a local stock of OEM parts and accessories, to ensure total customer peace of mind.

UNMATCHED QUALITY

The Whirlwind was introduced over 40 years ago and has been continuously improved - Now sold with a single-engine design. Manufactured in an ISO:9001 certified plant, Elgin's are quality inspected and functionally tested prior to shipment. Paint prior to assembly ensures uniform, durable coverage. Whirlwinds are proudly assembled in the U.S.A.

VARIABLE SPEED DEVICE (VSD) TECHNOLOGY

The Whirlwind1 single-engine provides a simple solution; a single push-button operation. This procedure incorporates a Variable Speed Device (VSD) – a planetary gearbox – located between the chassis engine and the Allison transmission. The VSD has two modes of operation; road mode and work mode.



The VSD replaces the diesel auxiliary engine, eliminates a complex aftertreatment system, and untimely regenerations. It's simple to operate, and carries a three year warranty.



SCAN to view our VSD animation or visit elginsweeper.com



Chassis Engine

Variable Speed Device (VSD)

Allison Transmission

Singular Push-Button Technology

The Whirlwind1 does not require engaging the park brake before shifting into work or road modes. Shift-on-the-fly design provides unmatched ease of operation; combined with increased productivity.

Road Mode:

When the VSD is in road mode, the chassis operates normally. The accelerator pedal controls the chassis engine speed and the transmission shifts normally.



Work Mode:

When the VSD is in work mode, the chassis accelerator now controls only the input speed to the transmission, not the chassis engine speed.



SUPERIOR SINGLE-ENGINE VACUUM SWEEPER

High Productivity Suction Nozzle(s)

A single or dual 32 in (813 mm) abrasion-resistant suction nozzles are available. Each nozzle covers 174 in² (1123 cm²) and extends 15 in (381 mm) beyond the tire's track for increased performance closer to the curb. The 11 in (279 mm) diameter suction hose accepts large debris. The suction nozzle rides on two heavy-duty pivoting caster wheels allowing it to track, staying in the path of the debris and following road contours. The suction nozzles are equipped with a front-mounted shutter that allows easy entry of larger/bulky objects and large quantities of leaves.



Powerful Blower

The Whirlwind1 features a nine-vane closed face turbine blower. Vanes are constructed from Hardox® brand steel for durability.



Resilient Housing

Replaceable urethane liners inside blower housing extends service life.



Flexible Design

The Whirlwind1 mounts on a conventional or cab-over chassis, respectively offering maneuverability, visibility, ease of entry and egress. Elgin's standard auto pickup-in-reverse feature protects the sweep components while allowing quick change of sweeping locations.

Hydrostatically Driven Blower

Eliminates frequent tensioning of a belt driven blower. Vibration and noise from belt slippage is avoided. Added cost and maintenance of a fluid coupler is avoided.

High Capacity/ Efficient Loading

The 8 cu. yard (6 m³) capacity hopper provides extended sweeping time. Abrasion-resistant steel inlet deflector directs debris flow to the center of the hopper for maximum capacity utilization.

Drop down hopper screens make the Whirlwind1 easy to clean.



Simple, Easy - Maintenance Access

The Whirlwind1 is designed so that systems are accessible and easy to service. The hydraulic system with o-ring face seal (ORFS) fittings is designed for long life and leak-free operation. Heavy-duty, waterproof electrical connectors, and color-coded wires are functionally stamped for quick identification and trouble shooting.

Ergonomic Controls

The Whirlwind1's centrally-mounted console features rocker switches for all sweep functions and complete gauges (fuel level, fan hour meter, fan RPM) for quick review of system conditions. A backup camera and alarm are standard for increased operational awareness and safety.

Effective Windrow Extension Broom

The 60 in (1524 mm) hydraulically-driven extension broom operates at an 18 degree auger angle, directing the debris into the path of the nozzle. The broom can pivot for left or right side sweeping.



Unique Trailing Arm Side Brooms

Elgin's trailing arm design provides inward motion to avoid obstacles. Standard parallelogram linkage allows side brooms to closely follow road contours, and maintain a consistent broom tilt (angle) with the road surface. Digging pressure is adjustable in-cab. Brooms can be extended outward for maximum sweep path.

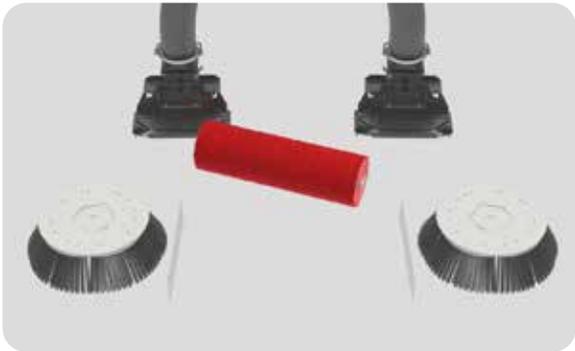
Superior Dust Suppression

The durable 335 gal. (1268 L) polyethylene dual water tanks provide ample water capacity. Water is delivered using two run-dry water pumps; distributed through quick-to-clean water nozzles. High/low in-cab selectable pump speeds allow adjustment by application.



Elgin's Memory Sweep® system allows the operator to resume all previous sweep settings, even broom tilt (if so equipped), with one touch control. Memory Sweep incorporates a multi-screen display that indicates system diagnostics, as well as optional features such as broom tilt angle, and broom hours.

POWERFUL CLEANING SYSTEM



*With 36 in side brooms

Highly Efficient Air Conveyance System

Efficient air flow, including a superior vacuum source and air routing path, is at the heart of the Whirlwind1.

- High volume air flow at high velocity results in exceptional one-pass pickup while eliminating plugging that can occur in similar type sweepers.
- A hydrostatically driven nine-vane closed face turbine fan provides maximum airflow

High Productivity Sweep System

The Whirlwind1's versatile sweep path picks up debris close to the curb and across the widest expanse of road in its class.

- The sweep system includes one or two suction nozzles, trailing arm side brooms, and a centrally-mounted extension broom.
- You can choose 28 in (711 mm) or 36 in (914 mm) diameter trailing arm side brooms that can be operated individually or simultaneously for a sweep path of up to 144 in (3658 mm)*.
- Choose between single or dual 32 in (813 mm) welded-steel suction nozzles that can be operated individually or simultaneously.
- The 11 in (279 mm) diameter suction hose accepts large debris. Quick disconnect allows an operator to inspect and clean the hose intake without raising the hopper.

Whirlwind Specifications:

Sweep System

- High performance vacuum sweeper

Sweep path*

- One suction nozzle, one side broom, and extension broom: 95 in (2413 mm)
- Dual suction nozzles, two side broom and extension broom: 144 in (3658 mm)

Nozzle

- Single 32 in (813 mm) abrasion-resistant suction nozzle (dual nozzles available)
- Pick-up area: 174 in² (1123 cm²)
- Extension beyond tire track: 15 in (381 mm)

Variable Speed Device (VSD)

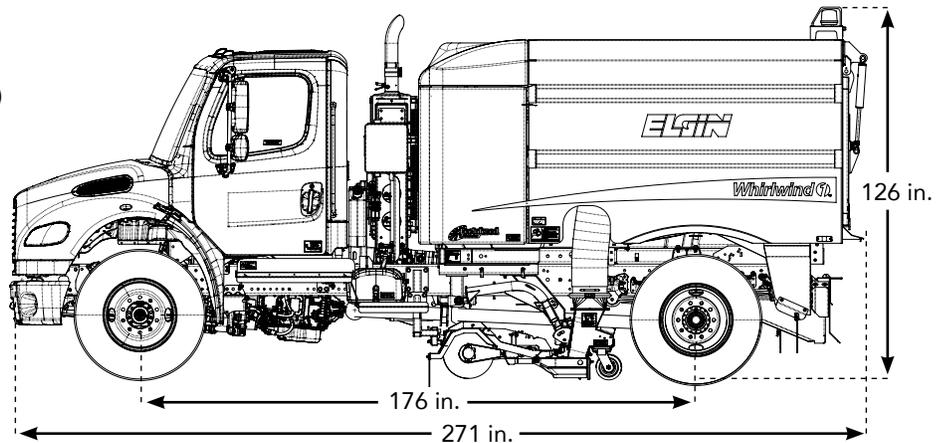
- Installed between the chassis engine and the Allison transmission; eliminates auxiliary engine
- Singular in-cab push button control

Chassis

- Choice of conventional or cab-over chassis

Travel Speed

- Highway speeds



POPULAR ENHANCEMENTS



Wandering Hose

The versatile, hydraulic-assist hose gets into hard to reach places and is effective in catch basin cleaning. It handles multiple tubes for especially deep catch basin cleaning.



LifeLiner® Hopper System

The LifeLiner hopper liner and finish system greatly improves the life, durability, and dumping functionality of a sweeper hopper. It is backed by a lifetime warranty*.



Stainless Steel Hopper System

This complete hopper body is constructed entirely of 304 grade stainless steel to provide maximum service life, even in the most corrosive applications. It is backed by a lifetime warranty.*

ADDITIONAL ENHANCEMENTS:

- Variable broom speed
- Auto nozzle shutter
- Front spray bar
- R or L inspection doors
- Rear flood light(s) LED
- Rotating beacon/strobe light LED
- Automatic lubrication system
- Hopper deluge
- Auxiliary hydraulic pump
- High/low pressure washdown
- In-cab side broom tilt
- Utility cover lifter
- PM-10 compliant
- Quiet Pak™ Acoustical insulation
- Additional water:
140 gal (530 L) or 360 gal (1363 L)

Catch Basin Cleaning



The combination Elgin Whirlwind1 sweeper with wandering hose option provides a cost-effective tool to facilitate storm water management.

Permeable Pavement



The Whirlwind1's incredible vacuum is able to pull out embedded debris that plugs drainage paths.

Visit elginsweeper.com/whirlwind1 for application-specific configurations.

*Consult factory for warranty details

Because with *one*, you get a whole lot *MORE!*

- *Greater Sweeping Productivity*
- *Improved Operator Efficiency*
- *Quieter Operation*
- *Lower Maintenance Costs*
- *Reduced Emissions*



Your local Elgin Dealer is:



elginsweeper.com

Phone (847) 741-5370 • Fax (847) 742-3035

1300 W. Bartlett Road, Elgin, IL 60120 U.S.A.

WARRANTY

Elgin Sweeper Company backs the Whirlwind1 sweeper with a one-year limited warranty. The Whirlwind1 is warranted against defects in material or workmanship for a period of 12 months from the date of delivery to the original purchaser. Optional extended warranty packages are available. Consult your Elgin dealer for complete warranty information.

Specifications subject to change without notice. Some items shown may be optional. Elgin® Ecolnused® LifeLiner® Memory Sweep® and Whirlwind1® are registered trademarks of Federal Signal Corporation. Hardox® is a registered trademark of Hardox wear plate. Federal Signal Corporation is listed on the NYSE by the symbol FSS.

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