

ELGIN®

Subsidiary of Federal Signal Corporation

Whirlwind®



WHIRLWIND® - POWERFUL, DURABLE VACUUM SWEEPER

Need a powerful vacuum sweeper that not only cleans but is durable, easy to operate and easy to maintain? The Elgin® Whirlwind is the answer. Suited for municipalities, contractors and general maintenance sweeping, the Whirlwind has evolved over four decades to bring out the best in vacuum street sweeping. The high performance sweep system, user-friendly controls, customizable suction nozzle and side broom configurations, and selection of cab-over or conventional chassis make the Whirlwind the obvious choice. Thanks to our worldwide factory-trained dealer network, you can be sure of satisfaction on delivery and far down the road.



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 each customer to ensure that you get a machine that fits your specifications, with the right truck, engine configuration, fuel requirements, and options.

POWERFUL SUPPORT

Elgin's sweepers are built for clean, backed for life. Throughout the life of the sweeper, we offer training to your team 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. 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.

POWERFUL CLEANING SYSTEM

How well a street sweeper picks up material is determined by its overall design. The air conveyance, sweeping and dust suppression systems, as well as ease of sweeper maintenance must all work together to achieve maximum sweeping performance.



HIGHLY EFFICIENT AIR CONVEYANCE SYSTEM

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

- High volume air flow at high velocity results in exceptional one-pass pickup while eliminating plugging that can occur in similar type sweepers.
- A nine-vane closed face turbine fan is powered by a turbo-charged diesel auxiliary engine for maximum airflow.

HIGH PRODUCTIVITY SWEEP SYSTEM

The Whirlwind'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)*.
- Simultaneous sweep is standard with the dual nozzle configuration. 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.



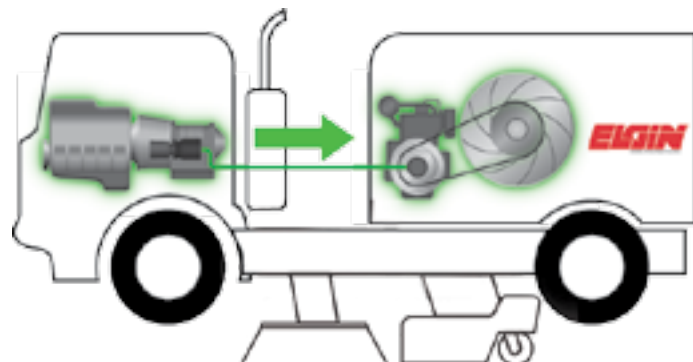
ECOINFUSED® SHAREDPOWER TECHNOLOGY

The Whirlwind's patented shared power system is a Tier 4F compliant solution that delivers proven performance, increased fuel efficiency, reduced emissions and lower noise levels at engine-rated speeds.

- The system was developed to share chassis power when using a 74 hp auxiliary engine to maintain outstanding sweep performance while providing a simple emission compliant solution that doesn't involve complex, higher maintenance, and expensive exhaust after treatment devices.
- Typically the chassis engine is underutilized while sweeping. EcoInfused SharedPower technology taps into that unused potential and allows power to be hydraulically transferred to, and shared with, the auxiliary engine.
- Power can also come from regenerative braking. Using a transmission mounted PTO, energy normally lost to vehicle momentum while sweeping on downhill grades or coasting can be reclaimed and immediately applied back into the sweeper system.



EcoInfused
Technology
SharedPower



To see an animation on how the SharedPower system works, scan the QR code or visit:
elginsweeper.com/Products/AirSweepers/Whirlwind

*With 36 in side brooms

THE ELGIN WHIRLWIND

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.



HIGH-PERFORMANCE SWEEPER ENGINE

The heavy-duty John Deere 4045T diesel engine provides exceptional power and extended service life. Auto shut-down of engine functions comes standard. The latest EPA Tier 4F and CARB emission compliant packages are now standard.

POWERFUL BLOWER

The high velocity, 9-vane blower generates the necessary airflow to convey the debris from the suction nozzle into the hopper and vacuum needed to overcome any restrictions such as rocks or bulky debris. More power means one-pass pickup, increasing operator productivity. The vanes are constructed of Hardox® brand steel for durability and maximum service life.



HIGH CAPACITY/EFFICIENT LOADING

The 8 yd³ (6 m³) capacity hopper provides extended sweeping time. Abrasion-resistant steel inlet deflector(s) direct debris flow to the center of the hopper for even, efficient material loading and maximum capacity utilization.

COMPACT DESIGN

The sweeper mounts on conventional or cab-over chassis with short wheelbases, enabling a tight turn radius for better reach in cul-de-sac sweeping and greater maneuverability around corners. The standard auto-pickup in reverse allows for quick change of sweeping locations.

UNIQUE TRAILING ARM SIDE BROOMS

The trailing arm design provides special 4-way action to closely follow road contours, provide inward safety for obstacles, and maintain a consistent broom angle even as the broom starts to wear. Digging pressure is adjustable in-cab.

EFFECTIVE WINDROW EXTENSION BROOM

The 54 in (1372 mm) hydraulically-driven extension broom operates at an 18 degree windrow angle, directing the debris into the path of the nozzle. The broom can pivot for left or right side sweeping and is pivoted by a heavy duty pneumatic cylinder.



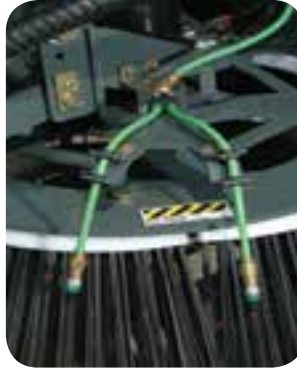
SIMPLE, EASY, ACCESS MAINTENANCE

The Whirlwind is designed so that systems are accessible and easy to service. Large access doors allow for quick inspection of the auxiliary engine, electrical, water and hydraulic systems without tilting the hopper. The engine oil and pneumatic pressure can be checked, hydraulic filter changed and the fan bearings greased. The hydraulic system with o-ring seal fittings is designed for long life and leak-free operation. Heavy-duty, waterproof electrical connectors and color-coded wires have stamped identification for quick location during trouble shooting.

SUPERIOR VACUUM SWEEPER DESIGN

COMPREHENSIVE WATER SYSTEM

Proper use of water is essential for dust suppression, sweeping performance and longevity of sweeper components. Up to 20 spray nozzles are located at the side brooms and inside the suction nozzles. The extension broom has 4 rubber mounted, quick-disconnect spray nozzles for easy cleaning and maintenance. The spray system is powered by two water pumps, one for each side of the sweeper. The pumps are controlled in-cab, with high/low settings to adjust for sweeping conditions. Two durable polyethylene water tanks provide 335 gal (1268 L) of water.



ERGONOMIC CONTROLS

All sweep and water functions use rocker switches located on a centrally-mounted console for easy operation from either operator position. Air regulators provide positive side broom down pressure and separate switches control the in/out and up/down function. Easy-to-read gauges provide quick assessment of all sweep and engine systems. Water level indicator is standard. A standard back-up camera and alarm enhance operator and sweeper safety.



Elgin's Memory Sweep® system allows the operator to resume all previous sweep settings, even broom tilt (if so equipped), with one-touch control to enhance productivity and reduce fatigue. It incorporates a multi-screen display that indicates system diagnostics, engine hours and broom hours.



QUICK COMPLETE DUMPING

The 8 cubic yard (6 cubic meter) hopper is constructed of 10 gauge steel walls, a 1/4 inch (6.35 mm) thick steel floor with easy drop-down screens for quick cleanup.

A 50 degree tilt angle ensures efficient dumping. Hopper controls are safely accessible on the curb side of the sweeper and conveniently located in-cab for quick unloading of the hopper.



APPLICATION-SPECIFIC CONFIGURATIONS



PERMEABLE PAVEMENT CLEANING & RESTORATION

Installation of permeable pavement has increased in recent years as a best management practice (BMP) to deal with storm water runoff. These surfaces effectively reduce the amount of untreated water and accompanying pollutants directed into waterways. Both regenerative air sweepers and high-power pure vacuum sweepers can be used as part of a practical maintenance program for permeable pavement. However, for restoration when the surface is blocked and water is no longer able to infiltrate the ground, pure vacuum sweepers, such as the Whirlwind, work better due to highly concentrated vacuum levels which exceed that of a regenerative air sweeper. The Whirlwind's incredible vacuum is able to pull out embedded debris that plugs drainage paths. Most permeable pavement periodically requires this degree of vacuum to restore infiltration of clogged areas.



CATCH BASIN CLEANING

Catch basins allow surface water runoff to enter the storm water conveyance system, while trapping solids and sediments that might otherwise end up polluting the receiving waters. Catch basin cleaning is an efficient and cost-effective method for preventing flooding as well as removing the sediment and pollutants before they can get into the waterways. A regular schedule of catch basin cleaning improves both aesthetics and local water quality.

A Whirlwind equipped with a heavy duty wandering hose becomes a versatile machine capable of street sweeping and catch basin cleaning.

- Multiple aluminum hose extensions can be added to the 4 ft long (1.2 m) catch basin nozzle for deep and thorough cleaning.
- Fingertip hydraulic controls on the handles easily adjust the height of the nozzle.
- The rear auxiliary engine throttle control improves operator productivity and adjustment of vacuum power.

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

OPTIONAL 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.

ADDITIONAL OPTIONS:

- Variable broom speed
- Auto nozzle shutter
- Front spray bar
- Hopper inspection doors
- Rear flood light(s) LED
- Rotating beacon/strobe light LED
- Automatic lubrication system
- Hopper deluge
- Auxiliary hydraulic pump
- Additional water:
140 gal (530 L), 280 gal (1060 L), 360 gal (1363 L)
- High/low pressure washdown
- In-cab side broom tilt
- Utility cover lifter
- PM-10 compliant
- 10 yd³ (7.6 m³) hopper

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 sidebrooms 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)

AUXILIARY ENGINE

John Deere 4045T

Tier 4F low emission diesel

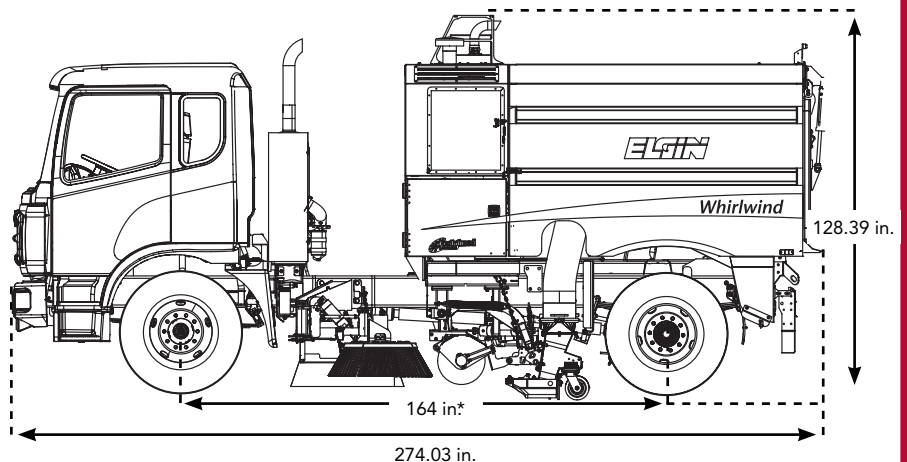
*Tier 3 and Tier 2 for export only

CHASSIS

Choice of conventional or cab-over chassis

TRAVEL SPEED

Highway speeds



*With 36 (914 mm) in side brooms. **Consult factory for warranty details

ELGIN SWEEPER IS YOUR PARTNER...

IN THE PLANNING

Instead of one-size-fits-all solutions, we'll work with you to select the sweeping technology that fits your specific needs.



IN THE STREETS

We're here to help you maintain your Elgin and train your operators to ensure the job is done right.



INTO THE FUTURE

Our dealers don't just sell you an Elgin; they're available to answer your questions and provide service for the life of the machine.



WARRANTY

Elgin Sweeper Company backs the Whirlwind sweeper with a one-year limited warranty. The Whirlwind 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 details.

Your Local Elgin Dealer Is:



elginsweeper.com

1300 W. Bartlett Road • Elgin, IL 60120 U.S.A.
(847) 741-5370 Phone • (847) 742-3035 Fax

Specifications subject to change without notice. Some items shown may be optional. Elgin® Whirlwind® LifeLiner® and Memory Sweep™ 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. ©2015 Elgin Sweeper Company. U.S. Patent #9,010,467 B2 Effective 9/15 P/N 0705312-F