Crosswind







SUPERIOR SINGLE-ENGINE REGENERATIVE AIR SWEEPER

Searching for a solution that eliminates maintaining and servicing an auxiliary engine on a regenerative air sweeper? Elgin® Sweeper Company has the answer. The Crosswind1® eliminates all things associated with a diesel auxiliary engine, providing value to customers that extends beyond having one less engine. The Crosswind1 has undergone years of customer focused testing and validation; ensuring a design that exceeds expectations!



VARIABLE SPEED DEVICE (VSD) TECHNOLOGY

The Crosswind1 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.

SINGULAR PUSH-BUTTON TECHNOLOGY

The Crosswind1 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.



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.





INNOVATIONS AT WORK

A closer look at the Elgin Crosswind1 reveals innovative design features, systems, and components that not only simplify operation and improve performance but also make maintenance and servicing faster and easier. The result is the optimal efficiency of your operations, as you reduce maintenance requirements and downtime. The Crosswind1 brings you an array of innovative systems including:





The Crosswind1 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.



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 Crosswind1 easy to clean.

Memory Sweep

Elgin's exclusive Memory Sweep feature allows the operator to resume ALL previous sweeper settings with one-touch control to increase productivity. The feature provides a multi-screen display for tilt angle, broom hours, water level, and diagnostic information.

Ergonomic Controls

The Crosswind1'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.





BUILT TO LAST

Powerful Blower

The Crosswind1 features a nine-vane closed face turbine blower. Vanes are constructed from Hardox® brand steel for durability.

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 240 gal (908 L) polyethylene water tank provides 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.

Simple, Easy-Access Maintenance

The Crosswind1 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.









Crosswind POWERFUL CLEANING SYSTEM

Elgin regenerative air sweepers give contractors, municipalities and airports a powerful sweeper with versatility and productivity. The Elgin® Crosswind1® efficiently cleans large flat paved areas such as streets, parking lots, and airport runways. Mounted on the short-wheelbase of either conventional or cab-over chassis, the Elgin Crosswind1 is operated by simple rocker switches and equipped with all the essentials to get the job done right. A combination of large 8 cubic yard (6 m³) hopper and 240 gal (908 L) water tank, plus excellent fuel efficiency, allow maximum productivity between trips to dumping, re-watering and fueling.



EFFICIENT AIR CONVEYANCE SYSTEM

Efficient air flow, including a superior vacuum source and air routing path, is essential to Crosswind1. High volume air flow at high velocity results in exceptional one-pass pickup while reducing plugging that can occur in similar type sweepers. A nine-vane closed face turbine blower is hydrostatically driven, eliminating belt tensioning, and provides vibration free and quiet operation. A centrifugal dust separator minimizes pressure loss and maximizes sweep performance and fan life.



HIGH-PRODUCTIVITY SWEEP SYSTEM

The sweep path picks up debris close to the curb and across a wide area. A 90 in (2286 mm) wide pick-up head and hydraulically driven 42 in (1067 mm) dual side brooms provide a 12 ft (3658 mm) wide sweep path. Work with brooms fully extended, or add the optional full broom retract feature for powerful scrubbing action in front of the pick-up head. An optional center broom provides added digging power for compacted debris. A 12 ¾ in (324 mm) diameter suction hose accepts large debris. Quick disconnect allows operator to inspect and clean hose and intake tube without raising hopper. The vacuum enhancer facilitates sweeping under light and bulky debris conditions.

ENHANCEMENTS



Lifeliner[®] hopper system



In-cab side broom tilt and extended reach



Wandering hose

ADDITIONAL ENHANCEMENTS

- Automatic lubrication system
- Broom camera system (rear standard)
- PM-10 dust suppression
- Broom hour meter
- Center broom
- Front spray bar
- And more



OUR COMMITMENT TO QUALITY ONLY BEGINS WITH OUR EQUIPMENT

The Elgin Crosswind 1 is manufactured in an ISO 9001 certified, advanced industrial plant. We employ the latest technology to build the most reliable equipment, including high-precision laser cutters, efficient, accurate computer numerical controls (CNC), and a sophisticated powder coating system.

When you build a quality product you can back it up with a full one-year, unlimited hours warranty. Elgin also backs up your investment with superior local service and support. Our goal is to keep your machine—and your entire operation—up and running.

The Crosswind 1 can be customized to your unique requirements to meet local standards and regulations by means of a broad selection of configurations, options and accessories.

Through our international dealer network, we maintain a vast inventory of spare parts and offer fast shipment to any region of the world.

Altogether, the rugged, reliable Elgin Crosswind 1 is easy to operate, easy to maintain, and an easy choice when you are looking for quality equipment that is built to last.

Crosswind1 Truck Mounted Regenerative Air Sweeper Specifications

Chassis Engine*	Electrical System	Side Brooms	Pick-up Head	Hopper
Make Cummins ISB 6.7 or equivalent Type In-Line 6 cylinder, turbocharged diesel Displacement 409 cubic inch (6.7 L) Horsepower 200 (150 KW) @ 2,400 RPM Torque 520 ft-lbs (708 Nm) @ 1,600 RPM Fuel Tank Capacity 50 gal (189 L)	Chassis Battery Rating 12 volt Sweeper Battery Rating 1000CCA Chassis Engine Alternator 160 amperes Lights Rear clearance, rear identification Reversing Safety Electric back-up alarm, sweep components raise automatically	Diameter 42 in (1067 mm) Disc Construction Steel plate Speed Constant Drive Hydraulic motor, protected by relief valve Mounting Free floating trailing arm Motion Pneumatically inward/outward, raised/ lowered	Length: 90 in (2,286 mm) Area: Approx. 2,700 in. ² (17,420 cm2) Pressure Hose: 14 in (355 mm) Suction Hose: 13 in (330 mm)	Volumetric Capacity 8 cubic yard (6 m ³) Effective Dump Angle 50° Dust Separator Self- cleaning, centrifugal Lifting Hydraulic, two-stage telescoping cylinders Hopper Dump Door Hydraulic open/close and lock/unlock



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RELIABLE. VERSATILE. REGENERATIVE AIR SWEEPER

The Crosswind1 steps ahead as the market leader with innovative single-engine technology. This new easy-to-use design, with single button operation, will increase productivity and decrease maintenance time and costs. The Crosswind1 sweeper is also effective in frequent maintenance of permeable pavement. This sweeper is versatile and can easily pick up litter and chip seal. The large pickup head makes it desirable for many applications.

WHY CROSSWIND 1:

- Maintaining two engines
- Complex aftertreament system and maintenance
- Untimely auxiliary engine regenerations
- Cost exposure resulting from "missed"
 auxiliary engine regenerations
- Cumbersome belt tensioning systems
- Auxiliary engine noise and vibration





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