

**Specially built for the most demanding jobs.
Yet, cleverly designed to be the least demanding to operate.**

The Elgin® Road Wizard® is making a clean sweep across the nation, featuring a simplified, dual-engine design that offers the best of both worlds: increased operator efficiency and productivity, along with the latest technology for superior results.

Mounted on a commercial cab-over chassis equipped with a 200 hp engine, and a five-speed-overdrive automatic transmission, the Road Wizard reaches a top speed of 65 mph on the highway. The sweep system is powered by an 80 hp John Deere® 4045 diesel engine, the largest standard auxiliary engine available on a mechanical sweeper.

The availability of a cab-over chassis provides excellent forward visibility, and gives operators a great vantage point for dumping operations. Other chassis configurations, and a skid model version for mounting on a customer's chassis, are also available.

The control console, located between the operator stations, provides quick, easy access. All sweep function switches have tactile-feel surfaces, so operators can work the panel while keeping their eyes forward, for added safety and efficiency.



Easy access, tactile control panel

The control console, located between the operator stations, provides quick, easy access. All sweep function switches have tactile-feel surfaces, so operators can work the panel while keeping their eyes forward, for added safety and efficiency.

With dual free-floating gutter brooms that adjust to variable road surfaces, a sweep path of 10-feet, and a powerful, free floating direct-drive main broom, you are ensured reliable pickup and a highly productive sweeper. Superior dust control is maintained through an in-cab controlled, dual water pump system and a 340 gallon water tank.

The Road Wizard's large hopper features a double-scissors lifting mechanism that is center-mounted for greater stability, rigidity and trouble-free operation. Plus, its dumping height is adjustable up to 11-feet.



Hopper lift system

Road Wizard® Easy operating, dual-engine mechanical sweeper



Conventional Chassis

Available for mounting on conventional style chassis if preferred.



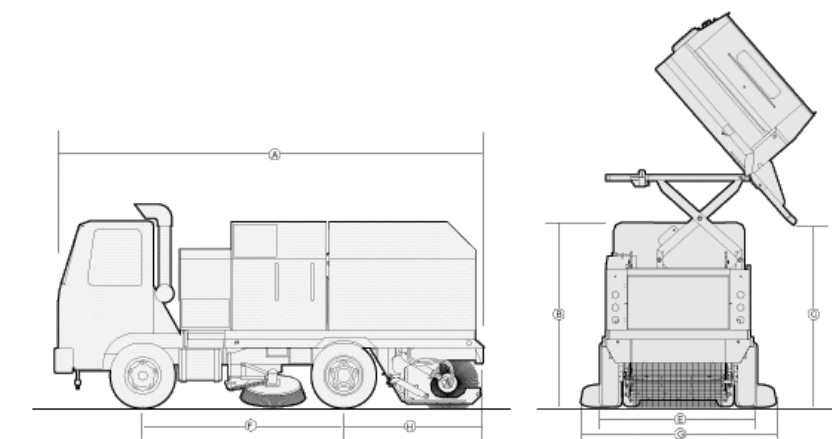
Camera System

Camera system, strategically mounted to monitor sweep functions, dumping, and backup movements.



Skid

Available to ship as skid and mount locally on conventional or cab-over chassis.



Basic Specifications

Weight, empty: 20,300 lbs (9,216 kgs)
Width (side brooms retracted): 8'
Sweep path with 2 brooms: 10'
Axle capacities:
• Front: 12,000 lbs (5,455 kgs)
• Rear: 20,000 lbs (9,090 kgs)
• GVWR: 32,000 lbs (14,528 kgs)

Dimensions (on Sterling SC8000 Chassis)

A. Overall length: 22' 7"
B. Height: 9' 6"
C. Dump height at chute: 11'
D. Fully extended hopper height: 21' 9"
E. Body width: 8'
F. Wheelbase: 10' 8"
G. Width: 10' 7"
H. Rear overhang: 91"

Additional Options

- In-cab, side broom down pressure control
- In-cab, main broom down pressure control
- In-cab, elevator speed control
- Main broom spray bar
- Water system line purge
- Strobe lamp
- Arrow board
- Automatic lubrication system
- Fire extinguisher
- Camera system

Value Added Services

Elgin's commitment to the customer continues long after the sale.

- On-time delivery
- Factory-trained worldwide dealer network
- Genuine Performance Matched Parts
- Elgin Training Center
- Customized leasing and financial services

Warranty

Elgin Sweeper Company backs the Road Wizard sweeper with a one-year limited warranty. The Road Wizard 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.

Your local Elgin Dealer is:



2521 BOWMAN ST
INNISFIL, ONTARIO
L9S 3V6 CANADA
PHONE: 705.733.7700
FAX: 705.733.8800

1300 West Bartlett Road • Elgin, Illinois 60120-7529
Phone: 847-741-5370 • Fax: 847-742-3035
E-mail: sales@elginsweeper.com • www.elginsweeper.com

©2003 Federal Signal Corporation. Federal Signal Corporation is listed on the NYSE by the symbol FSS. Some items shown may be optional. Specifications subject to change without notice. P/N (0705323) Effective 12/03





1 Side Brooms

Large, 50-inch (1270 mm) trailing arm, and free-floating side brooms offer four-way motion and side-ways protection against hitting obstacles, to help protect the arm against damage. Hydraulic lift and extension control enhances performance while sweeping within a 10-foot-wide path. Steel-plate disc construction adds durability. Broom speed control is achieved through the hydraulic motor operating at variable speeds that coincide with auxiliary engine RPM. Automatic settings control down pressure, digging pressure and wear control. Side broom pressure gauges are standard, and are located inside the engine compartment along with down-pressure controls to help prevent mis-adjustment by inexperienced operators. In-cab down pressure is available as an option.



2 Main Broom

The main broom is attached to a fully floating trailing arm with dampers to better conform to road contours. Powered by the auxiliary engine, it works at variable speeds, depending on the RPM. Productivity is enhanced through automatic settings for down pressure, and wear control. Lift and lower functions are controlled from the cab. Main broom pressure gauge, along with down-pressure controls, are located in the engine compartment to help prevent mis-adjustment by inexperienced operators. In-cab down-pressure controls are available as an option. Bearings are sealed, can be re-lubed and are self-aligning for self-adjustment when experiencing an uneven load, which increases bearing and main broom life.



3 Conveyor

Triple pin-driven belts drive a nine-flight, squeegee-type conveyor to lift debris into the hopper. Speed is controlled inside the cab by adjusting the auxiliary engine RPM. The conveyor can rotate forward or in reverse for inspections, or to remove lodged debris. Operating height is adjustable for various applications, with 12-inches of clearance for larger objects. A jam alarm in the cab warns the operator when the conveyor is stalled. Conveyor bearings are sealed and self-aligning for longer life.

4 Hopper

The Road Wizard features a variable-height, right side dump hopper with a capacity of 5.45 cubic yards (3.5 cubic meters) volumetric, and 3.8 cubic yards (2.7 cubic meters) of material. All hopper lift and dump controls are hydraulic and easily operated from inside the cab. A 48 degree dump angle allows material to easily slide out.

5 Hopper Lift System

The variable-height hopper lift system can unload material at a minimum of 24-inches (610 mm) and a maximum of 11-feet (3353 mm). Lift capacity is 12,000 pounds (5448 kg) per load. Dump and retract time is 20 seconds for a fully loaded hopper at short intervals, while full loads at the top height take 70 seconds. The Road Wizard uses a unitized, twin-cylinder, double-scissors lift for maximum strength, rigidity and trouble-free operation.



THE POWER OF SIMPLICITY AND DUAL-ENGINE PERFORMANCE

6 Auxiliary Engine

A powerful, 80 hp John Deere 4045 diesel engine (60 kW at 2,500 RPM) provides variable control over sweeper speeds with no effect on truck speed. It is the largest standard auxiliary engine available on a mechanical sweeper. Maximum fuel capacity is 62 gallons (235 l). The engine includes a two-stage, dry-type air cleaner with safety element, pre-cleaner and in-cab restrictor indicator (option). In-cab gauges and warning lights are displayed for all engine functions, including tachometer, hour meter, voltmeter, fuel level, coolant temperature, oil pressure, hydraulic oil filter, engine running and air filter restriction.



7 Water Pump System

Water flow for the side and main brooms is controlled in-cab. Two self-priming diaphragm pumps (run-dry type, 40 psi) provide effective dust control. Three spray nozzles are positioned on each side broom, three on the main broom and six located on the vehicle's front bumper.

8 Water Tank

With a total capacity of 340 gallons, the removable water tank is made of rustproof polyethylene. A 16-foot, 8-inch long (5.1 m) fill hose, and a low-water indicator light located on the control console, are standard.

9 Hydraulic System

Featuring a 70-gallon (264 l) reservoir with an external level indicator, the Road Wizard's hydraulic system offers the largest capacity in its class – with a tandem gear pump (24 gpm capacity at 1,200 rpm of the auxiliary engine). Pressure gauges for pump sections are permanently mounted in the engine compartment. In-cab controls are available as an option.

10 Cab

The standard chassis cab is fully dualized by the chassis manufacturer and includes full factory controls, steering and OEM gauge packages that are identical for both left and right operator stations. The chassis meets all FMVSS standards. The cab-over design provides excellent overall visibility. The cab tilts forward for complete engine access. There is also a conventional-style chassis, or skid mounted sweeper unit for installation on customer supplied chassis as an option.

11 Controls

The control console is located between the left and right operator stations. All sweep, dump, spray water and hopper operations are controlled from this single panel. One-button, automatic return to sweep improves operator efficiency. Tactile controls allow the operator to work by feel for added safety by the ability to control switches on or off without

To learn more about the Road Wizard difference, talk with your Elgin dealer or visit www.elginsweeper.com.