



# Broom Bear®

Single Engine CNG Alternative Fuel



3600 PSI Composite Fuel Tanks



Conveniently Located Fill Door

## Low Emissions - Highly Economical Single Engine

The Elgin Broom Bear is now available powered by compressed natural gas. This means that a popular, commercial chassis, single engine mechanical sweeper is finally available. This rugged, mechanical sweeper is powered by the state of the art Cummins Westport ISL G natural gas engine making the Broom Bear a fully certified 2013 EPA/CARB emission standards single engine street sweeper. The Broom Bear can also be SCAQMD rule 1186 compliant with the optional PM-10 package. With it's three 3600 psi composite fuel tanks, the Broom Bear has a generous 51 gallon diesel equivalent fuel capacity giving a sweeping range even beyond the standard diesel Broom Bear. The Elgin Broom Bear is still tough on dust and debris while being easy on operators, but is now also easy on the environment.



Optional In-Cab Mounted Methane Detection

**For more information or to schedule a demonstration, contact your local Elgin dealer or visit [www.elginsweeper.com](http://www.elginsweeper.com) to locate a dealer near you.**

## CNG Engine

### Engine

**Make** Cummins Westport ISL G  
charge air cooling  
**Type** In-line, 6 cylinder  
**Displacement** 540 cu. in. (8.9 L)  
**Horsepower** 260 HP @ 2200 rpm  
**Peak Torque** 660 ft./lbs. @ 1300 RPM

### Chassis

Mounted on Freightliner M2  
Contact your Elgin dealer for detailed  
Chassis specifications

### General Specs

#### Sweep Path:

Main broom only: 60"  
Main broom & one side broom: 90"  
Main broom and 2 side Brooms: 120"  
**Chassis** Commercial Class 7  
**Wheel Base** Chassis dependent  
**Warranty** Sweeper, 1 year parts & labor

### Main Broom

**Type** Prefab disposable  
Polypropylene filled  
**Diameter** 34" (864 mm)  
**Broom Material** Polypropylene  
**Length** 60" (1524 mm)  
**Core Type** Disposable steel tube  
**Speed** Constant  
**Drive** Hydraulic motor with direct drive  
**Digging Pressure & Wear Control**  
Variable geometry spring  
**Lift Control** Hydraulic  
**Mounting** Full-floating trailing arm

### Side Broom

**Type** 5 or 6 segment plastic disposable  
**Diameter** 46" (1188 mm)  
**Broom material** 26" wire (660 mm)  
**Disc Construction** Steel  
**Speed** Adjustable on side of machine  
**Drive** Full hydraulic  
**Digging Pressure & Wear Control**  
Pneumatic, from cab  
**Lift Control** Pneumatic  
**Flexibility** Free-floating and full side-ways oscillation  
**Mounting** Trailing Arm

### Engine Accessories

Spin-on CNG filter/water separator.  
18.7 SCFM air compressor.  
Spin -on full flow/bypass oil filter.  
Air intake warmer.  
Engine block heater.  
Viscous fan drive.  
Auto shutdown protection.

### Conveyor

**Type** Squeegee with replaceable rubber edging  
**Material** (elevator bottom) Bolt-in multi section abrasion resistant steel plates  
**Speed** Constant, forward and reverse  
**Flexibility** Lift independent (for large object passage)  
**Drive** (forward and reverse) Hydraulic motor  
**Adjustment** Hydraulic chain adjuster  
**Lift Control** Hydraulic (independent of rear broom)  
**Ground Clearance** Liftable to 12" (305 mm) for bulk object passage  
**Cascade Washdown** With fill diverter

### Instrumentation/Controls

#### Warning Lamps & Buzzer

Low hydraulic oil  
Conveyor stall

#### Warning Lamps

Hydraulic oil temperature  
Hydraulic oil filter restriction  
Low water spray  
Broom position  
Hopper position  
Water tank level

### Electrical System (Chassis)

**Twelve Volt Negative Ground System**  
160 amp alternator  
**Battery** 2- Group 31, 1850 CCA  
**Circuit Protection** Activated by ignition switched constant duty solenoid (except lights).  
**Wiring** Hot stamp identified with weatherproof connectors

## CNG Fuel System

51.2 Gallon Diesel Equivalent.  
Three aluminum core, filament wound, 3600 psi gas cylinders.  
3600 psi nominal service pressure.  
50 scfm high flow CNG filter with coalescing and particulate elements.  
Stainless steel fuel lines.  
Meets all North American and international NGV system standards.

### Hydraulic System

**Sweep System Pump** Variable displacement  
**Capacity** 22 gpm  
**Fittings** O-ring face seal  
**Reservoir Capacity** 23 gal  
**Inlet Strainer** 100 mesh  
**Return Filter** 6 micron  
**Filter Restriction Indicator**  
**Breather** 10 micron  
**Cooler** Externally mounted  
**Valves** Electro-hydraulic

### Hopper

**Volumetric Capacity** 4.5 yd<sup>3</sup> (3.4 m<sup>3</sup>)  
**Material Volume** 3.3 yd<sup>3</sup> (2.5 m<sup>3</sup>)  
**Hopper Lift and Dump Controls**  
Electro/hydraulic in cab  
**Inspection Door**  
**Offload**  
**Right Side**  
**Minimum dump height** 38" (965 mm)  
**Maximum dump height** 10' (3048 mm)  
**Maximum hopper dump angle** 50°  
**Design lift capacity** 10,000 lbs. (4,545 kgs)  
**Lifting mechanism** Two stage scissors with hydraulic cylinders

### Water Spray System

**Tank Construction** Polyethylene  
**Tank Capacity** 360 gallons (1362 L)  
**Fill Hose** 15' 0" (4572 mm) with 2.5" (64 mm) NST hydrant coupling  
**Pump** Electric diaphragm  
**Spray nozzles** 3 across main broom and over each gutter broom  
**Water Filter** 80 mesh plastic housing  
**Controls** In cab pump control and flow control valves at each side broom

Your Elgin Dealer is:



**Joe Johnson  
Equipment**  
Subsidiary of Federal Signal Corporation

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