

Elgin Broom Bear Single Engine CNG Alternative Fuel

Low Emissions - Highly Economical - Single Engine

The Elgin Broom Bear is powered by compressed natural gas. This means that a popular, commercial chassis, fully OEM manufactured, single engine mechanical sweeper is available. This rugged, mechanical sweeper is powered by the state of the art Cummins 8.3G+ natural gas engine making the Broom Bear a fully EPA/CARB/ULEV certified single engine street sweeper. The Broom Bear can also be SCAQMD rule 1186 compliant with the optional PM-10 package. With it's four 3600 psi composite fuel tanks, the Broom Bear has a generous 53 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 also easy on the environment.



For more information or a demonstration, please contact your local Elgin dealer.



Conveniently located fill panel



Easy fuel system service at rear of sweeper



CNG Engine

Engine

Make Cummins 8.3G+
charge air cooling
Type In-line, 6 cylinder
Displacement 505 cu. in. (8.3 L)
Horsepower 250 HP @ 2400 rpm
Peak Torque 660 ft./lbs. @ 1400 RPM
Bore 4.49 in.
Stroke 5.32 in.
Compression ratio 10.5:1
Oil Capacity 6.3 gals.
Carburetion (Cummins Westport)
single phase

Engine Accessories

Through the hood air filter with active pre cleaner.
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.

Chassis

Mounted on Sterling Acterra
Contact your Elgin dealer for detailed
Chassis specifications.

CNG Fuel System

53.2 Gallon Diesel Equivalent.
Four aluminum core, filament wound, 4500
psi gas cylinders.
7280 scf total gas capacity.
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.

Sweep System - Components

Main Broom

Diameter 34 1/2" (876mm)
Length 58" (1473)
Type Cable wrap polypropylene filled
Filament length 26" (660mm)
Lift control Hydraulic
Drive Hydraulic motor through chain and
sprocket
Speed constant
Mounting Full spring floating with variable
geometry
Bearings Self aligning

Flexibility Lift independent (for large object
passage)

Drive (forward and reverse)
Hydraulic motor

Lift control Hydraulic (independent of rear
broom)

Bearings
Self-aligning

Elevator chain, constant radius chain and sprock
et steel chain on urethane sprockets.

Spray nozzles Across front bumper and over each
gutter broom

Controls Independent valves

Filter Plastic housing - fine mesh screen

Water tank Corrosion resistant polymer with
manhole cover

Vehicle Hydraulic System

Pump Variable displacement piston type with
controlled flow for all rotation and lift functions,
load sensing hydraulics

Gutter Broom

Diameter 44" (1188mm)
Type 4 or 5 segment plastic disposable with
vertical digging wire fill
Disc construction Steel plate
Speed constant forward
Flexibility Free floating and full sideways
oscillation
Drive Direct hydraulic
Adjustment Tilt in/out, forward/ backward and
sweep path width
Digging Pressure/Wear control
Pneumatic, from cab
Lift control Pneumatic

Debris Hopper

Capacity, volumetric 4.5 yd³ (3.4 m³)
Material volume 3.3 yd³ (2.5 m³)
Hopper and dump controls
Electro/hydraulic in cab
Maximum dump height 10' (3048mm)
Minimum dump height 38" (965 mm)
Body to discharge door at dumping height 2' 3"
(686 mm)
Maximum hopper dump angle
50 degrees
Dump cycle 70 seconds
Lift mechanism Two stage scissors with
hydraulic cylinders
Design lift capacity 11,000 lbs. (5000 kgs)

Electrical System

Twelve volt negative ground system with 160 amp
alternator driven by propulsion engine. Battery: 2-
925 CCA. All circuits protected by manual reset
circuit breakers.

Warranties

Chassis OEM supplied
Engine OEM supplied
Transmission OEM supplied
Rear axle OEM supplied
Sweeper 1 year parts and labor

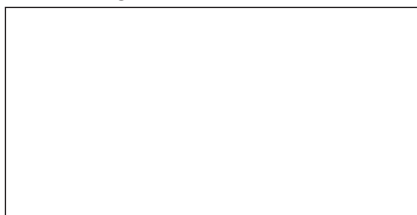
Dirt Conveyor

Type Squeegee with replaceable rubber edging
Material (elevator bottom) Bolt-in 2 piece
abrasion resistant steel plates
Speed Constant, forward and reverse

Constant Pressure Water System

Capacity of tank 350 gallons (1325 L)
Water fill hose 15' 0" (4572 mm) with 2.5" (64
mm) NST hydrant coupling
Pump Electric centrifugal type

Your Elgin Dealer is:



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Specifications subject to change without notice

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