

## Sweep System - Power

### Engine

**Make** Ford 2.5 L LPG  
**Type** In-line, 4 cylinder  
**Displacement** 153 cu. in. (2.5 L)  
**Horsepower** 77 HP @ 3000 rpm  
**Peak Torque** 135 ft./lbs. @ 2000 RPM  
**Bore** 3.0 in.  
**Stroke** 3.4 in.  
**Compression ratio** 9.37:1  
**Oil Capacity** 4 qts.  
**Carburation** IMPCO

### Fuel System

50 Gallon Diesel Equivalent

- Regulator includes a jacket to eliminate freeze-up

- Fuel system installed in accordance with NFPA standards

## Sweep System - Components

### Main Broom

**Diameter** 35" (889mm) **Length** 60" (1524 mm)  
**Type** Prefab. disposable, polypropylene filled  
**Core Diameter** 8.5 in. (216 mm)  
**Digging Pressure & Wear Control** Pneumatic, in-cab  
**Lift Control** Pneumatic, in-cab  
**Drive** Hydraulic motor/direct drive  
**Mounting** Full floating, trailing arm, with shocks  
**Speed** Variable with auxiliary engine RPM  
**Bearings** Sealed, self-aligning, re-lube  
**Pressure Gauge** Main broom pressure gauge

### Gutter Broom

**Type** 5 segment nylon disposable with wire fill  
**Diameter** 42 in. (1067 mm)  
**Disc Construction** Steel plate  
**Speed** Variable with auxiliary engine RPM  
**Flexibility** Spring biased sideways oscillation  
**Drive** Direct hydraulic, reversible, from cab  
**Mounting** Free floating, trailing arm  
**Adjustment** Inward, outward/forward, backward  
**Digging Pressure/Wear Control** Pneumatic, from cab  
**Lift Control** Pneumatic lift with hydraulic extend  
**Broom Material** 26 in. (660 mm) wire

### Standard Accessories

Full flow oil filter, mechanical governor, heavy-duty dual stage dry type air cleaner with safety element

### Instrumentation

Tachometer/hour meter  
Oil pressure, engine water temperature gauges  
Control console warning lights for full load, engine oil system, aux. engine running, hydraulic oil filter restriction, charging system, hopper up, machine level, low spray water, air filter

### Conveyor

**Type** Belt with molded-in rubber cleats  
**Material (belt)** Rubber reinforced fabric  
**Speed** Variable with auxiliary engine RPM  
**Flexibility** 9 in. oscillation for large object passage  
**Drive** Reversible, direct drive hydraulic motor  
**Lift Control** Pneumatic  
**Bearings** Sealed, self-aligning, re-lube

### Debris Hopper—Series F

**Capacity Volumetric** 4.5 cu. yd (3.5 cu. m)  
**Material Volume** 3.3 cu. yd. (2.5 cu. m)  
**Hopper Lift and Dump Control** Hydraulic in cab  
**Maximum Dump Height** (bottom of hopper) 10 ft. 2 in. (3048 mm)  
**Maximum Dump Height** (bottom of hopper) 10 ft. 4 in. (3505 mm)  
**Minimum Dump Height** (bottom of discharge door) 38 in. (965mm)  
**Maximum Hopper Dump Angle** 50°  
**Time to Reach Maximum Dump Height** 20 sec.  
**Time to Tilt Hopper** 13 sec.  
**Design Lift Capacity** 11,000 lbs. (5,000 kg)  
**Lifting Method** Twin cylinder, two stage scissors  
**Right Side Dumping** Standard

## Options

|                                      |                                    |
|--------------------------------------|------------------------------------|
| Extended Warranty on sweeper         | Automatic lubrication system       |
| Strobe light                         | Engine shutdown                    |
| Rotating beacon                      | temperature/pressure               |
| Light protector for beacon or strobe | Life last hopper liner             |
| Fire extinguisher                    | Silicone hoses on auxiliary engine |
| Extended side broom reach            | Rear compartment cover             |
| Carbide dirt shoes                   |                                    |
| Front spray bar                      |                                    |
| Arrowboard                           |                                    |
| In-cab side broom tilt               |                                    |

## Electrical System

12V negative ground with 95 amp truck alternator and 105 amp sweeper alternator, dual maintenance-free truck batteries. All circuits protected by circuit breakers and/or fuses. Sweeper wires color coded and labeled with circuit identification every four inches; connectors plated and polarized. 925 CCA auxiliary engine battery.

## Truck - Power

### Engine

**Make** Cummins B 5.9 195LPG Liquefied Petroleum Gas, Turbocharged  
**Type** In-line, 6 cylinder  
**Displacement** 359 cu. in. (5.9 L)  
**Horsepower** 195 hp (146 kw) @ 2800 rpm  
**Peak Torque** 420 ft./lbs. (569NM) @1600rpm  
**Bore & Stroke** 4.02 x 4.72 in. (102 x120mm)  
**Compression ratio** 10.5:1  
**Oil Capacity** 4.0 U.S. Gals. (15 L)  
**Coolant Capacity** 10.5 U.S. qts. (9.9 L)  
**Air/Fuel Regulation** Cummins Electronic Control System  
**Ignition** Cummins Electronic High Energy System

### Chassis

Mounted on Sterling SC 8000 Chassis. Contact your Elgin dealer for detailed specifications.

### Pneumatic System

**Compressor** 15.2 CFM @ 2,500 RPM  
**Air Dryer** Bendix heated AD-9

### Hydraulic System

**Pump** Three section gear drive with dual inlet  
**Capacity** 25 GPM (98 LPM) @ 2500 RPM  
**Fittings** 'O' ring seal type  
**Reservoir Capacity** 21 gallons (79 L)  
**Reservoir Level** Externally readable  
**Inlet Strainer** 100 mesh  
**Filter, Return** 10 micron, full flow with bypass  
**Filter Restriction Indicator** In-cab  
**Breather** 10 micron, spin-on

### Water Spray System

**Tank Construction** Polyethylene, removable  
**Tank Capacity** 280 gallons (1060 L)  
**Fill hose** Anti-siphon, 16 ft. 8 in. (5080 mm) with strainer and 2.5 in. (64 mm) NST coupling  
**Wash Down** Lower conveyor  
**Conveyor Flusher** Built-in cascade-type  
**Pump** Centrifugal, 5 GMP @ 40 psi (19 LPM@ 2.8 bar)  
**Spray Nozzles** 3 per gutter broom, 3 for main broom  
**Controls** On/off, volume in-cab  
**Filter** Non-corrosive housing, 100 mesh screen

## Warranty

**Sweeper**  
1 year parts and labor  
**Chassis & Aux. Engine**  
Consult factory

## Paint

Powder Coat, consult factory for availability of colors.

**ELGIN**

Elgin Sweeper Company  
1300 West Bartlett Road  
Elgin Illinois, U.S.A. 60120-7529  
847-741-5370 Phone  
847-742-3035 Fax

Effective 6/00 P/N: 0705308-A  
Specifications subject to change without notice



Federal Signal Corporation

## Low Emissions - Highly Economical - Extremely Quiet

The Elgin Eagle now has the option of being powered by Liquefied Petroleum Gas (LPG).

This popular four wheel broom sweeper features a wide (10 ft.) sweeping path, heavy duty No-Jam™ debris conveyor, and a variable dump height 4.5 cubic yard hopper.

The alternative fuel dual engine Eagle is mounted on a commercial Sterling SC8000 cab-over chassis powered by the Cummins B5.9-195LPG engine — a six-liter LPG engine that is capable of meeting the low emitting vehicle (LEV) standards.

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

The sweeper is powered by a Ford 2.5 L L4 engine, which allows for excellent fuel economy with an impressive power to weight ratio. The engines share a common fuel system, providing in excess of 50 gallons of a diesel equivalent. LPG is an alternative fuel that is economical, abundant in supply and produces approximately 20% of the pollutants normally emitted by traditional gasoline or diesel engines. The combination of the Elgin Eagle and clean burning LPG fueled engines produces an environmentally sound solution to your sweeping needs.



The Elgin Eagle Series F LPG

