

## Sweep System - Power

### Engine

**Make** John Deere Diesel Model 4024 TF  
**Type** In-line, 4 cylinder  
**Displacement** 149 CID (2.4 L)  
**Bore** 3.39 in (86 mm)  
**Stroke** 4.13 in (105 mm)  
**Compression ratio** 18:1  
**Horsepower** 49 HP (37 kW) governed @ 2,800 RPM  
**Torque** 127 ft-lbs (172 Nm) @ 1,680 RPM  
**Fuel tank capacity** Common 50 gal (190 L)

### Standard Accessories

Full flow oil filter, mechanical governor, heavy-duty dual dry type air cleaner with safety element pre-cleaner, fuel filter, fuel/water separator, coolant recovery, glow plug cold weather start aid

### 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, high aux. engine water temperature.

## Sweep System - Components

### General Specifications

**Sweeping path:**  
**Main broom only**  
 60 in (1524 mm)  
**Main broom and one side broom**  
 90 in (2286 mm)  
**Main broom and two side brooms**  
 120 in (3048 mm)

### Main Broom

**Diameter** 35 in (889 mm) **Length** 60 in (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** In-cab

### 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

### Options

Extended Warranty on sweeper	Automatic lubrication system
Strobe light	Engine shutdown temperature/pressure
Rotating beacon	Urethane hopper liner
Light protector for beacon or strobe	Left side dumping
Fire extinguisher	Inspection door
Rear compartment cover	Silicone hoses on auxiliary engine
Carbide dirt shoes	Left side broom
Front spray bar	Extended side broom reach
Arrowboard	
In-cab side broom tilt	
66 hp aux. engine	

### Conveyor

**Type** Belt with molded-in rubber cleats  
**Material (belt)** Rubber reinforced fabric  
**Speed** Variable with auxiliary engine RPM  
**Flexibility** 9 in (229 mm) 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 discharge door) 10 ft 2 in (3100 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  
**Maximum time for full height lift, dump, and lower cycle** 70 sec  
**Design lift capacity** 11,000 lbs (5,000 kg)  
**Lifting method** Twin cylinder, two stage scissors  
**Right side dumping** Standard

### Paint

**Powder Coat:**  
 Undercarriage in standard Elgin gray  
 Body in choice of 99 colors  
 Consult factory for color chart

### Chassis

Contact your Elgin dealer for detailed specifications.

### Your Elgin Dealer is:



## Electrical System

Sweeper wires color coded and labeled with circuit identification every four inches; connectors plated and polarized. 12V negative ground with minimum 145 amp truck alternator and 120 amp sweeper alternator. All circuits protected by circuit breakers and/or fuses. 1000 CCA auxiliary engine battery.

### Pneumatic System

**Compressor** 15.2 CFM (0.43 cu. m/min.) @ 2,500 RPM  
**Air dryer** Bendix heated AD-9

### Hydraulic System

**Pump** Three section gear drive with dual inlet  
**Capacity** 26 GPM (98 LPM) @ 2500 RPM  
**Fittings** 'O' ring seal type  
**Reservoir capacity** 21 gal (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 gal (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 GPM @ 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

<b>Sweeper</b>	<b>Chassis &amp; Aux. Engine</b>
1 year parts and labor	Consult factory



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