

Sweep System – Shared Power

Shared Power System* (Patented Issued 4/21/2015 US# 9,010,467 B2)

Chassis power is used to boost system performance by providing power to the auxiliary engine; either through excess horsepower available from the chassis engine or by reclaiming energy from chassis regenerative braking.

Auxiliary Engine

Make John Deere 4045T Tier 4 Final
Type 4 cylinder, turbocharged diesel
Displacement 276 cu. in. (4.5 L)
Horsepower 74 (55 kW) @ 2400 RPM
Torque 224 ft-lbs (304 Nm) @ 1600 RPM
Oil Filter Spin-on full flow
Air Cleaner Dual safety element dry type
Auto Shutdown For Low Oil / High Temp
Electronic Throttle

Instrumentation / Controls

Rocker switches in central console gauges:
 Tachometer, hour meter, oil pressure, fuel, voltmeter, coolant temperature, spray water level gauge, hopper up, hopper rear door open, full load indicator
Memory Sweep Sweep resume feature

Sweep System – Components

General Specifications

Measured sweeping path (with 36" side broom):

- Suction nozzle only
32 in. (813 mm)
- Suction nozzle and one side broom
52 in. (1320 mm)
- Suction nozzle and extension broom
78 in. (1981 mm)
- Suction nozzle, extension, and one side broom
95 in. (2413 mm)
- Dual suction nozzles, side brooms and extension broom
144 in. (3658 mm)

Blower

Drive Fluid coupler and 5-groove banded power belt with adjustable idler pulley
Blower Construction Hardox brand steel
Blower Housing 10 gauge (3.4 mm) steel, rubber-lined for extended wear

Vacuum Nozzle and Hoses

Nozzle Width 32 in. (813 mm)
Pickup Area 174 in² (1119 cm²)
Construction Abrasion resistant steel components
Hose Connection Quick disconnect type at lower area near vacuum nozzle
Hose Construction Flexible rubber, steel reinforced
Hose 11 in. (280 mm) inside diameter

Side Broom

Diameter
 28 in (711 mm) WB Chassis Specific
 36 in (914 mm) WB Chassis Specific
Construction Steel plate
Speed Constant
Drive Hydraulic motor, protected by relief valve
Mounting Free floating trailing arm

Side Broom Cont.

Motion Pneumatically inward/outward, raised/lowered
Tilt Adjustment Inward/outward, forward/backward
Digging Pressure/Wear Control
 Pneumatic in cab
Type Segment set disposable
Material Tempered steel wire

Extension Broom

Diameter 16 in. (406 mm)
Length 54 in. (1372 mm)
Speed Constant
Drive Hydraulic motor, protected by relief valve
Digging Pressure/Wear Control Pneumatic outside cab
Lift Control Pneumatic from control panel
Type Polypropylene prefab, disposable
Location Center of sweeper

Debris Hopper

Volumetric Capacity 8.0 yd³ (6.0 m³)
Floor Angle 10°
Dump Angle 50°
Construction 10 gauge (3.4 mm) steel sides and top, 1/4" gauge (6.4 mm) steel floor
Lifting Double acting hydraulic cylinder
Hopper Dump Door Hydraulic open/close and lock/unlock
Full Load Indicator Weight actuated with in-cab warning light
Hopper Screens Hinged, quick release, steel
Safety Prop Steel bar under body and outside rear door
Hopper Dumping Controls Push button on right side of unit
In Cab Dumping Controls Standard

Spray Water System

Water Tank Construction Dual polyethylene, removable

Spray Water System Cont.

Water System Capacity 335 gal. (1268 L) standard
Pump Type Twin diaphragm with run-dry capability with HI and LO selectable pump speeds.
System Flow 8 GPM (30 LPM) (2 - 4 GPM Pumps)
System Pressure 40 PSI (2.8 bar)
Spray Nozzles (Quick Disconnect Type)
 7 inside each suction nozzle
 4 at extension broom
 3 at each side broom (36" broom)
Controls On/off at control panel
Filter 100 mesh, cleanable
Anti-Siphon Fill Standard
Hydrant Fill Hose 16 ft. 8 in. (5080 mm) with coupling

Hydraulic System

Purpose: Powers hydraulic motors on side broom, extension broom, and hopper cycle Hydraulic Pump
Capacity 8.3 GPM (31 LPM)
 @ 2500 RPM, each section (16.6 GPM Total)
Hydraulic Pump Direct gear driven, tandem type
Reservoir Capacity 23 gal (87 L)
Filter 10 micron, spin-on type with in-cab restriction indicator

Electrical System

Alternator 95 amperes
Battery 12 volt, 1000 CCA
Lights Side broom, rear clearance, rear identification
Reversing Safety Electric back-up alarm, sweep components raise automatically
Wiring Harnesses Color coded, function stamped and labeled every 4 in (100 mm)

Available Enhancements

- Front spray bar
- Aux. lighting packages
- In-cab side broom tilt
- Variable broom speed
- Auxiliary hydraulic system
- Wandering hose
8 in (203 mm) diameter
- Auto lubrication system
- LifeLiner® Hopper System
- Stainless steel hopper
- 10 yd³ hopper
- Hopper inspection door(s)
- Hopper deluge washout system
- Hopper drain
- Auto-shutter
- High/low pressure washdown
- Auxiliary water tank capacities
- PM-10 water system
- Extended warranty

Paint

Powder Coated,
 Standard Elgin white and gray

Chassis

Available on commercial cabover and conventional
 Consult factory.

Warranty

Sweeper
 1 year parts and labor
Engine
 Consult Factory

Your Elgin Dealer is:



ELGIN
Subsidiary of Federal Signal Corporation

Elgin Sweeper Company
 1300 W. Bartlett Rd.
 Elgin, Illinois, U.S.A. 60120-7529
 847-741-5370 Phone
 847-742-3035 Fax
 www.elginsweeper.com