### General Data

- **Chassis requirement**: 33,000 LBS - Class 7
- **Wheelbase**: 136" (chassis dependent)
- **Dump height**: 12.5' (chassis dependent)
- **Dump angle**: 54°
- **Sweep path, main broom**: 58°
- **Sweep path, MB & (1) SB**: 90°
- **Sweep path, MB & (2) SB**: 120° (144" extended reach)
- **Elevator type**: Squeegee, 12 flights
- **Elevator wear plate material**: .25" stainless steel
- **Elevator drive**: Hydraulic chain driven, forward/reverse
- **Hopper lift control**: Hydraulic 2 stage scissors
- **Sweeping speeds**: 2-15 MPH (chassis dependent)

We are THE ONLY sweeper manufacturer to offer an all-inclusive warranty (2 years/2,000 hours) and an “entire debris hopper” constructed of stainless steel as a standard with a LIFETIME WARRANTY.

### Sweeping Equipment

- **Gutter broom**: 44" dia - leading arm/digger type
- **Main broom**: 34.5 x 58"
- **Drives**: Direct coupled hydraulic motor
- **Gutter brooms**: Un-handed design
- **Speed adjustment**: Variable hydraulic, in-cab
- **Digging pressure**: Variable pneumatic, in cab

### Engine Data

- **Model**: Cummins 6.7 - 260 HP
- **Cubic capacity**: 6.7 liters
- **No. of Cylinders**: 6
- **Gross rated power**: 260 HP @ 2300 RPM
- **Maximum torque**: 660 LB/FT @ 1600 RPM
- **Aspiration**: Turbocharged
- **Operational RPM**: Variable between 1200-2000 RPM
- **Transmission**: Allison 3500 RDS
- **Alternator**: 160 AMP
- **Electrical system**: 12 v negative ground system
- **Battery**: (2) Group 31 2250 CCA
- **Two-speed rear Ratio**: 6.17/8.42

### Capacities

- **Hopper usable volume**: 4.5 cu³, includes 42" debris chute
- **Hopper construction**: 9 gauge stainless steel LIFETIME WARRANTY NO PRORATION
- **Payload capacity**: 12,000 LB (chassis dependent)
- **Fuel tank**: 50 gallon
- **Water tank**: 360 gallon
- **Tank construction**: Polyethylene

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**Endless Sweeping Solutions**  
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Commercial Chassis/
Single Engine
The Johnston ES351 mechanical sweeper is mated with a Freightliner M2 Class 7 chassis. Combined they make for one of the best looking, hardest working and most reliable machines in the industry. Its simple single engine design allows for fuel efficiency and easy maintenance.

Power Train
Utilizing an Allison 3500RDS automatic transmission, a 10,000 lb front axle and a 23,000 lb two-speed (6:17/8:42 ratio) rear axle geared for proper over the road and sweep speeds, the Johnston ES351 is transporting its load quickly and safely.

Gutter Brooms
Large 44” hydraulic-driven, leading arm, digger-type, free floating gutter brooms with in-cab adjustable speed and down pressure to ensure aggressive cleaning of curbs and gutters.

The side brooms feature a heavy duty steel disc, drilled for either four or five segment broom sections. The broom material is tempered steel tines, 26” long.

At the operator’s discretion from the cab, the dual brooms can extend out to achieve a 144” total reach to facilitate cul-de-sacs and curve sweeping.

Main Broom
Our aggressive 34.5 X 58” polypropylene tube main broom is direct hydraulically driven and attached to two fully floating trailing arms to allow for changing road surfaces.

Optional strip brooms are available on request.

Dirt Shoes
Sweeper is fitted with standard T-Plate steel skid dirt shoes. Optional carbide or new maintenance free strip-brush type dirt shoes are available.

Variable Dump Height Hopper
Choose to unload at ground level or into a dump truck with side boards or anywhere in between. The stainless steel 4.5 yd³ hopper is raised and lowered via a heavy duty; two stage scissors lift with hydraulic cylinders.

All lift and dump controls are hydraulic and located in-cab. Lift capacity is rated at 12,000 lb and hopper dump angle is 54° including 42” chute for better reach and efficient off-loading of debris.

Wheelbase/Truck
The Johnston ES351 mechanical sweeper delivers a tight 18.6° turning radius from a truck with a 136” wheelbase. This dramatically increases maneuverability on tight streets and cul-de-sacs.

Water System/Dust Control
A 360 gallon baffled, polyethylene water tank provides the necessary water to supply a direct-coupled hydraulic driven twin diaphragm pump delivering water to multiple water spray nozzles, strategically located at each gutter broom and front bumper. An optional rear broom spray bar is available.

Instrumentation/Controls
The Johnston Easy Sweep Mechanical Sweeper features all the necessary warning lamps and buzzers:

• Low hydraulic oil
• Conveyor stall alarm
• Hydraulic oil temperature
• Hydraulic oil filter restriction indicator
• Low water alarm
• Hopper up alarm

All wiring is color coded and numbered. All internal and external wiring conforms to IP65 and IP67 standards - waterproof and dustproof.

Hydraulic System
The Johnston ES351 features a 20 gallon hydraulic reservoir supplying oil to a variable displacement hydraulic pump in a load sensing hydraulic system. This system will adjust flow based on hydraulic demand from the sweeping gear so as to maximize efficiency and reduce heat.

All hydraulic valves are equipped with light emitting diodes to signal function and feature manual overrides. All hydraulics are centrally located in their own system locker for ease of access and maintenance.