



MODOT Bid [REDACTED]

Blue = Standard Equipment

Red = Included in MODOT Bid Price

Black = Options

### Standard Sweeper Equipment for RT655

#### Standard Factory Warranty: 2 years or 2,000 Hours

Stainless Steel Covered Auxiliary Engine Compartment	Step-Up Gear Box Driven Vacuum Blower via Fluid Coupler
Coolant/Oil Pressure Shutdown System	14" Diameter Vacuum & Blast Hoses
Electrically Operated Throttle Actuator	In-Cab Large Object Pick-Up Head Lift
John Deere Engine Management System with LED Display	In-Cab Variable Vacuum Enhancer with LED Position Indicator
58 gal Auxiliary Engine Fuel Tank with Locking Fuel Cap	43" Diameter "unhanded" Gutter Brooms with Work Lights
8.5 Cubic Yard Stainless Steel Hopper w/ Lifetime Warranty	In-Cab Variable Gutter Broom Speed Control - Dual
55 Degree Dump Angle of Hopper	In-Cab Variable Gutter Broom Down Pressure Control - Dual
Stainless Steel "S" Shape Dust Separator w/ Lifetime Warranty	Two (2) Rear Mounted LED Strokes with Limbgaurds
Two (2) 3" Diameter Rear Door Drain Hoses	125 Micron Hydraulic Suction & 25 Micron Return Filters
Two (2) Side Mounted Hopper Access Doors; LH & RH	20 Gallon Hydraulic Oil Tank
25' Hydrant Hose with Coupling & Wrench	Master Sweep Control Switch to Start/Stop All Sweeping Functions
253 gallons; Polyethylene Water Tank	Pick-Up Head measuring 93" x 30"
Front Mounted Water Spray Bar with Four (4) Spray Jets	12' Wide Sweeping Path
Four (4) Gutter Broom Water Spray Jets Per Side	Automatic Safety Body Prop with Hands Free Release
Two (2) Suction Tube Spray Jets	Electric Over Hydraulic Hopper Lift
Two (2) Interior Mounted Hopper Spray Jets	Dust Separator, Pick-up Head, and Hopper Deluge System
Stainless Steel Auxiliary Engine Exhaust System	Inside or Outside Cab Handheld Pendant Dump Controls
Auxiliary Engine Air Restriction Indicator Gauge on Air Cleaner	Stainless Steel Water Manifold
Dust Proof Electrical Wiring - IP65 Standards	L.E.D. Indicators on All Solenoid Plugs
Water Proof Electrical Wiring - IP67 Standards	Body Painted in Standard Factory White
Two (2) Convex Mirrors & Brackets, 8" Diameter	Body Paint Two Part Epoxy
Front Mounted Storage Basket 54" x 13" x 11" w/36" markers	Engine Pack & Sweep Gear Powder Coated Gray
	1 each Sweeper Ops, Parts & Service Manuals - English

QTY ID Number		DESCRIPTION	ADD>Delete
1		2017 Freightliner M2 Conventional Chassis, Cummins ISB 6.7 200 HP Engine with EPA 2013 Emissions.	Included\\$80,000
1	RT655-D	Dual Gutter Broom - Includes Dual In-Cab Gutter Broom Controls, Down Pressure and Speed	Standard
1	K31766-DS	John Deere Tier III B 4045HF285 115 HP @ 2200 RPM Engine (US EPA Flex Engine)	Standard
1	K31546	Gutter Broom In-Cab Tilt Control - Dual	Included\2750
1	K31590	Gutter Broom In-Cab Two position Lateral control (Allows for sweeping in front of pick up head.)	Included\750
1	K37635	MDOT Required Yellow Paint Chassis & Sweeper RAL 1037	Included
1		Sweeper Auto Lube	Included\4800
1		MDOT Required Arrow Board	Included\6500
1		Discount for White Paint	(\$2,500)
1	K30483	Strobe, Amber (Cab Mounted) LED with limb guard	\$750
0	SS6730	Stainless Steel Hopper Screen ILOS	\$1,810
0	K32086	Bonded Intake Duct, Tube and Heavy Duty Wearplates - Rubberized	\$1,250
1	K31549	Screen Vibrator - Pneumatic	\$2,000
1	K32221	Catch Basin, rear mounted Powaboom 8" Diameter includes: Alum - 4 ft. Crown and 6 ft. Extension	\$5,700
0	K30519	Supawash, 8 gpm, 1500 psi Handlance only	\$8,500
0	K31519	Supawash, 8 gpm, 1500 psi with Handlance, Front Mounted Spray Bar	\$9,570
0	K39999	Additional Stainless Steel Water Tank 185 Gallons - Adds 12 inches to WB Consult factory prior to placing order.	\$7,750
0	K32215	Split Arrow Stick, LED	\$1,500
0	K12228	Fire Extinguisher 5 Pound	\$350
0	K30153	Work Lights Set of two (Rear mounted) LED	\$750
0	JSL002	Cameras Dual Rear & Side 7" Color Display	\$2,200
0	JSL003	Cameras: Triple Rear & Both Sides 7" color Display	\$2,500
0	K31593	PM-10 Water System 6 - Extra Spray Nozzles Per Side	\$3,700
0	TM00001	Extra - Technical Manual - Paper Copy	\$345
0	TM00001	Extra Operator's Manual - Paper Copy	\$135

0	Sweeper Auto Lube	\$4,800	
0	MDOT Required Arrow Board	\$6,500	
1	2017 International, 4300 M7, Conventional Chassis, Cummins ISB	\$81,600	
1	2017 Peterbilt Cab Over, 220, PACAR PX-7 220 HP Engine with	\$97,000	





# The Johnston RT Range





## RT655 Regenerative Air Sweeper

The RT655 provides cost effective, efficient road sweeping. Regenerative air recirculation, in conjunction with large forward facing 'digger' gutter brooms and a full width suction hood maximizes sweeping speed. Combined with ergonomic operator controls and low running costs, the RT655 provides an ideal solution to a variety of sweeping applications.

The operator environment is more important today as drivers work maximum hours and multiple shifts. The RT has been designed to fit onto a wide variety of chassis while giving the best maneuverability in its class. This allows for each user to select a chassis which suits their needs with the knowledge that the Johnston Sweeper will provide the power and performance required to achieve the task.



Certificate No. FM 83396



Certificate No. EMS 533329



Certificate No. OHS 54760





## Operator Environment

- Inside the selected chassis, the Johnston master control module is mounted in the cab and gives easy access to all the sweeper controls and options. An optional rear view camera provides safety for pedestrians and the sweeper when backing up.
- The ergonomic in cab controls incorporate an audible and visual raised hopper warning, sweeper fuel gauge, engine hour meter, tachometer and a low level water indicator as standard.
- Throttle control of the auxiliary engine is infinitely variable ensuring optimum operational and fuel efficiency with no performance compromise. This can also be used to reduce noise levels for night sweeping operations.
- A pendant control connected via a flexible cable allows the operator to safely tip the body and open the rear door from both inside and out of the cab. This allows the operator to ensure the rear of the vehicle is clear of pedestrian traffic and positioned in the correct areas before discharging the load. The body can be tipped with or without the engine running via an electric motor.
- When tipping, the body prop engages automatically as the body is raised, and at 'full tip' allows maximum access for routine maintenance. This removes the requirement for the operator to touch any part of the mechanism during the raising or lowering operation.

FAR RIGHT  
In cab master  
control module

RIGHT  
Large 'digger'  
gutter brooms

BELOW  
Remote body tip and  
rear door control



- The auxiliary engine has a platform accessible via a service ladder to allow for easy access to daily check, routine service and maintenance.
- The RT range also comes with waterproof IP67 automotive electrical connectors to enhance reliability.
- The RT range features a standard Pressadrain water purging system that enables the easy removal of water from the systems in freezing overnight conditions.



# Productivity

The RT range balances performance, environmental impact and low cost of ownership very effectively. Sharing the same power train from the Johnston VT range, the RT provides excellent productivity with reduced maintenance costs.

A high power 115hp John Deere turbocharged engine provides outstanding vacuum performance. Combined with Johnston's mechanical step up gear box and fluid coupling, the RT range of sweepers provide the best power to fan speed ratio in the industry.

Large forward facing digger brooms rotate from 0 to 100 rpm to lift dirt and debris from the curb side, controlled from the cab, the operator can adjust the speed of the brooms to suit the environment being swept. With the optional rotatilt, the operator can adjust the angle of the broom for deeper curbline cleaning.

Twin corrosion proof polyethylene water tanks carry 253 gallons of water allowing for a long on station sweeping time before refilling.

An air blast system transfers debris to the suction side of the 90" wide full width sweeping hood. This together with an air knife feature situated across the rear of the hood lifts stubborn debris into the airstream leaving a clear path even at high sweeping speeds. An in cab controlled vacuum exhaust gate provides the operator with the ability to sweep large litter and bulky items without leaving the driving seat, while the wide diameter 14" nozzle trunkings maximize airflow and allow any larger items to pass easily into the hopper. All of which can be done at sweeping speeds of up to 10 miles per hour with a 140" swept path.

Due to the hood design, the RT655 can sweep in reverse without the need to lift the sweep gear, this allows the operator to sweep over heavily soiled areas several times without the need to turn around or maneuver in the road.



FAR LEFT  
SupaWash hand lance

LEFT  
Powapack

BOTTOM  
Vacuum exhaust gate







The RT655 has a class leading 8.5 cubic yard hopper, complete with an access doors on either side. In addition, an optional 4003 Stainless Steel hopper can be specified complete with anti-corrosion warranty for long term durability. A 55 degree angled hopper floor provides easy discharging of the load without the need for a raker bar.

A range of options can increase productivity and provide increased performance to maximize the versatility of the RT range:

- SupaWash high pressure water system, provides a hand lance to enable cleaning of street fixtures and the machine itself. High pressure jets are positioned at the front of the cab to provide a street flushing option.
- An optional rear mounted catch basin cleaner provides additional flexibility to collect leaves and litter from the side or rear of the sweeper in areas where access is restricted and can be used to empty catch basins.



**ABOVE**  
The RT655

**MIDDLE**  
SupaWash front  
spray bar



**BOTTOM**  
Rear mounted catch  
basin cleaner





ABOVE  
The RT655

RIGHT  
High speed  
sweeping capability

FAR RIGHT  
140" swept path



## Environmental Impact

Manufactured in a factory accredited to ISO 14001 for sustainability, Johnston is committed to providing the most environmental way to remove dust and debris from the streets.

Low fuel consumption is a key attribute in reducing carbon foot print and CO<sub>2</sub> emissions. With the mechanical drive system running at maximum efficiency, the fuel consumption is the lowest in its class.

The John Deere engines meet the highest standards for emissions and environmental impact.

With multi-functional options such as street flushing and catch basin cleaning equipment, the RT can do several tasks requiring fewer individual vehicles to meet the demands of a tight budget.

Nearly 100% of the RT range is fully recyclable so when the product eventually retires from service the impact on the environment is kept to a minimum.



# Additional Features



A wide range of options can increase productivity and provide increased performance to maximize the versatility of the RT range:

- Optional bonded intake duct coated with a rubber liner to reduce wear and tear while reducing noise levels.
- Rotatilt, controlled from inside the cab, allows the tilting of the gutter broom to facilitate cleaning of a variety of curb angles.
- Optional screen shaker is available. An air operated cleaning system, pneumatically shakes the screen via an exterior button reducing debris build up and maintaining the peak performance of the machine.
- Body upgrade to stainless steel, increases the durability of the component and machine in highly corrosive working areas.
- Gutterbroom Extension Override (GEO) option allows the operator to bring the brooms close to the hood for removal of heavy, compacted debris.



MIDDLE  
Full service access



BOTTOM  
Service ladder  
and platform



# Cost of Ownership

The RT range of sweepers operate at the lowest costs while maintaining high productivity. The large 58 gallon auxiliary polyethylene fuel tank allows for increased time on the street feeding the fuel efficient engine and mechanically driven fan.

Maintenance costs are significantly reduced as no belts or high wearing components are required and due, to the sweeper collecting debris through airflow, fewer parts are required to clean the street.

Designed to last in the toughest environments, the RT range hopper is steel, shot blasted with aluminium oxide prior to the application of a strontium based primer followed by a hard wearing top coat. In addition, the sweep gear, powerpack and subframe are shot blasted and electromagnetically powder coated with a durable two part epoxy paint finish. This ensures your sweeper continues to look as good as it performs, retaining a high resale value or longer in-service life.

The RT has the option of a stainless steel hopper to further enhance the durability of the sweeper.



FAR LEFT  
High visibility  
body prop

LEFT  
Standard engine cowling

BELOW  
The RT655





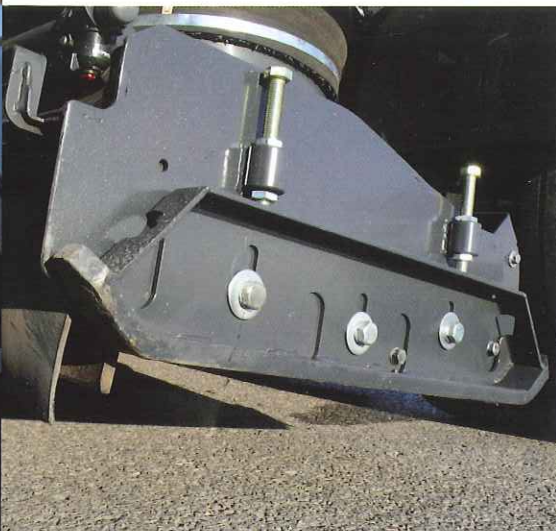


**TOP LEFT**  
Totally accessible for service and inspection

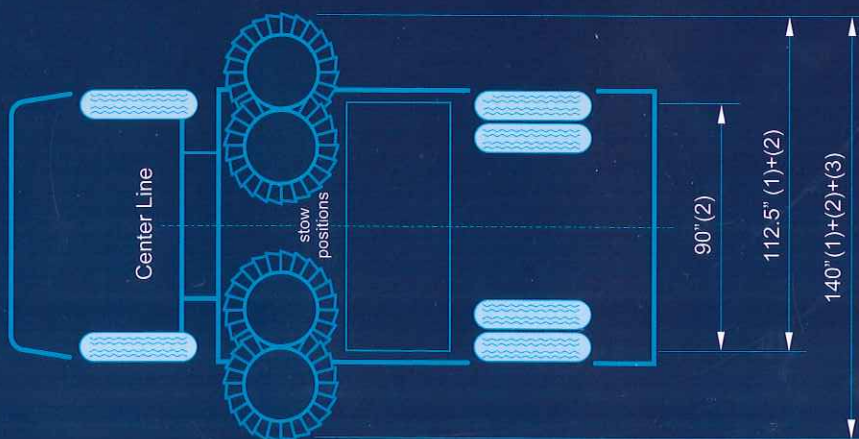
**TOP RIGHT**  
SepaVac dust separator with deluge self-cleaning system

**BOTTOM LEFT**  
Easy to clean & maintain

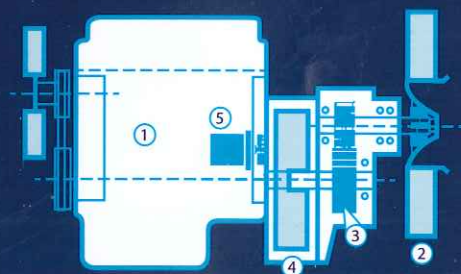
**BOTTOM RIGHT**  
Blast hood with adjustable skids



## Sweeping configurations



## RT Range powerpack



- 1 Engine
- 2 Exhaust fan impeller
- 3 Step-up gearbox
- 4 Fluid flywheel coupling
- 5 Gear driven hydraulic pump

### Outline Specification RT655

Engine: John Deere 4045T Tier 3	Full width hood: 90"
Hopper voided volume: 8.5 cubic yards	Nozzle trunking dia: 14"
Payload voided volume: 7.5 cubic yards	GB life expectancy: 80-100 accumulated
Fuel tank: 58 gallons	Rear door opening angle: 125 degrees
Water tank: 253 gallons	Gutter broom: 43"
Hydraulic system: 20 gallons	



Your local dealer is :



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