



VT551

Mid-sized sweeper



VT551 – Slimline Sweeper

Johnston's VT551 is the latest evolution of the Johnston 7.5T mid-sized sweeper. Designed specifically for the heavy duty urban environment, the VT551 is built on a smaller slimline chassis with narrower overall width and length than a conventional truck chassis, resulting in a sweeper that provides the outstanding manoeuvrability of a compact sweeper combined with truck-sized payload.

With experience covering more than 50 years designing vacuum sweepers, the VT551 is an innovative transformation within the Johnston truck mounted range.

The VT551 design concept has been customer driven, giving an urban sweeper which retains the low cost of ownership, high productivity, ease of use and excellent operator environment vital for this working environment.



Certificate No. FM 83396



Certificate No. EMS 533329



Certificate No. OHS 54760

Operator Environment

Options

The VT551 meets the demands of an urbanised environment with a range of useful options which contribute to improved operator performance and productivity:

- Large buttoned brush control pad located on the driver's door for ease of use
- In-cab screen for reversing camera
- Sweep settings memory
- Single button operation lowers the sweepgear and operates the vacuum and water jets
- Electric Hand Washing Unit
- Raised hopper warning
- Auxiliary engine hour counter
- Quick release brush system
- Choice available of manual or automatic gearbox, without loss of payload



RIGHT
In-cab screen for the reversing camera

BOTTOM
Large buttoned brush control pad





High Performance

- The Tier 3A, 58 kW, VM engine provides the best combination of weight to power ratio for durable and consistent performance. The load sensing hydraulically controlled Johnston Wearsafe® fan provides reliable and powerful suction for heavy duty municipal operations
- Exhauster fan: heavy duty, dynamically balanced impeller with multivane corrosion resistant blades. Operational speed is variable between 2400 rpm – 3500 rpm to suit operation
- Compact in size the VT551 retains a 5.25 m³ hopper capacity ideal for the heavy urban sweeper. VT551 payload is maintained on a 7.5 tonne Euro 5 chassis achieving a payload of 2250 kg allowing the best productivity available (Single sweep)
- Discharging the hopper is easy and convenient due to the high tipping angle
- A poly-modular wide sweep brush on a quick release system combined with dual channel brushes achieves a swept width of 3070 mm
- With an 825 litre water tank integrated within the body of the VT551 hopper, an even weight distribution is achieved whilst the sweeper is in transit or sweeping



TOP
Automatically engaging
body prop

MIDDLE
Convenient size for
urban sweeping

BOTTOM
Channel brush sweepgear

- Automatic multi-position body-prop mechanism (with manual retract) engages when the hopper is raised
- Pneumatic filter mesh shakers
- Powathrust/Powasave system
- Powascrub – wide sweep brush ground pressure system
- A Supawash high pressure lance with 15 m hose reel and front and nozzle sprays conveniently stowed and reached from a side door for easy cleaning of street furniture

(NB: The addition of options will affect payload)





TOP
Dual sweep option

MIDDLE & BOTTOM
Suitable for early start sweeping in residential areas

Low Environmental Impact

Dust suppression and air quality

The VT551 is fully EU PM10 compliant and has dust suppression sprays fitted by the suction nozzle, the channel brush and under the front bumper of the sweeper which can be operated independently from the cab for effective dust suppression.

Noise Reduction

In cab noise less than 75 dB(A) generally (dependent on chassis selection).

External noise is a maximum of 79 dB(A) making the VT551 ideal for early morning sweeping in residential areas as it meets ISO 3744 for noise levels on this type of machinery.

Emissions

Essential for City Low Emission Zones the VT551 can be fitted to Euro 5 chassis plus EEV (Enhanced Environmentally friendly Vehicles), to date the most stringent exhaust emission standard for diesel engines.

Fuel Consumption

The 7.5T twin-engine VT551 achieves lower fuel consumption in all rev ranges than equivalent competitive single engine hydrostatic sweepers.

The VT551 features an Auto Rest Mode. When the sweepgear is lifted the fan cuts out and the auxiliary engine will go into 'tick over' to save fuel.



Low Cost of Ownership

Running costs are an important factor when choosing a sweeper and lower cost of ownership can be achieved at the outset by selecting the Johnston VT551 on a lightweight 7.5T or 9.5T chassis for a significantly reduced capital cost, although larger chassis are also available from up to 12T, which can significantly increase the payload up to 5T.

With a narrow body, the VT551 fits within the lightweight chassis track width of 2085 mm and can be mounted on a 3095 mm wheel base (Euro 5) for outstanding manoeuvrability. Used around heavily urbanised environments, these compact dimensions enable greater manoeuvrability and flexibility.

Maintenance of the VT551 is monitored through the in-cab J-Plex system. The sweeper has 300 hours service intervals and for added convenience, the system will automatically indicate when the engine requires oil or coolant, and in extreme cases will shut down the engine before any damage can occur.

As part of the Johnston V Range, the VT551 shares common components with other models within the range which can reduce consumable stock requirements and running costs.

The VT551 sweeper body comprising the hopper, integral water tank and rear door are constructed from heavy duty stainless steel for extended durability.

As standard, the VT551 comes with a 500mm channel brush with the option of adjustable pressure and simultaneous sweep. Brushes are mounted on a trailing arm with a kick-back feature which prevents damage when sweeping around solid objects.

All external electronic components are IP67 rated for prevention of dust and water ingress and major components are housed in an accessible kerbside locker.

Drivers with a European C1 Class driving licence (or similar) can operate the VT551 mounted on a 7.5T chassis, as weight restrictions requiring HGV qualifications do not apply. (Territory dependant).

TOP & BOTTOM
Other truck
chassis choices
are also available

Productivity

- In-cab load indicator alerting the operator when the hopper is full
- An optional in-cab rear view camera and parking sensors for increased vision and safety when reversing
- VT551 J-Plex panel can be programmed with a variety of preferred sweep settings which can be selected for particular areas and sweeping requirements
- In-cab side sweep brush direction change button quickly re-directs the wide sweep brush and nozzle box so that roundabouts and streets can be swept together without disrupting progress
- Gull-wing side covers provide unrestricted access to engine parts and enable daily checks can be carried out without the hopper being raised
- Remote controlled pendant for hopper tipping, to allow the operator a safe view of the rear of the vehicle
- The Autolube option reduces maintenance by automatically lubricating key points around the sweeper
- Rear mounted Wanderhose option, powerful lightweight and operational within minutes
- A 250 mm diameter suction hose with a direct route to the hopper provides maximum airflow which prevents blockages and also allows tool free adjustment
- The VT551 has an 825 litre water tank over the rear wheels, removing weight transfer between axles during operation
- Water purging is carried out automatically from the J-Plex control inside the cab. The operator only has to drain the water tank and initiate the purging program, which is quick and easy and importantly prevents damage to the sweeper during cold weather

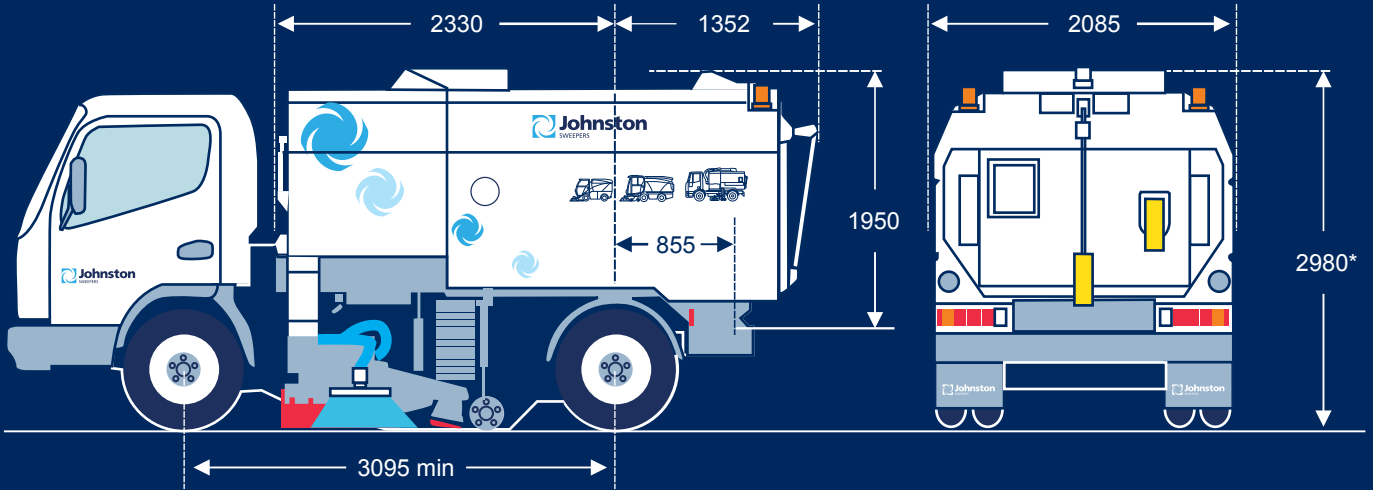


TOP
In-cab CanView system

MIDDLE
High pressure spray lance option

BOTTOM
Convenient access for servicing

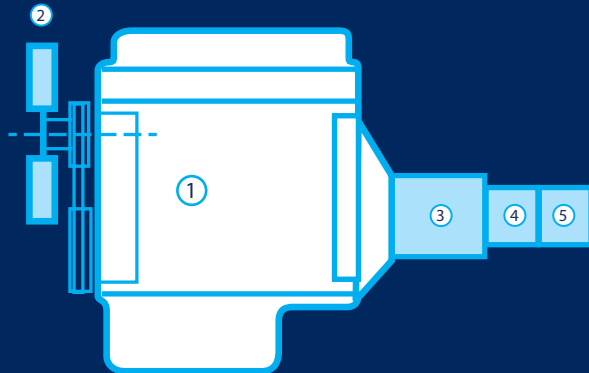
Sweeping Configurations



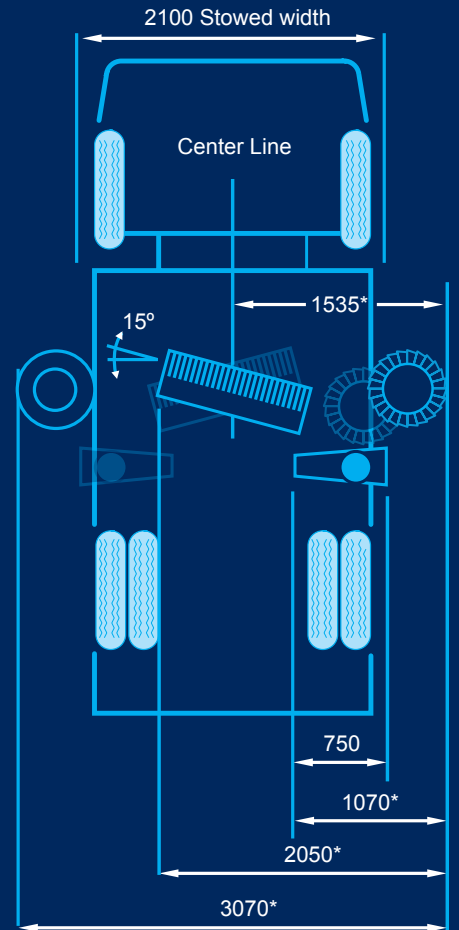
Outline Specification VT551	
Engine: VMD 754TE3	
Fuel tank: 100 litres	Water tank: 825 litres
Hopper voided volume: 5.25 m ³ nominal	Payload capacity: 2250 Kg*
Dump height: 950mm nominal	Filter mesh area: 1.00 m ²
Dust spray water pressure: 3.5 bar	Hydraulic suction filtration: 125 micron
Hydraulic return filtration: 25 micron	Channel Brush: Ø 500mm
Nozzle trunking: Ø 250mm	Nozzle width: 750mm

*based on Canter 7.5T single sweep

Aux Engine Powapack



- 1 Engine
- 2 Cooling Fan
- 3 Fan Pump
- 4 Sweep System Pump
- 5 Water System Pump



Simultaneous Channel Brush Option
* Chassis dependent

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