

# Specification Sheet

## V651 SWEEPER

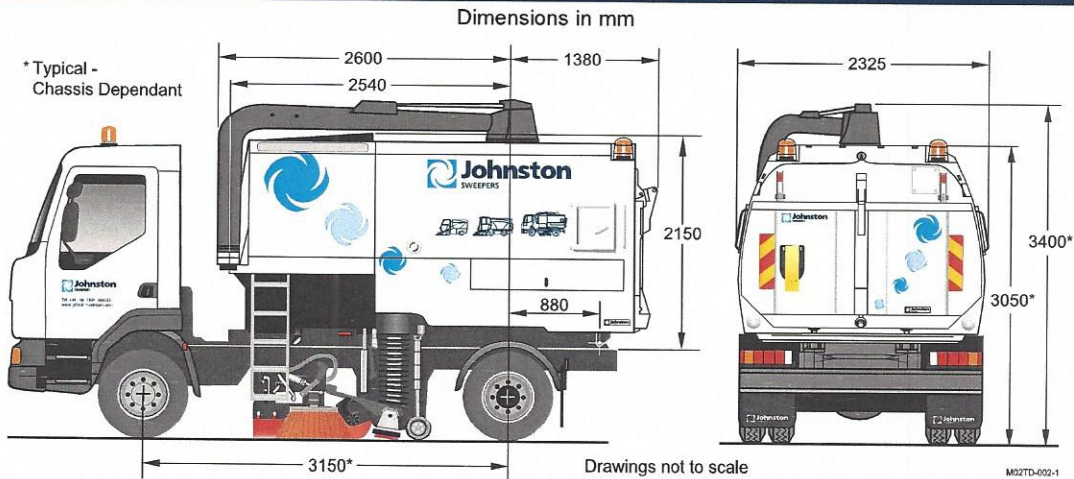
**Series** V651 (VT/VS/VM)

Sheet 1 of 1

**Subject** Technical Information and Data

Revision: A

Date: 18.05.2016



### Data and Performance Information

VT - Engine Data	
Model	JCB Ecomax 444 Stage 3b
Cubic capacity	4.4 litres
No. of cylinders	4
Gross rated power	55kW @ 2200 rpm
Maximum torque	400Nm @ 1250 r/m
Legislation compliance	NRMM Stage 3b EC directive 97/68EC

VS - Gearbox Data	
Transmission pump	55 cc/rev. variable output
Pump pressure	420 bar forward (350 bar reverse)
Transmission motor	160 cc/rev variable
Work input speed	Up to 1700 rpm
Fan pump	57 cc/rev variable output
Fan pump input speed	Up to 2400 rpm @ 1600 rpm engine
Fan pump pressure	≤ 240 bar
Fan motor	40 cc/rev (bent axis)

VM - Fan Pump Data	
Fan pump	135 cc/rev variable output
Fan pump input speed	Up to 2000 rpm (PTO dependent)
Fan pump pressure	210 bar
Fan motor	40 cc/rev (bent axis)

Capacities	
Hopper voided volume	6.5 m <sup>3</sup> nominal
Payload voided volume	5.56 m <sup>3</sup> nominal
Payload capacity	6 Tonnes (chassis dependent)
Fuel tank	Up to 190 litres
Water tank	1554 litres
Hydraulic system	VT: 61 litres - VS/VM: 75 litres

Sweeping Equipment	
Channel brush (CB)	Ø 500 mm (Ø 650 - 710 mm Option)
Wide sweep brush (WSB)	Ø 406 mm
Nozzle trunking diameter	Ø 250 mm
Nozzle width	750 mm

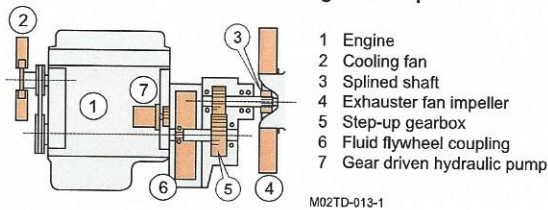
General Data	
Chassis requirement	13-15 Tonnes
Wheelbase	3150 mm nominal
Discharge height	950 mm (nom) chassis dependent
Discharge angle	54° nominal
Door opening angle	125° nominal
Dust spray pump output	Up to 35l/min
Dust spray water pressure	3.5 bar
VS Hydrostatic Transit	0 - 40 km/h (chassis dependent)
VS Hydrostatic Workmode	0 - 18 km/h

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Due to continuous product development Johnston Sweepers reserves the right to alter specifications without prior notice.

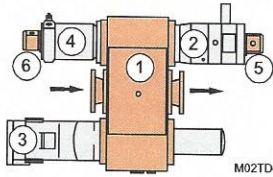
## Technical Specification

### VT - Aux Engine Powpack



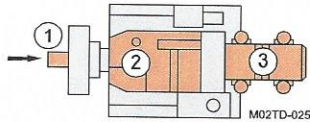
- 1 Engine
- 2 Cooling fan
- 3 Splined shaft
- 4 Exhauster fan impeller
- 5 Step-up gearbox
- 6 Fluid flywheel coupling
- 7 Gear driven hydraulic pump

### VS - Hydrodrive Gearbox Configuration

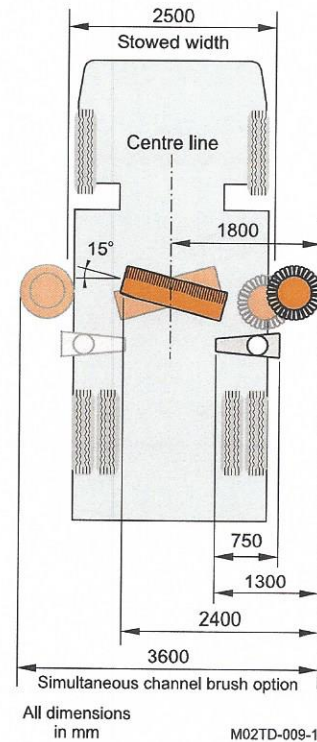


- 1 Hydrodrive gearbox
- 2 Vehicle transmission pump
- 3 Vehicle transmission motor
- 4 Exhauster fan pump
- 5 Sweeping function pump (SF)
- 6 Additional/optional equipment pump(AOP)

### VM - Hydraulic Fan Pump



- 1 Drive shaft from chassis PTO
- 2 Fan pump
- 3 Gear pump(s)



## Base specification

### Performance data

#### Exhauster fan:

Operational speed variable between 2400 rpm - 3500rpm to suit operation.

VT: Step-up gearbox ratio: 1.79:1

#### Channel brush:

Quick release brush system with infinitely variable speed up to 160rpm (cab controlled).

#### Nozzle:

Cast aluminium nozzle with 250mm diameter inlet and tool free adjustment.

#### Wide sweep brush:

Quick release brush system with a nominal 160rpm rotation speed.

#### Dust suppression system:

Dust suppression sprays located at suction nozzle(s), channel brush(es) and across front of vehicle.

Pressadrain water purging system.

#### Electrical system:

24 volt.

All external loom connections are full automotive IP67 rated.

### Controls:

Centre cab mounted master control panel with Johnston Video Monitor (JVM) providing information on a wide range of sweeper functions plus data capture download. Up to four optional cameras can also be viewed on the JVM screen. Separate palm rest controller housing controls for the main sweeping functions is mounted on the door side.

### In cab noise:

<75 dB(A) generally (dependent on chassis selection).

### Exterior noise / Sound power level:

L<sub>WA</sub> 110 dB(A) for standard power engines measured in accordance with EC directive 2000/14/EC.

L<sub>WA</sub> 112 dB(A) for high power engines measured in accordance with EC directive 2000/14/EC.

### Body & Cowl

Body comprises of hopper & integral water tank. Fabricated from heavy duty stainless steel plate.

Cowling is lined with frequency matched soundproofing material.

Water tank incorporates anti-surge baffles and filled via a type 'A' water hydrant fill. Water tight twin lock rear door latching system with de-watering function.

Two body side access doors.

Plug in hopper floor as transfer port for use as Streetwasher.

Rear discharge chute, twin rear caged beacons, automatic multi position body propping mechanism and side storage lockers are standard features.

### Optional equipment

- JCB Dieselmax 444 NRMM Stage 3a. Gross power 85kW @ 2200 rpm. Max torque 440 Nm @ 1300 rpm.
- JCB Ecomax 444 NRMM Stage 4. Gross power 93kW @ 2200 rpm. Max torque 550Nm @ 1500 rpm.
- Camera monitoring systems.
- Littasnatch.
- Microtrap dust suppression system.
- Powasave/thrust.
- Pneumatic mesh shakers.
- Powascrub - wide sweep brush ground pressure device.
- Supawash - High pressure washing system (32 l/min @ 100 bar), c/w Handlance, reel, 15m hose. Also available with front and nozzle spraybars.
- Wanderhose (6" or 8") top mounted also available with power assist option.
- Water Recirculation.
- Telematics CAN Gateway.

A comprehensive range of additional options is available. Please ask for details.

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