



C202

COMPACT SWEEPER

SMALL AND PERFECTLY FORMED





Founded in 1904, Johnston Sweepers is one of the world leading manufacturers of outdoor surface cleansing equipment with machines operating in over 80 countries worldwide.

Johnston Sweepers is committed to producing equipment that incorporates all the very latest technological advances in performance, efficiency, running costs and impact on the environment which are highly regarded by our customers and the industry alike.

Reinforcing our commitment to ongoing excellence in quality, performance and sustainability, ISO accreditations to ISO 9001, ISO 14001, ISO 50001 and ISO 18001 put the company in a unique position within sweeper manufacturing by completing the full suite of internationally recognised standards.



Small and perfectly formed

The Johnston C202 compact sweeper is the latest evolution of Johnston's class leading compact design.

Designed around six key objectives as required by our customers, the C202 achieves high performance, high productivity, low cost of ownership, minimal environmental impact, safety and operator's experience all delivered in one package.

- ▶ **High performance**
- ▶ **High productivity**
- ▶ **Lower cost of ownership**
- ▶ **Environmental impact**
- ▶ **Safety**
- ▶ **Driver's experience**



High performance

The C202 offers longer on-station time allowing the sweeper to be out cleaning whilst others are returning to base to tip, refuel or fill with water.

Maximising on-station time requires a balance of having enough water to allow the operator to fill the hopper on a dry day, having enough hopper volume to cope with large volumes of leaves and litter, having enough of a payload to handle heavy detritus and having enough fuel to last the shift. Over years of development, Johnston feel they have achieved this is the most compact design available.





Disc brakes

Provide improved straight line braking.



1985mm

Under 2m with wanderhose.



Up to 1,750kg payload

With 4,500kg GVM



402 litres total water

250 litres water recirculation with 152 litres of lost water tank.



4.3 l/h

Lowest fuel consumption in its class to the EN-15429-2 standard.



1.8m³

Cubic metre hopper void.



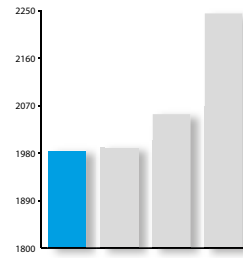
4 wheel steer

Optional 4 wheel steer allowing the smallest turning circle in its class.



SmartLink

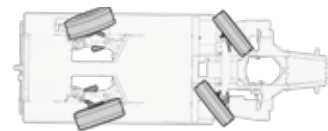
With Johnston SmartLink your sweeper fleet can be out working harder for longer – AND you can save money making your fleet more efficient.



1985mm height compared to 3 competitors



2610mm turning radius compared to 3 competitors (2ws kerb to kerb)



4 wheel steer option
2110mm kerb to kerb



SmartLink portal

High productivity

Productivity is driven by a combination of reliability, having fewer service interventions, great suction performance, quick engage options and outstanding manoeuvrability.

The C202 delivers.

- ▶ Four-wheel-steer option, allows the smallest turning circle in its class, and superb manoeuvrability.
 - ▶ 500 hours between routine services.
 - ▶ The C202 is under 2m including optional wanderhose allowing access to car parks and under bus shelters where other sweepers are unable to sweep.
 - ▶ Johnston's front facing brush system maximises sweeping width.
 - ▶ The operator can see the front of the nozzle so can open the leaf flap * or lift the nozzle to prevent 'bulldozing'.
- Service interventions restrict the time out sweeping, routine servicing, hydraulic leaks, damage and even punctures have an impact on utilisation. The C202 has been improved to reduce the risk of damage, reduce tyre wear and punctures and improve hydraulic routing to prevent leaks and chaffing.
- ▶ Johnston's unique top mounted wanderhose is quick to deploy and easy to stow, allowing easy access for litter collection outside of the sweeper's reach.*
 - ▶ Johnston's on board Supawash system with retractable hose allows operators to jet wash street furniture and clean the sweeper down after use.*
 - ▶ Hinged recirculation pump allows easier cleaning.
 - ▶ Large removable recirculation water tank cover allows full access for cleaning.
 - ▶ Easy access to major components.
 - ▶ Independent brush arms.
 - ▶ Tubeless tyres reduce tyre damage.
 - ▶ The articulated brush arms include forward impact shock absorbers and side impact hydraulic dampening reducing damage costs.
 - ▶ Shuffle button.
 - ▶ Low volume 'misting' jets reduce clean water consumption.

* Optional equipment

▶ Front brushes perfect for hammerhead



▶ Supawash System



▶ 4-wheel steering



▶ Leaf flap



- ▶ Battery isolation switch allows safe working.*
- ▶ Hydrostatic drive can switch seamlessly from forward to reverse and work mode/transit.
- ▶ Stainless steel wedge wire water recirculation screens prevent blocking and allowing easier cleaning.
- ▶ Large water recirculation tank with large aperture and tilting pump allows quick access for emptying and washing out.
- ▶ The 1.8m³ (hopper volume) capacity and 1.5m discharge height is ideal for tipping into skips or bins.
- ▶ Lowest fuel consumption in its class with an average usage of 4.3 litres per hour to the EN15429-2 standard.

500 hours
between routine services



▶ 2-level sweeping

▶ Hinged water recirc pump

▶ Easy clean removable glass floor

▶ Third brush option



Lower cost of ownership

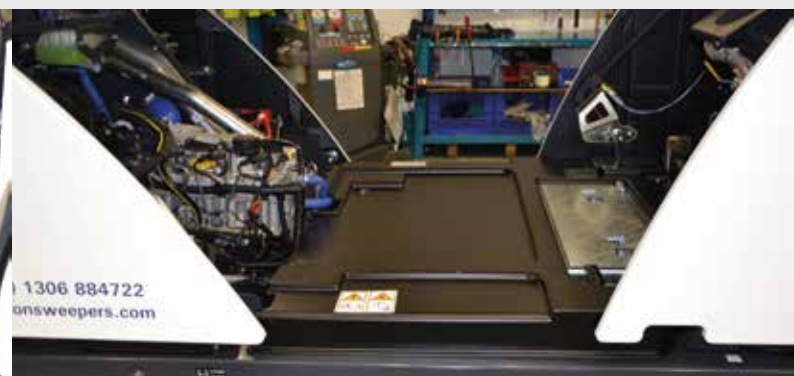
As part of Johnston's on-going product development programme, the C202 has been designed with low running cost in mind. A host of new features have been added using the latest technology and innovation to lower the cost of ownership.

- ▶ The new axle increases the front track width bringing the front wheels in line with the rear for increased stability and improved road handling.
- ▶ Additional modifications to the hydraulic system have been made to further improve road handling and maintain the excellent manoeuvrability of the compact model. The brake/steering pump has changed to a 10.8cc/rev from 6.45cc/rev pump to further improve brake responsiveness.
- ▶ Disc brakes on front axle reduces service time.
- ▶ 1.4003 stainless steel hopper designed to last the life of the sweeper with low corrosion and high wear.
- ▶ Pusher cooling fan ensures the radiator stays clean when tipping.
- ▶ Data capture on the JVM provides information on performance and service history. Hours used, fuel consumption, distance travelled and distance swept are all accessible via a USB stick.
- ▶ Industrial tyres designed to last up to 3 times longer than commercial tyres.
- ▶ Tubeless tyres reduce tyre damage.
- ▶ Steel hydraulic pipes replace flexible hoses to reduce chaffing and premature hose wear. New quick change brush arm hoses reduce downtime.
- ▶ Vulnerable nodes and electronic components protected up to IP69 standard and additional covers reduce risk of water ingress further.
- ▶ Full engine cover protects the engine from water and debris when opening the hopper and when cleaning.
- ▶ Johnston JVM has full on board diagnostics for easy fault finding and reduced downtime.
- ▶ The articulated brush arms include forward impact shock absorbers and side impact hydraulic dampening reducing damage costs.
- ▶ A replaceable "Shear Pin" which can be easily replaced by the operator protects the brush arms and chassis from expensive repairs.
- ▶ LED work lights as standard offer more powerful lighting while significantly reducing the number of times bulbs require replacement.
- ▶ Service interval every 500 hours.

▶ Engine Layout



▶ Engine Cover



Industrial tyres designed to last up to

3 times

longer than commercial tyres

Disc brakes on front axle

reduces

service time

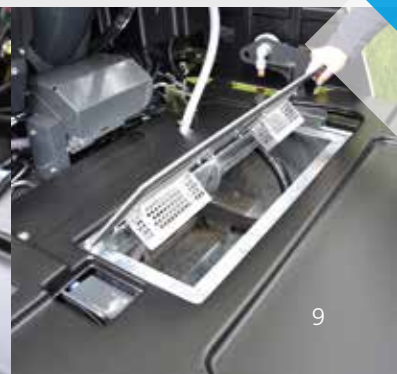


▶ JVM System

▶ Tubeless tyres

▶ Electrical box

▶ Easy access



Low environmental impact

In a busy urban setting, the C202 is taken for granted by the public as an environmental benefit to their living space, it's comforting to know the C202 can deliver a productive service with a minimal impact to the environment.



Low noise

The C202 can work down to 1000 rpm reducing the noise levels to 65dB(A). Max sound power to 2000/14/EC. L_{WA} 105dB(A).

Environmental impact extends far beyond emissions and noise produced by the sweeper; the C202 traps particulate matter inside the hopper, removing harmful dust from the surface and helps to improve the air quality.



Low water usage

The C202 uses a pumped water recirculation system to reuse the water inside the hopper, this reduces refilling costs and extends on-station time.



High dust suppression

EUnited 4 star certified for PM_{10} and $PM_{2.5}$



Low fuel consumption

Through intelligent design, the C202 can provide a high performance at lower engine revs. Allowing upto 40% less fuels to be used.



HVO compatible

HVO (Hydrotreated Vegetable Oil) has the equivalent productive output as diesel but with none of the harmful properties, burning cleaner and with significantly lower damaging emissions up to 90% less Carbon Dioxide (CO_2) and 30-70% less NOX (nitrogen oxides). A non-fossil fuel, HVO can be used 100% or with any EN590 diesel mix without modification or change in servicing requirements.



Less CO_2 emissions

At an average fuel consumption of 4.3 litres per hour in work mode the C202 produces up to 10,000kg less CO_2 emissions per year than other sweepers in its class (per year = 2000 operating hours).



Latest Regulation Engines



Standard Euro 6c Engine - with diesel particulate filter, SCR and Water heated AdBlue system.



Optional Stage 5 Engine – with diesel particulate filter (no SCR or AdBlue system)

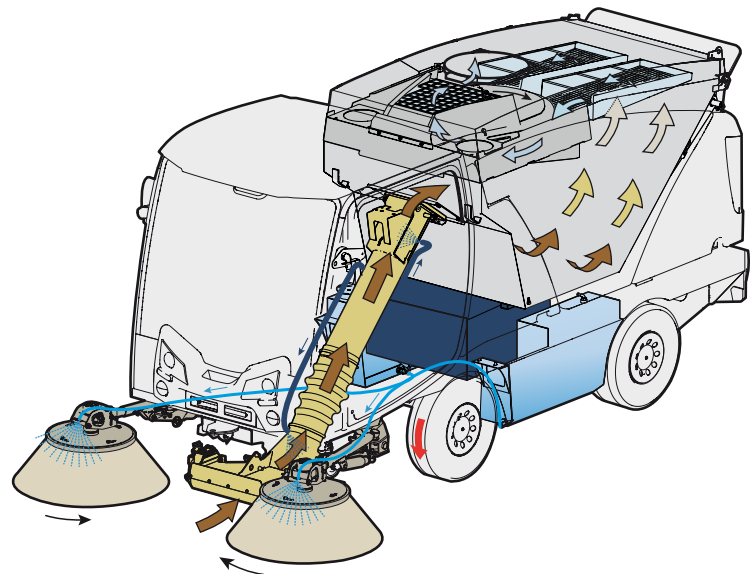


Optional Stage 3a Engine - with diesel particulate filter (Not available in EU28)



Dust suppression

Water jets on each brush arm provide a fine clean water spray to trap dust particles lifted by the two brushes. In addition, recycled water from the hopper load is filtered via stainless steel 'wedge wire' panels and pumped into the nozzle intake duct. All material is soaked as it passes through this 'water curtain' and falls safely into the hopper.



Safety

Safety for the operator, service engineer, other road users and vulnerable road users is everyone's priority and the C202 has a range of features and optional equipment designed to make operating and repairing the C202 better than ever.

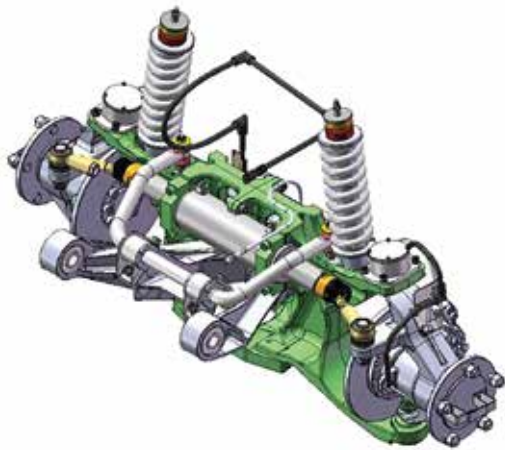
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- ▶ Cruise control in work mode.
 - ▶ An audible signal for safe reversing, with standard Night Silent override switch.
 - ▶ Automatically engaged mechanical hi vis body props.
 - ▶ Hydrostatic drive system autobrakes when the driver disengages drive.
 - ▶ New wider front axle, progressive steering and new anti-roll bar transforms the drive of the C202 to reduce fatigue on long transits.
 - ▶ Rear view camera auto engages when reverse is selected.*
 - ▶ Rear parking sensors provide audio warning of distance for the operator.*
 - ▶ 4 wheel steer.*

* Optional equipment



Improved braking system

incorporating front discs
to improve braking ability
and consistency of performance



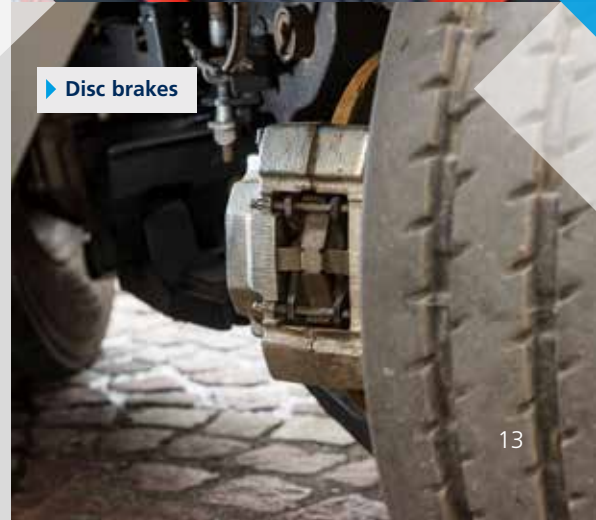
▶ LED work lights



▶ Rear View Camera option



▶ Red seat belts for safety



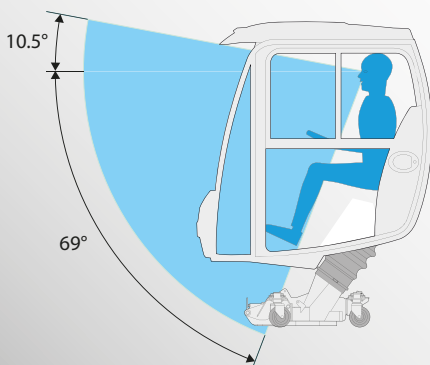
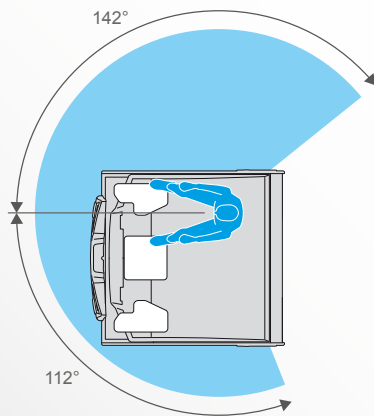
▶ Disc brakes



Driver experience

High productivity starts with the operator and the C202 provides a first class working environment including:

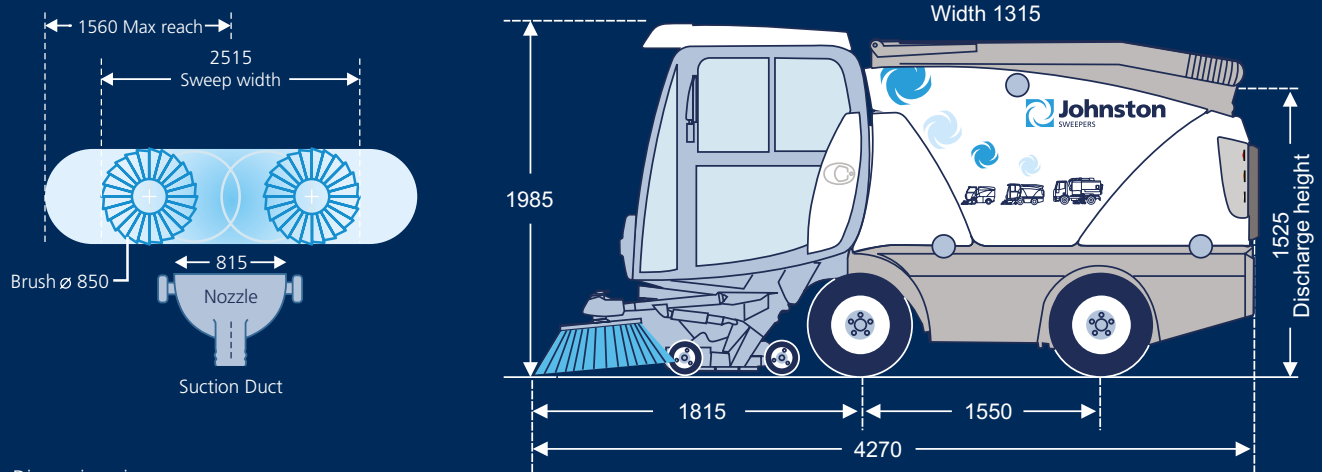
- ▶ Low noise 65dB(A) at drivers ear at 1000rpm.
- ▶ 2 full size seats for the driver and passenger both fitted with red 3 point seat belts. Driver's seat fully suspended with adjustable back rest.
- ▶ Adjustable centre control arm, ergonomically positioned for ease of use with all sweeper functions easily accessible.
- ▶ Floor to ceiling heated front windscreen allowing maximum direct vision of nozzle below and above branches, etc.
- ▶ Walk through cab with clear side vision.
- ▶ Large floor glass panels for improved operational vision and removable centre floor glass for easy cleaning.



- ▶ Illuminated nozzle box provides improved visibility for night time sweeping.
- ▶ Armrests fitted to both cab doors for improved comfort in transit.
- ▶ Adjustable steering column for height and rake.
- ▶ A choice of options for in-cab temperature control of either air conditioning or climate control.
- ▶ Easy reach/use control panels positioned to the front and side of the operator. Radio with sockets for both SD Cards and MP3 Player.
- ▶ 7" full colour JVM display ideally positioned for operator feedback.
- ▶ Rear facing camera screen built into the JVM reducing monitors and allowing operator to see performance easily.
- ▶ Cup holders built into the drivers cab.
- ▶ Cruise control in work mode to allow operator consistent performance.
- ▶ Glide II suspension design for improved sweeper ride, further reducing whole body vibration and driver fatigue.

Call us to book your demonstration

Sweeping configuration



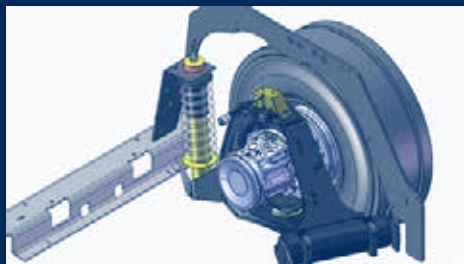
Dimensions in mm

Turning radius (Four Wheel Steer Option)



Outline Specification C202

| | |
|--|--|
| Length: 4270 mm | Maximum speed: 50 km/h |
| Width: 1315 mm | Brush diameter: 850 mm |
| Height: 1985 mm | Brush speed: Variable up to 125 rpm |
| Unladen weight: from to 2850 kg - Dependant on options | Clean water tank capacity: 152 litres (E6C & stage 5), 175 litres (stage 3a) |
| Payload: up to 1750 kg - Dependant on options | Recirculating water system: 250 litres |
| GVM: 4500 kg, optional 3500 kg | Gradeability: 30% fully laden |
| Hopper voided volume: 1.8 m ³ | Sweep rate/output: 40,240 m ² /hr (theoretical max) |



Glide II suspension

Full automotive front and rear suspension even with 4 wheel steer improving stability and reducing driver fatigue.



Control arm

Control arm provides the operator with the ability to independently adjust brush pressure, brush position, nozzle box height, operating revs and water jets without having to look away from the road.



Rear view

Walkthrough cab

**Vision &
features**

Adjustable air
suspended seat



JVM System

Rear view

Control Arm

Brush view

**Easy clean
glass floor**

**Full passenger
seat**

Call us to book your demonstration

Tel: +44 (0) 1306 884 722

Enquiries@johnstonsweepers.com



General Enquiries

Tel: +44 (0) 1306 884 722

Fax: +44 (0) 1306 884 151

Email: Enquiries@johnstonsweepers.com

 @JohnstonSweep
 Johnston Sweepers Ltd
 Johnston Sweepers Channel

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