GREEN MACHINES

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636

GM636HS

www.greenmachines.com +389 43 551 100 office@greenmachines.com



WELCOME TO THE WORLD OF GREEN MACHINES Where Innovation Beats Imitation

Green Machines is among the oldest manufacturers of sweepers, dating back to 1965 and our first headquarters in Scotland. From the very first walk-behind sweepers with their exceptional maneuverability to state-of-the-art battery and hydrogen technology present in our sweepers, Green Machines has created a market which remains unrivaled to date. We currently operate from our offices in North Macedonia, the Netherlands, United Kingdom, Germany and USA, while we offer clients all around the world full support through our wide global dealership network. With our ambitious Green Machines vision, we plan to stay ahead of the game by bringing new product technologies to the highly demanding outdoor cleaning market.

For many years now, we have aimed to contribute decisively towards cleaner and tidier towns and cities by providing efficient and sophisticated sweeping machines. Our portfolio comprises 7 machine models and each one is unique in its own way. We offer you a wide range of choices by providing cleaning solutions that others have yet to catch up to. All of our machines are compact and swift enough to enable you to clean any urban area around the city with maximum efficiency, without worrying that they will disrupt your citizens. Our machines are purposefully designed in a way that does not impact the normal everyday functioning even of the busiest areas in your city.







OUR MISSION: ZERO EMISSIONS

Green Machines realizes that the earth's environment is under severe stress from uncontrolled human activity, threatening the survival of our society and the performance of Green Machines' mission. We are dedicated to minimizing our own impact and maximizing the effective use of resources.

Green Machines strives to develop and produce sustainable sweeping machines combined with excellent performance for a better world. Our vision is often far from the traditional approach but we are proud to take leadership in paving the path to an emissionfree world. Our vision focuses on minimizing global impact through the following guidelines:

•Help our customers reduce their carbon footprint through the use of our eco-friendly products.

•Maximize the "End of Life Environmental Value" of our products.

•Work with suppliers who promote sustainable practices.

•Participate in efforts to further improve sustainable protection and understanding among our staff and end-users across the globe.

·Listen to the voice of the customers.



KEEPS YOUR CITY CLEAN AND GREEN





PORTFOLIO

We have over 55 years of manufacturing experience and we are constantly improving our products based on direct customer feedback and the ongoing changes and trends on the market. Our current product portfolio comprises some of the world's most technologically advanced sweepers, and each of our machines is so unique that it is basically impossible to compare them to one another. Every machine is designed in a way that meets specific needs and we are confident that we have a machine that will meet your specific needs.



GM1ze

Fully electric, versatile, waste Vacuum Cleaner. Small manoeuvrable and Compact, ideal for any City Centre.



GM400ze/GM414

One of our latest environmental sweeper innovations, the 400ze is based on the world beating 400-series Sweeper. Compact, manoeuvrable, Operator friendly and now also Electric.



GM500ze

This marathon machine is the world's first-ever fully electric sweeper and offers lasting performance with the latest generation of Li-ion batteries. It is small, swift, and eco-friendly with superb ergonomic design. The 500ze is one of the most popular zero emission sweepers in the world.



GM500H2

The world's first-ever hydrogen fuel cell sweeper. It runs 100% on hydrogen with zero emissions, while providing the same comfort and cleaning efficiency the 500ze offers. It comes in two types: with replaceable H2 pods or with a fixed hydrogen tank system.



Our dependable, hard working front line sweeper will remove debris from all surfaces and efficiently, it has a 1.5 m3 capacity, designed for maximum performance and minimum waste volume. With its sophisticated design details and ability to considerably reduce water consumption, the 636 cuts labor and maintenance costs.

GM636HS



GM955

The 955 is a 6 m3 mechanical sweeper supported by vacuum. The powerful sweeping mechanism is able to collect even the largest debris, the powerful Vacuum will remove the smallest dust particles with the 955 you have the best of two worlds.





The Green Machines 636HS is ideal for all road and paved surfaces. With its tight turning circle, nimble joystick-controlled brushes, great suction and high transit speed, its a hard to match package of design and engineering which maximises capacity, cleaning power, manoeuvrability and, not least offers easy maintenance.

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636 Diesel Technical Specifications

Dimensions

| Length - Standard machine | 3,520 mm |
|------------------------------|----------|
| Width | 1,130 mm |
| Height - Warning lamp folded | 1,990 mm |
| GVW | 2,550 kg |
| Wheelbase | 1,400 mm |
| Turning circle | |
| Curb to curb | 2,100 mm |
| Wall to Wall | 3,735 mm |

Suction Fan Performance

| Maximum Flow | 7200 m³/h (2 m³/sec) |
|------------------|----------------------|
| Maximum Pressure | 48 mbar |

Water system

| Tank Capacity | 195 L (51.4 US Gal) |
|----------------------|-----------------------|
| Max system Pressure | 8 bar (118 psi) |
| Cloudmaker Flow Rate | 15 L/hr (3.95 US Gal) |

Pressure washer

| Water Flow | 13 L/min (3.43 US Gal) |
|--------------------|------------------------|
| Max Water Pressure | 90 bar (1323 psi) |

Street Washer

| Max Water Flow | 17 L/min (4.48US Gal/min) |
|--------------------|---------------------------|
| Max Water Pressure | 100 bar (1470 psi) |

Accessories and optional equipment



Air conditioning





Winter equipment

*



Deluxe Seat w/Air Suspension





Dust control system

| Dust filtering | SeparationThree-stage filtering |
|---------------------|---------------------------------|
| Stage 1: | Angled hopper swirl plates |
| Stage 2: | Stainless steel filter screen |
| Stage 3: | Twin cyclones |
| Dust control system | |
| CloudMaker® | Standard |
| Vacuum impeller | 12 vanes made of steel alloy |

Hydraulics

| ISO 46 Hydraulic Oil |
|----------------------|
| 40 L (10.5 US Gal) |
| 2800 rpm |
| 105 rpm |
| 275 bar (4043 psi) |
| |

Engine type

| Туре | Kubota V1505 CR T EW02 Turbo Diesel |
|------------------------------------|-------------------------------------|
| Capacity | 1.498 litres |
| Power | 32.5 kw (43.5 HP) |
| Max. Torque | 118 Nm at 2000 rpm |
| BioDeisel Usage | up to 5% |
| Fuel Consumption under normal work | 7.4 L/hr |
| Engine Oil Type | 10w40 API CJ4 or CK4 |
| Engine Oil Capacity | 6 lts (1.59 US Gal) |
| | |

| Hopper | |
|-------------------------|--------------------|
| Capacity | 1.5 m ³ |
| System Compaction Ratio | 2:1 |
| Clearance for tipping | 1.4 m (55 in) |

636 Petrol Technical Specifications

Dimensions

| Length - Standard machine | 3,520 mm |
|------------------------------|----------|
| Width | 1,130 mm |
| Height - Warning lamp folded | 1,990 mm |
| GVW | 2,550 kg |
| Wheelbase | 1,400 mm |
| Turning circle | |
| Curb to curb | 2,100 mm |
| Wall to Wall | 3,735 mm |

Suction Fan Performance

| Maximum Flow | 7200 m³/h (2 m³/sec) |
|------------------|----------------------|
| Maximum Pressure | 48 mbar |

Water system

| Tank Capacity | 195 L (51.4 US Gal) |
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| Max system Pressure | 8 bar (118 psi) |
| Cloudmaker Flow Rate | 15 L/hr (3.95 US Gal) |

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Air conditioning (





Winter equipment

Deluxe Seat w/Air Suspension





Dust control system

| Dust filtering | SeparationThree-stage filtering |
|---------------------|---------------------------------|
| Stage 1: | Angled hopper swirl plates |
| Stage 2: | Stainless steel filter screen |
| Stage 3: | Twin cyclones |
| Dust control system | |
| CloudMaker® | Standard |
| Vacuum impeller | 12 vanes made of steel alloy |

Hydraulics

| - | |
|-----------------------------------|----------------------|
| Oil Specification | ISO 46 Hydraulic Oil |
| Hydraulic Tank Operating Capacity | 40 L (10.5 US Gal) |
| Suction Fan – max RPM | 2800 rpm |
| Brush Motor – max speed | 105 rpm |
| Transmission Max Pressure | 275 bar (4043 psi) |

Engine type

| Туре | WG1605-G-ET01 Petrol |
|------------------------------------|------------------------------|
| Capacity | 1.6L ; 4 cylinder |
| Power | 39.5 KW (43.5hp)/3000 rpm |
| Max. Torque | 112 Nm/2200 rpm |
| Fuel Consumption under normal work | 9.9 L/hr |
| Engine Oil Type | 10w-40 API SLOR HIGHER CLASS |
| Engine Oil Capacity | 6 lts (1.59 US Gal) |
| | |

Hopper Capacity 1.5 m³ System Compaction Ratio 2:1 Clearance for tipping 1.4 m (55 in)



SWEEPER FEATURES



Superior Cleaning

With a 600mm diameter vacuum van, the 636's high suction is ideal for even coarse and heavy debris, while its innovative cyclonic separator and Cloudmaker™ systems allow great dust control and sustained performance.

GM636



Safe and comfortable

The 636 can travel up to 40km/ hour (where permitted), minimising traveltime. The fine-tuned coil spring suspension gives a "carquality" ride while the front axle tracks outwards as speed increases to maintain stability and minimize rollover risk.



Innovative dust control

The 636 effectively "eats"dust, thanks to 3-stage cyclonic separation and CloudmakerTM misting system which also reduces water consumption, so extending the operating time between water fills.



Easy maintenance

Based on the popular "clamshell" design with tilting cab and swing-out sections, the 636 opens like a swiss army knife for easy access.



Clean where other large-city cleaning machines can't. This easy to maneuver, quiet-operating sweeper can also function as a street-washer, street-scrubber, and can be used during Winter season with a snowplow, snowbrush, sand/salt spreader...it has multi-tool capabilities and therefore can be used all seasons.

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Stage 3: Filtration: Double Cyclone Cleaners, removes any remaining dust from the airflow.

Innovative vehicle management system with integral monitoring, detection and diagnostic feature facilitates operation and troubleshooting.

Stage 2: Filtration: Stainless Steel Mesh

Improved productivity thanks to intelligent single-button change-over feature between sweeping and transit mode.

Brushes with independent joystick control enable efficient sweeping even around obstacles. The brush ground pressure can be controlled from within the cab. Brushed powered both in and out for easy cleaning of corners. cab. Brushed powered both in and out for easy cleaning of corners. Stage 1: Filtration: Hopper Cyclone swirl plates allow debris and dust to fall from the airflow, this is then collected in the bottom of the hopper.

The centrifugal action means that the 1,5 m³ stainless steel hopper fills internally from the outside using its full net capacity.

Driving comfort and safety like that of a car thanks to four-wheel drive and independent wheel suspension.

Safety at higher speeds (up to 40 km/h) thanks to enhanced stability provided by the extendable Vari-track[™] front axle.

The Green Machine 636HS, is reliable, quiet, manoeuvrable and operator friendly, ideal for cleaning outdoor public spaces, such as towns and cities, paths, cycle ways and pedestrian areas, with its powerful suction, Cyclonic Filtration and Cloud maker Technology, the Green Machines 636HS helps minimise airborne particulate and keep the environment clean.

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Wanderhose





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