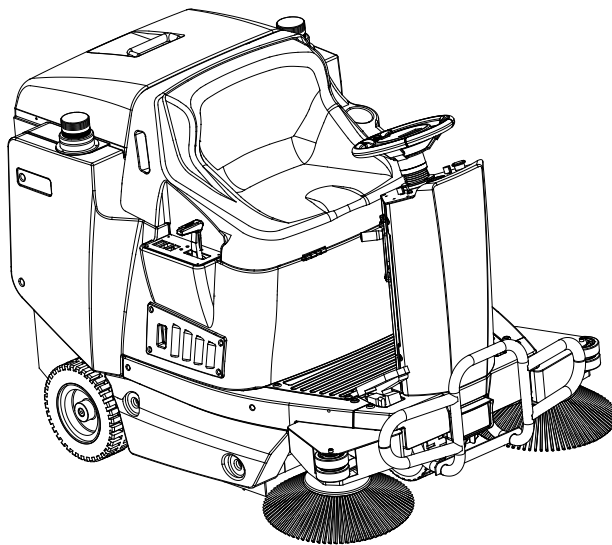




GTS 1250

Sweeper/ 扫地机



OPERATOR'S MANUAL/操作说明书

！警告 使用前请先阅读

阅读本说明以便能安全，方便的操作机器。此说明对用户以后的维护有很大的帮助。
使用户在使用过程中不会受到伤害和其他物品不受损害。从而使机器得到更好的养护。
使用前必须熟读此说明，本说明提供详细的图解说明。

TECHNICAL SPECIFICATIONS

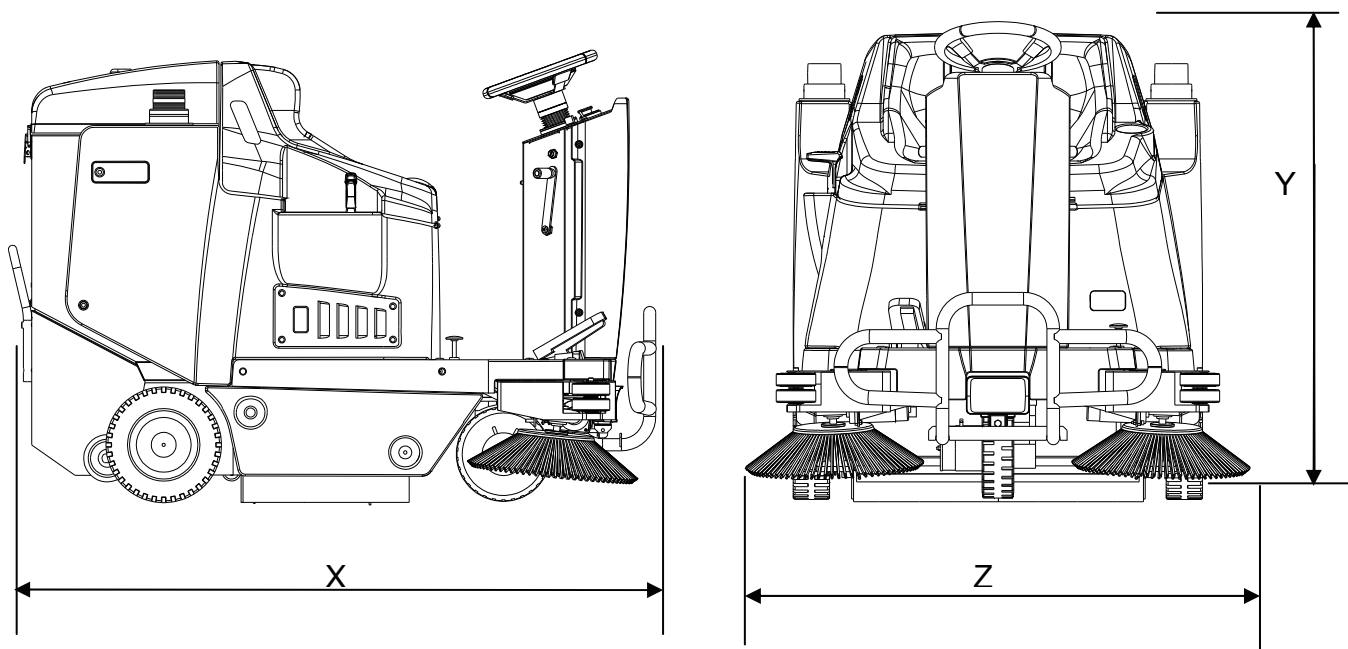
技术规格

		GTS1250
Cleaning width-Main brush 清洁宽度-主刷	mm	710
Cleaning width-With 2 Side brushes 清洁宽度-2个边刷	mm	1250
Hourly performance 最大工作效率	m ² /h	8750
Main brush motor power 主刷电机功率	W	600
Side brush motor power 边刷电机功率	W	90
Traction motor power 驱动电机功率	W	800
Suction fan power 吸尘风扇功率	W	180
Filter shaker motor power 振尘电机功率	W	90
Maximum speed-Forward 最高速度-前进	Km/h	7
Maximum speed-Reverse 最高速度-后退	Km/h	4
Maximum Climbing % 最大爬坡能力	%	15
Hopper Volume 垃圾箱容量	L	105
Rear Wheel Diameter 后轮尺寸	mm	306
Front Wheel Diameter 前轮尺寸	mm	250
Main brush diameter 主刷直径	mm	280
Side brush diameter 边刷直径	mm	450
Filter surface 过滤器面积	m ²	4
Net weight without batteries 净重（不含电瓶）	Kg	300
Number of batteries 电瓶数量	n°	4
Series battery voltage 工作电压	V	24
Single battery capacity 电瓶容量（选配）	Ah (4h)	260
Single battery weight 单个电瓶重量（选配）	Kg	35-60
Power supply voltage 机器工作电压	V	24
Battery compartment size (length, width, height) 电瓶箱尺寸(长, 宽, 高)	mm	560x400x 330
Machine size (length, width, height) 机器尺寸(长, 高, 宽)	mm X/Y/Z	1690 / 1010 / 1170

Tab. A Data can be changed without notice.备注:

以上数据厂方具有修改权利,无须通知用户。

MACHINE SIZE – 机器尺寸



X-Y-Z: See table “TECHNICAL SPECIFICATIONS”

X-Y-Z: 请查阅.“技术参数”

中文

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2. 概述



在对机器¹进行任何操作之前，请先认真阅读本操作说明

2.1. 手册的内容

使用手册是由制造商起草写成的.被当作是整体机器的一个部分.他的内容是所生产的机器使用时所包含的所有具体要求。

在此手册中包含了使用者²必须掌握的基本信息。其他文件也有阐述的，他包含了保养³的特别技术信息。

按照手册来操作，可以确保操作人员和机器的安全。同时使机器运作消耗低，扫地效果佳和有更持久的工作时间。如果不遵循手册来操作就会伤害工作人员和机器，损坏工作地面，甚至那里的环境。

查看手册的前部分的目录，你就可以以最快的方式找到你要查找的主题。

以下章节是不可忽视的，请务必注意下面的粗体文字和图形的说明。

！ 危险

表示必须要注意小心操作，要了解清楚操作说明事项，否则会引起人员的受伤甚至会导致死亡。

👉 重要提示

表示必须要注意小心操作，要了解清楚操作说明事项，否则会引起一系列不良后果。如：损坏机器,损坏机器使用的场所，从而造成经济损失。

i 信息

需特别注意的操作

由于制造商会对产品进行必要的更新及改进，制造商有权在没有任何预先通知的情况下对机器进行更新。

机器可能会和说明书的图标略有不同，但在说明书上显示的信息及安全可以获得保证。

¹ 本操作说明书中"机器"的定义为实际产品的型号

² 对机器进行维护操作的授权人员必须具备精湛的技术知识.

³ 对机器进行安装, 使用及维护操作的人员, 必须具备相关经验, 做好技术准备, 熟知相关的法律规章, 并且能够识别及避免有可能发生的危险.

2.2. 机器的识别

机器的铭牌在座椅的下方，列出机器的具体信息：

- 型号；
- 动力源；
- 标称功率；
- 序列号；
- 制造年份；
- 重量；
- 爬坡能力；
- 制造商信息

2.3. 随机文档

- 用户手册；
- 质保卡；
- EC 认证。

3. 技术信息

3.1. 概述

本机器是适用于民用和工业的机械化扫地车。

本扫地车可以清扫工业加工过程中的残渣、灰尘、污垢。也适用于室内或室外的各种地面，包括平整的硬地板，如混凝土、沥青路、瓷砖地、金属板、大理石；有浮花或者平整的橡胶、塑料垫等

3.2. 图例

机器的主要部件如下 (图.A-B):

- 垃圾箱(图. B, 位置. 1): 装载由扫地机滚刷清扫的垃圾以及过滤器的灰尘。
- 控制台(图. C)
- 滚刷 (图. F-G): 是机器的主要部件，把垃圾和碎屑收集到垃圾箱里。根据不同的清扫地面，可选择不同硬度和材质的滚刷。
- 边刷 (图. A, 位置. 1): 把垃圾和碎屑扫到中间位置以便滚刷收集，特别适用于边界和角落位置的清扫。
- 过滤器(图. I): 聚酯材质过滤器，用于过滤控尘风扇吸进来的灰尘。
- 控尘风扇(图. B, 位置. 2): 控制清扫过程中的扬尘装置。
- 密封胶条(图. L-M-N-O): 用于密封滚刷区间，保证控尘效果

3.3. 危险区域

- **控制面板：** 短路的危险。
- **滚刷：** 由于滚刷的旋转存在的危险。
- **边刷：** 由于滚刷的旋转存在的危险。
- **电瓶箱：** 电瓶电极间短路的危险；发动机类型的扫地车，则存在停机后尚未完全冷却来进行维修时被烫伤的危险。
- **垃圾箱：** 垃圾箱升降过程中产生夹伤的危险

4. 安全信息

4.1. 安全守则



在启动和使用机器前，或者进行维护和操作前，请先认真阅读“用户手册”。

👉 重要提示

请严格遵守本操作手册中所有的使用说明(尤其是有关危险和警告部分)和机身上的所有安全提示标签。

制造商对违反操作说明而导致的人员和财产损失不负赔偿责任。

机器必须由受过培训的人员进行操作使用,此员工必须熟悉操作及经过认证。

未成年人严禁使用机器。

本机器不能用于超出设计范围的其他用途.在特殊环境（例如制药业，医院，化工业等）使用时，必须要严格遵守所在环境的安全标准及条例。

本机器不能在黑暗无光的地方，易引起爆炸的地方，存在对人体有害物质的场所及不合适的环境使用。

本机器使用时的环境温度是+4° C 至+35° C. 当机器处于闲置状态时，存放环境温度为+0° C 至+50° C

本机器适宜工作的湿度介于 30%至 95%

本机器不能用来吸收易燃易爆液体(如：汽油,燃油等等);易燃气体,干灰尘,酸性和溶解性物质(如：溶解性油漆,丙酮等).不能收集燃烧的热的物体。

机器严禁在倾斜的表面或者坡度高超过 16%的斜坡上工作.如果机器在坡度高度小的坡上工作,请不要横向使用.要特别小心并且不能往后退.当沿着斜坡行驶时,要特别注意防止机器翻倒，严禁突然加速。在斜坡上行驶时，必须将刷盘和吸水扒升起。

任何时候都禁止将机器停放在斜坡上

机器的电机没有停止运转时，操作人员严禁离开机器，离开机器前,先将马达开关关闭,断开电源，确保其不会突然移动。

不管在何处进行作业时,请注意在你工作现场出现的的人员及小孩。

严禁将机器用于运输用途及拖动其他物体。严禁拖动机器。

不要在机器上方存放任何物体。

不要将通风处和散热处堵塞

不要移动,修改或是遮盖安全装置。

经验表明，在工作期间整理个人物品等的行为会引起严重的事故发生。开始工作前,请先脱掉首饰，手表，领带等等。

工作人员必须穿着及佩戴防护衣物及护具—防护围裙/保护套，防滑防水鞋，橡皮手套，眼睛护罩和帽子,耳塞,面罩等。

不要将手伸入转动部件里。

禁止使用不符合规定的清洁剂。必须根据安全指引使用.我们建议不要让儿童接触清洁剂.如果不慎接触到眼睛，请立即用清水清洗。如果发生吸入，请立即联系医生。

请确保连接电瓶充电器电源的插座正确接地，及使用保护开关。

确保供电要求与跟机器铭牌所提供的电流/电压一致，如果机器型号是拖线式，请务必注意要正确接地。

必须根据电瓶制造商的指引及当地的法律使用电瓶，电瓶表面必须保持干净及干燥，以防止表面泄漏。电瓶必须远离金属粉尘。

不要遗留任何工具在电瓶上方，会容易引起电瓶短路及爆炸。

当使用酸性电瓶时，必须严格遵守安全指引。

机器在高磁场的地方工作，会容易导致电子控制系统失效。

严禁用水枪直接喷洗机器。

机器工作时候回收的污水、清洁剂等等，请根据当地法例处理。

如果机器操作时，发生任何故障失去控制，请立刻关闭机器（拔下主电源），然后立刻尽快联系厂方技术人员。

所有的机器维护操作必须在照明足够的地方进行，而且必须断开电瓶连接线。

所有电路部分及所有维护操作必须由经过认证的技术人员进行。

本机器只能使用原厂提供的附件及零配件，以确保机器的安全及运行。严禁使用从其他机器上卸下的零配件。

本机器的设计使用寿命为 10 年，使用期后，无论机器是否继续使用，必须根据当地的法规对机器进行报废处理：

- 机器必须断开所有电源，排出所有液体及清洁剂；
- 本产品属于WEEE 类型特殊废物，适用于新的环境保护条例。必须根据当地法律，与日常垃圾分隔，进行分类处理。 .



特殊废物. 须与日常垃圾分隔处理.

或者可以将机器送返制造商进行翻新处理。

如果机器不再使用，建议将废旧电瓶送到经过认证的处理中心进行处理。

你必须确保所有有害的部件安全处理，防止儿童接触。

5. 操控及安装

5.1. 机器（含包装）的运输及升降

重要提示

在进行升降操作时，必须确保机器安全固定，避免机器发生意外翻侧或者跌落。

使用叉车运输机器时，必须保证在光线充足的环境下进行。

机器出厂时由制造商固定好在木底板上，必须使用适当的设备（参阅 EC Directive 2006/42 指引及附加文件）装载到运输车辆上。到达目的地后，必须使用同样符合指引的机器装卸。

使用叉车搬运机器时，必须连同包装一起操作。操作过程中，要小心避免机器碰撞和翻侧。

5.2. 运输过程的检查

接收机器时，请检查运输途中机器和包装有否损坏。如果发现机器或者包装发生任何损坏，请告知运输者，填写索赔申请申请赔偿。

5.3. 包装拆卸

重要提示

机器拆包时，操作人员必须配备必要的工具（手套、护目镜等），以最大限度预防意外事故的发生。

请跟随以下步骤取出机器：

- 使用剪刀及钳子剪开塑料胶带
- 拆开纸箱
- 根据不同的机器型号，卸下木底板上用于固定机器的金属支架
- 使用一个斜坡板，将机器向后从木底板推出
- 拆开刷子的包装
- 根据安全守则清洁机器的表面
- 取出机器后，可以进行电瓶的安装

如果可能，请保管好拆下来的包装材料，以便机器需要再次运输或需要送到维护中心检修时保护机器。

否则，请根据当地法律去处理包装物。

！ 危险

必须严格遵守以上指引，否则可能引致意外的伤害及危险，而且会导致失去机器保修的权利。

5.4. 电瓶

本机器可能会配置两种电瓶：

- **加水电瓶：** 该类型电瓶需要定期维护，检查电解液的水位，如果电解液不足，请使用蒸馏水添加到足够的水平（浸过极板 5mm）。
- **AGM / 胶体电瓶：** 该类型电瓶属于免维护类型。

电瓶的参数必须符合机器技术规格中的范围，如果使用过重的电瓶，会导致机器转弯时发生危险，及导致电机过热。如果配置容量过小的电瓶，会使机器充电的频率增加。

电瓶必须经常保持充电，保持表面干燥及清洁，连接线必须确保连接完好。

5.4.1. 电瓶：预备事项

！ 危险

在安装或者进行任何维护电瓶的期间，操作人员必须准备必要的装备(例如：手套、护目镜、防护衣.....等)；为了防止事故的风险，请保持远离火焰，预防短接电瓶的电极，预防产生火花和严禁吸烟。

正常情况下，随机提供的电瓶是加好了酸的，随时可以使用的；如果提供的电瓶是没有加水的电瓶（没有加酸），安装电瓶到机器前，必须按照以下步骤进行：

- 打开电瓶小盖，给每个电瓶单元加入酸性电解液（密度在 1.27 至 1.29 千克之间 25°C），务必确定金属板完全被溶液浸没；
- 闲置 4-5 小时，使酸性电解液与电极板充分反应；
- 检查溶液的水平线是否仍然在金属板之上；如果不是，把溶液加满到水平线；
- 盖好电瓶盖；
- 将电瓶安装好在机器上（根据下面的指引）。

在首次使用机器前，请先根据以下步骤对电瓶进行充电。

5.4.2. 电瓶： 安装及连接

！ 危险

检查控制面板上所有的开关处于 "0" (OFF) 位置。

请确保电瓶线连接标线标有 "+" 终端连接到电瓶的正极上，在有火花的环境下严禁检查电瓶。

请小心根据以下步骤进行操作，电瓶短路会导致发生爆炸。

- 向前翻开座椅并固定好，确保有足够空间接触电瓶箱
- 将电瓶放置在电瓶箱中。

👉 重要提示

请确保安装电瓶的重量必须适合你的机器使用。正极和负极的接头的直径是不同的。

- 将电瓶连接线根据接线图 (图. K), 拧紧螺母并涂上凡士林。
- 将座椅复位到工作位置
- 请根据以下指引，使用机器。

5.4.3. 电瓶： 卸装

卸装电瓶的期间，操作人员必须准备必要的装备(例如：手套、护目镜、防护衣.....等)；为了防止事故的风险，请保持远离火焰，预防短接电瓶的电极，预防产生火花和严禁吸烟。检查控制面板上所有的开关处于 "0" (OFF) 位置。

- 断开并卸除电瓶电极的电源线。
- 如有需要，拆除固定电瓶的安装带。
- 使用适当的设备，从机器上取出电瓶。

5.4.4. 电瓶充电器

👉 重要提示

禁止将电瓶过度放电，这样会导致电瓶永久损坏。

5.4.5. 电瓶充电器的选择

请确保电瓶充电器与所安装的电瓶相匹配：

- 加水电瓶： 建议使用自动充电器
- AGM / 胶体电瓶： 建议使用专用的充电器。

- 根据充电器制造商及手册去选择合适的充电器。

5.4.6. 充电器的准备

如果你使用的充电器不是随机提供的，你必须使用随机提供的连接头去安装在充电器上。请根据以下步骤安装连接头：

- 从充电器的电瓶连接线（红线和黑线）分别去掉大约 13 mm 的保护层；
- 将电线插入到连接器的接线柱中，然后用钳子夹紧；
- 将接线柱按照极性(红线 + 黑线 -) 安装到连接头。
- 将充电器连接头连接到机器充电连接端 (图. A, 位置. 5)。

5.5. 机器的运输及升降

👉 重要提示

所有的操作必须在光线充足的环境下进行，而且必须依照所有的安全指引。
操作员必须穿戴安全保护衣物。

要将机器包装后运输，请根据以下步骤进行：

- 清空垃圾箱；
- 将机器放置在木底板上，用金属支架及包装带固定；
- 使用叉车将木底板（含机器）装载到运输工具上；
- 使用安全带将机器及木底板固定好在运输工具上。

6. 使用者操作指引

6.1. 操控 – 描述

有关机器的操控及指示灯，请参阅 图. C：

- **主开关** (图. C, 位置. 1): 机器所有电源及功能的开关。
- **显示屏** (图. C, 位置. 6): 显示机器的运行状态及报警信息。机器正常运行期间，会显示机器的电瓶电压及机器的累计工作时间。
- **紧急按钮** (图. C, 位置. 3): 安全装置。
- **速度调节器** (图. C, 位置. 6): 调节机器前后行走的最高速度
- **机器行走方向换挡开关** (图. C, 位置. 5): 设定机器前进/后退行走方向
- **喇叭按钮** (图. C, 位置. 8): 发出警示声音
- **吸尘风扇开关** (图. D, 位置. 2): 启动/关闭吸尘风扇
- **振尘电机开关** (图. D, 位置. 2): 启动/关闭振尘电机。
- **计时器** (图. C, 位置. 4): 记录机器累计工作时间
- **主刷开关/压力调节杆** (图. D, 位置. 1): 启动/关闭主刷，并且可以调节主刷对地压力。
- **边刷控制杆**(图. P, 位置. 1): 用于控制边刷的升降（启动/关闭）。
- **边刷速度调节旋钮** (图. C, 位置. 7): 用于设定边刷转速(逆时针方向抓动，减低速度)
- **加速踏板**(图. A, 位置. 3): 控制机器移动，踩下踏板，机器开始移动。
- **制动/驻车制动踏板**(图. B, 位置. 3): 激活机器的制动系统，停止机器移动
- **前挡板胶条开关踏板** (图. H, 位置. 1): 打开滚刷前端的挡板，用于收集大块的固体垃圾和碎片。
- **工作照明灯开关**(图. C, 位置. 8): 启动/关闭机器前部的工作照明灯

6.2. 工作前准备

重要提示

机器开始工作前，请根据工作环境穿戴防护衣、帽、防滑靴等等，同时根据清洁剂供应商的建议佩戴面罩保护呼吸系统

工作前请根据以下步骤检查机器：

- 电瓶式机器：检查电瓶电量，如果电量不足，请先充电；
- 请确保垃圾箱清空，如果没有清空，请先把垃圾箱清空。
- 安装好边刷(参阅第 8 章)。

i 信息

如果操作人员是第一次使用机器，请在较宽阔的空间进行培训使用机器。

6.3. 机器的工作

机器的启动：

- 根据下面的描述对机器进行准备。
- 将钥匙开关 (图. C, 位置. 1) 拧到 "ON" 位置，同时脚不要踩到加速脚踏板 (图. A, 位置. 3)，通过显示屏 (图. C, 位置. 2)检查电瓶的电量。如果电量不足，将钥匙开关拧回 "OFF" 位置，对电瓶进行充电 (参阅第 8 章)。
- 使用机器行走方向换挡开关 (图. C, 位置. 5)选择行走方向。
- 用手转动方向盘及踩下加速脚踏板 (图. A, 位置. 3)，机器开始移动，机器的移动速度可以使用速度调节器(图. C, 位置. 7)设定。
- 确保垃圾箱关闭完好。

i 信息

在开启垃圾箱前，请务必关闭吸风和关刷功能。

- 将主刷开关杆推到"START"位置(图. D, 位置. 1)，主刷下降到地面，并且根据不同的地面及垃圾类型，用主刷开关/调节杆将压力调节到合适位置，本机主刷采用自动压力调节控制。
- 将吸尘风扇开关拨到到(图. D, 位置. 2) "Suction On" 位置
- 将边刷控制杆转动到 "ON" 位置 (图. O)
- 使用边刷主刷调节旋钮(图. C, 位置 ref. 3) 调节合适的边刷转速
- 开始工作,用手控制方向盘，使用机器行走方向换挡开关 (图. C, 位置. 5)选择行走方向，然后踩下加速脚踏板(图. A, 位置. 3)驱动机器。
- 机器的行走速度可以使用速度调节按钮 (图. C, 位置. 6) 设定。

重要提示

为了防止发生地面磨损，要避免机器在原地使用刷子。

重要提示

每工作 30 分钟，请启动震尘马达(图.D, 位置 2)30 秒以震落附在尘隔上的灰尘。在震尘过程中，吸尘马达会自动停止。

重要提示

请不要清扫有积水的地面，如果机器在湿地面工作，请关闭机器的吸尘风扇，以免潮湿和水分影响过滤器效能。

i 信息

为了获得良好的清扫效果，请经常将垃圾箱内垃圾倾倒在干净，并使用特殊设备清洁过滤器。

清空垃圾箱:

👉 重要提示

每次清空垃圾箱时，请戴上口罩以保护呼吸道系统。

i INFORMATION

在进行清空垃圾箱前，请先使用振尘电机 **30 秒**，对过滤器进行清洁。

清空垃圾箱之前，请确保已停止机器的所有功能。

- 将机器移动到垃圾桶旁。
- 通过锁扣 (图. B, 位置. 4) 松开垃圾箱
- 将垃圾箱拖出并将垃圾倾倒在干净。
- 将垃圾箱装回并使用锁扣(图. B, 位置. 4)重新将垃圾箱固定。

前挡板胶条-大块垃圾收集门

- 当遇到大块的固体垃圾，可以踩下前挡板胶条控制踏板(图. H,位置. 1)将收集门打开，以便清扫大块的垃圾，但收集门打开时间应该尽可能短，因为打开收集门会影响清扫效果。

机器的停止:

- 将机器驶入停车区
- 松开加速踏板 (图. A, 位置. 3)，并踩下制动踏板(图. B,位置,3)停止机器移动。
- 将边刷控制杆转到"OFF"位置(图. P).
- 将主刷控制杆拉到 "STOP" 位置(图. D, 位置. 1)
- 将吸尘风扇开关(图. D, 位置. 2) 按到空档位置。
- 将机器总开关 (图. C, 位置. 1) 转到 "OFF" 位置。

7. 机器长时间停止运行

- 如果机器长时间不再使用，必须断开电瓶的连接，每 30 至 40 天为电瓶充电一次以保持电瓶的电量。如果电池液过低，请添加蒸馏水。
- 清空垃圾箱。
- 清洁扫地车（参阅第 8 章）。
- 清洁过滤器。

👉 重要提示

如果不对电瓶进行周期性充电，电瓶将有可能永久损坏。

8. 机器维护指导

！ 危险

在进行任何维护前，请务必断开机器主电源。

所有有关电器部分的保养维护，必须由经过认证及培训的专业人员进行，并必须遵守安全规则及说明书的指引。

8.1. 维护 – 概述

依照制造商的指引进行常规维护有利于机器获得最佳的使用性能及延长机器寿命
每次清洁机器请跟随以下步骤：

- 不要使用喷水装置，喷水装置会容易让水进入到电路板及电机，引致发生短路或机器损坏；
- 不要使用蒸汽清洗机器，会导致塑料产生变形；
- 不要使用熔剂及碳氢化合物，会导致橡胶部分损坏。

8.2. 更换主刷

！ 危险

在进行操作前请务必关闭机器电源并将启动钥匙拔出。

请跟随以下步骤：

- 卸下把手，将边门打开 (图. E).
- 将主刷区的三个把手卸下 (图. F).
- 将主刷固定板卸下 (图. F).
- 取出主刷 (图. F).
- 将主刷扣卸下并安装到新的主刷上，并确保刷毛方向与原来一致(图. G).
- 按以上步骤反向执行，重新安装主刷

8.3. 更换/安装边刷

！ 危险

在进行操作前请务必关闭机器电源并将启动钥匙拔出。

为方便运输，机器运输时边刷没有安装在工作位置上。

请跟随以下步骤安装边刷到正确的位置：

- 从电机轴上卸下边刷的固定螺丝 (图. H).
- 撕下电机轴上的保护胶带，将固定插销安装到电机轴
- 将边刷安装到电机轴上(图. H).
- 使用固定螺丝把边刷安装固定到电机轴上 (图. H).

如需更换边刷，重复以上步骤。

8.4. 更换/安装过滤器.

！ 危险

在进行操作前请务必关闭机器电源并将启动钥匙拔出。

每 50 个工作小时，必须对过滤器进行检查：

- 松开锁扣 (图. B, 位置. 5)，取出顶盖(图. B, 位置. 2).
- 卸下四个螺丝(图. I).
- 断开吸尘电机的连接头(图. I).

- 将过滤器从支架上取出(图. I).
 - 使用吸尘器清洁过滤器或者更换新的过滤器 (图. J).
 - 按以上步骤反向执行，重新安装过滤器
- 将顶盖 (图. B, 位置. 2)重新安装，并使用锁扣 (图. B, 位置. 5)重新锁住

8.5. 断路保护器 – 重置

👉 重要提示

在进行操作前请务必关闭机器电源并将启动钥匙拔出。

断路保护器(图 .Q – 图. C,位置 10-11) 是一个保护电器过载并且能重置的装置，当断路保护器断开线路时，请让断路保护器冷却并重新按下按钮，手动重置断路保护器。

如果过载仍然存在，断路保护器会持续断开，直到过载消失为止。

以下表格显示断路保护器的参数以及对应保护的电器。

断路器	额定值	保护设备
A1	10A	左边刷电机
A2	10A	右边刷电机
A3	35A	主刷电机
A4	15A	吸尘风机
A5	10A	振尘电机

保险管对照表: 要获知详细的保险管参数，请查阅零配件手册。

👉 重要提示

严禁使用安培值不符的保险丝

如果保险丝持续烧毁，表示电机或者线路板可能出现故障，请联系符合资格的技术人员检查机器。

8.6. 更换防尘密封胶条

! 危险

在进行操作前请务必关闭机器电源并将启动钥匙拔出。

请每隔 50 个工作小时或者有必要时，检查挡板的密封情况，请跟随如下步骤：

8.6.1. 边胶条

- 打开侧面保护罩 (图. L – 图. M).
- 使用螺丝刀卸下固定螺丝 (图. L – 图. M).
- 更换磨损的胶条 (图 fig. L - fig. M).

按以上步骤反向执行，重新安装胶条。

8.6.2. 后胶条

- 卸下垃圾箱.
- 使用螺丝刀卸下固定胶条的螺丝 (图. O).
- 卸下后胶条 (图. O).
- 更换磨损的胶条 (图. O).

按以上步骤反向执行，重新安装胶条。

8.6.3. 前挡板胶条

- 卸下两个边刷(图. H).
- 使用螺丝刀卸下固定胶条的螺丝 (图. N).
- 移开压片，卸下胶条。

- 更换磨损的胶条 (图. N).
- 按以上步骤反向执行, 重新安装胶条。

8.7. 电瓶

! 危险

在安装或者维护任何类型的电瓶的期间, 操作人员必须准备必要的装备(例如: 手套、护目镜、防护衣.....等); 为了防止事故的风险, 请保持远离火焰, 不要短接电瓶的电极, 不要产生火花和不要吸烟, 请在通风的环境进行充电操作。

8.7.1. 使用内置式充电器进行充电

- 提起座椅(图. A, 位置. 4)将充电器电源线连接到电源插座。

8.7.2. 使用外置式充电器进行充电

- 翻开座椅(图. A, 位置. 4)并将座椅固定
- 充电器插头连接到机器充电插座, 提起座椅 (图. B, 位置. 8) 将充电连接线连接到红色的连接座上 (图. A, 位置. 5).
- 将充电器电源线连接到供电电源插座。

👉 重要提示

如果使用胶体电瓶, 请使用专用充电器。

- 根据充电器手册进行充电操作;

9. 故障速查及错误代码

9.1. 显示屏代码对照表

显示值	含义
GADLEE GREEN GT1250 版本:1.00	控制面板软件号
电压: XX.X V 累计时间: XXXX.XX 小时	机器工作状态指示
主刷电机故障	主刷电机故障, 请联系技术人员
行走电机故障	行走电机故障, 请联系技术人员
吸尘电机故障	吸尘电机故障, 请联系技术人员
震尘电机故障	震尘电机故障, 请联系技术人员
边刷电机故障	边刷电机故障, 请联系技术人员
请解除驻车锁定	驻车制动生效
请清理尘袋	尘袋堵塞, 需清洁
电瓶电量低 请进行充电	电量低, 请马上充电
电瓶保护状态 所有功能停止	电量耗尽, 机器所有功能锁定

9.2. 驱动卡报警代码

驱动器的作用是控制行走电机，垂直安装在机器的前部。如果驱动发生中断，错误码会显示在 LED 显示灯上，如果机器工作正常，LED 显示灯会保持亮起。如果检测到故障发生，LED 指示灯会提供两种信息，慢速闪烁 (2 Hz) 或者快速闪烁 (4 Hz)，显示机器的具体故障信息。

慢速闪烁的信号在故障排除后，会自动取消。快速闪烁的信号(在表中以"*" 表示)表示机器的故障较为严重，故障修复后，必须关闭钥匙开关重新启动机器

故障信号提示会在 10 秒后提示，LED 信号灯会分两段闪烁，直到故障修复。

例： 错误代码 "1,3" 信号灯号显示如下：☼☼☼☼ 显示错误代码 1,3

LED 信号		描述
	1, 1	☼ ☼
	1, 2	☼ ☼☼
	1, 3	☼ ☼☼☼
	1, 4	☼ ☼☼☼☼
	1, 5	☼ ☼☼☼☼☼
	2, 1	☼☼ ☼
	2, 3	☼☼ ☼☼☼
*	3, 1	☼☼☼☼ ☼
	3, 2	☼☼☼☼ ☼☼
	3, 3	☼☼☼☼ ☼☼☼☼
	3, 4	☼☼☼☼ ☼☼☼☼☼
	3, 5	☼☼☼☼ ☼☼☼☼☼☼
*	4, 1	☼☼☼☼☼☼ ☼
*	4, 2	☼☼☼☼☼☼ ☼☼
*	4, 3	☼☼☼☼☼☼ ☼☼☼☼
*	4, 4	☼☼☼☼☼☼ ☼☼☼☼☼☼

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2. GENERAL INFORMATION



Read this manual carefully before carrying out any work on the machine¹.

2.1. Scope of the manual

This manual has been written by the Manufacturer and is an integral part of the machine. It defines the purpose for which the machine has been designed and constructed and contains all the information required by operators.

In addition to this manual containing all user information, other publications are available providing specific information for maintenance personnel.

Constant respect for the instructions guarantees the safety of the operator and the machine, low running costs and high quality results and extends the working life of the machine. Failure to respect the instructions may lead to damage to the operator, machine, floor being washed and environment.

To find the topic that interests you more rapidly, consult the list of contents at the beginning of the manual.

Parts of the text requiring special attention are highlighted in bold and preceded by the symbols illustrated and described here.

! DANGER

Indicates the need for attention in order to avoid a series of consequences which could cause death or damage to the health of the operator.

👉 IMPORTANT

Indicates the need for attention in order to avoid a series of consequences which could cause damage to the machine or work environment or financial loss.

i INFORMATION

Particularly important instructions.

In line with the company's policy of constant product development and updating, the Manufacturer reserves the right to make modifications without warning.

Although your machine may differ appreciably from the illustrations in this document, safety and the information contained in this manual are guaranteed.

¹ The definition "machine" substitutes the commercial name to which this manual refers.

² People authorised to use the machine without carrying out maintenance operations that require precise technical knowledge.

³ People having the experience, technical preparation and knowledge of the regulations and laws necessary to carry out the activity and capable to recognize and avoid possible dangers when handling, installing, using the machine and carrying out maintenance operations.

2.2. Identifying the machine

The rating plate under the seat provides the following information:

- Model;
- Power supply;
- Total nominal power;
- Serial number;
- Year of fabrication;
- Weight fully loaded;
- Maximum slope;
- Barcode with serial number;
- Manufacturer's identification.

2.3. Documentation provided with the machine

- User manual;
- Guarantee certificate;
- EC certificate of conformity.

3. TECHNICAL INFORMATION

3.1. General description

This machine is a motorised sweeper designed to sweep floors in civil and industrial premises.

The motorised sweeper may be used to clean the residues from industrial processes, dust and dirt in general on all relatively even flat hard surfaces such as concrete, asphalt, porcelain stoneware, ceramic tiles, sheet metal, marble, embossed or smooth rubber or plastic mats indoors or outdoors.

3.2. Legend

The main parts of the machine are as follows (fig.A-B):

- Debris bin (fig. B, ref. 1), contains the material picked up by the centre brush and the dust from the filter.
- Control panel (fig. C).
- Centre brush (fig. F-G), the principal organ of the machine, transfers the dust and debris to the bin. Available with bristles of different hardnesses and materials according to the type of debris to be picked up.
- Side brushes (fig. A, ref. 1), convey the dust and debris, used exclusively to clean edges, corners and profiles.
- Suction filter (fig. I), consists of a polyester bag filter which filters the air drawn in by the suction fan.
- Suction fan, enables the machine to sweep without raising dust (fig. B, ref. 2).
- Flaps (fig. L-M-N-O), surround the centre brush and guarantee the suction effect.

3.3. Danger zones

- **Control panel:** danger of short circuit.
- **Centre brush:** danger due to brush rotation.
- **Side brushes:** danger due to brush rotation.
- **Motor/battery compartment:** danger of short circuit between the battery poles, risk of serious burns when performing any maintenance with the engine off but not completely cold (PETROL and DIESEL version)
- **Battery compartment:** danger of short circuit between the battery poles and presence of hydrogen during charging.
- **Debris bin:** during bin raising/lowering, danger of crushing.

4. SAFETY INFORMATION

4.1. Safety regulations



Read the "User manual" carefully before start-up and use, or before performing maintenance or any other work on the machine.

IMPORTANT

Rigorously respect all instructions in the Manual (in particular those relating to danger and important information) and on the safety plates fitted to the machine. The Manufacturer declines all liability for damage to people or things resulting from failure to observe the instructions.

The appliance must be used exclusively by persons trained in its use and/or who have demonstrated their ability and have been expressly instructed to use the appliance.

The machine must not be used by minors.

The machine must not be used for purposes other than those for which it was expressly designed. Scrupulously respect all safety standards and conditions applicable to the type of building in which the machine is to be operated (eg: pharmaceutical companies, hospitals, chemicals, etc).

Do not use the machine in places with inadequate lighting or explosive atmospheres, on public roads, in the presence of dirt hazardous to health (dust, gas, etc) and in unsuitable environments.

The machine is designed for use at temperatures of between +4°C and +35°C. When the machine is not being used, the temperature range is +0°C and +50°C.

The machine is designed to work in a humidity between 30% and 95%.

Never use or pick up flammable liquids or explosives (eg. petrol, fuel oil, etc), flammable gases, dry dusts, acids and solvents (eg. paint solvents, acetone etc) even if diluted. Never pick up flaming or incandescent objects.

Never use the machine on slopes or ramps of more than 16%. In the case of slight slopes, do not use the machine transversally, always manoeuvre with care and do not reverse. When transporting the machine on steeper ramps or slopes, take the utmost care to avoid tipping up and/or uncontrolled acceleration. Move the machine on ramps and/or steps only with the brush head and squeegee raised.

Never park the machine on a slope.

The machine must never be left unattended with the motors on. Before leaving it, turn the engine or motors off, make sure it cannot move accidentally and disconnect the electrical power supply.

Always pay attention to other people, children in particular, present in the place where you are working.

Never use the machine to transport people or things or to tow things. Do not tow the machine.

Never rest objects of any weight on the machine for any reason.

Never obstruct ventilation and heat dispersion slits.

Never remove, modify or circumvent safety devices.

Numerous unpleasant experiences have shown that a wide range of personal objects may cause serious accidents. Before beginning work, remove jewellery, watches, ties, etc.

The operator must always use personal protection devices - protective apron or overalls, non-slip waterproof shoes, rubber gloves, protective goggles and ear protectors and mask to protect the respiratory tract.

Keep the hands away from moving parts.

Never use detergents other than those specified. Follow the instructions on the relative safety sheet. We recommend keeping detergents out of reach of children. In the event of

contact with the eyes, wash immediately with abundant water. If ingested, consult a doctor immediately.

Make sure the power sockets used for the battery charger are connected to a suitable earth system and protected by differential thermal solenoid switches.

Make sure the electrical characteristics of the machine (voltage, frequency, absorbed power) given on the rating plate are the same as those of the mains electricity supply. The machine with cable has a three-wire cable and a three pin earthed plug for use in an appropriate earthed socket. The earth wire is yellow and green. Never connect this wire to anything other than the earth contact of the socket.

It is indispensable to respect the battery manufacturer's instructions and current legislation. The batteries should always be kept clean and dry to avoid surface leakage current. Protect the batteries from impurities such as metal dust.

Never rest tools on the batteries as this could cause short circuit and explosion.

When using battery acid, always follow the relative safety instructions scrupulously.

In the presence of particularly strong magnetic fields, assess the possible effect on the control electronics.

Never wash the machine with water jets.

The fluids collected contain detergent, disinfectant, water and organic and inorganic material. They must be disposed off in accordance with current legislation.

In the case of malfunction and/or faulty operation, turn the machine off immediately, disconnect from the mains power supply or batteries and do not tamper. Contact a service centre authorised by the Manufacturer.

All maintenance operations must be performed in an adequately lit place and only after isolating the machine from the power supply by disconnecting the battery terminals.

All work on the electrical system and all maintenance and repair operations other than those explicitly described in this manual must be performed by specialised personnel expert in the sector only.

Only original accessories and spare parts supplied by the Manufacturer may be used in order to guarantee safe problem-free operation of the machine. Never use parts removed from other machines or from other kits.

This machine has been designed and constructed to provide ten years' service from the fabrication date shown on the rating plate. After this time, whether the machine has been used or not, it should be disposed of according to current legislation in the country in which it is used:

- the machine must be disconnected from the power supply, emptied of liquids and cleaned;
- the product is classified as WEEE type special waste and is covered by the requisites of the new environmental protection regulations (2002/96/EC WEEE). It must be disposed of separately from ordinary waste in compliance with current legislation and standards.



Special waste. Do not dispose with ordinary waste.

Alternatively the machine must be returned to the Manufacturer for a complete overhaul.

If you decide to stop using the machine, you are recommended to remove the batteries and dispose them at an authorised collection centre.

You should also make sure that all parts of the appliance which could represent a hazard, particularly to children, are made safe.

5. HANDLING AND INSTALLATION

5.1. Lifting and transporting the packaged machine

IMPORTANT

During all lifting operations, make sure the packaged machine is firmly anchored to avoid it tipping up or being accidentally dropped.

Always load/unload lorries in adequately lit areas.

The machine, packaged on a wooden pallet by the Manufacturer, must be loaded using suitable equipment (see EC Directive 2006/42 and subsequent amendments and/or additions) onto the transporting vehicle. At destination, it must be unloaded using similar means.

A fork lift truck must always be used to lift the packaged body of the machine. Handle with care to avoid knocking or overturning the machine.

5.2. Checks on delivery

When the carrier delivers the machine, make sure the packaging and machine are both whole and undamaged. If the machine is damaged, make the carrier is aware of the damage and before accepting the goods, reserve the right (in writing) to request compensation for the damage.

5.3. Unpacking

IMPORTANT

When unpacking the machine, the operator must be provided with the necessary personal protection devices (gloves, goggles, etc) to limit the risk of accident.

Unpack the machine as follows:

- Cut and remove the plastic straps using scissors or nippers;
- Remove the cardboard;
- Depending on the model, remove the metal brackets or cut the plastic straps fixing the machine chassis to the pallet;
- Using a sloping ramp, push the machine backwards off the pallet;
- Unpack the brushes;
- Clean the outside of the machine in respect of safety regulations;
- Once the machine is clear of the packaging, the batteries can be installed.

The packaging may be kept as it can be reused to protect the machine if it is moved to another site or to a repair workshop.

Otherwise it must be disposed off in compliance with current legislation.

! DANGER

Failure to observe these instructions could cause possibly serious damage to people and things and invalidates the guarantee.

5.4. Batteries

Two different types of battery may be installed on these machines:

- **Wet batteries:** the electrolyte level must be checked regularly. When necessary, top up with distilled water until the plates are covered. Do not over fill (5 mm max. Above the plates).
- **Gel batteries:** this type of battery requires no maintenance.

The technical characteristics must correspond to those indicated in the paragraph on the technical specification of the machine. The use of heavier batteries could seriously

jeopardise manoeuvrability and lead to the brush motor overheating. Batteries with a lower capacity and weight will require recharging more frequently. They must be kept charged, dry and clean and the connections must be tight.

5.4.1. Batteries: preparation

! DANGER

During installation of the batteries or any type of battery maintenance, the operator must be provided with the necessary personal protection devices (gloves, goggles overalls, etc) to limit the risk of accident. Keep away from naked flames, avoid short circuiting the battery poles, avoid sparks and do not smoke.

The batteries are normally supplied filled with acid and ready for use.

If the batteries are dry, before mounting them on the machine, proceed as follows:

- Remove the caps and fill all elements with specific sulphuric acid solution until the plates are entirely covered (this requires at least a couple of passes for each element);
- Leave for 4-5 hours to allow the air bubbles to come to the surface and the plates to absorb the electrolyte;
- Make sure the level of electrolyte is still above the plates and if necessary top up with sulphuric acid solution;
- Close the caps;
- Mount the batteries on the machine (following the procedure described below).

Before starting up the machine for the first time, charge the batteries as follows.

5.4.2. Batteries: installation and connection

! DANGER

Check that all switches on the control panel are in the "0" (off) position.

Make sure you connect the terminals marked with a "+" to the positive poles of the battery. Do not check the battery charge by sparking.

Meticulously follow the instructions given below as short circuiting the batteries could cause them to explode.

- Lift the seat cowling and KEEPING HOLD OF IT move it forwards to access the battery compartment from the top.
- Place the batteries in the battery compartment.

IMPORTANT

Mount the batteries on the machine using means suitable for their weight.

The positive and negative poles have different diameters.

- Referring to the arrangement of cables shown in the diagram (fig. K), connect the battery cable and bridge terminals to the battery poles.
Arrange the cables as shown in the diagram (fig. K), tighten the terminals on the poles and cover with Vaseline.
- Lower the cowling into the working position
- Use the machine according to the instructions below.

5.4.3. Batteries: removal

When removing the batteries, the operator must be equipped with suitable personal protection devices (gloves, goggles, overalls, safety shoes, etc) to reduce the risk of accidents. Make sure the switches on the control panel are in the "0" position (off) and the machine is turned off. Keep away from naked flames, do not short circuit the battery poles, do not cause sparks and do not smoke. Proceed as follows.

- Disconnect the battery wiring and bridge terminals from the battery poles.
- If necessary, remove the devices fixing the battery to the base of the machine.

- Lift the batteries from the compartment using suitable lifting equipment.

5.4.4. The battery charger

Never allow the batteries to become excessively flat as this could damage them irreparably.

5.4.5. Choosing the battery charger

Make sure the battery charge is compatible with the batteries to be charged:

- **Wet batteries:** An Automatic Charger Is Recommended
- **Gel batteries:** use a charger specific for this type of battery.

Consult the battery charger manufacturer and manual to confirm the choice.

5.4.6. Preparing the battery charger

If you wish to use a battery charger not provided with the machine, you must fit it with the connector supplied with the machine.

To install the connector, proceed as follows:

- Remove about 13 mm of protective sheath from the red and black wires of the battery charger;
- Insert the wires into the connector contacts and squeeze them forcefully with suitable pliers;
- Respect the polarity (red wire + black wire -) when inserting the wires into the connector.
- Insert the wired-up connector into the connector(fig. A, ref 5) on the machine.

5.5. Lifting and transporting the machine

IMPORTANT

All phases must be performed in an adequately lit room and adopting the safety measures most appropriate to the situation.

The operator must always use personal protection devices.

To load the machine onto a means of transport, proceed as follows:

- Empty the debris bin;
- Place the machine on the pallet and fix it with plastic straps or metal brackets;
- Lift the pallet (with the machine) using a fork lift truck and load it onto the means of transport;
- Anchor the machine to the means of transport with cables connected to the pallet and machine itself.

6. PRACTICAL GUIDE FOR THE OPERATOR

6.1. Controls - Description

With reference to fig. C, the machine has the follow controls and indicator lights:

- **On/OFF Switch** (fig. C, ref. 1): enables And Disables The Electrical Power Supply To All Machine Functions.
- **Display LCD** (fig. C, ref. 2): displays alarms, menus and function status. during normal operation, the hour counter (giving the actual number of hours the machine has been operating) and battery voltage are displayed.
- **Emergency button** (fig. C, ref. 3): acts as a safety device. to stop the machine press the button.
- **Speed potentiometer** (fig. C, ref. 6): regulates the speed of the machine forwards and backwards
- **Direction selector** (fig. C, ref. 5): move this selector to set movement of the machine to forwards or reverse
- **Horn button** (fig. C, ref. 9): acoustic warning.
- **Suction fan switch** (fig. D, ref. 2): enables/disables the suction function
- **Filter shaker button** (fig. D, ref. 2): enables the filter shaker.
- **Timer (fig. C, ref. 4)**: records the working hours of the machine
- **Main brush on/off and pressure regulation lever** (fig. D, ref. 1): enables/disables operation of the main brush and regulates the pressure of the brush on the floor.
- **Side brush lever** (fig. P, ref. 1): this lever raised and lower (enables/disable) operation of the side brushes.
- **Side brushes speed knob** (fig. C, ref. 7): this knob sets the rotation speed of the side brushes (turn counter clockwise to reduce the speed)
- **Accelerator pedal** (fig. A, ref. 3): pivoting device, press forwards to move the machine forwards.
- **Service brake/parking brake pedal** (fig. B, ref. 3): acts mechanically on the two brake drums on the back wheels.
- **Front flap pedal** (fig. H, ref. 1): raises the front flap to collect bulky debris.
- **Working light switch** (fig. C, ref. 8): enables/disables the front working light.

6.2. Preparing the machine for work

IMPORTANT

Before starting work, wear overalls, ear protectors, non-slip waterproof shoes, mask to protect the respiratory tract, gloves and all other personal protection devices recommended by the supplier of the detergent used or necessitated by the work environment.

Before starting work, proceed as follows:

- Check the battery level (recharge if necessary);
- Make sure the debris bin is empty. If necessary, empty it;
- Mount the side brushes (see MAINTENANCE chapter).

i INFORMATION

If you are using the machine for the first time, we recommend trying it on a large obstacle-free surface first to acquire the necessary familiarity.

6.3. Working

Starting up/use:

i INFORMATION

The seat (fig. A, ref. 4) has two safety sensors which allow the machine to move only when the operator is seated.

- Prepare the machine as described above.
- Turn the key switch (fig. C, ref. 1) into the "ON" position without pressing the drive pedal (fig. A, ref. 3), check the battery charge as shown by the Display LCD (fig. C, ref. 2). If the battery level is low, turn the key switch back to the "OFF" position and recharge the batteries (see chapter 8).
- Use the direction selector (fig. C, ref. 5) to set the direction of movement;
- Take the machine to the work area by starting it up with your hands on the steering wheel and pressing the pedal (fig. A, ref. 3) on the front to move. The speed can be adjusted from zero to maximum by adjusting the pressure exerted on the pedal and speed potentiometer (fig. B, ref. 6).
- Make sure the debris bin is perfectly closed.

IMPORTANT

Opening of the debris bin disables operation of the suction fan and centre brush.

- Push the main brush lever to "START" position (fig. D, ref. 1) to lower the main brush on the floor and adjust the pressure of the centre brush according to the type of floor and dirt to be picked up. The brush is self-levelling
- Press the suction switch (fig. D, ref. 2) to "Suction On" position
- Turn the side brush lever to "ON" position (fig. P)
- Use the knob to adjust the speed of the side brush (fig. C, ref. 7)
- Start cleaning, select forward or backward by direction selector (fig. C, ref. 5), manoeuvring with your hands on the steering wheel and the moving the machine for by pressing the pedal (fig. A, ref. 3).
- The working speed can be set using the maximum speed regulator (fig. C, ref. 6).

IMPORTANT

To avoid damaging the surface of the floor to be treated, avoid rotating the brushes/pads with the machine stationary.

IMPORTANT

Each 30 minutes of work, activate the filter shaker button (fig. C, ref. 5) for 30 seconds to clean the suction filter. During this operation, the suction fan shuts off automatically.

IMPORTANT

Avoid passing over puddles of water. If the work surface is wet, you can only continue using the machine if you turn off the suction fan as damp/wet dirt reduces the performance of the suction filter.

i INFORMATION

For good results, empty the debris bin often and keep the filter clean by shaking it using the special device.

Emptying the debris bin:

IMPORTANT

When emptying the bin, always wear a mask to protect the respiratory tract from the dust which is always present during this operation.

i INFORMATION

Before emptying the debris bin, operate the filter shaker for 30 seconds to clean the filter

Before emptying the bin, make sure all machine functions are turned off;

- Move to the waste container.
- Pull lever (fig. B, ref. 4) that locks/releases the bin
- Pull out the bin by handle and empty it.
- Refit the bin and lock it in place with lever (fig. B, ref. 4).

Flap raiser

- To collect bulky solid debris, raise the flap by pressing the pedal (fig. H, ref. 1). As far as possible, you should, however, avoid using the sweeper with the flap raised as cleaning efficiency is reduced.

Stopping:

- Move the machine to the parking area.
- Release the machine movement pedal (fig. A, ref. 3) and press brake pedal(fig. B,ref. 3) to stop machine moving
- Turn the side brushes off by turn the side brush lever to "OFF" position (fig. P).
- Turn the centre brush off by pull the main brush lever to "STOP" position (fig. D, ref. 1)
- Turn the suction fan off by pressing the switch (fig. D, ref. 2) to neutral position .
- Turn the key switch (fig. C, ref. 1) to the "OFF" position.

7. PERIODS OF INACTIVITY

- Disconnect the batteries. To optimise the working life of the battery, it should be charged every 30/40 days. If the level of solution is low, top up with distilled water.
- Empty the debris bin.
- Clean the machine in general, see chapter MAINTENANCE INSTRUCTIONS.
- Clean the suction filter.

IMPORTANT

If you do not charge the batteries regularly, they may be irrevocably damaged.

8. MAINTENANCE INSTRUCTIONS

! DANGER

Never perform any maintenance operations without first disconnecting the batteries from the machine's electrical circuit.

Maintenance on the electrical circuit and all other operations not explicitly described in this manual must be performed by specialised personnel only, in compliance with current safety legislation and as described in the maintenance manual.

8.1. Maintenance - General rules

Performing regular maintenance according to the Manufacturer's instructions improves performance and extends the working life of the machine.

When cleaning the machine, respect the following:

- Avoid the use of water cleaners. Water could penetrate the electrical compartment or motors leading to damage or the risk of short circuit;
- Do not use steam to avoid the heat warping plastic parts;
- Do not use hydrocarbons or solvents as they could damage the cowling and rubber parts.

8.2. Replacing/mounting the centre brush

! DANGER

This operation must be performed with the machine off and ignition key removed.

Proceed as follows:

- Open the door on the left of the machine by unscrewing the knob (fig. E).
- Unscrew and remove the three knobs fixing the brush compartment cover (fig. F).
- Remove the brush compartment cover (fig. F).
- Remove the brush (fig. F).
- Remove the adaptor from the brush drum and place it on the new brush, maintaining the same bristle slant (fig. G).
- Proceed with the same sequence in reverse to replace the brush.

8.3. Replacing/adjusting the side brushes

! DANGER

This operation must be performed with the machine off and ignition key removed.

To facilitate transport, the side brush/es is/are not mounted in the operating position.

To mount the side brush in the correct position, proceed as follows:

- Remove the side brush retainer screw from the motor shaft (fig. H).
- Remove the adhesive tape fixing the drive key to the motor shaft.
- Position the brush complete with flange on the shaft (fig. H).
- Fix the brush in position using the retainer screw removed at point 1 (fig. H).

To replace worn side brushes, repeat the procedure above.

8.4. Replacing/installing the suction filter.

! DANGER

This operation must be performed with the machine off and ignition key removed.

Every 50 working hours or as necessary, check the suction filter as follows:

- Pull lever (fig. B, ref. 5) that locks/releases, then take out the cover (fig. B, ref. 2).
- Unscrew the four screws (fig. I).
- Disconnect the connector on the filter shaker (fig. I).
- Remove the filter from its housing (fig. I).
- Thoroughly clean the filter with a vacuum cleaner or replace it (fig. J).
- To mount the filter, follow the same procedure in reverse.
- Close the cover (fig. B, ref. 2) and lock the cover by lever (fig. B, ref. 5).

8.5. Circuit breaker – reset

👉 IMPORTANT

This operation must be performed with the machine off and ignition key removed.

Circuit breakers (fig. Q – fig. C, ref. 10-11) are resettable electrical circuit protection devices that stop the flow of current in the event of a circuit overload. Once a circuit breaker is tripped, allow breaker to cool and then press the reset button to manually reset the breaker.

If the overload that caused the circuit breaker to trip is still there, the circuit breaker will continue to stop current flow until the problem is corrected.

The chart shows the circuit breakers and the electrical components they protect.

Circuit breaker	Rating	Circuit Protected
A1	15A	Life side brush motor
A2	15A	Right side brush motor
A3	35A	Main brush motor
A4	15A	Suction fan motor
A5	10A	Filter shaker motor

Fuse table: For the complete fuse table, see the spare parts catalogue.

👉 IMPORTANT

Never use a fuse with a higher amperage than specified.

If a fuse continues to blow, the fault in the wiring, boards (if present) or motors must be identified and repaired. Have the machine checked by qualified personnel.

8.6. Replacing/installing flaps

! DANGER

This operation must be performed with the machine off and ignition key removed.

Every 50 working hours or as necessary, check the flaps and if worn, proceed as follows:

8.6.1. Side flaps

- Open the side guards (fig. L - fig. M).
- Using a screwdriver, unscrew the flap fixing screws (fig. L - fig. M).
- Replace the worn flaps (fig. L - fig. M).

To mount, follow the same procedure in reverse.

8.6.2. Rear flap

- Remove the dust bin.
- Using a screwdriver, unscrew the flap fixing screws (fig. O).
- Remove the rear flap (fig. O).
- Replace the worn rear flap (fig. O).

To mount, follow the same procedure in reverse.

8.6.3. Front flap

- Remove the two side brushes (fig. H).
- Using a screwdriver, unscrew the worn front flap fixing screws (fig. N).
- Release the flap from the pronged clip.
- Replace the worn front flap (fig. N).

To mount, follow the same procedure in reverse.

8.7. Batteries

! DANGER

Do not check the battery by sparking.

The batteries give off flammable fumes. Put out all fires and hot embers before checking or topping up the batteries.

Perform the operations described above in a ventilated room.

8.7.1. Procedure for charging using the battery charger installed by the Manufacturer

- Raise the seat (fig. A, ref.4) and connect the battery charge cable to the mains power supply.

8.7.2. Procedure for charging using an external battery charger

- Raise the seat (fig. A, ref.4) cowling and KEEPING HOLD OF IT move it forwards. This provides access to the battery compartment from above.
- Connect the battery charger connector to machine socket (fig. A, ref.5)
- Plug the battery charger into the mains and turn it on.

IMPORTANT

In the case of gel batteries, use a charger specific for gel batteries only.

- Charge the batteries as described in the battery charger manual;

9. TROUBLESHOOTING AND ERROR CODES

9.1. Alarms displayed

Display value	Description
GADLEE GREEN GT115 VER:1.00	Software release
Volts: XX.X V Hours:XXXX.XX H	Machine status
CHECK BRUSH MOTOR	Main brush motor failure
CHECK TRACTION MOTOR	Traction motor failure
CHECK FILTER SHAKER	Filter shaker motor failure
CHECK SIDE BRUSH MOTOR	Side brush motor failure
PARKING BRAKE	Parking brake activated
PLEASE CLEAN FILTER	Filter need to clean
BATTERY LOW CHARGE BATTERY	The battery voltage is <22.0V
BATTERY FLAT ALL FUNCTION STOP	The battery voltage is <21.0V

9.2. Motor drive alarm board

































The board controlling the motor drive is located inside the front upright. If drive is interrupted, the error code should be identified by means of the status LED. In the absence of malfunctions, the status LED is steadily on while the machine is in operation. If a malfunction is detected, the status LED provides two types of information, a slow flash (2 Hz) or a rapid flash (4 Hz) to indicate the severity of the malfunction.

Malfunctions with a slow flash are cancelled automatically once the malfunction has been repaired and the machine functions normally again. Malfunctions with a rapid flash ("*" in the table) are considered more serious. The machine must be turned of using the key switch to reset operation after repairing the malfunction.

The indication of severity remains active for 10 seconds, after which the status LED flashes constantly showing a two digit malfunction code until the repairs have been carried out.

For example, error code "1,3" is displayed as follows:

  **example alarm code 1,3**

LED CODES		DESCRIPTION	
	1,1	 	Overheating > 92°
	1,2	 	Accelerator malfunction
	1,3	 	Speed limiter potentiometer malfunction
	1,4	 	Overvoltage malfunction
	1,5	 	Undervoltage malfunction
	2,1	 	Principal contactor actuator opening failure
	2,3	 	Principal contactor actuator closing failure
*	3,1	 	Accelerator potentiometer malfunction
	3,2	 	Brake activation malfunction
	3,3	 	Low battery voltage
	3,4	 	Brake deactivation malfunction
	3,5	 	HPD malfunction (incorrect regulation of accelerator potentiometer)
*	4,1	 	Motor short circuit
*	4,2	 	Incorrect motor voltage/short circuit in motor
*	4,3	 	EEPROM malfunction
*	4,4	 	Short circuit in motor/EEPROM error



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Gadlee Green Cleaning Equipment (HK) Co.,Ltd
Gadlee Green Cleaning Equipment Co.,Ltd
1-2/F, Block A, Hantian Industrial Park
Dongping Road , Guicheng,
Nanhai District, Foshan 528200 Guangdong, China
Tel:+86 757 81019199 Fax:+86 757 81019198
Toll-free: 4008-833-830
[Http://www.gadlee.com](http://www.gadlee.com) E-mail:gadlee@gadlee.com