GLOBAL™ INDUSTRIAL

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User's manual	Manual del usuario	Manuel de l'utilisateur
Customer Service US: 1-800-645-2986	Servicio de atención al Cliente US: 1-800-645-2986	Service à la clientèle Canada: 888-645-2986

Auto Ride-On Floor Sweeper Scrubber, 44" Cleaning Path

Model: 641890



Read all instructions thoroughly before operating, maintaining, or storing this product. Keep these instructions in a safe place for future reference.

⚠ **WARNING - Follow these safety instructions to reduce the risk of fire, electrical shock, and/or injury/damage to persons or property:**

Safety Instructions

• Unauthorized disassembly of the machine for repair or troubleshooting is strictly prohibited.
• Do not replace the power cord without proper authorization.
• The charger must be connected to a properly grounded 3-prong outlet.
• Do not place or operate the charger in wet conditions or expose it to the elements.
• Ensure the plug and socket are securely connected. Replace immediately if damaged or loose.
• If any abnormal noise or odor occurs during operation, unplug the charger immediately.
• For service or repairs, contact Global Industrial for assistance.
• Do not use extension cords or modify the output cable.
• Do not block the charger's air inlet or outlet.
• Disconnect the power cord and charging plug before moving the charger.
• Ensure the battery voltage matches the charger rating (24V charger for 24V batteries only).
• Do not pull, twist, or shake the charging cable to avoid damage.

General Safety Information

• Before performing any maintenance or repairs, turn off the power and remove the key from the main power switch.
• This machine must only be operated by trained and authorized personnel. Children, untrained individuals, and those unable to safely operate the equipment are strictly prohibited from use.
• Keep batteries away from sparks, flames, and other ignition sources.
• Do not wear loose clothing or dangling accessories while operating the machine.
• Do not operate in areas containing flammable or explosive gases, liquids, or vapors.
• Charge batteries in a well-ventilated area, with the cover open and away from open flames.
• This machine is intended for cleaning purposes only. Use outside the scope of this manual is not permitted and voids responsibility.
• Remove large debris from the floor prior to operation. Failure to do so may result in blockage and damage to the suction motor.
• Operation is restricted to trained personnel only. Minors and unqualified individuals are prohibited from operating the machine.
• Do not operate the machine under the influence of alcohol or drugs.
• Do not exceed safe operating speeds.
• Exercise caution on slopes and when turning to prevent tipping.
• Keep bystanders away from the machine during operation.
• Maintain a working speed of no more than 5 km/h for optimal cleaning performance.
• Ensure the battery is charged in a well-ventilated area. Charge promptly when a low-voltage alarm occurs to extend battery life.
• Remove the key after use to prevent unauthorized operation.
• Do not operate the machine outdoors in rainy conditions without proper shelter.

Warning:

• Carefully read all maintenance and repair instructions before performing service operations.
• Keep loose clothing, hair, fingers, and all body parts away from air vents and moving components.
• Do not smoke while charging the battery.
• When connecting the battery charger to the power supply, ensure the voltage and frequency match the nameplate specifications.

• Do not charge the battery if the charger cable is damaged. If the machine is damaged or has been exposed to water, contact Global Industrial after-sales service.
• Do not pull or carry the charger by its cables. Avoid pinching cables when closing doors and prevent contact with sharp edges. Do not use charger cables to operate or move the machine.
• Keep charger cables away from hot surfaces.
• To reduce the risk of fire, electric shock, or injury, do not leave the machine unattended while it is plugged in.
• Do not use or store the machine outdoors. Store indoors only.
• Keep children away from the machine at all times.
• Operate the machine only as described in this manual. Use only Global Industrial approved accessories.
• Always remove the key when the machine is not in use.
• Do not operate the machine on surfaces exceeding the specified slope limits.
• Do not clean the machine with running water or use aggressive cleaning agents.
• Do not operate the machine in excessively dirty or hazardous environments.
• Follow all safety guidelines to prevent injury and equipment damage.
• Do not use the machine for transportation purposes.
• Do not allow the brush to rotate when the machine is stationary to prevent floor damage and premature wear.
• Avoid collisions with shelving or objects that may fall and cause injury or damage.
• Adjust travel speed based on floor conditions and level of dirt.
• Do not modify or disable any safety devices. Perform maintenance as instructed.
• Do not remove or alter the machine nameplate.
• If a malfunction occurs, verify that proper maintenance has been performed. If the issue persists, contact Global Industrial or an authorized service center.
• Use only genuine replacement parts from authorized service providers.
• Maintenance and repairs must be performed by qualified personnel in accordance with this manual.
• When disposing of the machine, ensure proper handling of hazardous materials (e.g., batteries, oil, plastics) in accordance with local regulations.

Installation Precautions

1. Remove the outer packaging film.
2. The rear wheels are secured to the pallet with metal clamps and packing straps.
3. Remove the metal clamps and loosen the packing straps.
4. Carefully unload the machine from the wooden pallet.
5. Retain the metal pallet/brackets for future transport or handling.

Safety Instructions for Operation

Warning:

• This ride-on scrubber/sweeper must be operated by a trained, designated operator.
• Use only on flat, hard surfaces such as concrete, epoxy, or ceramic tile floors.
• Select appropriate cleaning agents based on the level of contamination.
• When using detergents, always add a compatible de-foamer to the recovery (sewage) tank.
• If the sewage indicator light illuminates (tank full), stop operation immediately and empty the recovery tank.
• After each use, drain and thoroughly clean the recovery tank to prevent bacteria buildup and maintain performance.

Caution:
• Operating the machine with a full recovery tank may cause water to enter the suction motor, resulting in short circuit or permanent damage.
• Remove large debris from the floor before operation.
• Failure to do so may block the suction inlet, reduce drying performance, or overload and damage the suction motor.

Safety Instructions for Driving

Warning:
• When the machine is not in use, raise the brush deck and squeegee assembly to prevent deformation.
Caution:
• If the machine is powered off or malfunctioning and must be moved manually:
• Push or tow at a speed not exceeding 3 mph.
• Disconnect the drive motor wire before moving the machine.
Warning:
• Before pressing the accelerator pedal, always confirm that the parking brake is fully released. Operating the machine with the brake engaged may result in:
• Drive motor failure
• Excessive brake wear
• Damage to the rear wheel hub
• Damage caused by improper operation is the responsibility of the operator.

Safety Instructions for Batteries

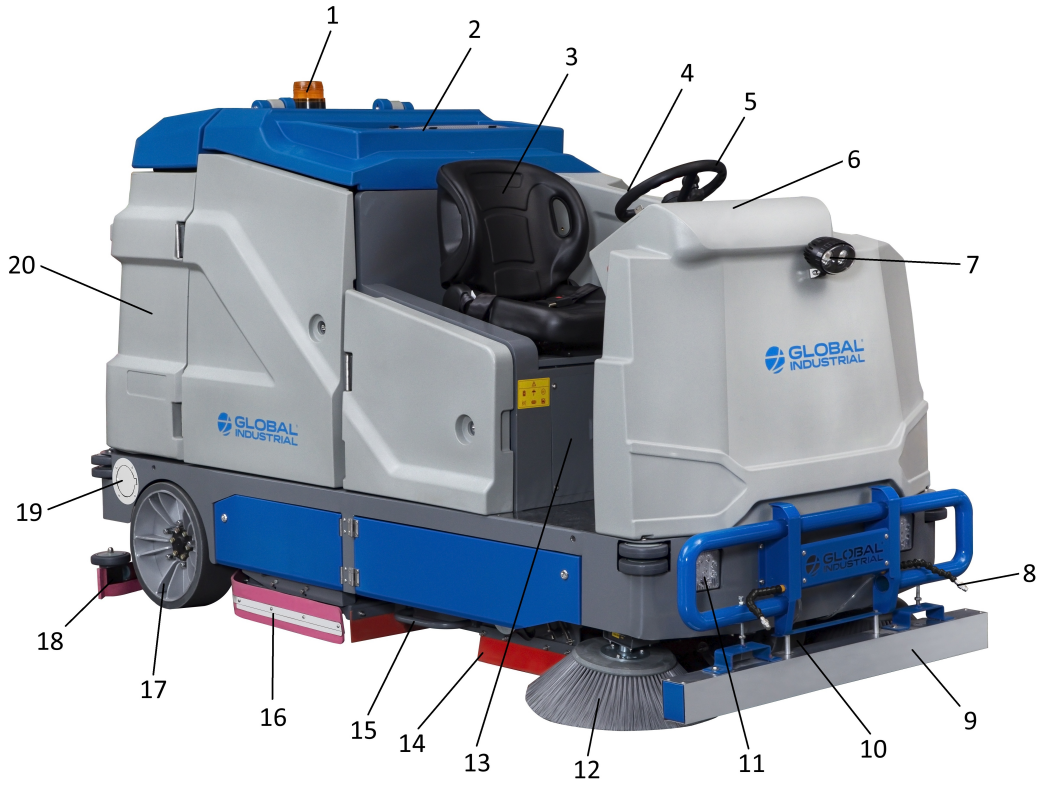
• Avoid operating the battery in a low-voltage state. Recharge the battery as soon as possible when the charge is low.
• This machine uses maintenance-free lead-acid batteries; do not add electrolyte.
• Keep the battery clean and dry at all times. Remove contaminants such as dust, debris, or metal particles to prevent leakage or damage.
• Do not place metal objects (e.g., tools) on the battery, as this may cause a short circuit and result in overheating or fire.
• Dispose of or recycle batteries in accordance with local regulations.
• Do not use open flames near the battery.
• Ensure the charging area is well ventilated.
• Do not connect or disconnect the battery while the key switch is in the ON position.
• Before removing the battery:
• Disconnect the negative (-) cable first; then disconnect the positive (+) cable.
• When reconnecting the battery:
• Ensure correct polarity.
• Incorrect connections may damage electrical components.
• Do not allow direct contact between the positive and negative terminals, as this can cause a high-current short circuit, excessive heat, and potential fire.

WARNING:

This machine is secured on a dedicated pallet for shipment and must be handled using a forklift or pallet jack with a minimum fork of 60 inches. Extra long pallet jack trucks or fork extensions are required. Due to weight distribution, the pallet must be lifted form the rear only.

Safety Instructions for Maintenance

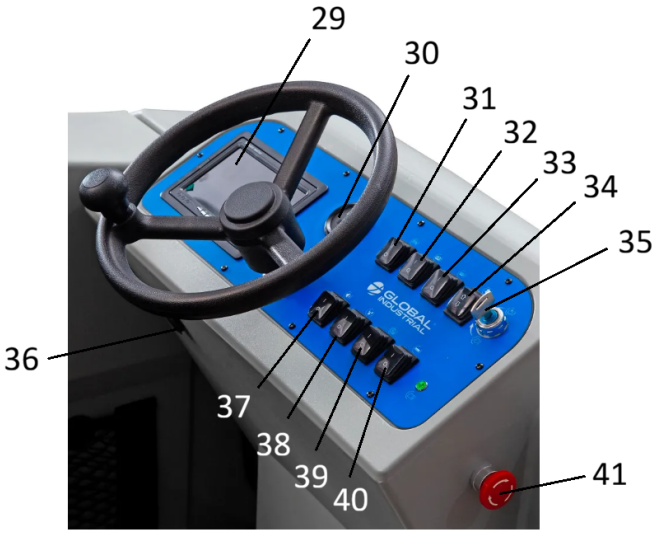
- All maintenance, service, and repair work must be performed by qualified personnel.
- Use only original replacement parts supplied or approved by Global Industrial.
- For parts, service, or technical support, contact Global Industrial's after-sales service center.
- When requesting service or ordering parts, provide the machine model and serial number.
- Perform regular daily and weekly maintenance to identify potential issues early, maintain optimal operating condition, and ensure maximum performance and efficiency.



Parts Breakdown:

1 - Strobe Safety Light
2 - On-Board Tools
3 - Adjustable Seat
4 - Solution Tank Cover
5 - Steering Wheel
6 - Operation Panel
7 - Blue Safety Light
8 - Water Sprayer
9 - Magnetic Bar
10 - Front Wheel
11 - Headlight
12 - Side Brush
13 - Battery Compartment
14 - Cylindrical Brush
15 - Dust Hopper
16 - Scrubber Brushes
17 - Rear Wheel
18 - Squeegee Assembly
19 -Charging Port
20 - Recovery Tank





Parts Breakdown (continued):

21 - Recovery Tank Cover
22 - Suction Hose
23 - High Pressure Spray Gun
24 - Drain Hoses
25 - Rearview Camera
26 - Scrubber Water Flow Adjustment Valve
27 - Spray Gun and Front Spray Adjustment Valve
28 - Solution Tank
29 - Backup Camera Display
30 - Battery Gauge
31 - Side Brushes
32 - Cylindrical Brush
33 - Dust Shaker
34 - Forward / Reverse
35 - Key Switch
36 - USB Port
37 - Horn
38 - Water Activation
39 - Scrubber Brushes
40 - Vacuum
41 - Emergency Stop Button

Dashboard Icons & Controls:



Key Switch - Turn counterclockwise to turn machine on.



Headlights - Turn clockwise to activate the front headlights.



Side Brushes - Activates side sweeper brushes.



Cylindrical Brush - Activates center cylindrical sweeper brush.



Dust Shaker - Activates filter vibration to remove accumulated dust.



Forward / Reverse Switch - Press up to move forward; press down to move in reverse.



Horn - Press to activate.



Water Activation - Press to turn on machine's water.



Vacuum - Press to activate squeegee suction vacuum.

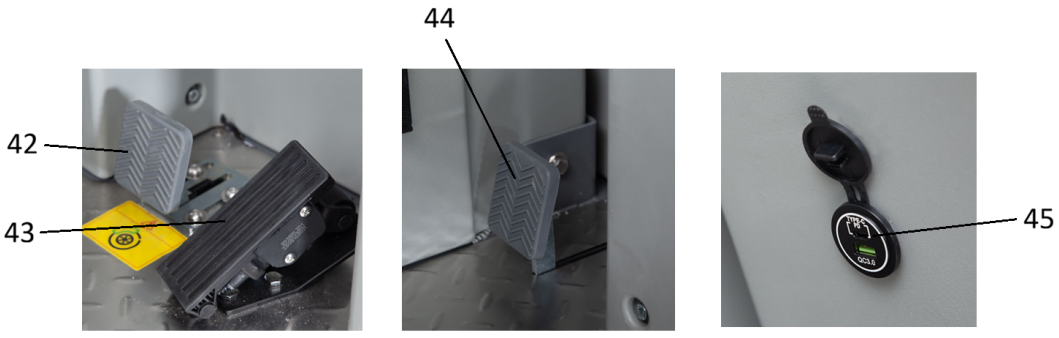


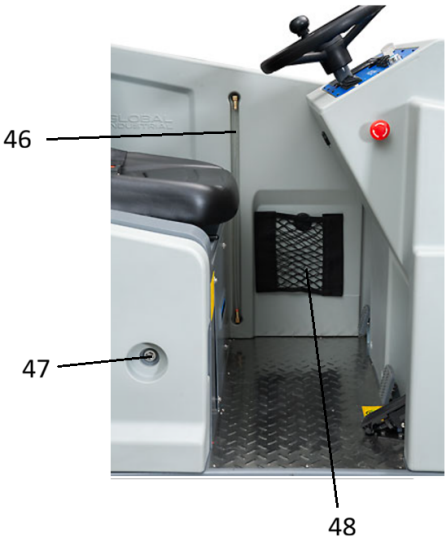
Scrubber Brushes - Press to activate center scrubber brushes.

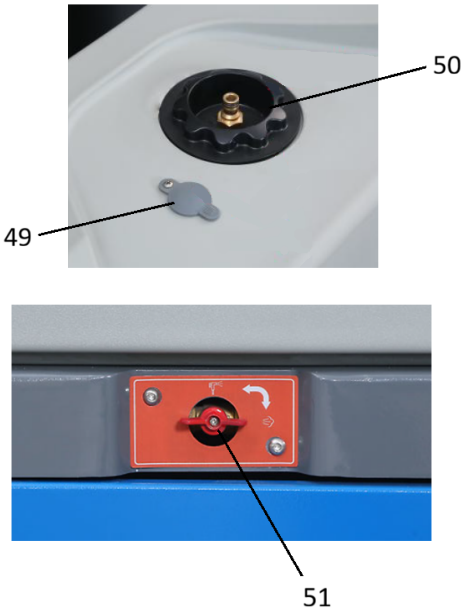


Full Tank Indicator - Illuminates when the recovery tank is full.

Parts Breakdown (continued):







Parts Breakdown (continued):

42 - Brake Pedal
43 - Drive Pedal
44 - Squeegee Lift Pedal
45 - USB-C Port
46 - Water Level Indicator
47 - Access Door Lock
48 - Accessory Pocket
49 - Solution Fill Port
50 - Quick-Connect Solution Fill Cap
51 - Water Control Valve

Pre-Operation Inspection

Caution:
Before starting the machine, verify the following:
• Brush deck is properly installed
• Squeegee assembly is securely mounted
• Recovery tank cover is closed
• Inspect the machine for any damage or loose components caused during transportation

Magnetic Bar Installation

Install the magnetic bar (9) to the underside of the front crash bar using the two bolts. Adjust the height be tightening or loosening the bolts as needed. The recommended height is 1-2 inches from the floor.

Filling the Solution Tank

Fill the solution tank through the fill port (49) or using the quick-connect fill cap (50).
• Use clean water only
• Do not use water containing debris or sediment
• If connected to a water the quick-connect solution fill cap, filling will automatically stop when the tank is full.
• Adjust the water pressure by turning the water control valve (51) to the desired setting.

Drive Mode

Caution:
Ensure the brush deck and squeegee are in the raised position.
• Insert the key and turn to the ON position
• Turn to the lighting position to activate headlights
• Select forward or reverse using the direction switch
• Press the drive pedal to move the machine

Scrubbing Mode

Caution: Remove large debris from the floor before operation.
• Press the scrubbing and vacuum controls to lower the brush deck and squeegee
• Select forward direction and press the drive pedal to begin cleaning
• Adjust solution flow using the solution flow control valve as needed

Operating Notes:
• Reduce speed or use appropriate detergent for heavily soiled areas
• When using cleaning chemicals, add defoamer to the recovery tank
• Regularly monitor and drain the recovery tank
• Clean the recovery tank after each use

Obstacle Clearance:
• Obstacles ≤ 2.0 inches: Raise brush deck and squeegee before crossing
• Obstacles > 2.4 inches: Use a ramp or incline

Sweeping Mode

Caution:
• Activate main brush and side brush controls to lower brushes
• Select forward direction and press the drive pedal to begin sweeping

Operating Notes:
• For large debris (leaves, cartons, etc.), press the debris lift pedal and operate at low speed
• Use the dust filter shaker periodically in dusty environments
• Empty the debris hopper as needed

Obstacle Clearance:
• Obstacles ≤ 2.0 inches: Raise brushes before crossing
• Obstacles > 2.4 inches: Use a ramp or incline

Draining the Recovery Tank

Caution:
1. Release the drive pedal to stop the machine
2. Remove the rear drain hose
3. Position the hose over a drain and remove the cap
4. Allow tank to fully drain
5. Rinse the recovery tank with clean water
6. Reinstall the drain cap and secure the hose

Shutting Down the Machine

Caution:
Before leaving the machine:
1. Raise the brush deck and squeegee using the control switch
2. Empty and clean the recovery tank
3. Turn off the machine and remove the key in the raised position.
• Insert the key and turn to the ON position
• Turn to the lighting position to activate headlights
• Select forward or reverse using the direction switch
• Press the drive pedal to move the machine

Squeegee Adjustment

Check the contact angle between the squeegee blade and the floor (optimal: 45°).
Procedure:
• Place machine on a level surface
• Lower the squeegee
• Move machine forward slowly
• Visually inspect blade contact angle
If the blade is worn and cannot be adjusted, replace it per maintenance instructions.

Caution:
Incorrect angle may reduce drying performance and cause premature wear or overheating of components.

Moving the Machine (Manual Transport)

Caution:
If the machine is powered off or malfunctioning:
• Push or tow at speeds not exceeding 3 mph

Storage

Caution:
• Store between 32°F–104°F (0°C and 40°C)
• Do not expose to direct sunlight, rain, or harsh weather
• Maintain humidity between 30%–95%
• Do not store liquids on the machine
• For operation below 32°F, consult Global Industrial

Maintenance

Caution:
• Turn off machine and remove key before maintenance
• Disconnect battery if required
• Refer to safety section before performing service
Maintenance Schedule
After first 8 hours of operation, check:
• All fasteners and connections are secure
• No visible damage to components

Maintenance Tasks

Caution:
• Ensure machine is powered off and key removed
• Disconnect battery if necessary
• Follow all safety guidelines before performing maintenance

Maintenance Schedule

Every 10 Hours
• Inspect height adjustment of side and main brushes
• Inspect brush deck skirt (splash guard)
• Inspect filter element and filtration system
• Perform visual inspection of main brush drive belt

Every 50 Hours
• Inspect height adjustment of side and main brushes
• Clean and inspect debris filter screen
• Check for debris, string, or wrapping on brushes and squeegee

Maintenance Schedule (continued)

Every 100 Hours

- Inspect brush deck skirt (splash guard)

Every 200 Hours

- Inspect filter element and filtration system
- Inspect main brush drive belt
- Check and tighten all screws and fasteners
- Check brake function and adjustment

Every 400 Hours

- Inspect wear of brushes and squeegee blades
- Replace main brush drive belt
- Lubricate and inspect drive chain (tension and condition)
- Inspect and replace motor carbon brushes if needed
- Ensure charger is stored in a dry, ventilated location

Replacement of Consumable Parts

Brush Disc Replacement

Caution: Wear protective gloves when replacing the brush discs to avoid injury from sharp bristles.

Removal Procedure

1. Turn off the scrubbing function and raise the brush deck.
2. Turn the power switch OFF and remove the key.
3. Open the side access panel:
   - Use the triangular key to unlock and open the side door
   - Loosen the plastic hand knob and remove the side cover
4. Remove the brush disc:
   - Left brush disc: Rotate clockwise (viewed from top)
   - Right brush disc: Rotate counterclockwise (viewed from top)
   - Apply firm force until the brush disc disengages from the aluminum drive hub

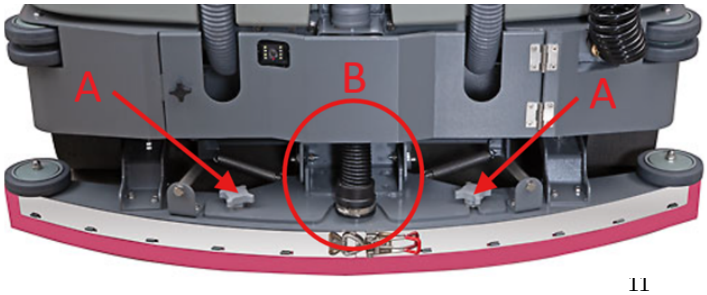
Installation Procedure

1. Align the brush disc with the drive hub.
2. Install in the reverse direction of removal:
   - Left brush disc: Rotate counterclockwise (viewed from top)
   - Right brush disc: Rotate clockwise (viewed from top)
3. Apply firm pressure until the brush disc is securely locked into place.
4. Reinstall the side cover and secure the panel.

Squeegee Assembly Replacement

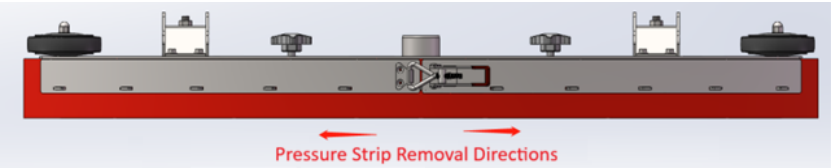
Removal Procedure

1. Loosen the two hand knobs (A) by turning counterclockwise.
2. Remove the squeegee assembly and disconnect the suction hose (B).



Disassembly and Replacement of Front and Rear Rubber

• To remove the front squeegee rubber, release the center buckle on the rear pressure strip, then apply force to both sides of the strip to disengage the hooks and remove the front rubber.

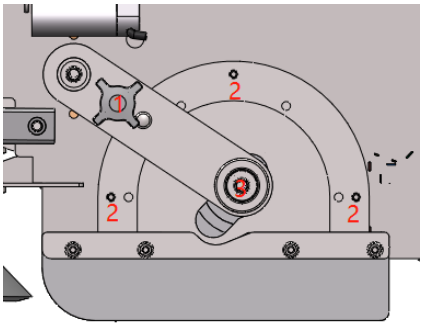


• After removing the front squeegee rubber, proceed with the rear rubber. Release the center buckle on the rear pressure strip, then apply force to both sides to disengage the hooks and remove the rear rubber.
• When installing the squeegee rubber, ensure the bottom edge sits flush on a flat surface with no height variation. Secure the pressure strip to achieve optimal drying performance.

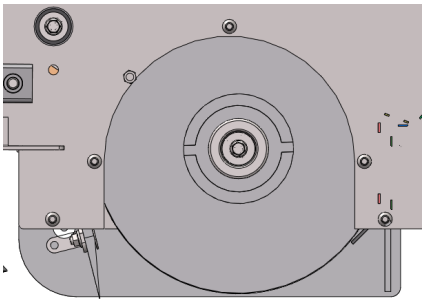
Cylindrical Brush Replacement

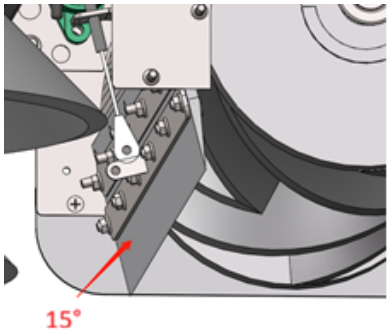
Caution: Wear gloves when replacing the main brush to avoid injury.

1. Loosen the star knob labeled “1” and remove the main brush support rod.
2. Remove the screw labeled “2” to detach the left side cover.
3. During installation, ensure the height difference between screw “3” and the ground is within 0.2 cm. Adjust screw “1” if necessary.

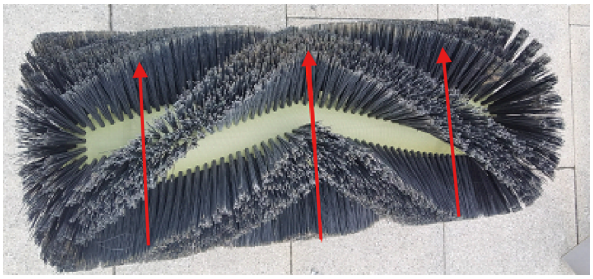


4. After disassembly, remove the main brush.





5. Adjust the front bumper to tilt backward at approximately 15°.
6. During installation, ensure the main brush is lowered and installed in the direction of the arrow, pointing toward the front of the machine.

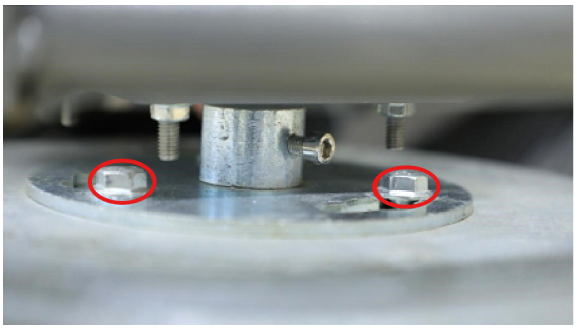


Attention:
The rotation direction of the cylindrical brush is shown in the figure above. Install the brush accordingly and verify proper orientation. Check the contact pressure between the brush and the ground as described in the relevant section.

Side Brush Replacement

Removal and Installation

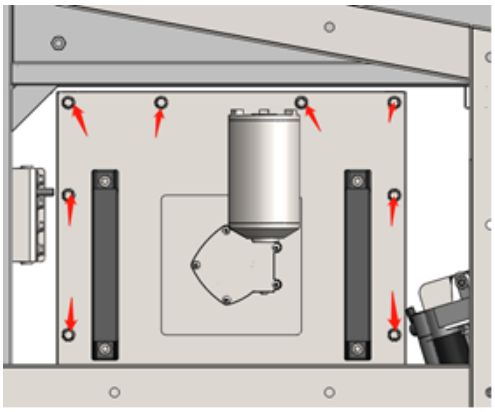
• Loosen the three screws shown in the red circle by turning them counterclockwise until the circular plate can be removed, then remove the side brush.
• During installation, rotate in the opposite direction and securely tighten the screws.

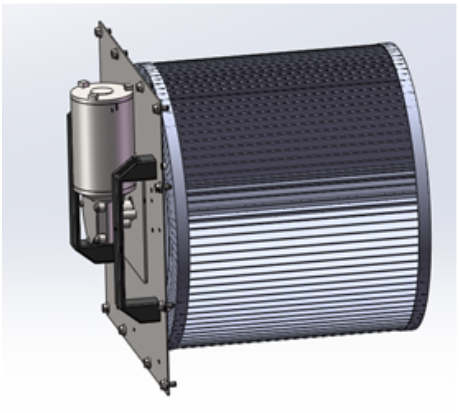




Filter Cleaning and Inspection

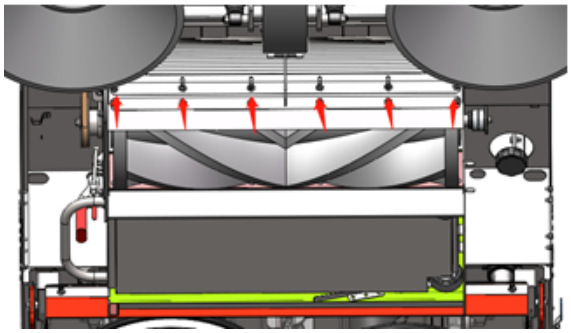
• Remove the screws indicated by the red arrows, then pull outward to remove the filter assembly.
• Clean dust from the filter without damaging the filter material.
• When replacing the filter, apply lubricating grease to the filter seal.





Front Lifting Cover Replacement

• Before replacing the front lifting cover, remove the main brush and pull out the debris bin.
• When replacing the front lifting mechanism, ensure the brake teeth are properly engaged to prevent the machine from moving.



• Remove the screws indicated by the red arrows in sequence, then remove and replace the waste cover.

Troubleshooting

Issue	Possible Cause	Solution
No power	Air switch tripped	Reset air switch
	Battery low or dead	Charge or replace battery
No movement	Motor failure	Replace motor
	Loose wiring	Secure wiring
	Controller/throttle failure	Replace controller or throttle
Brush inactive	Motor failure	Replace brush motor
	Switch failure	Replace switch
Low suction	Worn rubber	Replace rubber
	Blocked hose	Clear blockage
Poor cleaning	Worn brush	Replace brush
Batteries not charging	Charger failure	Check charger
Batteries drain quickly	Insufficient charge time	Increase charging time
Low/no water	Pump failure	Repair or replace pump
	Clogged filter	Clean filter

For additional questions or concerns, please contact Global Industrial Customer Service1-800-645-2986 or visit: www.globalindustrial.com