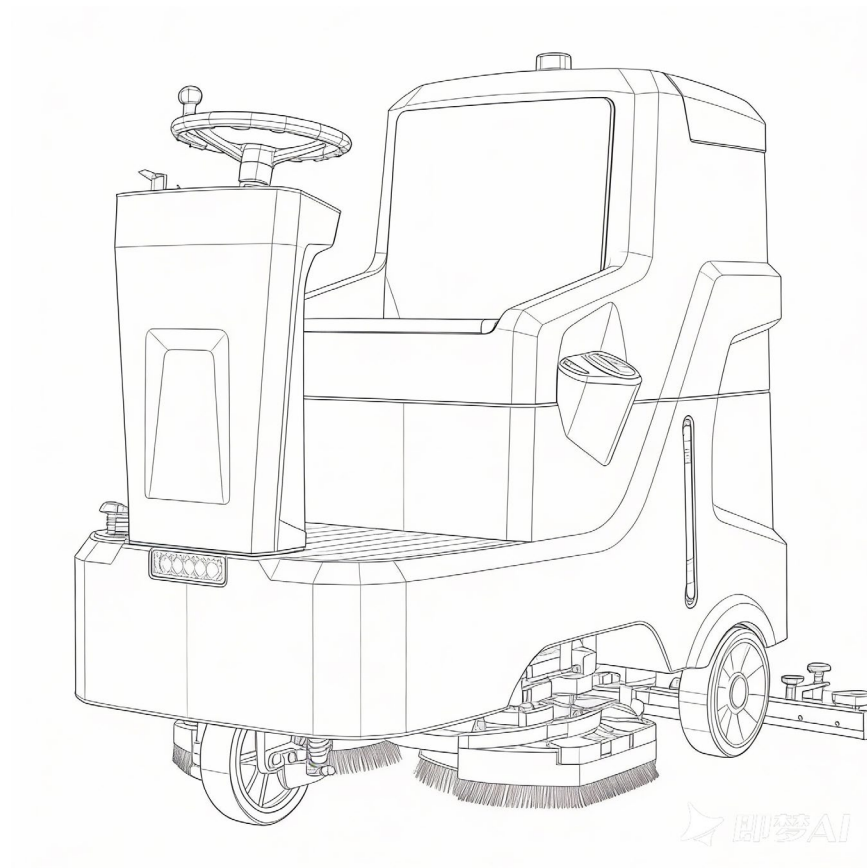


DAPPER

User Manual

30" Commercial Ride on Floor Scrubber

Model: DP-RAFS1234



For any service-related issues,

Please contact us: Phone Number: 718-301-8243

Email address: support@dapper-supply.com

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Introduction

Read this manual carefully before operating the machine.

Purpose of the Manual

This manual is written by the manufacturer and is an integral part of the machine.

It explains the purpose of the machine's design and production and contains all the information required by the operator.

In addition to operating instructions, this manual also includes maintenance guidance.

Operating and maintaining the machine in accordance with this manual helps ensure the safety of both the operator and the machine, reduces operating costs, improves performance results, and extends the service life of the machine. Failure to follow these instructions may result in injury to the operator, damage to the machine, or harm to the surrounding environment.

To quickly locate topics of interest, refer to the table of contents.

Text requiring special attention is highlighted in bold and accompanied by symbols and diagrams.

DANGER

The symbol above indicates that special attention is required to fully understand the operating instructions.

Failure to follow these instructions may result in serious injury or death.

IMPORTANT NOTICE

The symbol above indicates that special care must be taken to avoid damage to the machine or the surrounding working environment, which may result in economic loss.

INFORMATION

The symbol above indicates helpful information or instructions that improve operation and efficiency.

Fault Code

Classification	Panel Indicator Light	Flash Count	Fault Description	Cause / Solution
Control Panel	Headlight indicator light	Continuous flashing	Headlight overload	The instantaneous current exceeds 7A.
Control Panel	Sewage indicator light	Continuous flashing	Sewage tank full	Clean the sewage tank.
YG2402F Two-Way Control Device	Fan operation indicator light	Continuous flashing	Fan overload or short circuit	Check whether the water-absorbing motor is burned out or shows excessive sparking.
Device	Brushing operation indicator light	Continuous flashing	Disk overload or short circuit	Check whether the brush motor is burned out or overloaded.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (1 time)	Electromagnetic brake not engaged	Check whether the electromagnetic brake plug or wiring is loose or disconnected.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (2 times)	Drive motor contact fault	Check the drive motor circuit for loose or missing connections.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (3 times)	Implementation mode active	Implementation mode has started. After exiting implementation mode, power will be restored to clear the fault.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (4 times)	Main control circuit fault	Replace the controller and return it to the factory for repair.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (5 times)	Master control circuit or motor short circuit	During the first 10 seconds after power-on, false triggering may occur. If the indicator continues flashing after power is restored, replace the controller.
YG24140 Drive Control Device	Fault indicator lamp	Continuous flashing (6 times)	Motor overload	Restart the power supply and check whether the drive motor is overloaded.

Indicator Flashing Rule

When the system enters fault reporting mode, the indicator light flashes a specific number of times to indicate the fault type.

After the indicator flashes the fault code sequence, it pauses for 1–2 seconds, then repeats the cycle.

Example:

The indicator flashes three times, pauses for 1–2 seconds, then repeats the sequence.

Special Precautions

The manufacturer reserves the right to make improvements to the machine without prior notice, as product updates and enhancements are continuously implemented.

Even if the purchased machine differs slightly from the images shown in this manual, the safety instructions and information provided herein remain applicable to your equipment.

Included Documents

Operating Instructions

Certificate

Overview

Overview

This machine performs two primary functions in a single operation: floor cleaning and wastewater recovery. It is suitable for both commercial and industrial applications and can be used on smooth or moderately rough floor surfaces.

The floor scrubber automatically dispenses a properly diluted cleaning solution onto the floor to remove dirt and contaminants. Select appropriate cleaning agents and floor brushes based on the specific floor surface and cleaning requirements.

The machine is equipped with integrated clean water and wastewater tanks, allowing for simultaneous floor cleaning and wastewater recovery.

The system operates by generating suction through the wastewater tank motor, which draws contaminants into a dedicated recovery inlet for collection.

Parts List

The main components of the machine are listed below (see Figure 1).

1. Steering wheel
2. Control panel
3. Seat
4. Charging port
5. Accelerator pedal
6. Headlight
7. Warning light
8. Wastewater tank
9. Clean water inlet
10. Water fill port
11. Clean water level indicator
12. Water tank
13. Water absorption pad
14. Drive motor
15. Brush plate
16. Waterproof skirt edge
17. Emergency stop switch
18. Drain outlet



Machine Operation Panel Diagram

The control functions of the machine are shown in Figure 2.

Ammeter

Forward / Reverse selector

Key switch

Squeegee control

Light switch

Horn

Cleaning function switch

High / Low speed selector

Figure 2: Operation Panel Diagram

Hazardous Areas

Water Tank System:

When using commercially available, qualified cleaning agents, irritation to the eyes, skin, mucous membranes, or respiratory tract may occur. Hazards may result from contaminants (such as bacteria and chemical residues) collected from the surrounding environment. There is also a risk of injury associated with contact with the water tank.

Control Panel:

Risk of electric shock or short circuit.

Floor Brush Base:

The rotating mechanism of the floor brush presents operational hazards and may cause injury if contacted during operation.

Rear Wheels:

There is a risk of injury from becoming caught between the rear wheels and the chassis.

Battery Box:

Risk of electrode short circuit and hydrogen gas generation during battery charging, which may result in fire or explosion if not properly ventilated.

Safety

Safety Regulations

Read the operating manual carefully before using, servicing, or repairing the machine.

IMPORTANT NOTICE

- Strictly follow the instructions in this manual, particularly all safety warnings and hazard-related information. Failure to comply with these instructions may result in serious injury, equipment damage, or other severe consequences. The manufacturer shall not be held liable for any damage or injury resulting from failure to follow these instructions.
- The machine may only be operated by trained and qualified personnel. Minors are strictly prohibited from operating the machine.
- Do not use the machine for purposes outside its intended design and application. Use beyond the specified scope may result in unsafe operating conditions.
- When operating the machine in special environments (such as pharmaceutical facilities, hospitals, chemical plants, or similar settings), strict compliance with applicable safety standards and workplace regulations is mandatory.
- Do not operate the machine in areas with poor lighting, flammable or explosive materials, on public roads, or in environments hazardous to health.
- Operating Temperature Limits:
The recommended operating temperature range is 4 °C to 35 °C (39 °F to 95 °F).
Do not operate the machine when the ambient temperature is below 0 °C (32 °F) or above 50 °C (122 °F).
- The suitable ambient humidity range for this machine is 30% to 95%.
- Do not use the machine to suction flammable or explosive liquids (e.g., gasoline, fuel oil), flammable gases, dry powders, or corrosive liquids, even when diluted (e.g., paint solvents, acetone).
Do not suction burning or heated objects.
- Do not operate the machine on slopes exceeding 12°. Avoid operating across sloped surfaces whenever possible.
- Exercise caution when reversing.
When operating on slopes, take measures to prevent tipping or uncontrolled acceleration. Operate slowly on inclines and raise the floor brush and suction squeegee.
- Never park the machine on a slope.
- Before leaving the machine unattended, turn off the motor. Ensure the machine cannot start unexpectedly.
- Always be aware of people in the surrounding work area, especially children.
- Do not use the machine for transportation or towing. Towing the machine is strictly prohibited.

- Do not place or store any objects on the machine.
- Do not block ventilation openings or heat-dissipation components.
- Do not remove or modify any safety devices on the machine.
- Wearing personal items during operation may lead to serious accidents.
Remove jewelry, watches, and ties before starting work.
- Operators must wear appropriate personal protective equipment (PPE), including:
Protective work clothing or aprons, slip-resistant and waterproof footwear, rubber gloves,
safety goggles, hearing protection, and respiratory protection as required.
- Do not place hands near moving machine parts.
- Use only cleaning agents that meet the specified requirements.
- Keep cleaning agents out of reach of children.
In case of eye contact, immediately rinse with plenty of clean water.
If ingested, seek medical attention immediately.
- Ensure the charger socket is properly grounded and protected by an overcurrent protection device.
- Verify that all electrical parameters (voltage, frequency, and power rating) match the power supply specifications before operation.
- Use and maintain the battery in accordance with the manufacturer's instructions.
Keep the battery clean to prevent electrical leakage and protect it from contamination such as metal dust.
- Do not place tools or metal objects on the battery, as this may cause a short circuit or explosion. When handling battery electrolyte, strictly follow all safety guidelines.
- Do not operate the machine in areas with strong magnetic fields, as this may cause malfunction or failure of the electronic control system.
- Do not clean the machine using a water spray or water gun.
- Wastewater generated during machine operation may contain detergents, disinfectants, and organic or inorganic substances.
Dispose of wastewater in accordance with local environmental regulations.
- If a malfunction occurs during operation, immediately shut off the power supply, disconnect the battery, do not attempt to modify or repair the equipment, and promptly contact the manufacturer's authorized service center.
- All maintenance work must be performed with the power supply disconnected and the machine positioned on a level surface.
- All electrical maintenance and repair work, except for procedures explicitly described in this manual, must be performed by qualified personnel.
- To ensure operator safety, use only original manufacturer-approved parts.
Do not install components removed from other machines.
- The designed service life of this machine is 10 years.

After the service life has expired, the machine must be decommissioned and disposed of in accordance with local regulations, regardless of whether it is still operational.

- Remove the wooden rack from the pallet.
- Lift the inclined plate on the pallet and push the machine off the pallet.
- Remove the brush and the water-absorbing squeegee.
- Remove the sealed paper bag from the battery compartment and verify that the following items are included:
 - Operation Manual
 - Certificate of Conformity
- Clean the area around the machine.
- After removing all packaging materials, install the battery in the machine.
- Retain the packaging for reuse when transporting the machine to another location or sending it to a service center.
Dispose of packaging materials in accordance with local regulations if reuse is not possible.

DANGER

Failure to follow the instructions in this manual may result in serious injury to persons or damage to property. Failure to comply will void the manufacturer's warranty.

Battery

The following two types of batteries may be installed in the machine:

Lead-acid battery:

Check the electrolyte level regularly. If the level is low, add distilled water. Avoid overcharging. The electrolyte level should be approximately 5 mm above the battery plates.

Colloidal battery:

These batteries are maintenance-free.

The electrical parameters of the battery must meet the machine's requirements. Using an oversized battery may result in inflexible operation and motor overload. Using a battery with insufficient capacity will result in frequent charging.

The battery must be charged regularly, kept clean and dry, and all connections must be secure.

IMPORTANT NOTICE

The battery type used for the sweeper is determined by the manufacturer's factory configuration.

Battery Preparation

DANGER

When installing or maintaining batteries, operators must wear appropriate personal protective equipment (such as gloves, goggles, and protective clothing) to minimize the risk of injury. Keep away from open flames, prevent electrode short circuits, avoid electrical sparks, and do not smoke.

The battery is typically fully charged and ready for use.

If the battery is not fully charged, follow the steps below:

Open the battery cover and fill each compartment with battery electrolyte until the liquid level reaches the battery plates.

Allow 4–5 hours or longer for bubbles to rise and for the plates to fully absorb the electrolyte.

Ensure the electrolyte level remains above the plates. If necessary, add additional electrolyte.

Close the battery cover. Install the battery into the machine (refer to the steps below).

Before operating the machine for the first time, fully charge the battery. Refer to the charging instructions for details.

Battery Installation

DANGER

Ensure that all switches on the control panel are in the "0" (STOP) position before installation.

Confirm that the battery cable "+" terminal is connected to the battery's positive terminal.
Do not use sparks to test battery polarity.

Handle the battery with care. Short circuits may cause fire or explosion.

Ensure that both water tanks are completely drained.

Lift the water tank and tilt it backward 90° to access the battery compartment.

Place the battery into the battery compartment.

IMPORTANT NOTICE

Before opening the water tank, disconnect the water hose from the suction nozzle.

Connect all battery cables and apply petroleum jelly to the battery terminals.

IMPORTANT NOTICE

Use appropriate lifting equipment when installing the battery.

The positive and negative battery terminals have different diameters, and battery terminals may vary by specification.

Return the water tank to its normal operating position.

Start operating the machine by following the instructions below.

Battery Removal

DANGER

When removing the battery, the operator must wear appropriate personal protective equipment (such as gloves, goggles, and protective clothing) to minimize the risk of injury. Ensure all switches on the control panel are in the "0" (STOP) position. Keep away from open flames, avoid electrode short circuits, prevent electrical sparks, and do not smoke.

Disconnect the battery cables from the battery terminals.

If necessary, remove the retaining strap or cord securing the battery first.

Use appropriate tools to remove the battery from the battery compartment.

Battery Charger

IMPORTANT NOTICE

Do not allow the battery to become over-discharged, as this may cause irreversible damage.

Selecting a Battery Charger

Ensure the charger is compatible with the battery being charged.

Tubular lead-acid battery:

An automatic charger is recommended. Consult the charger manufacturer and refer to the charger manual to confirm compatibility.

Colloidal battery:

Use of a dedicated charger is recommended.

Preparing the Charger

The standard configuration of this machine includes a dedicated charger for the floor-cleaning machine battery, which is suitable for use with lead-acid batteries.

If a charger other than the supplied unit is used, ensure that the connector is compatible with the machine's charging socket.

|Transportation

IMPORTANT NOTICE

All operations must be performed on level ground and with appropriate safety measures based on the working conditions. Operators must wear personal protective equipment.

Follow the steps below to load the machine onto a transport vehicle:

Empty the clean water tank and the wastewater tank.

Remove the suction squeegee and floor brush (or cleaning pad).

Remove the battery.

Place the machine on a wooden pallet and secure it with metal brackets or packaging straps.

Use a forklift to load the palletized machine onto the transport vehicle.

Secure the machine and pallet to the transport vehicle using safety restraints.

Operation

Installation and Adjustment of Water-Absorbing Squeegee

1. Water absorption is the first step in drying the floor.
2. Follow the steps below to install the water-absorbing squeegee on the machine:
3. Insert the suction hose into the suction nozzle.
4. Loosen the two knobs located at the center of the water-absorbing squeegee.
5. Install the water-absorbing rubber strip onto the bracket groove.
6. Tighten the two knobs on the water-absorbing squeegee.

The water-absorbing rubber strip removes moisture and cleaning solution from the floor. Over time, the edges of the strip that contact the floor may wear or crack, reducing effectiveness. To maintain optimal performance, regularly inspect the strip and replace it when necessary.

For optimal water recovery, adjust the water-absorbing squeegee as follows:

During operation, the rear rubber strip should be bent at approximately a 45° angle to the floor and maintain firm contact with the surface. The bending angle can be adjusted by changing the height of the squeegee caster wheels.

Installation and Replacement of Floor Brush / Needle Plate (Standard Configuration)

IMPORTANT NOTICE

Do not start the machine unless the brush or needle plate is properly installed.

Install the brush/needle plate as follows:

Open the water-repellent skirt. Rotate the brush motor drive plate to align it with the slot, then push upward and rotate the brush in the reverse direction until it locks into place.

To remove the needle holder or brush, lift the head and rotate it clockwise.

Verify that the brush is correctly positioned and securely installed.

Use of Cleaning Agents

IMPORTANT NOTICE

Dilute the detergent strictly according to the manufacturer's instructions. Do not use bleach or oxidizing agents (especially highly concentrated types), and avoid solvents or saturating agents. The temperature of the water or detergent solution must not exceed the specified limits. The solution must be free of sand or other impurities.

This machine must use low-foaming detergents specifically designed for floor scrubbers.

Contact the manufacturer for the latest and complete information regarding approved detergents.

Select the appropriate cleaning agent based on the floor condition and type of contamination.

Use detergents in accordance with the relevant safety data sheets and instructions.

Pre-Operation Preparation

IMPORTANT NOTICE

Before operating the machine, wear appropriate personal protective equipment based on the working environment, including protective clothing, head protection, and non-slip footwear. Wear respiratory protection as required, in accordance with the detergent manufacturer's recommendations.

Before starting work, complete the following steps:

Check the battery charge level. If the battery is low, recharge it.

Ensure the wastewater tank is empty. If necessary, drain the tank before operation.

Fill the clean water tank with clean water mixed with low-foaming detergent at the specified concentration through the inlet beneath the seat. Maintain a minimum clearance of 5 cm between the water level and the inlet opening.

Select a brush or needle plate appropriate for the floor surface to be cleaned.

Ensure the water-absorbing squeegee is securely connected to the suction hose and that the rear rubber strip is in good condition, free from excessive wear or damage.

INFORMATION

If this is your first time operating the machine, select an open and unobstructed area for training. Always empty the wastewater tank before refilling the clean water tank.

To achieve optimal cleaning performance and extend the service life of the machine, follow the guidelines below during operation:

Keep the work area clean and remove any obstacles.

Perform cleaning operations during periods of low foot traffic to reduce recontamination.

When cleaning, operate the machine in straight passes whenever possible.

For large cleaning areas, divide the area into smaller rectangular sections for separate cleaning. If necessary, use a mop or cloth to dry areas inaccessible to the floor-cleaning machine.

Adjusting the Steering Wheel Angle

The steering wheel angle can be adjusted using the adjustment lever to achieve a comfortable driving position.

Operation of the Machine

Ensure you are prepared before starting the machine.

Follow the steps below:

Sit in the operator's seat.

Do not press the accelerator pedal. Turn the key switch to the "ON" position and verify that the power indicator illuminates normally.

Press the accelerator pedal to begin operation.

Control the steering wheel with both hands, press the accelerator pedal, and select forward or reverse to drive the floor scrubber to the work area. The operating speed is controlled by the amount of pressure applied to the accelerator pedal, within the machine's maximum speed range.

IMPORTANT NOTICE

The machine is equipped with a headlight. Turn it on when operating in low-light conditions.

IMPORTANT NOTICE

The machine is equipped with a safety device to reduce the risk of tipping. When accelerating or making sharp turns, reduce speed to enhance stability and prevent tipping.

IMPORTANT NOTICE

Do not remain stationary on the same area of floor for an extended period during operation, as this may damage the surface.

End of Operation (Shutdown)

Release the accelerator pedal.

The machine is not equipped with a brake pedal. It uses an automatic braking system. When the accelerator pedal is released, the machine will brake automatically.

Press the scrubbing disc and water suction switches to stop all functions.

IMPORTANT NOTICE

Before adding water to the clean water tank, empty the wastewater tank first.

DANGER

Operators must wear appropriate personal protective equipment. When discharging wastewater, disconnect the power supply.

When the wastewater tank is full, the liquid level indicator will illuminate and the suction motor will automatically stop after a few seconds. Stop the cleaning operation immediately and empty the wastewater tank.

Emptying the Wastewater Tank

Release the accelerator pedal.

Press the brush and water-absorption switches to stop all functions.

Drive the floor-cleaning machine to the designated drainage area.

Empty the wastewater tank through the drain hose. Rinse the tank with clean water.
Empty the clean water tank as follows:

Follow steps 1 through 3 above.

Open the drain valve to empty the clean water tank. Rinse the tank with clean water.

IMPORTANT NOTICE

When cleaning the wastewater tank, do not remove the filter screen and do not spray water directly onto the filter screen.

After completing the above steps, cleaning operations may resume.

Moving the Machine Manually

When the machine is powered off, the electromagnetic brake must be released to allow manual movement. The standard configuration locks the handwheel to engage the brake.

To move the machine manually, operate the electromagnetic brake handwheel or screw to release the brake.

After repositioning the machine, re-engage the handwheel to activate the electromagnetic brake.

Maintenance

Machine Storage

If the machine will not be used for an extended period, remove the water-absorbing squeegee and floor brush (or needle plate), clean them thoroughly, and store them in a dry location, preferably in a sealed plastic container.

Ensure both tanks are empty and clean.

Fully charge the battery before storage. During extended storage, recharge the battery regularly (at least once every two months) to maintain the charge level.

IMPORTANT NOTICE

Failure to charge the battery periodically may result in permanent battery damage.

Battery Maintenance and Charging

DANGER

Do not use an open flame or lighter to test battery polarity. The battery may release hydrogen gas. Keep away from sparks and open flames.

Keep the battery compartment open during charging and ensure charging is performed in a well-ventilated area.

To prevent irreversible battery damage, do not completely discharge the battery.

Charging Procedure

Connect the charger plug to the charging socket.

When charging begins, the left red indicator light will flash. When charging is complete, the right green indicator light will illuminate.

Press the button on the charger to display the following parameters. Refer to the charger manual for details:

V: Voltage

H: Charging time

AH: Ampere-hours

A: Charging current

bv: Lead-acid battery mode

Disconnect the charger after charging is complete.

Machine Maintenance

DANGER

Before performing any maintenance, ensure the main power supply is disconnected.

All electrical components must be serviced by certified and trained professionals, in strict accordance with applicable safety regulations and the instructions in this manual.

Maintenance Overview

Regular maintenance performed in accordance with the manufacturer's instructions will improve machine performance and extend service life.

When cleaning the machine, observe the following precautions:

Do not use high-pressure water jets or spray equipment to clean the machine, as water ingress into the control board or motor may cause short circuits.

Do not use steam-cleaning equipment, as excessive heat may cause plastic components to deform.

Do not use fluxes or hydrocarbon-based substances, as these may damage the machine housing or rubber components.

Daily Maintenance

After daily cleaning operations are completed, perform the following maintenance tasks:

Empty and clean the wastewater tank.

Clean the water-absorbing rubber strip and inspect it for wear. Replace it if necessary.

Check whether the air intake of the water-absorbing squeegee is clogged. Remove any debris inside.

Charge the battery as specified.

Weekly Maintenance

Clean the float switch in the wastewater tank to ensure proper operation.

Clean the filter screen of the suction motor and inspect it for damage. Replace it if necessary.

Clean the water filter and inspect it for damage. Replace it if necessary.

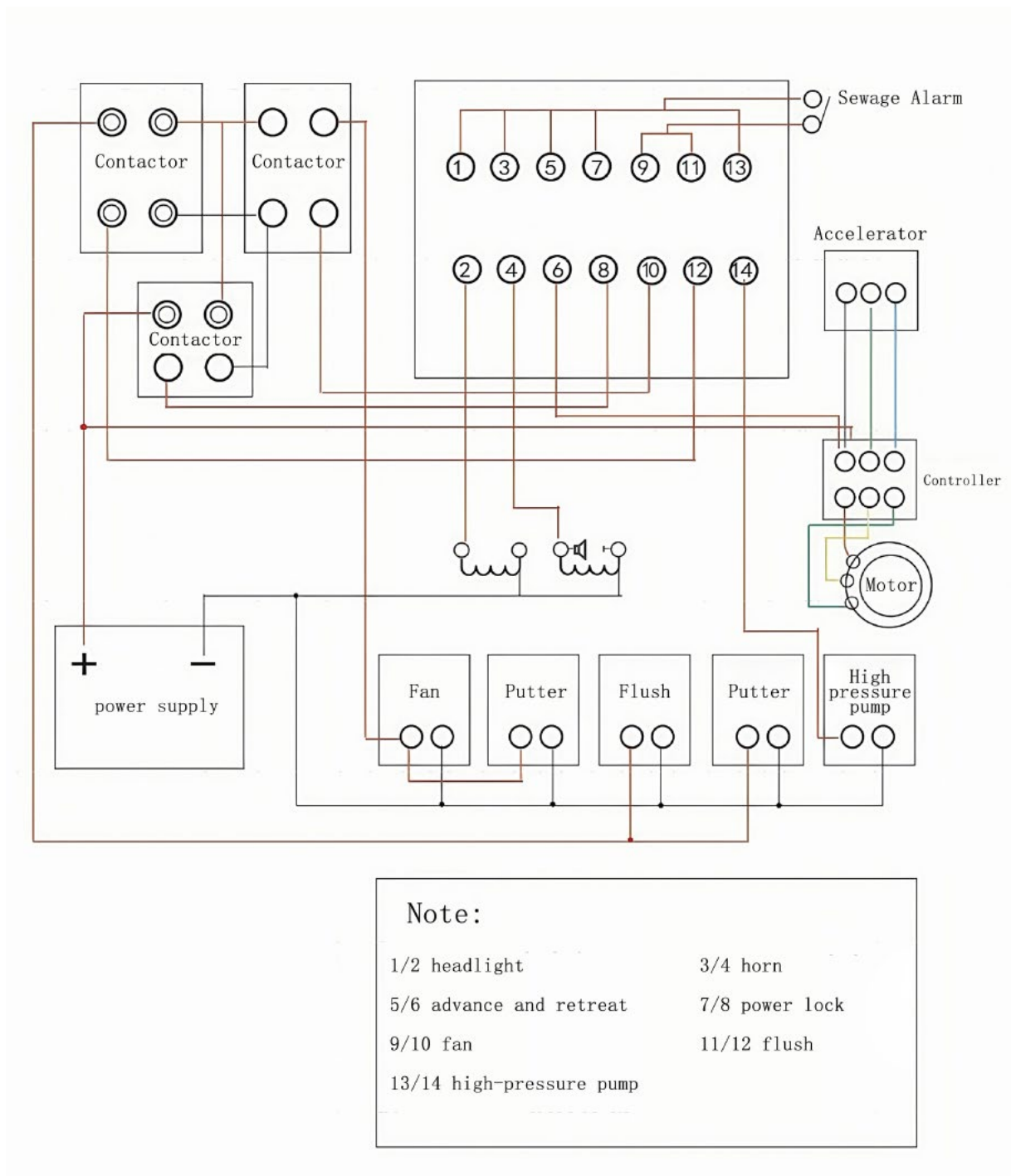
Clean the suction hose.

Clean the clean water tank and the wastewater tank.

IMPORTANT NOTICE

Before lifting the water tank, disconnect the suction hose from the suction inlet.

Electric Diagram



Warranty

Limited Warranty

Dapper Supply, Inc. extends a limited warranty to the original purchaser, guaranteeing that this Dapper Supply product is free from manufacturing defects in material or workmanship for one year from the date of purchase. If a defect is discovered within the warranty period, Dapper Supply, Inc. reserves the right to repair or replace the product at no cost to you, or to cover the cost of replacement parts and repair labor necessary to address defects present at the time of purchase or resulting from normal usage, provided the product has been installed, operated, and maintained according to the provided instructions. Any replacement parts requested within the first year are free of charge and fall under this warranty.

At its sole discretion, Dapper Supply, Inc. may choose to replace the product. In such cases, the replacement product will carry the warranty for the remainder of the original unit's warranty period.

This warranty is valid exclusively for the original purchaser of the product and applies only within the United States. The warranty begins on the date of the original purchase. Proof of the purchase date is required to obtain service under this warranty.

Under this limited warranty, your sole and exclusive remedy is the repair of the product as described above. All warranty services must be performed by a Dapper Supply-authorized service provider.

To claim warranty or request repair service:

Email: support@dapper-supply.com

Include your name, address, phone number, details of the warranty repair request, and a copy of your proof of purchase receipt. Alternatively, visit dapper-supply.com and use the "Contact Us" page. A Dapper Supply customer service representative will assist in arranging service for your product.

Thank you for choosing Dapper Supply.

WARRANTY EXCLUSIONS

This limited warranty does not cover:

- 1.Product failure due to power outages, interruptions, or inadequate electrical service.
- 2.Damage incurred during transportation or handling.
- 3.Damage caused by accidents, pests, lightning, wind, fire, floods, or other acts of God.
- 4.Damage resulting from accidents, misuse, abuse, improper installation, repair, or maintenance, including the use of devices that alter or convert the voltage or frequency of electricity.
- 5.Unauthorized product modifications, repairs performed by unauthorized providers, or use of non-approved replacement parts.
- 6.Cleaning and maintenance not performed according to the user manual.
- 7.Use of incompatible accessories or components.
- 8.Any costs associated with repairs or replacements under these excluded circumstances will be the responsibility of the consumer.

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