# Operational Manual Sedimclean Commercial Submersible Sediment Removing Machine



**Note**: - Actual product may vary slightly from given images, packing or design as a part of our continuous improvement in product performance.

Dear Customer,

Thanks for purchasing this innovative product. The aim for this product development is for

achieving followings.

1. Improve safety standard in tank or sump cleaning

2. Reduce shut down frequency and down time

3. Improve water quality for overall better performance of system.

4. Conserve Water & Electricity

We the team "Sedimclean" wishes you to achieve same aim. Before using the machine,

please read the safety information and operation instructions completely. You may also

download the video at www.sedimclean.com.

Your feedback to us after use of this machine at info@sedimclean.com, will give us

opportunity to serve you better in future.

Thanks.

Team Prayosha Innovative

Vadodara. Gujarat India.

**Important Instruction** 

Congratulations on your purchase of the most technologically advanced Sedimclean

Commercial submersible sediment removing machine available today. This product is easy to

use and will keep your water storage clean by regular use.

Following these simple directions will insure that the **Sedimclean** will quickly and efficiently

clean your sump today and for many years to come. Please read operational manual

completely before operating machine. Also, for better product use clarity please view complete video demonstration at our product website video page. www.sedimclean.com

**Application** 

Sediment deposition cleaning in water sump, fish pond, apartment water tanks, small cooling

tower's basin. Decorative water bodies.....etc.

#### **Product Description**

In few applications water storage complete drain out is not convenient due to its application criticality. This product gives us an option to remove sediment without empty out. These facilities are having sediments deposition because of settling of suspended impurities. Now days it is very difficult to empty out and clean it frequently. Also day-by-day water quality is deteriorating which increases more trouble in such tank's water quality & cleanness management. This product facilitates us to clean such water bodies in continuous process of usage, without wastage of water or with minimum possible water wastage and with better safe option.

#### **Features**

- 1. Machine works in water submersed condition.
- 2. Works without entry inside water storage.
- 3. Works with water filled storage.
- 4. Simple to operate and maintain.
- 5. Cleans bottom floor and submersed walls.
- 6. Machine can empty out water tank.
- 7. Light weight and compact design.
- 8. Transportation easy and simple.
- 9. Best suitable for cleaning of water sump with capacity with depth up to 3000 mm.

#### **Product specification**

## **Pump Specifications**

- 1. Pump make:- Wilo
- 2. Model:- PD 300EA
- 3. Power Supply: 230 V AC 50 Hz single phase
- 4. Working depth :- 3 meters maximum
- 5. Working Temperatures :- 35 Deg. Centigrades
- 6. Pump Rating: 300 Watts
- 7. Pump protection: IP 68
- 8. Pump speed :- 2900 RPM
- 9. Pump Flow Rate :- 3 to 7 Cu.M per hours as per head difference.
- 10. Pump Head: Maximum 7.5 M above water level of tank.
- 11. Cable Length: 3.2 meters approximate
- 12. Pump MOC: SS-304, PP, Rubber....etc.

#### **System Specification**

- 1. Suction hose pipe :- 25 NB x 3 meter long
- 2. Discharge hose pipe :- 32 NB x 4 meter long
- 3. Overall size of unit :- 250 mm x 250 mm x 350 mm height
- 4. Approximate submerse pump unit weight :- 10 Kg.
- 5. Weight of hoses and Handle set:- 5 kg Approximate
- 6. Base Frame :- SS-304, Poly propylene, Rubber
- 7. Brush 02 nos. (Straight and angular)

#### **Important Note**

Above specifications may vary in different applications and electrical supply outlets as per purchase order finalization.

#### **Application limitation**

- 1. Machine can remove sediment size up to 10 mm diameter. Avoid use of machine where civil debris or other form of large sediments are present.
- 2. Machine cannot remove any floating impurities.
- 3. Machine works in normal atmospheric water temperatures only.
- 4. Do not use machine as final sediment removing from drinking water.
- 5. Do not use machine in any chemical, oil or in corrosive liquid application.
- 6. Machine suitable for working depth of water less than 3 meters. (10 feet)

## **Unpack the product**

Please follow following sequential steps.

- 1. Open the packed boxes.
- 2. Remove plastic wrap from all components.
- 3. Verify that all components are safe without any damage.

#### **Product package standard contents**

Product standard packing is having following items in package.

- 1. Submerse unit, consist of Electrical submersible Pump on mounting trolley and power supply cord.
- 2. Suction Hose pipe:- 1" diameter x 3 meters for length
- 3. Discharge Hose pipe:- 1.25" diameters x 4 meters for suction

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- 4. Brush 02 nos. (Angular and straight)
- 5. Lifting rope (1 nos.) with spring snap hooks (2 nos.)
- 6. Handles 3 nos. (1 set)

#### Safety precautions & important instructions for using machine

- Risk of electrical shock or electrocution The electrical supply to this product must be installed in accordance with the National Electrical Code and all applicable local codes and Standards. Improper installation will create an electrical hazard which could result in death or serious injury to machine user or others due to electrical shock, and may also cause damage to property.
- 2. To reduce the risk of injury, use this product by trained person unless they are closely supervised at all times.
- 3. The sole purpose of this product is for use as a bottom deposited sediment deposit removal as described in this manual; any modification or other use will void the warranty.
- 4. For safety purpose, do not allow children to use, touch, or play near or around the machine.
- 5. A Earth Leak Interrupter (ELI-EU) must be installed to protect your electrical outlet and to prevent any possible electric shock. Failure to do so could create an electrical hazard which could result in death or serious injury to sump users or others due to electrical shock and may also cause damage to property.
- 6. Use this machine with rated single phase AC power supply only.
- 7. Do not operate machine in under volts or over volts.
- 8. Connect to Power source after complete inspection of machine and its cable. Do not operate machine with a damaged cables.
- 9. Do not operate it in dry, empty, or partially water filled condition where machine cannot submerse completely in water.
- 10. Make sure the machine is unplugged from its power supply before lifting, shifting or performing any maintenance.
- 11. To avoid damage to the power supply and cable, never carry the machine by the cable or pull on the cable. Do not pull cable around sharp corners or edges.
- 12. When machine is in water sump, do not enter when energized. Keep all persons away for electrical safety. It is advisable for extra safety to a strong earthing / ground cable is provided to water sump.
- 13. The machine designed to work on even floor surfaces. It is not designed to do initial clean up civil debris after new installation.
- 14. The source of power supply must be nearest to operational point at a safe distance.
- 15. Keep cable end dry and away from water source.
- 16. Recommended to operate machine in clean water before stopping to keep system hold up water clear from all debris and impurities. Make sure that impeller is free and clear of debris after every use.

- 17. Disconnect the power supply from the outlet when not in use.
- 18. DO NOT switch the machine to "ON" if it is not immersed in the water. Operation the product out of the water may cause severe damage and will result in loss of warranty.
- 19. Always remember to turn the power supply "OFF" and unplug it from the power outlet before removing the machine from the sump.
- 20. If machine is not working as it should or has been dropped or damaged in any way, contact Prayosha Innovative. By mail to <a href="mailto:info@sedimclean.com">info@sedimclean.com</a> or Customer Service +91 7096989955/66/44 For further updated details you may visit our product website at www.sedimclean.com

#### Assembling the machine and using for sediment removing

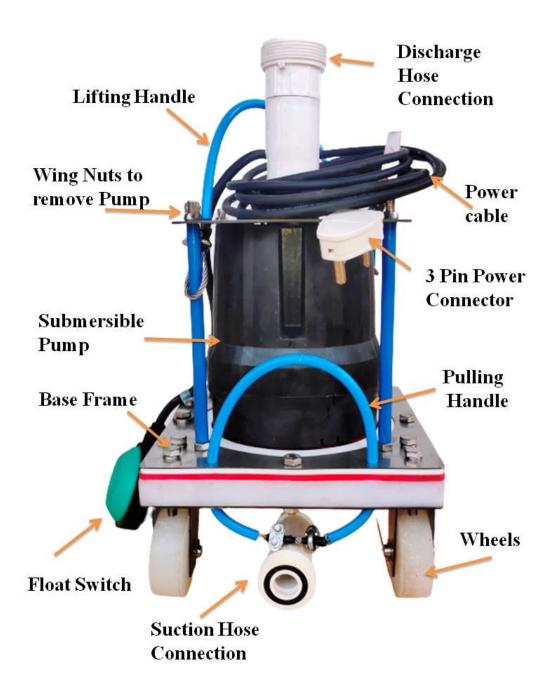
- 1. Unroll power cable.
- 2. Hand tight connect suction hose pipe union at bottom connection of submersible unit.
- 3. Hand tight connect discharge hose pipe union at top of submersible unit.
- 4. Assemble brush and handle set as per required depth of tank. We may use one or all three handles according to depth and distance of cleaning required.
- 5. Use rope with spring snap hook to tie up submersible unit of product with strong enough pole.
- 6. Move the machine up to insert position from where machine will be submersed in tank.
- 7. Lift the submersible unit by rope and submerse in water tank. Make sure that cable or hose pipe are not stretched during lowering for submerse.
- 8. Keep suction and discharge hose pipe's both ends outside water.
- 9. Fill water in suction hose pipe up to visible top level in discharge pipe.
- 10. Connect brush and its handle assembly to suction pipe.
- 11. Submerse brush end in water tank.
- 12. Check final discharged outlet of water is away from electrical installation and at appropriate drain or return position.
- 13. Connect power cord to power sourse and switch on the power.
- 14. Keep discharge hose at appropriate drain point or connect to filtration unit or at extend further to drain out away.
- 15. In starting pumping out water, few air bubbles may come out from discharge hose. Please allow it to stabilize to full water flow outlet.
- 16. Now move brush handle assembly to sediment settled floor for absorbing sediment.
- 17. Use brush movement forward or backward. Sometimes downpush pull is needed to mobilize sediment.
- 18. Based on type of sediment, control brush movement. For sand type sediment, we need to mobilize it faster by brush end to lift and pull in suction. While for fine dust like sediment, just move brush slowly on it. If observed that dusty cloud is becoming larger, stop movement and keep brush end over dusty cloud to suck it. This will keep our water clear to observe cleaning process easily.

- 19. If by mistake, settled sediments get mixed with water and water becomes turbid, stop cleaning process. Add appropriate quantity of alum powder in water and allow to settle it for few hours. Again water will be clear soon and cleaning process may be re started.
- 20. After completion of job, operate machine in clear water circulation just for few minutes for internal flushing of machine.
- 21. Stop the power to pump and move the machine to appropriate lifting position.
- 22. Pull out submersible unit by rope with keeping safety of hose and cable
- 23. Remove suction hose pipe and brush handle.
- 24. Disconnect suction and discharge hose pipes.
- 25. Allow to drain out machine's water content and hose pipes.
- 26. Roll the hose and cable
- 27. Store all components in safe and easy to asses for next use.

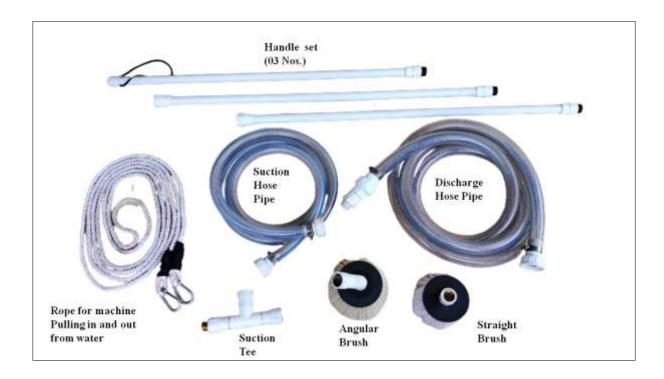
#### **Basic maintenance care**

- Do not dismantle electric motors.
- Do not grease or oil wheels
- Just clean external foreign object bonding from machine by low pressure water jet.
- Open top four wing nuts and lift the pump. Clean suction port and surroundings by fresh water. This cleaning is required occasionally.
- Inspect hose pipe and cables for any possible cuts or damages.

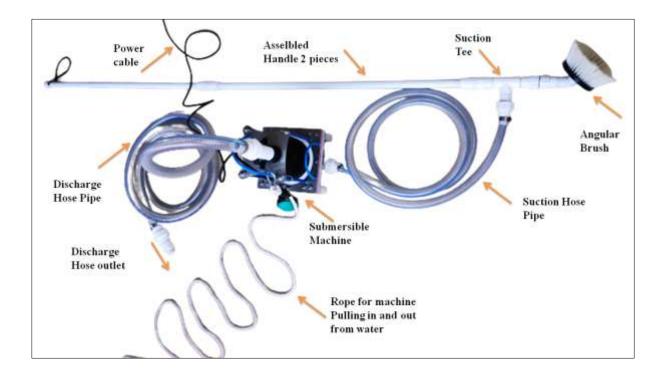
## **Submersible Pumping unit basic part Names**



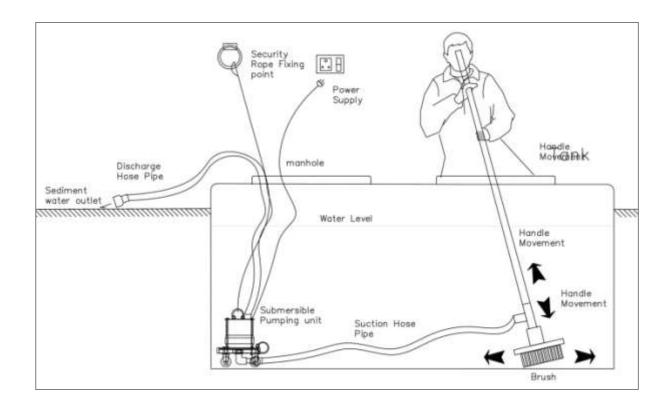
## All components shown separately



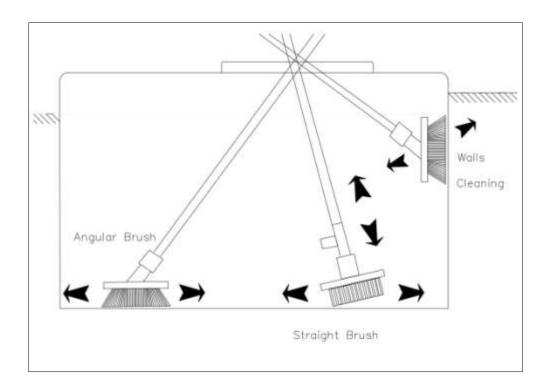
# **Assembled All components**



# **Using Machine for Sediment Removal**



## **Brush Movement**



#### **One Year Limited Warranty**

This product has been manufactured, tested and inspected in accordance with carefully specified engineering requirements. It is warranted to be free from defects in materials and workmanship under normal use and service, subject to qualifications, conditions and limitations described below.

Twelve months overall machine warranty. Pump motor warrantee is from pump manufacturer as per his terms and conditions. This warranty applies only while using this product in India. This warranty extends to the first consumer/purchaser for a period of 12 months from the original date of purchase.

This warranty covers only normal and reasonable use. Any damage, defects, malfunctions or other failures arising from its use without the original spares or any use which does not comply with the instructions in this manual, including failure of the purchaser to provide reasonable and necessary maintenance, will void this warranty.

The warranty obligations of **Prayosha Innovative** shall be limited to repair or replacement of the product or any defective component, at the discretion of **Prayosha Innovative**. The replacement or repair may include the use of refurbished components and/or units. **Prayosha Innovative** will not be liable or responsible under any circumstances or in any amount for any consequential or incidental damages, for any injury or damages to persons or property using or used in connection with this product, or for loss of profits or other costs or expenses of any kind or character.

This warranty does not include replacements of the filter bag, brushes, wheels, ..etc. Also cosmetic damage due to application wear and tear is not included.

There are no other warranties or representations, either expressed or implied, whether of merchantability, fitness for a particular purpose, or other, made by **Prayosha Innovative** other than those specifically set forth in this warranty. no person, firm, or corporation is authorized to make any representations or incur any obligations in the name for on behalf of **Prayosha Innovative**, except as stated herein. the remedies set forth in this warranty are expressly understood to be the exclusive remedies available to the purchaser, and this warranty contains the full and complete agreement between **Prayosha Innovative and the purchaser**. this warranty sets forth the only obligations of **Prayosha Innovative** with regards to this product, and there are no warranties which extend beyond the description on the face hereof.

## For spares and supports please contact us.

# Manufactured by



# PRAYOSHA INNOVATIVE

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