

# PROTEGE PUMPS®



## Macerator Pump

### User Manual

[Revision 2.0 October 2018]

---

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

---

# Table of Contents

<b>Safety Reminders.....</b>	<b>1</b>
<b>Usage and Safety Warning .....</b>	<b>1</b>
<b>Parts List.....</b>	<b>2</b>
<b>Installation .....</b>	<b>3</b>
Toilet Connection .....	3
Connection of Other Sanitary Appliances.....	4
Connection of the Discharge Pipework.....	5
Technical Advice for the Discharge Pipework .....	5
Connection to the Electrical Supply .....	5
<b>Operating Principle.....</b>	<b>6</b>
<b>Commissioning the Pump .....</b>	<b>6</b>
<b>Maintenance .....</b>	<b>6</b>
<b>Specifications.....</b>	<b>7</b>
<b>Correct Disposal .....</b>	<b>8</b>

## Safety Reminders

- The pump is only ready for use after installation.
- The pump must be supplied through a residual current device (RCD), having a rated residual operating current not exceeding 30mA.
- If the supply cord is damaged, it must be replaced by the manufacture or its service agent or a similarly qualified person in order to avoid a hazard.
- This pump is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the pump by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the pump.
- This pump is for domestic use only.

## Usage and Safety Warning



---

**WARNING! If you are away for a long period of time (e.g. holidays), we recommend that you turn off the water supply to the WC served by the pump.**

---

Toilet connected to this pump can be used like any normal toilet and requires minimum maintenance. The unit will operate automatically as soon as the required level of water enters the case.

The motor thermal protector will operate once the motor has overheated. Unplug the electrical plug from the socket-outlet, then plug it in again; the appliance will work normally after waiting for about 30 – 60 minutes.

## Parts List



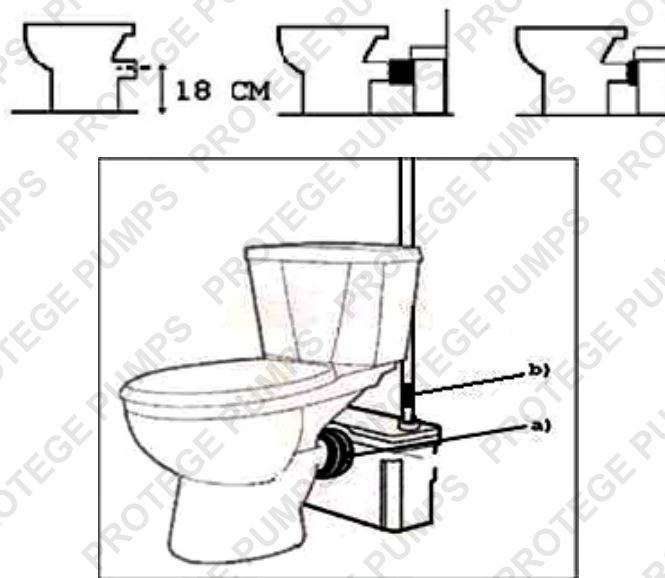
1. Manual switch
2. Connector for discharge pipe
3. Connector for toilet
4. Connector for other sanitary appliance
5. Connector for other sanitary appliance

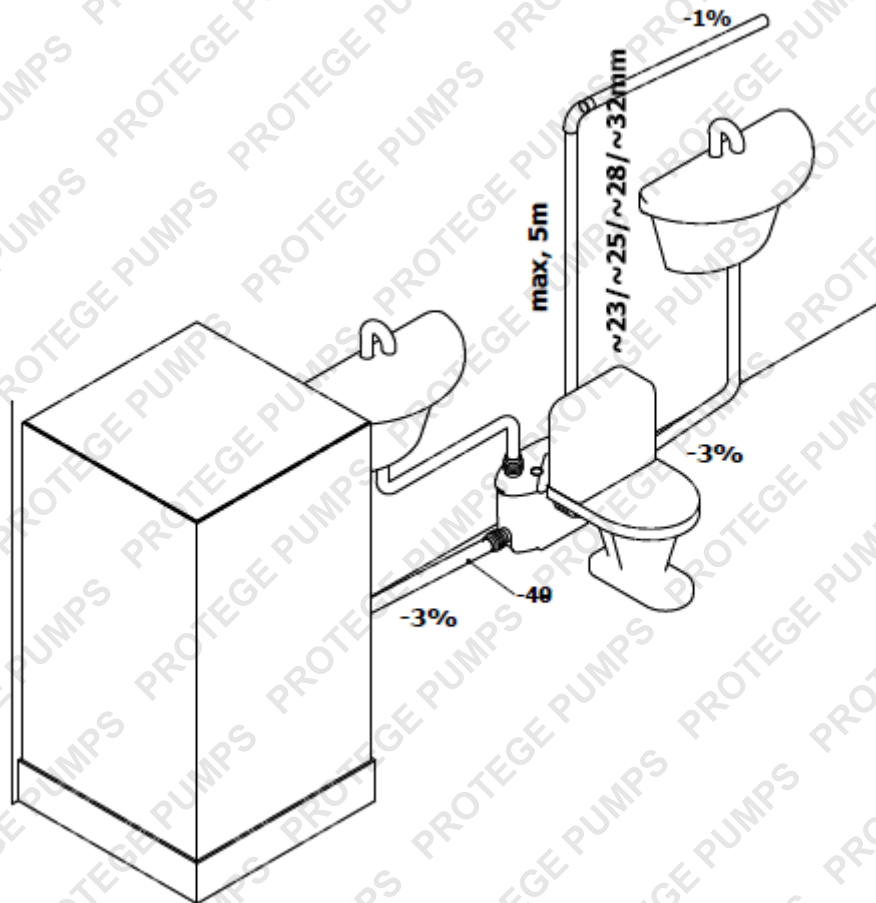
# Installation

## Toilet Connection

- Put some silicon or liquid soap on the toilet spigot.
- Fit the collar supplied onto the bowl outlet.
- Pull the flexible sleeve over the pan spigot.
- Position the jubilee clip over the edge of the flexible sleeve, and tighten it with a screwdriver.
- Once the pump has been positioned, secure it onto the floor by using the two screws supplied.

If you are using the two floor fixing lugs, secure them to the floor before positioning the pump.

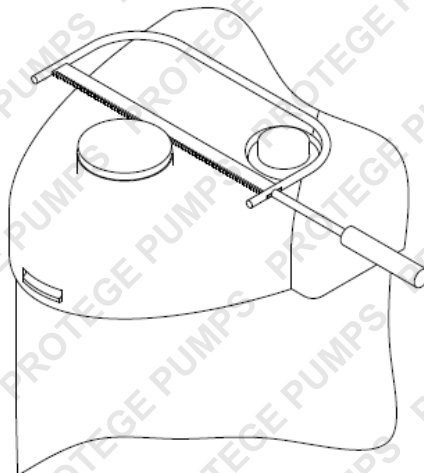




**WARNING!** There should be no water dripping from the toilet cistern or any other sanitary appliances. If there is, this will cause the pump to activate repeatedly as it pumps the water away.

## Connection of Other Sanitary Appliances

- Same as with [Toilet Connection](#).





## Connection of the Discharge Pipework

Insert the discharge elbow into the rubber discharge pipe, turn it to the desired direction and secure it with the metal jubilee clip provided (36 – 50mm). Then connect the hose to it using the 20 – 32mm metal jubilee clip, making sure that the hose is not twisted. A 22 – 32mm plastic reducer is supplied if the 32mm discharge pipework will be installed.

## Technical Advice for the Discharge Pipework

- Horizontal pipe runs must have a minimum fall of 1:200 (5mm per meter) to the soil stack.
- If a vertical lift is required, it must be made before the horizontal run at the start of the pipe run,
- Installing a drain-off point is recommended to allow the discharge pipework to be drained down before any service work.
- If the discharge pipework runs to a level considerably lower than that of the pump, the resulting siphoning effect can suck out the water seal in the pump. Fitting an air admittance valve (BBA approved) at the high point of the pipe run will overcome this problem.
- The discharge pipework must be connected to the soil stack using an appropriate strap on the pump.
- Ensure that all external pipework is adequately lagged to avoid the possibility of freezing.

**NOTE:** Any elbow on the discharge pipe of the pump will create friction loss (roughly 50 cm per elbow to be deducted from the vertical pumping spec.) Always use smooth bends (OR 2 X 45 degree bends together) and not 90 degree elbows.

## Connection to the Electrical Supply



---

**The electrical installation should only be carried out by a qualified person. The pump should be connected to a fully earthed electrical supply.**

---

# Operating Principle

The pump has been designed to pump away the waste from toilet and other sanitary appliances.

The pump for toilets comprises of an electric pump (D) that is automatically controlled by a float switch (C).

The discharge action is triggered when the flushing system is activated, as with a conventional toilet. See Figure 1 below:

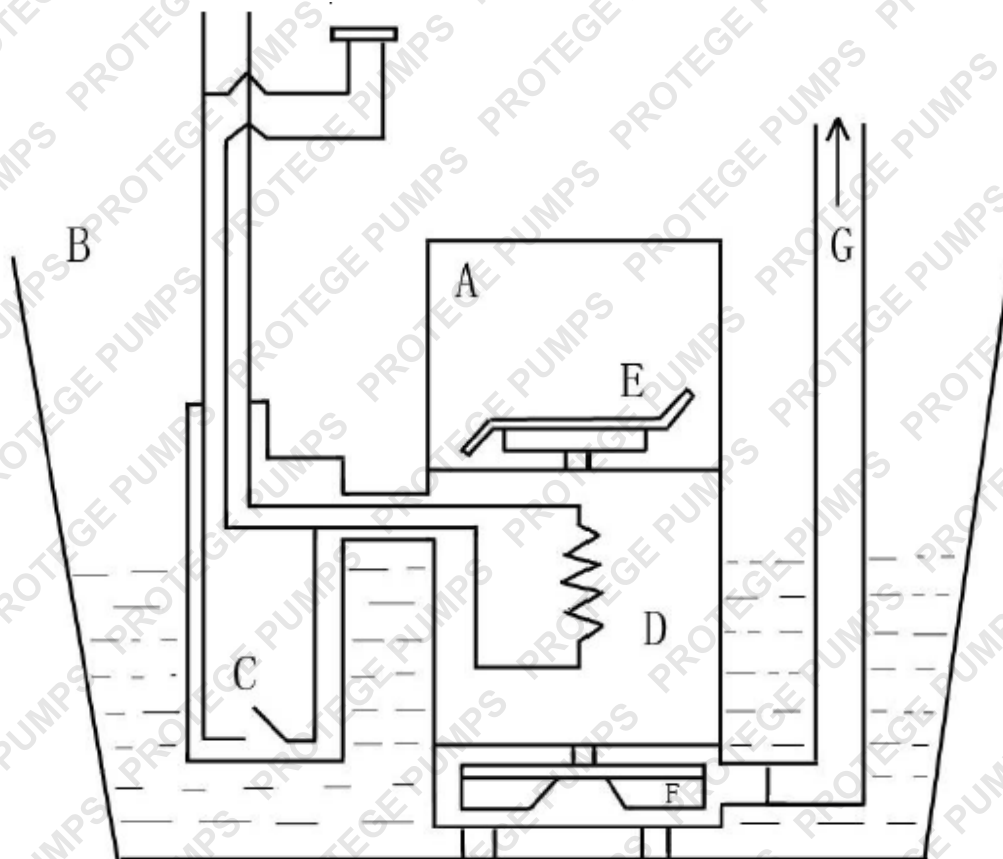


Figure 1

## Commissioning the Pump

Once the electrical and pipe connections have been made, flush the toilet once. The motor should run from 5 to 10 seconds to clear the waste (depending on the height of the pipe run). If it runs for more than 20 seconds, check that the pipework is clear and that the discharge hose is not tangled. Flush the toilet, checking that all of the seals and connections are watertight. Check both the discharge pipework from the pump and the other sanitary appliances connections.

## Maintenance



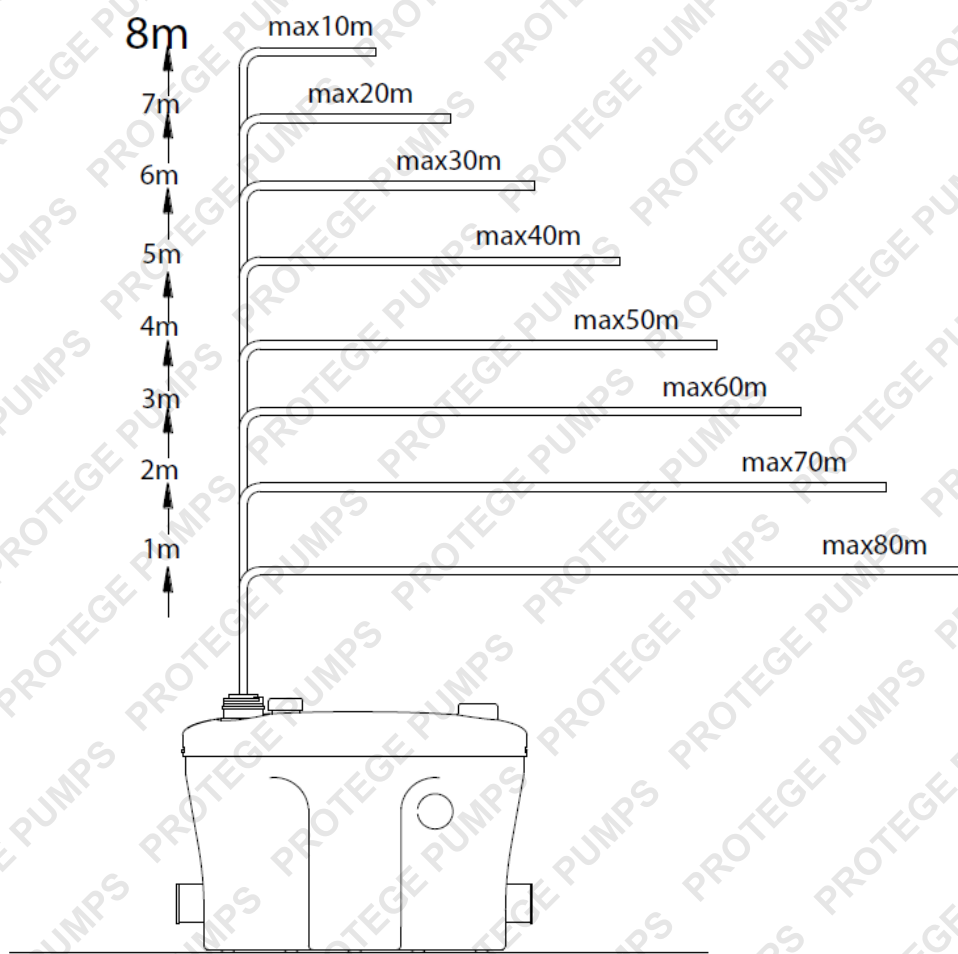
**DISCONNECT THE ELECTRICAL POWER SUPPLY BEFORE ATTEMPTING ANY WORK ON THE PUMP.**

- There is no need of any particular maintenance.
- This pump is fitted with an active carbon filter and requires no external venting.



# Specifications

<b>Rated Voltage</b>	220v-240v, 50Hz, 400W
<b>Max. Vertical head</b>	8m
<b>Max. Horizontal</b>	80m
<b>Rated Flow</b>	240L/min
<b>Min. Water Temp</b>	1°C
<b>Max. Water Temp</b>	60°C
<b>Rotating Speed</b>	2,750r/min
<b>Inlets</b>	1 x 100mm 2 x 40mm
<b>Outlet</b>	1 x 23/28/32mm (adjustable)
<b>Noise Level</b>	25 – 35dB
<b>Product Weight</b>	9kg



## Correct Disposal



This marking shown on the product or its literature indicates that it should not be disposed with other household wastes at the end of its working life.

To prevent any possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reusing of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office for details of where and how they can take this item for environmentally-safe recycling.





**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.</li> <li>▪ Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.</li> <li>▪ Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.</li> <li>▪ Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.</li> <li>▪ This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.</li> <li>▪ If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.</li> </ul> |
|---|---|



©2018 Protégé Pumps. All rights reserved. No part of this document, including descriptive content, concepts, ideas, diagrams or images may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, scanning or recording, or any information storage and retrieval system, without express permission or consent from the publisher.