



# Instruction manual

# **Waste Pump for Toilets**

PW600 - Item 50741









#### ENGI

## ADAPTABLE MACERATOR

## Installation and Utilization Instructions

#### OPERATING PRINCIPLE

The Macerator comprises a tank that receives the waste to be discharged and an electric pump that is automatically controlled by a pressure switch.

The discharge action is triggered when the flushing system is actuated, as with a conventional toilet.

#### INSTALLATION

In compliance with standard EN 12056-4

<u>ELECTRICS</u>: ♦ Connected with an earthed plug to a 2.5V 16 amp socket in accordance with current standards.

<u>HYDRAULICS</u>: The Macerator can only be used with a toilet with horizontal outlet and equipped with a tank or flushing tap.

The centre of the horizontal outlet must be 18 cm above the floor in accordance with European standards.

#### DISCHARGING THE TOILET ONLY:

- a) Introduce the horizontal bowl outlet into the rubber sleeve of the Macerator and clamp with the pipe ring supplied Fig. 1 -
- b) Introduce the discharge pipe into the rubber outlet. This shall be 40 mm or 32 mm in diameter. Clamp with the pipe ring.

#### CHECK VALVE

c) If the waste is to be expelled upwards, install the valve vertically as near as possible to the macerator --

### DISCHARGING WASTE FROM TOILET AND OTHER APPLIANCES

Connect the discharge pipes of the other appliances to the rubber connectors provided and clamp with the pipe ring - Fig. 2 -

For bath or shower waste water, check that the slope from the syphon has a gradient of at least 1 cm per meter so that the waste flows by gravity to the Macerator -.

If other appliances are connected along the discharge line near to the macerator, install check valves on their discharge pipes in order to prevent waste return.

The slope of the horizontal parts of the discharge line must have a gradient of 1 cm per meter.

#### PERFORMANCE RATINGS

Maximum discharge height: 5.5 meters
Maximum horizontal length: 60 meters

#### SPECIFICATIONS

Water temperature:

1°C minimum

Motor power:

90°C maximum 600 watts

Voltage:

230 V 50 HZ

Amperage:

3 A





Thermal safety device:  $135^{\circ}C$ Discharge head: 6 mwsCapacitor:  $10 \pi \text{ F}/450 \text{ V}$ Flow rate at pump output: 240 litres/minuteProduct compliant with standard EN 12050-3

## UTILIZATION

In order to ensure total satisfaction with your appliance for many years, only toilet waste, water and paper should be discharged using the macerator. Discharge of any other materials than those mentioned will invalidate the Warranty.

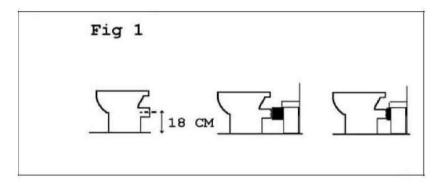
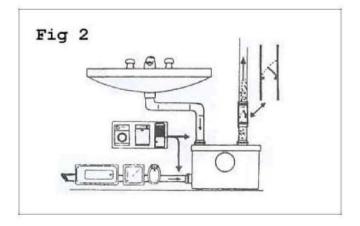


Fig 1 (a)







#### DISPOSAL OF THE APPLIANCE

When the appliance has reached the end of its service life, it can not be treated as ordinary household waste. It must be taken to a waste recovery centre or returned to the distributor when purchasing a new replacement appliance.

The symbol



on the appliance indicates that it meets the new directive 2002/95/EC 2002/96/EC 2003/108/EC and must be handled in accordance with these standards at the end of its service life.

## ADAPTABLE MACERATORS

## OPERATING PRINCIPLE

The products to be discharged are collected in tank A.

Air chamber B records the air pressure flowing through pipe C to pressure switch D.

The pressure switch trips the motor E that drives the turbine F.





The waste is discharged through outlet G.

The mechanism is simple and manufactured from top quality components. The operating principle is based on a proven design.

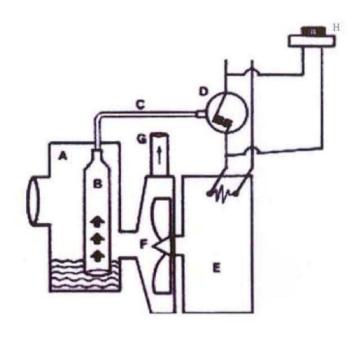
CONTROL COMPONENT 1 PRESSURE SWITCH

<u>MECHANISM COMPONENTS</u> 1 ELECTRIC MOTOR

1 TURBINE

CONTROL COMPONENTS 1 MANUAL OVERRIDE SWITCH

AND SAFETY DEVICE 1 CHECK VALVE

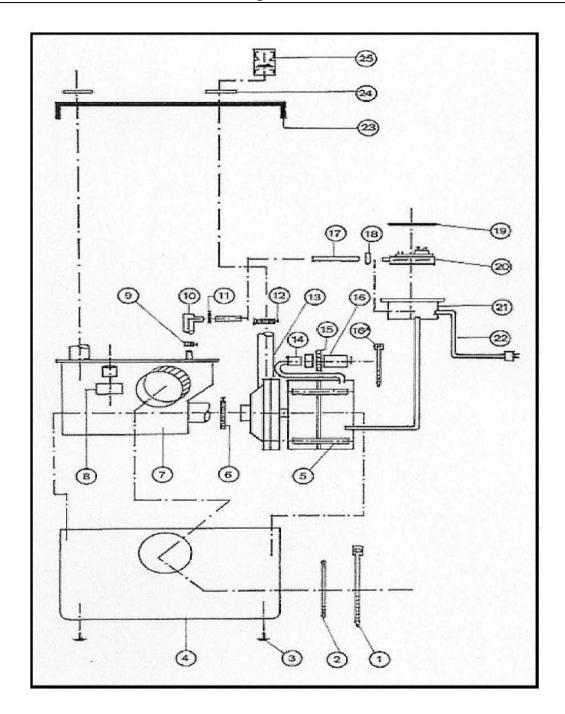


## ADAPTABLE MACERATORS

## BREAKDOWN OF THE APPLIANCE







# ADAPTABLE MACERATORS





## SPARE PARTS LIST

- 1. Plastic pipe ring to join the macerator to the toilet
- 2.110 mm chromium-plated flange
- 3. Rubber foot
- 4. Macerator housing
- 5.230 V electric motor
- 6. Steel pipe ring to join the turbine to the tank
- 7. Rubber tank
- 8. Decompressor float
- 9. Steel pipe ring
- 10 . Plastic elbow
- 11. Steel pipe ring
- 12.145 Mm diameter steel pipe ring
- 13 . Rubber discharge pipe
- 14.15.16. Capacitor
- 16A . Plastic pipe ring
- 17. Transparent pressure switch air pipe
- 18 . Plastic pipe ring
- 19. Cover of rubber housing containing the pressure switch
- 20 . Pressure switch
- 21. Rubber housing to contain the pressure switch
- 22. Pressure switch electric cable
- 23. Macerator housing cover
- 24 . Chromium-plated flange
- 25. Check valve
- 26. Manual override switch

## ADAPTABLE MAINTENANCE

Our appliances are designed to discharge fecal matter and toilet paper only.





Some small items may however pass through the pump. But larger items unfortunately can block the pump. This is the main cause of breakdown recorded by our Customer Support Department.

The appliance works but	down recorded by our customer Sup Causes	Remedies
	Discharge pipes too long or too high	Recalibrate the pipes
is not powerful enough or too	Discharge pipe diameter too small	Recalibrate the pipes
slow to discharge the waste		Actuate the pump with the manual
	Partial blockage	override switch. If the problem
		persists, the pump must be blocked Check the pump
	Pump blocked	Check the pump
Emits a humming noise but		
does not discharge the waste	Check valve installed the wrong way round	Reinstall it the right way round
	Check valve defect	Check the valve
Ct	Leak in the flushing tank that causes water to flow into the	
Starts running and discharging accidentally	macerator and sets it running	Repair the leak
discriding accidentally	intermittantly	Repuil The leak
	Vertical discharge without check valve	Install the check valve
Runs continually	Check valve defect	Check the valve
	Pressure switch defect	
		Check the pressure switch
	Electrical connection defect	Check the connection
		Press the manual override switch
	Pressure switch	several times, if the appliance starts running check the electrical
No humming noise	Fressure Switch	connection of the pressure switch and
		the pressure switch line (see method)
		Pressing the manual override switch
	Motor	has no effect. Check the motor.





## ADAPTABLE MAINTENANCE

## PRESSURE SWITCH INSPECTION

Plug the pressure tap chamber located in the rubber tank, press it down to create pressure and listen to hear if there is a click indicating that the motor has switched on. If there is no click, also check that the air chamber of the pressure switch pipe nozzle does not leak.

If the appliance is switched on, the motor should start running.

Before performing this operation, check that the opening or inside of the pressure tap chamber are not blocked.