

ecogum
MIDI

INSTRUCTION MANUAL

(Original Instructions)



Weight (Fully Loaded): 7.5kg
Lance Weight: 2.4kg



CONTENTS

This manual contains the following sections:

1. Warranty Information.....	3
2. Safety.....	4
3. Batteries: Charging.....	5
4. Gas Installation.....	6
5. Lance.....	7
6. Harness.....	8
7. Hand Controller.....	9
8. Solution.....	10
9. Gum Removal.....	11
10. Consumables.....	13
11. Technical Specification.....	14
12. Contact Us.....	15

WARRANTY INFORMATION

Thank you for the purchase of your Ecogum machine.

This warranty applies to physical goods, and only for physical goods, purchased directly from Eco Removal Systems or authorised distributors. This information is relevant to purchases in the United Kingdom only. For purchases in other countries, please contact the original point of purchase.

What does it cover?

This warranty covers any defects in material or workmanship under normal use during the Warranty Period. During the Warranty Period, Eco Removal Systems will repair or replace, at no charge, products or parts of a product that proves defective because of improper material or workmanship, under normal use and maintenance.

What is not covered?

This warranty does not cover any problem that is caused by:

- conditions or malfunctions not resulting from defects in material or workmanship.
- the use of non-Eco Removal Systems consumables; this will result in the warranty being voided.
- damage or wear and tear.

If a product is assessed and determined as not covered under warranty, the customer will be liable for transport, labour and parts costs associated with the repair. In the event a product is assessed and determined to be fully working and not needing of any repair, the customer will be liable for transport and a labour charge for assessment.

What will we do?

Eco Removal Systems will repair the product at no charge, using new or refurbished replacement parts. We will also arrange the collection and return using our own courier. If you choose to use your own transport, we cannot cover these costs.

The Warranty Period

The Warranty Period for Ecogum machines is 12-months from the date of dispatch. Please contact us if you wish to extend your warranty period.

What do you have to do?

To obtain our warranty service, you must first contact us to run through some troubleshooting to determine the problem. Once the problem is determined, we will arrange collection of your product, if it is determined that it needs to be assessed by our engineers.

Please have your serial number of the machine to hand. You will find this on the exterior of the Midi box (inside the backpack).

Servicing

The Ecogum Midi should be serviced every 12 months by Eco Removal Systems or an authorised agent only.

SAFETY

IMPORTANT SAFETY INFORMATION

READ ALL INSTRUCTIONS BEFORE OPERATING THIS MACHINE.

Do not use the Midi unless you have read and understood the operating instructions manual. In the event of a breakdown contact the manufacturer or authorised distributor.

When using this machine, basic precaution must always be followed.

Always keep the unit upright when operating and keep the lance held in an upright position always.

When operating the Midi be mindful of your surroundings and only move when it is safe to do so.

Lance not to be rested on any surface when in use and always switch off when not in use.

Ensure the Ecogum Midi is fully charged BEFORE each use to ensure maximum run time and peak performance during operation.

Only use manufacturer approved solution and gas canisters for the safe operation of the machine. Using other consumable items in the machine invalidates the warranty and will lead to damage of the internal parts of the machine and may pose a risk to the operator.

Misuse or use of other detergents may adversely affect the safety of the machine. This will also invalidate the warranty cover.

Never disconnect the lance or tamper with the lance.

Please read the safety label on detergent bottle. Please contact us if you require the MSDS for the gum remover solution.

Always wear appropriate PPE and beware of areas on the machine that may get hot.

Never leave the machine unattended, except when in storage.

Always dispose of equipment responsibly. Always dispose of lithium-ion batteries by approved disposable methods.

Always store the machine inside or in an area that is dry.

Subject to change without prior notice, please contact us for the latest information.



BATTERY: CHARGING

CHARGING

Built into the machine is a LI-ION battery, which will last approximately 8 hours. To charge the battery, plug the charger into the charging port on the side of the machine. The charger has a battery indicator that will be **red** while charging and show solid **green** when fully charged. It will take approximately 4 hours for the battery to fully charge.



Charging Port



Midi Battery Charger

On each charger, there is a small LED light. **RED** = charging. **GREEN** = fully charged. It takes approx. 4 hours to charge the battery.

IMPORTANT: Always make sure the battery is plugged in before switching on the charger.

NEVER connect the charger while the Ecogum Midi is still on.

Always fully charge before use.

Make sure your battery voltage matches with your charger.

Always place the charger in well-ventilated, dry environment.

Indoor charging only, never expose the charger to water such as rain and splashing.

Never charge other type batteries except these specific models.

Ensure good ventilation is provided when chargers in operation.

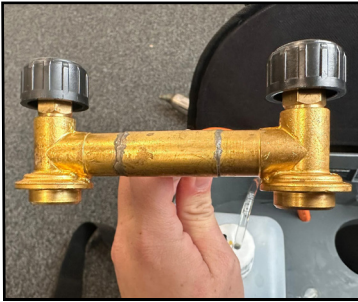
Never place the charger near a radiator, heat register or similar heat source when in charging.

GAS: INSTALLATION

INSTALLATION

The Ecogum Maxi uses two LPG gas canisters, which power the boiler within the lance. These gas canisters are fully interchangeable and connect to the unit via a gas manifold located inside the backpack. The gas canisters slot into the two cut-out holes within the backpack, which house the cans and minimise movement.

The Gas Manifold



Gas Manifold Valve
(Open + and Close -)



Gas and Detergent
Installed



Before connecting or removing the LPG gas canisters via the gas manifold, ensure the valves on either side of the manifold are closed (turned all the way clockwise to the minus symbol).

To connect the gas, align the manifold valve with the top of the LPG canister and twist anti-clockwise. Ensure the gas canister is fully tightened to avoid leakage. Important: Do not overtighten or you can break the valve knob.

Once both canisters are attached to the manifold, slot the canisters into the cut-out holes and twist the valves to the open position. (turned all the way anti-clockwise to the plus symbol). This will allow the gas to flow through the machine.

Important: Please ensure the valves are turned off (-) when not in use.

Only use the machine with two gas canisters connected.

The unit should be turned off immediately if you smell gas (except during the brief moment of fitting or removing the gas canisters).

This unit is designed to use only 350g butane-propane mix gas cartridges manufactured by Go Gas Ltd. This machine may be unsafe if used with any other gas cartridges.

LANCE

SAFETY

As the boiler is located within the lance, exercise caution with the placement of the exhaust when the machine is running or has recently been turned off, as it will be hot. To avoid damage, ensure the exhaust is not pointed at clothing or other flammable surfaces during use.



Lance Exhaust Label



The Heat Indicator Label



Attaching the brush to the lance

To attach the brush to the lance, ensure the machine is switched off and the dial is set to 0 (to avoid hot detergent spilling on your hand) and screw the brush onto the tip of the lance. (Note: Do not overtighten).

When the red label is showing black (55), this indicates the exhaust is HOT. It will take approximately 90 seconds to heat up the boiler and the label to change to black.

When the black (55) disappears and turns to red the boiler is now cold (please note the time for this will depend on the surrounding environment).

Over time, this label may start to turn black, even when cold. This is completely normal and is just a guide for the machine when you are learning how to use the machine.

Do not tamper with the lance at any time, refer to manufacturer for diagnosing any issues.

HARNESSES

ADJUSTING

1. Unclip the waist and chest straps.
2. Loosen the shoulder straps and waist belt.
3. Put on the unit by sliding your arms through the shoulder straps; first, secure and tighten the chest strap, then fasten the waist strap.
4. Tighten the shoulder straps.
5. Adjust the chest strap and waist strap position until comfortable so the weight is proportioned evenly.



Clip in the clasp on the chest strap



Pull the chest strap tight



Optional waist strap for comfort

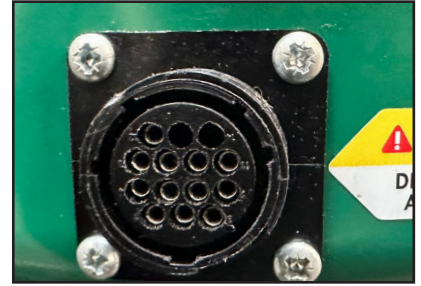


Waist strap pulled tight

HAND CONTROLLER

CONNECTING

1. Connect the hand controller to the side of the machine by lining up the pins with those in the socket. Once aligned, tighten the retaining clip to ensure the connection is secure.
2. Using the ON/OFF (O/I) switch, switch the machine ON (I) and the screen will illuminate.
3. Always remove the handheld controller when the machine is not in use.



IMPORTANT: when connecting the handheld controller, always go in flush to the connector, NEVER try to connect at an angle as this can damage the pins and you may cross thread the housing thread.

Always keep the plug and socket free from any fluid. If you get any gum remover solution on the pins, it may dullen the pins and stop them making contact. If you notice this, please clean the contact carefully to remove any residue.

UNDERSTANDING THE HAND CONTROLLER

Ignition button ignites the boiler within the lance. Hold for 2-3 seconds while the gas valves are open.

Pump dial, which controls the rate of solution out of the lance.

This DOES NOT control the heat of the machine. It controls how fast the detergent is pumped through the heater and out of the machine.



LCD Panel indicates your battery level. (For a true reading, if you put the machine in 'priming' mode, this will give you the most accurate battery level). *See the Priming section for more information*

Power button, which switches the machine on and off.

**Higher = colder
Lower = hotter
Between 2 and 3 = gum setting**

SOLUTION

LOADING THE SOLUTION

1. While the power is off, place the machine on a level surface. Open the backpack zipper to reveal the inside of the backpack, then place the pre-mixed Ecogum solution into the designated compartment.
2. Unscrew the cap and insert fluid pipe and tighten breather cap (do not overtighten).
3. Zip the backpack back up.



Zipper to open the backpack



Bottles of gum remover solution



Detergent Line



Solution Installed

GUM REMOVAL

SETUP

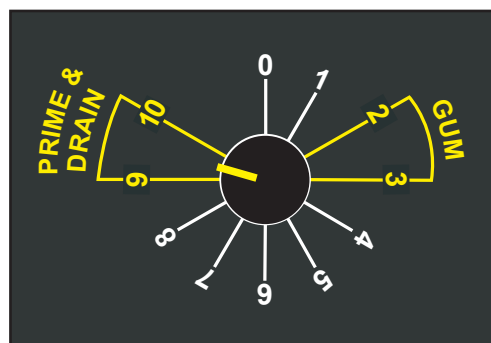
1. It is recommended to wear gloves and safety goggles when operating the gum remover.
2. Open the zipper on the backpack.
3. Connect both LPG canisters to the gas manifold and place them in the sleeve
4. Insert bottle of Gum Remover Solution and remove bottle cap inside the backpack.
5. Insert fluid pipe and tighten breather cap (do not overtighten).
6. Replace lid.
7. Screw brush onto the end of the lance.
8. Locate the handheld controller.
9. Ensure the on/off button is set to OFF (O) before connecting.
10. Connect to the machine using the connector at the base of the machine.
11. Secure the handheld controller to the harness using the carabiner.

PRIME

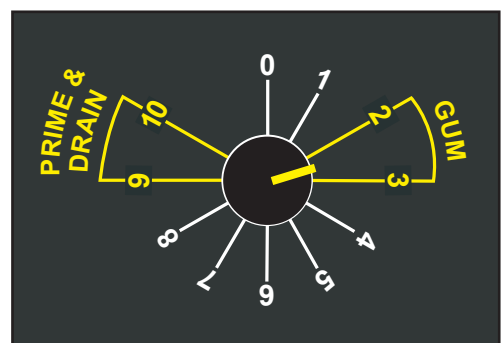
1. On the handheld controller, turn the switch ON (I) to turn on the machine. You will see the LCD panel illuminate to signify that is on.
2. Turn the pump dial to between 9 and 10 which will prime the machine's fluid lines.
3. Wait until fluid starts to exit the end of the lance.
4. **Important: When fluid is visible, turn the pump dial down to between 2 and 3.**
If you use a higher number, gum removal performance will be reduced.
5. Press the ignition button on the handheld controller, after holding for 2-3 seconds, the boiler should ignite.
6. Wait around 10 seconds for the lance to heat up and then you can remove gum.
7. Note: The LCD display on the control panel will give you a guide of battery %. When the heater is in operation, it will lower the % as it's drawing a current, especially if you just turn it on to check, as this causes a spike as the heater kicks in. To get an accurate read, turn your dial to 10 and this will cut off the heater and you will see the % increase to an accurate level.



Ignition Button on Handheld controller



Prime Setting



Gum Removal Setting

GUM REMOVAL

REMOVING GUM

1. Place the end of the lance on top of the piece of gum.
2. Wait a couple of seconds for the Gum Remover Solution to soak into the gum.
3. When you feel/see the gum start to break down, move the brush around to agitate and dissolve the gum.
4. Leave the remnants to dry or sweep away using a brush.
5. Repeat this process if needed to remove all traces of gum.



IMPORTANT: Always allow a few seconds for the gum remover solution to soak into the gum before agitating.

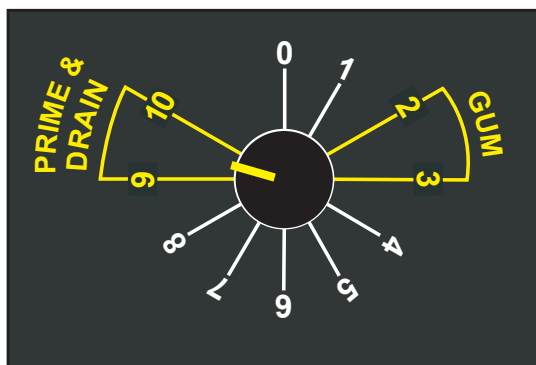
Agitating too early will slow down the gum removal process and will be more effort for the operator.

CLOSING DOWN

1. Open the backpack using the zippers.
2. Remove the fluid pipe from the detergent bottle.
3. **IMPORTANT: If the gum remover isn't going to be used for 2+ days, it is highly recommended to drain the lines of the machine. If not drained, there is a risk of a blockage.**
4. Drain the machine by turning the switch ON (I) and turning the fluid dial to between 9 and 10.
5. If you have depleted your battery, you will need to charge the battery to be able to drain the machine.
6. Disconnect the handheld controller. Screw original detergent cap onto the detergent bottle to prevent spillages.
7. Turn the switch OFF (O) on the control panel.



Fluid Line Removed



Drain Setting

CONSUMABLES

SERVICE PACK



Product Code	Product	Description
ERSDPG01	Gas Service Pack	Contains 4x 2L Gum Remover Solution, 2x Hard Brushes
BRSH0003	Brush- Hard, Stainless Steel	For all hard surfaces

ORDERING

If you'd like to order replacement consumables, please contact us directly: sales@ecoremovalsystems.com or call us on +44 (0)121 558 1550. For international orders, please contact your original point of purchase.

IMPORTANT: Only use manufacturer approved solution for the safe operation of the machine. Using other consumable items in the machine invalidates the warranty and will lead to damage of the internal parts of the machine and may pose a risk to the operator.

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**Scan me to contact
Eco Removal Systems**

TECHNICAL SPECIFICATION

Mains Charger	V	110-240
	Hz	50-60
DC Input	CC/CV	16.8
Rated Power	W	18
Battery Pack	V	15 nominal
	W	135
Battery Pack Cycle 300 times	%	≥ 90 of C rating
Run Time	Hrs	≥ 7
Hose Length	mm	1580
Lance Length	mm	1200
Noise Level	dB(A)	≤ 70
Weight	Kg	7.5
Temperature Output	°C	95 ± 2
LPG Gas Pressure Regulator	BAR	1
Solution Capacity	Ltr	2
Operating Output Pressure	BAR	≤ 1
Maximum Ambient Temperature	°C	40+
Ambient Humidity Range	%	10-90
Machine Dimensions (LxWxH)	mm	250x300x550
Pump Power	W	1.5-1.7
Pump Voltage	VDC	12
Pump Run Time	Hrs	1000
Flow Rate	SLPM	0.16 @ optimum use
Gas Consumption LPG	Gm/Kw	60g per hour = 0.83 kW per hour = 34 dm ³ per hour

CONTACT US



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