

# ECO REMOVAL SYSTEMS

ecogum  
MINI

## INSTRUCTION MANUAL

Steam Operated Machine  
(Original Instructions)

Backpack fully  
loaded 7.5kg



Lance  
weight 2.8kg



Patent number:  
GB2507664

Version 1.4





Thank you for purchasing an Eco Removal Systems product.

Your Warranty covers parts and labour for a period of 12 months.  
Please note this on all fair usage. Please see page 13 for full warranty information.  
Please contact us to extend your warranty at [sales@ecoremovalsystems.com](mailto:sales@ecoremovalsystems.com)

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

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This manual contains the following sections:

- How to Use This Manual
- Safety
- Operations
- Consumables

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering the correct consumables.

Consumables may be ordered from authorized dealers. When placing an order, the machine model and machine serial number are important.

The model and serial number of your machine is located inside of the backpack on the front case.



regarding hazardous or unsafe practices of the machine. Levels of hazards are identified that could result in product damage, personal injury, or severe injury resulting in death.

### IMPORTANT SAFETY INSTRUCTIONS

When using this machine, basic precaution must always be followed, including the following:

Using Machine -5° to +50° inside or outside

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

**WARNING:** To reduce the risk of fire, electric shock, or injury

- Keep the unit upright at all times when operating and keep the lance held in an upright position always. Do not put the lance down until 3 minutes after use or when it has cooled down.
- The rechargeable battery has been designed to be fully charged BEFORE each use.
- Only use manufacturer approved solution and fuel 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.
- Do not use the Mini machine unless you have read and understood the operating instructions manual.
- In the event of a breakdown contact the manufacturer or authorised distributor
- Never disconnect the lance or tamper with the lance especially when switched on.
- Please read the safety labels on the gas canister and detergent.
- Always wear appropriate PPE and beware of hot areas.



- Always dispose of equipment responsibly.
- Always dispose of lithium ion battery's by approved disposable methods.
- Lance not to be rested on any on any surface when in use. Allow a distance of 24 inches or 60cms from contact with the exhaust. Always hold the lance in an upright position when using, and always switch off when not in use.
- Only use recommended detergents, gas and consumables. Only purchase through the manufacturer or official distributor.
- Misuse or use of other detergents may adversely effect the safety of the machine. This will also invalidate the warranty cover.

**READ AND SAVE THESE INSTRUCTIONS**  
(and keep with the machine at all times)

The following symbols are used throughout this guide as indicated in their descriptions:

## HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words **WARNING** and **CAUTION** and **FOR SAFETY**.

The level of hazard intensity is determined by the following definitions:

### **WARNING:**

**WARNING** - Hazards or unsafe practices which COULD result in severe personal injury or death.

### **CAUTION:**

**CAUTION** - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

**FOR SAFETY:** To Identify actions which must be followed for safe operation of equipment. Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

- **FOR SAFETY - DO NOT OPERATE MACHINE:**
- Unless Trained and Authorized.
- Unless Operation Guide is Read and understood.
- In Flammable or Explosive areas.
- In areas with possible falling objects
- When in an area where there is a possibility of an electrical storm.

### **WHEN SERVICING MACHINE:**

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use manufacturer approved replacement parts.

### **WARNING HOT AREA:**



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

When red label is showing black (hot) the exhaust is HOT ( please note it will take approximately 3 minutes to heat up the boiler and the label to change to black) When the black ( HOT) disappears and turns to red the boiler is now cold ( please note the time for this will depend on the surrounding environment)

## Charging the machine

Plug the charger into the charging port on the machine.

It will take approximately 4 hours for the battery to fully charge.

A fully charged battery will last for 8 hours. Charger will show a red light while charging and a green light when fully charged.

If charger displays anything other than the listed colours, contact ERS.



## Cleaning Gum

Ensure the battery has been charged and disconnected from the charger (ensure this is done on a even surface)

Place on a even surface and unzip the backpack and undo the velcro which holds the pipe in place. Unscrew the lid on the detergent bottle and insert the bottle into the the large pocket.

Screw the cap onto the bottle (which is attached to the unit by a tube) and make sure the tube is pushed as far down the bottle as possible.

Screw the LPG gas bottles onto the gas valve manifold and tighten hand tight and place into the 2 circle pockets.

Secure the pipe using the velcro to the backpack Turn the gas valves on by turning clockwise ( please note the gas is now on)

Screw in the appropriate brush on to the end of the nozzle on the lance.

Zip the rucksack back up.

Operator to place rucksack on their back and adjust straps accordingly (please see page 8 )

### **WARNING**

**Always remove the brush when its cold. Switch off the machine and hold in a upright position for at least 3 minutes. Always remove the brush by wearing gloves.**





## Using the machine

- To commence operation make sure that the fluid controller is set to 0.
- Turn the on/off button to number 1 setting which turns on the battery, which starts the pump, the fan and the solenoid.
- After 5 seconds press the red button which ignites the burner in the lance. You will hear this ignite.
- Turn the fluid control dial to setting 10 until you see detergent appear from the lance brush.
- Then turn the fluid control dial to setting 0 for 1 minute while the boiler heats up.
- Next turn the fluid control dial to the required setting ( for gum removal set between 2-3 a small adjustment may be required depending on the surface or for a different use increase accordingly)
- Note: The fluid indicator will light up when the solution is empty in the backpack.

## Adjusting the Machine

Unclip waist and chest straps. Loosen shoulder straps and hip belt.

Put on unit by placing arms through shoulder straps and secure and tighten the hip belt.

*NOTE: For the most comfort, adjust unit so that the hip belt covers the front hipbones and the bowed-out portion of the back padding rests on the small of the back.*



Tighten the shoulder straps to the point where the unit's weight just starts to pull down on the shoulders. Ideally most of the unit's weight will remain on the waist.

Adjust the chest strap position to be high on the chest and tighten till comfortable.

## Cleaning Gum

Once the machine has heated up, place the brush on the piece of flattened gum and wait 5-10 seconds.

Agitate the flattened gum with the brush using circular motions until you see gum disintegrate. Do not scrub or apply pressure. The weight of the lance with agitation is all that is required.



Remove the brush from the gum and use a broom to sweep across the area. Determine if all the gum has been removed or if more cleaning is required.

If further cleaning is required, repeat the cleaning steps until gum is completely removed.

*NOTE: Always complete a test patch on surfaces to make sure no damage occurs to the flooring or surface.*



End of Use

Place the machine on a level even surface

Turn the switch to "OFF" - 0

Unzip the backpack and turn the gas valves off by turning clockwise and unscrew from the manifold, unscrew the detergent bottle and remove from the unit.

To drain the unit, turn "on" 1, turn the fluid control dial to 10 until there is no fluid coming from the nozzle at the end of the lance.

BEFORE YOU DO THIS ENSURE THE DETERGENT WAS ORIGINALLY REMOVED AND THAT THE FLUID IS NOT EFFECTING ANY SURFACE.



Turn the power "off" 0

Always store the ERS MIni in a well ventilated dry area.

| Product Code | Min. Qty | Description                                                                                         |
|--------------|----------|-----------------------------------------------------------------------------------------------------|
| ECOGSB       | 1        | <b>Gum Service Box</b><br>(2x gas cartridges, 4x detergent bottles, 2x ECORNB brushes)              |
| ECOOSB       | 1        | <b>Oil Service Box</b><br>(2x gas cartridges, 2x detergent bottles, 1x ECOOBSS brushes)             |
| ECOGPB       | 1        | <b>General Purpose Service Box</b><br>(2x gas cartridges, 4x detergent bottles, 1x ECOOBPP brushes) |
| ECORNB       | 20       | <b>Brush:</b> Round - Black - Hard - Stainless steel (for hard surfaces)                            |
| ECOSNBGREY   | 20       | <b>Brush:</b> Round - Grey - Medium - Polypropylene (for soft surfaces)                             |
| ECOSNBGREEN  | 20       | <b>Brush:</b> Round - Green - Soft - Polypropylene (for carpet & matting)                           |
| ECOOBSS      | 10       | <b>Brush:</b> Oblong - Blue - Hard - Stainless steel (for hard surfaces)                            |
| ECOOBPP      | 10       | <b>Brush:</b> Oblong - Orange - Hard - Polypropylene (for soft surfaces & carpet)                   |



Rolling Ball Lance Support

The ergonomically designed rolling ball lance support takes the weight of the lance making the cleaning process much easier on the operators arms.



Durable Carry Cart

Constructed in steel with rubber wheels and velcro fixings, this makes easy work of moving the backpack around.



Service Pack

Containing 4 x 2Ltr bottles of detergent, 2 gas canisters and 2 ECORNB brushes

Please note; The rolling ball and durable carry cart are added accessories please contact us for more details

READ AND SAVE THESE INSTRUCTIONS  
(and keep with the machine at all times)



**EC Declaration of Conformity**  
In accordance with BS EN ISO/IEC 17050-1:2010

We: Ecogum (Eco Removal Systems Ltd)  
Of: 126 Oldbury Road, Smethwick, Birmingham, B66 1JE

declare that:

Equipment: Portable LPG fuelled chewing gum removal system  
Model name/number:

in accordance with the following Directives:

|                    |                                                                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2004/108/EC</b> | Conforms with the essential performance requirements of the Electromagnetic Compatibility Directive and its amending directives                           |
| <b>2006/42/EC</b>  | Conforms with the essential health and safety requirements of the Machinery Directive and its amending directives                                         |
| <b>2011/65/EU</b>  | Conforms with the requirements of the RoHS Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment |

has been designed and manufactured to the following specifications:

**EN ISO 12100:2010**  
Safety of machinery. General principles for design. Risk assessment and risk reduction

**EN 60335-1:2012**  
Household and similar electrical appliances - Safety -- Part 1: General requirements

**EN 60335-2-79:2009**  
Household and similar electrical appliances - Safety -- Part 2-79: Particular requirements for high pressure cleaners and steam cleaners

**EN 55014-1:2006+A2:2011**  
Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Emission

**EN 55014-2:1997+A2:2008**  
Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Immunity. Product family standard

**EN 61000-3-2:2006**  
Electromagnetic compatibility (EMC) -- Part 3-2: Limits - Limits for harmonic current emissions (equipment input current <= 16 A per phase)

**EN 61000-3-3:2008**  
Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection

I hereby declare that the equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the Directives.

Signed by: 

Name: Jason Smith      Position: Director

Done at: Ecogum      On: 10/06/2014

This declaration of conformity is issued under the sole responsibility of the Eco Removal Systems Ltd

# 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 authorized 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.

## 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.

## Preparing the Product

You will be sent a document on how to prepare the product for collection via courier.

**Important:** keep your original box and inserts in the event you need to send your product to us. This protects your product in transit and allows us to safely return the product to you following repairs. Failure to keep the original box may incur a charge for replacement packaging.

# Contact Us



@ecoremovalsystems



Eco Removal Systems



@ecoremovalsystems



[sales@ecoremovalsystems.com](mailto:sales@ecoremovalsystems.com)



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