



# RIPAGREEN®

USER'S GUIDE (USBS)

## MINI LANCE



FABRICATION  
FRANÇAISE



# CONTENTS OF THE THERMAL MINI LANCE PACKAGE



Thermal Lance

4 m Hose



Pressure regulator  
RIPAGREEN®



Wrench



Memo



Warranty card



User's Guide



## HAND-OPERATED PROPANE GAS THERMAL WEEDER

### USER'S GUIDE

RIPAGREEN® Mini Thermal Lance (92 cm) - USBS  
*article code : 341053*












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# WARNINGS

TO BE READ BEFORE STARTING FOR THE FIRST TIME



<b>HAZARDS</b>		
		
Do not use this device in regulated areas with specific fire or explosion hazards	Do not treat surfaces covered with dry grass or dead leaves to avoid any risk of fire.	Clear the area to be treated of any flammable objects. Avoid treating areas near very highly flammable resins
<b>GUIDELINES</b>		
		
Delineate a working area such that the tip of the thermal lance is always at least more than 1.5 m inside this area and prohibit access to unauthorised individuals	Warn and place signs around the area before starting work.  Supervise the area treated approximately 1 hour after treatment	Do not work near grass or dried leaves. Pay particular attention during windy conditions to the flame being carried and to flying objects on fire (twigs, leaves, paper, etc.). Do not work on non visible areas (door, garage, basement...)
Check the material used in the construction of the walls, claddings, buildings of the treated area. If you are not aware of the composition of them, ask to the person in charge of the building. He will give you information on material and risks in the treated area . Define a path that avoids these risks.		
<b>EQUIPMENT</b>		
		
Have to hand an appropriate fire extinguisher or suitably-sized spray filled with water	Wear heat-resistant gloves while using the device	Avoid wearing highly flammable nylon or similar clothing

This device is designed to treat weeds by thermal choc and is for professional use only.

Users of the RIPAGREEN kit must read this user manual fully and must be trained in the applications requiring this device.

This user manual must be kept for future reference.

Turn off the gas inlet if you move out of sight of your RIPAGREEN or your supply.

Squeeze the trigger to empty the gas supply pipe to release pressure.

Monitor the area treated for a time determined by the user depending on the usage conditions.

**This device, like all gas-powered devices, consumes air and produces combustion gases containing both CO<sup>2</sup> and CO. CO is fatal at high concentrations.**

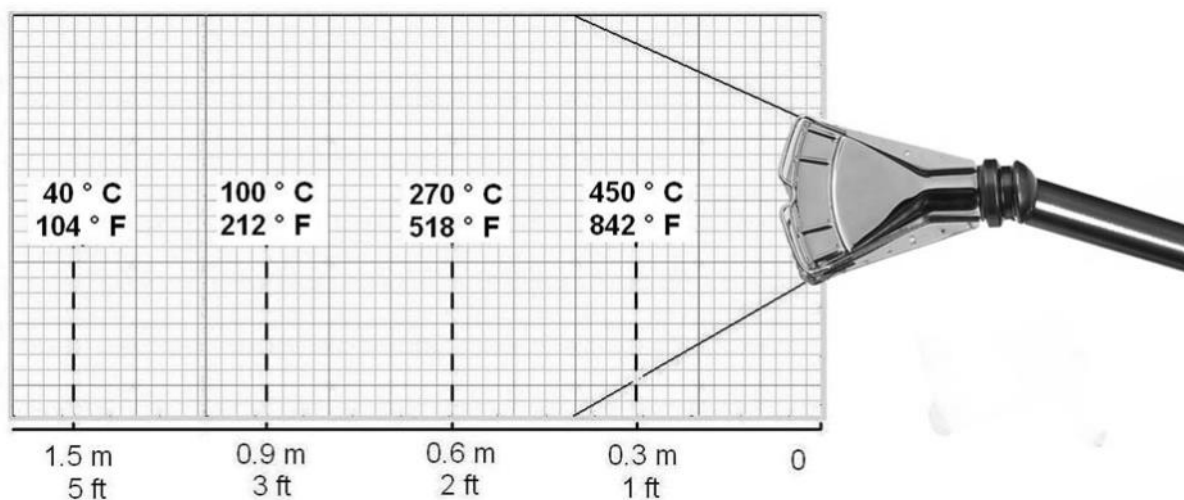
Never work indoors.

Before using, comply with the usage directives for liquid gases.

**When operating, the device produces a flame. This flame is short and sometimes not visible outside. Never direct this flame towards yourself, other persons or living beings, or towards the gas cylinder, hose and inaccessible area.**

In front of the combustion area of the device, there is a **hazardous area up to a distance of 1.5 metres (5')**.

The operator's attention is drawn to the fact that in this hazardous area, living beings may suffer burns and assets may be damaged or even burst into flames.



Always contact your RIPAGREEN<sup>®</sup> distributor whenever carrying out maintenance or changing spare parts.

Before using your RIPAGREEN<sup>®</sup> after a **period in storage or if it has not been used for while**, check the thermal lance and the trolley thoroughly for any gas leaks, clogging of the combustion nozzle or cuts in the hose. To find out which procedures to follow, refer to the "Connections" and "Troubleshooting" sections.

Ensure you comply with the national regulations in force when transporting industrial gas cylinders in a vehicle.

To **transport your gas cylinders**, make sure you:

- Close the valves, even if the cylinders are empty.
- Remove the equipment for transport.
- Lash your cylinders down firmly.
- Do not leave cylinders stored in your vehicle.
- Use an appropriate vehicle (ventilated, with separation)

The RIPAGREEN<sup>®</sup> uses a High Velocity Heating System with air propane gas diffuser.

It is lit by a piezoelectric igniter which acts when the gas supply is opened by pressing the trigger, the only control device.

The RIPAGREEN<sup>®</sup> is a safe thermal lance which has a number of **safety systems**.

- Its original, patented design provides combustion without heating the combustion nozzle (**cold nozzle**). In spite of this, when weeding, the **heat reflected** from the ground causes a limited rise in temperature.
- A **safety valve** system shuts off the gas inlet if the hose breaks or is torn away.
- A fail-safe, "dead man" device shuts off the gas automatically if the trigger is released. This **stops the heat immediately**. This fail-safe device must under no circumstances be blocked open by any means whatsoever.
- A **trigger guard** prevents it being turned on inadvertently.

# TECHNICAL DATA THERMAL LANCE

## DEVICE OPERATING ON PROPANE GAS



	SI system		
pressure (bar)	1.5	to	3.5
power (kW)	45	to	76
consumption (kg/h)	2.9	to	5.2
air intake (m <sup>3</sup> /h)	39	to	70
CO emission by % vol	0.0052	to	0.0021
CO <sub>2</sub> emission by % vol	2.81	to	4
noise level	<85 dbA		
length	1.6 m		
weight	2 kgs (without hose)		
energy source	propane		
	Imperial system		
pressure (PSI)	21	to	50
power (btu/h)	153000	to	259323
consumption (lbs/h)	6.6	to	11.7
air intake	1340 cu.ft/h	to	2400 cu.ft/h
CO emission by % vol	0.0052	to	0.0021
CO <sub>2</sub> emission by % vol	2.81	to	4
noise level	<85 dbA		
length	63 inches		
weight	4.4 lb		
energy source	propane		



## STARTING

Before starting, you must have read and must comply with the information contained in the "Warnings" section.

The ORIGINAL hose and RIPAGREEN<sup>®</sup> regulator supplied with this device must be used.

PROHIBITED WITH RIPAGREEN <sup>®</sup>	
	
<b>PROPANE GAS IN LIQUID PHASE</b> (e.g. forklift truck fuel)	<b>CYLINDER LYING ON ITS SIDE</b>

☺ The RIPAGREEN<sup>®</sup> operates with **PROPANE gas in gas phase** contained in cylinders of various capacities.

For its use with the trolley we recommend the **13 kg / 30 pounds** cylinders



RIPAGREEN<sup>®</sup> kit can also be used with cylinders from 5kg to 35 kg capacity.

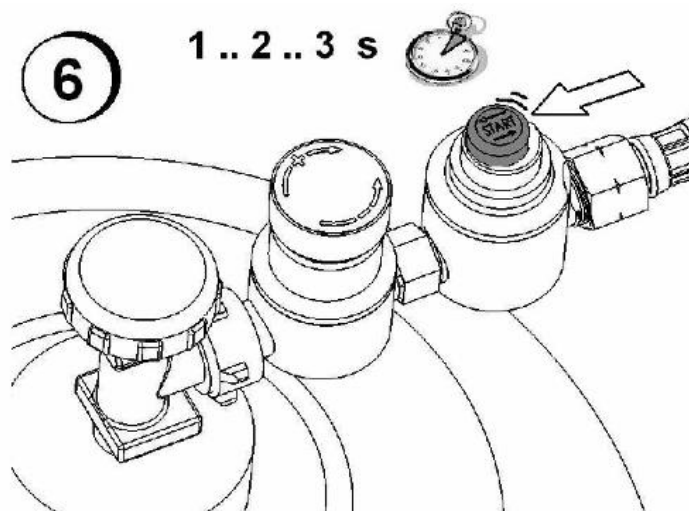
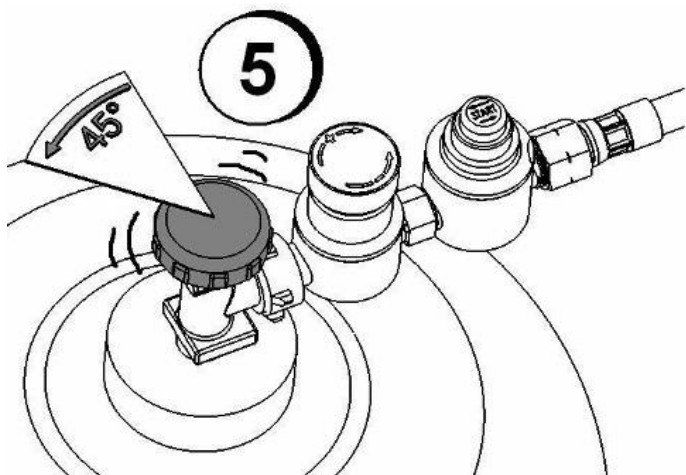
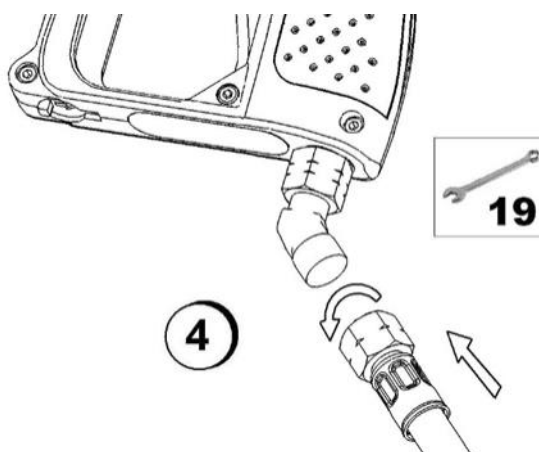
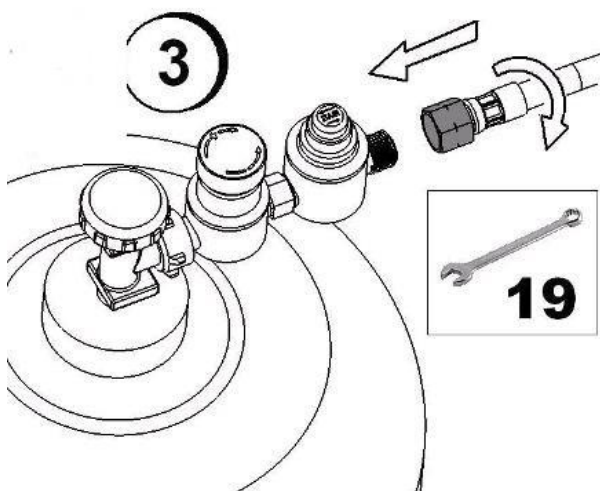
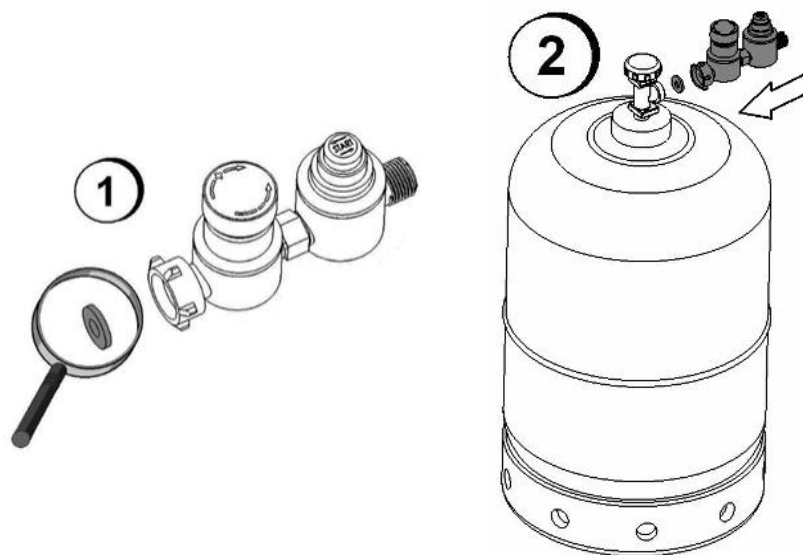


Always connect and disconnect cylinders away from any flame or ignition source.

## CONNECTIONS

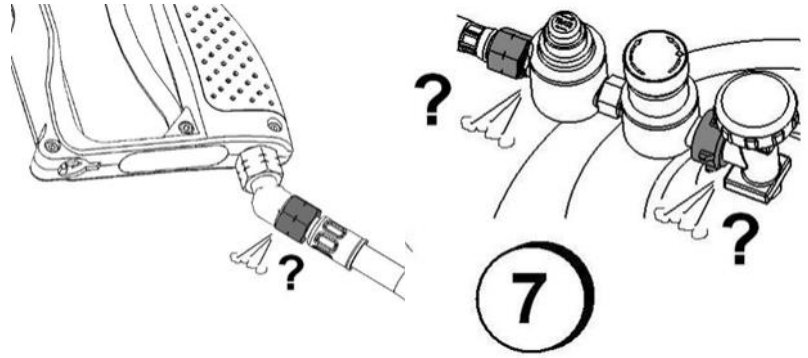
Before connecting the RIPAGREEN<sup>®</sup> pressure regulator to the gas cylinder, ensure that the seal is correctly installed for systems connected this way.

In other cases, ensure the contact surface of the fitting is clean.

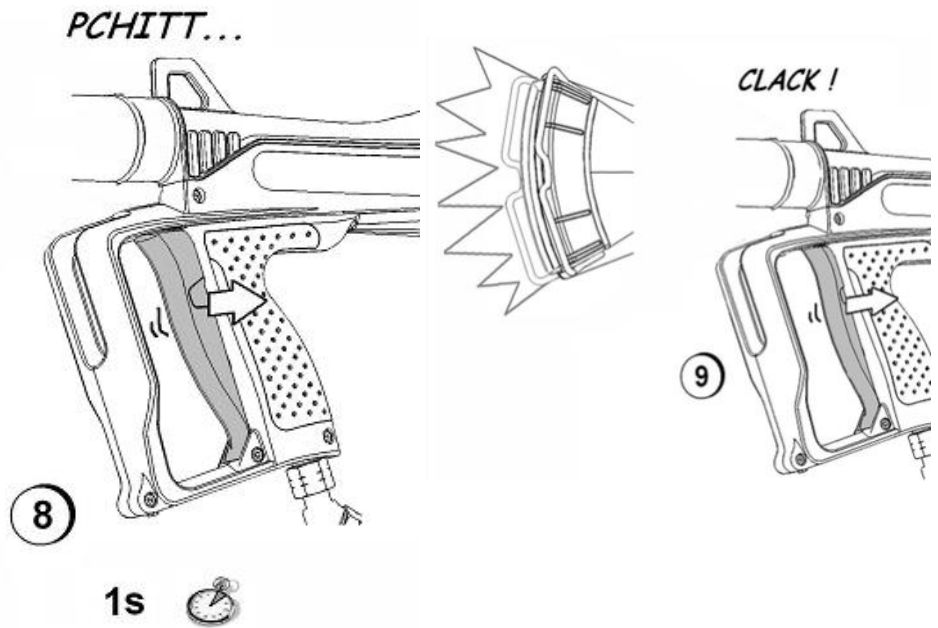


### SEALING:

Using a bubble spray or soapy water, ensure there are no leaks on threaded parts (cylinder, pipe and gun fittings).



### IGNITING THE RIPAGREEN®



### ADJUSTING THE POWER



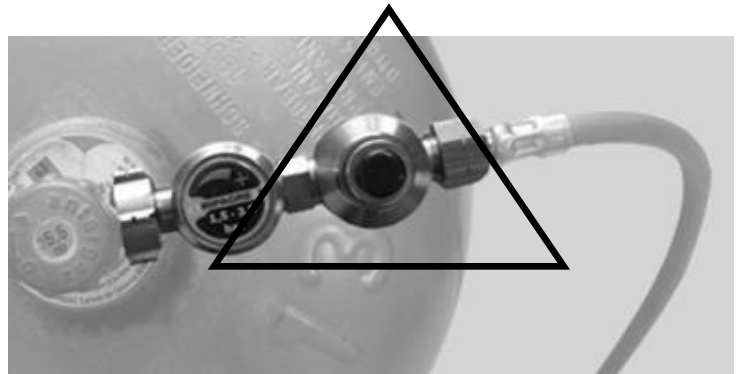
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## SAFETY

### NEVER HOLD DOWN THE RED BUTTON WHILE WORKING

The RIPAGREEN<sup>®</sup> pressure regulator automatically **shuts off** the gas inlet when the **pressure** delivered **drops** below the minimum threshold needed for normal working efficiency.



This means:

- Either that the cylinder is practically empty (there are only a few minutes' usage remaining at a very reduced pressure: change the cylinder) ;
- Or that the temperature of the cylinder has lowered after intensive use (icing): in this case temporarily change the cylinder or wait until normal pressure returns particularly when working outdoors (0°C / 30°F and below).

### NEVER HEAT A GAS CYLINDER WITH A FLAME.

**WHEN WORK IS FINISHED, ALWAYS CLOSE THE VALVE OF THE GAS CYLINDER AND DRAIN THE SUPPLY PIPE BY PRESSING THE TRIGGER**



If you work with small sized cylinders (5 to 6 kg gas), make sure that the adapter matches your cylinder and the regulator supplied with our device.



The 511 type adapter supplied with the Mobility Pack allows you to connect to the majority of cylinders on the French market (Twiny, Malice, Elfi, Clairgas ...). It does not fit the 5kg "Cube" cylinder of Butagaz.

## **TRAINING / PRINCIPLE OF THERMAL WEEDING**

Anyone operating our equipment must receive training. Your dealer is happy to provide training and give advices on treating weeds with RIPAGREEN<sup>®</sup>.

Safety concepts must of course be taken into consideration, some of which are described in this manual. In addition to these safety concepts, tips on how to use the RIPAGREEN<sup>®</sup> correctly will allow you to work more efficiently, consume less gas and obtain the best results with our RIPAGREEN<sup>®</sup> products.

You are also invited to visit our site [www.ripagreen.com](http://www.ripagreen.com) to watch tutorial or presentation videos which also enable you to keep your knowledge up to date.

## MAINTENANCE

**Any replacement parts must be of RIPAGREEN® origin. The manufacturer SEFMAT declines any responsibility and any request for recourse in case of non respect of the instructions or disassembly of the lance by a person not qualified to carry out operations of maintenance .**

Contact your dealer for any work requiring the RIPAGREEN® to be dismantled.

The only authorized operations are described in chapter "TROUBLESHOOTING".

### PERIODIC CHECKS AND CLEANING :

Necessary equipment :- one 19 wrench  
- a compressed air blower  
- grease.



#### **Every day before start working :**

Check the **good condition of the gas hose** on its whole length and its connectors. In case of cuts or cracks, even in surface, it is imperative to replace it with an original RIPAGREEN® hose with crimped connectors.

*Article code of the 4m gas hose : 250132RG*



#### **Every 2 weeks :**

Unscrew the hose and clean (with compressed air) the **grid filter** located in the **swivel connector**. If the deposit on the filter does not disappear, disassemble with a needle, clean and replace the filter in its housing.



Clean (with compressed air) the grid of the **combustion nozzle** and insist on the chimney tube in the center because it can be blocked by the pollution raised during the weeding. During this operation, the spark plug must be maintained or removed to prevent it from falling.



Check that the **spark plug** is present in the combustion nozzle and in good condition. If the ceramic is cracked, replace the spark plug.

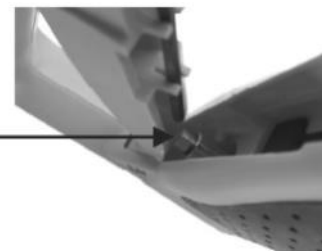
**Warning!** The spark plug is clipped in its housing (it must not fall).

*Article code of the spark plug : 232061RG*



 **Every month:**

Clean the dust that can accumulate on the **gas valve piston** (open the trigger where the piezo igniter is located). Lubricate the piston with a fluid oil to facilitate the back and forth. Do not overload with oil.



Check that the O-rings are in place and in good condition:

1. The 2 O-rings at the end of the hot air lance tube

*Article code : 140060RG*



2. The 2 O-rings at the end of the hot air gun

*Article code : 140084RG*

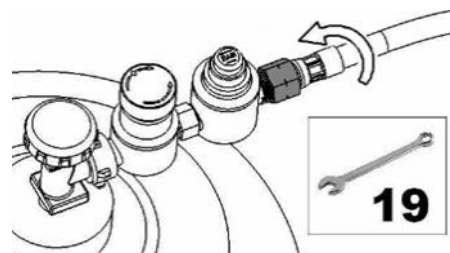


If one or several O-rings are damaged, it is imperative to change them. Lubricate the fittings and the O-rings with high temperature grease.

 **Every quarter (at least):**

Check that the **safety device against hose rupture** (incorporated in the regulator) is properly functioning, as follows:

1. Go outdoors, far from any source of inflammation, spark or ignition.
2. Pressurize the device. Using the wrench provided, loosen the hose fitting nut and fully unscrew it: the gas should cut off.

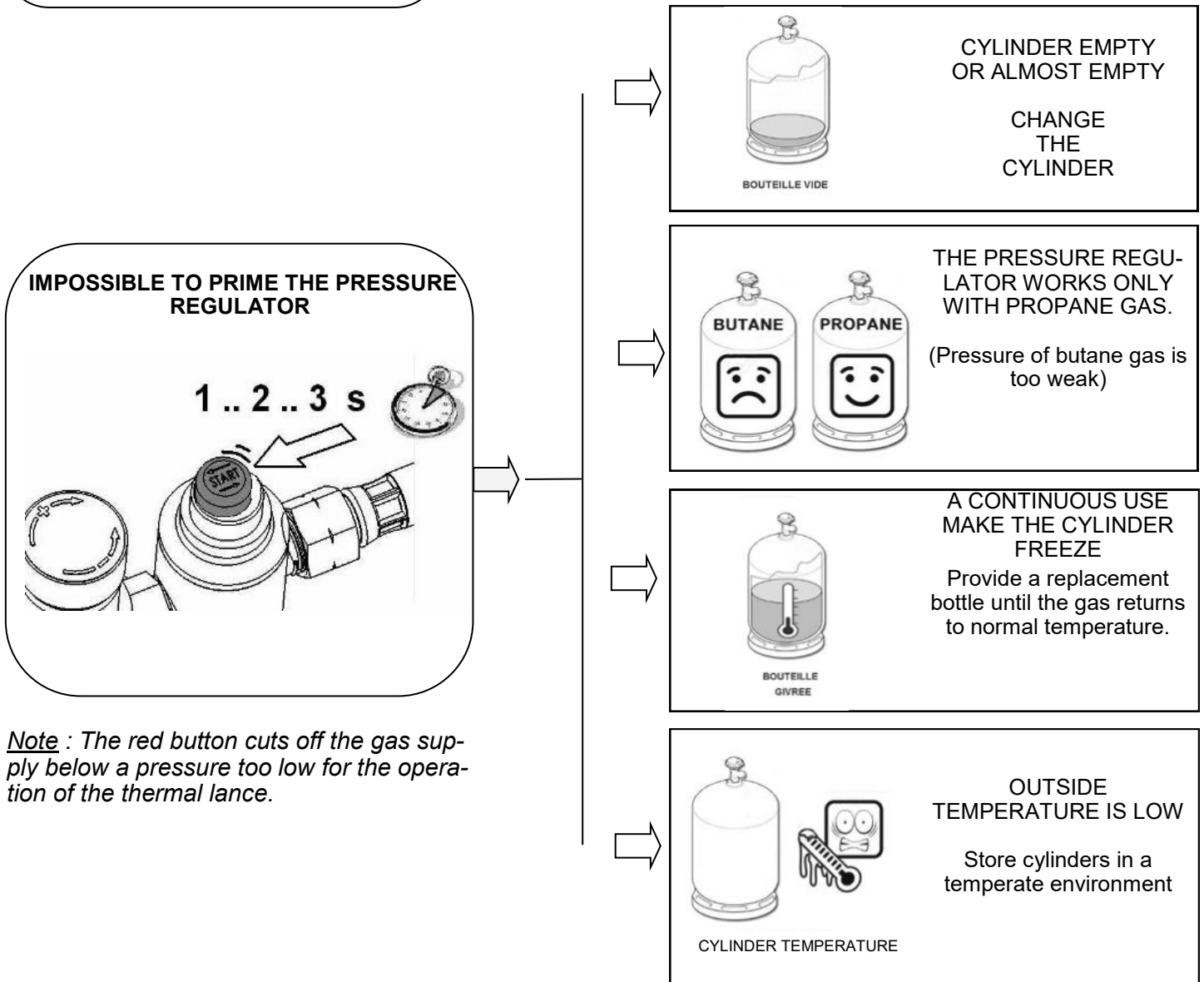
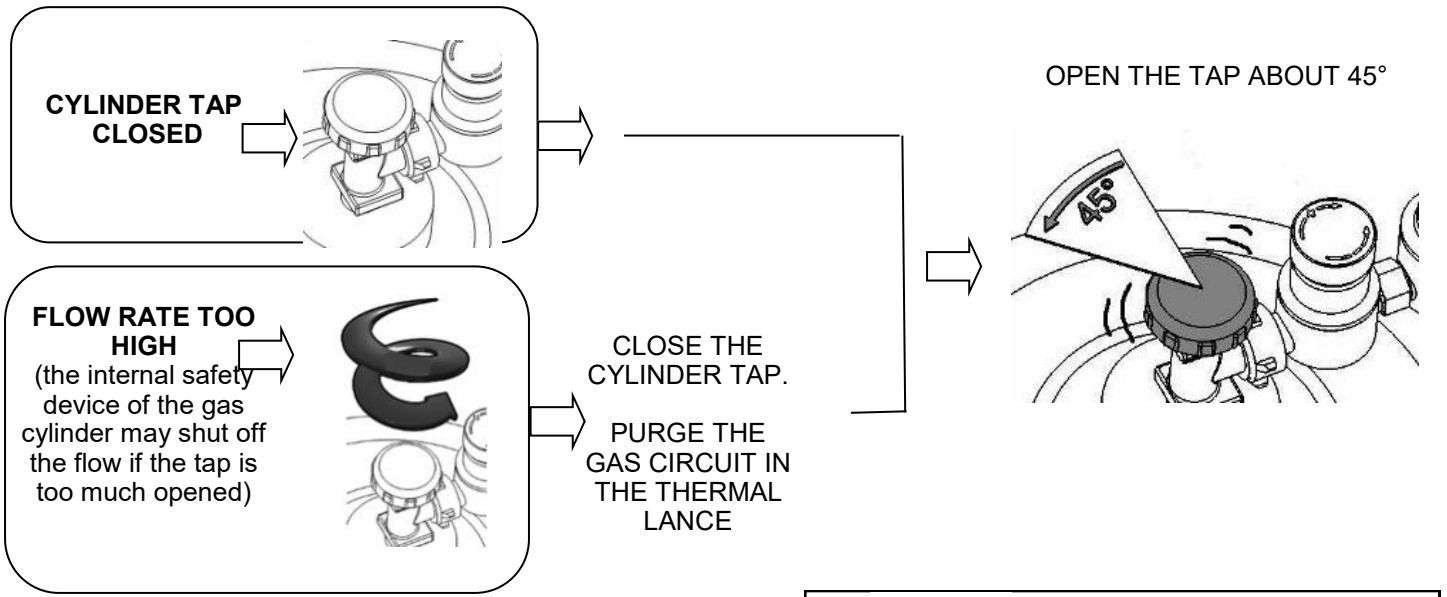


In the event of a dysfunction of the safety device, replace the pressure regulator.

*Pressure regulator article code : 134025RG*

# TROUBLESHOOTING

## >> NO GAS EMERGING FROM THE THERMAL LANCE

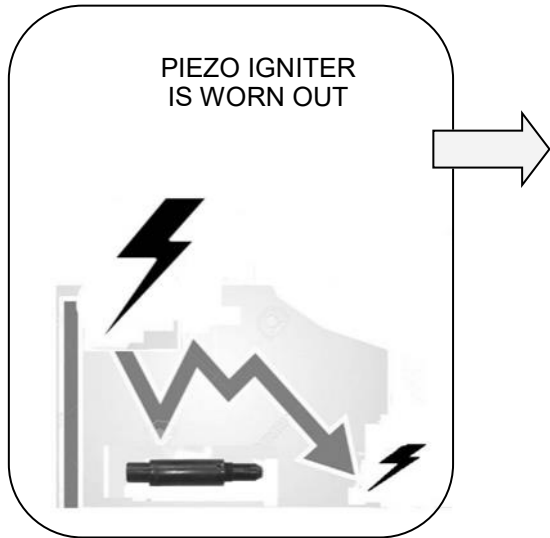


*Note :* The red button cuts off the gas supply below a pressure too low for the operation of the thermal lance.

Note: The pressure of the gas in the cylinder is proportional to the gas temperature.

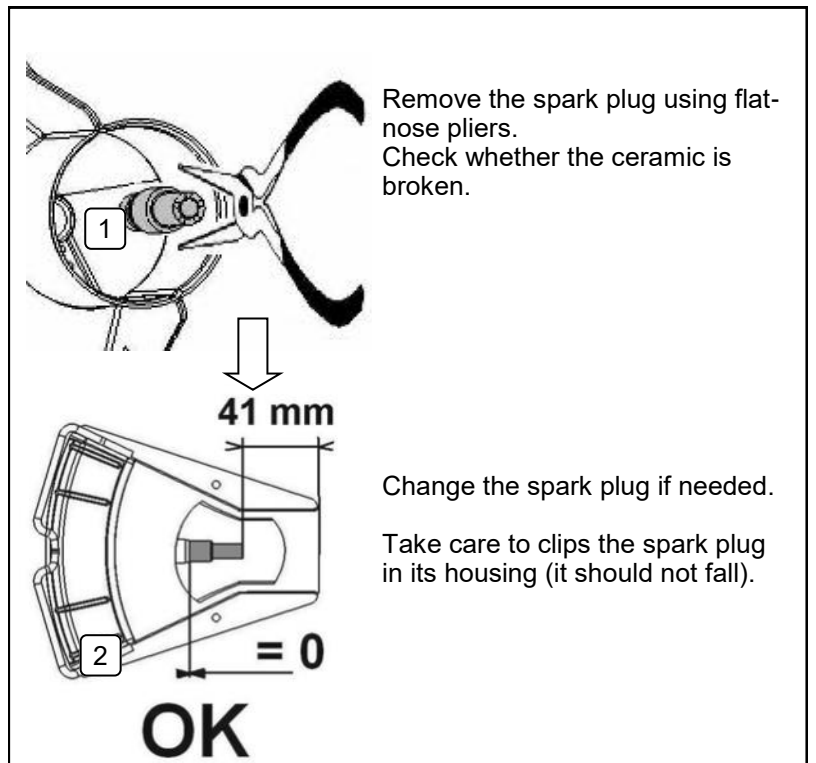
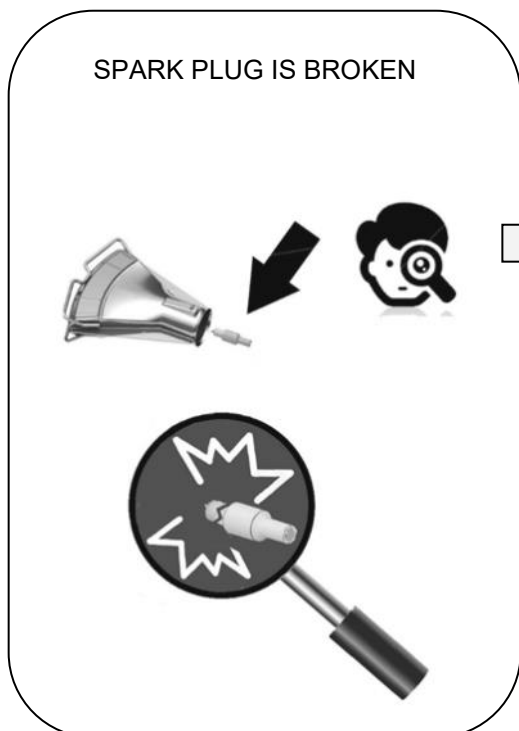
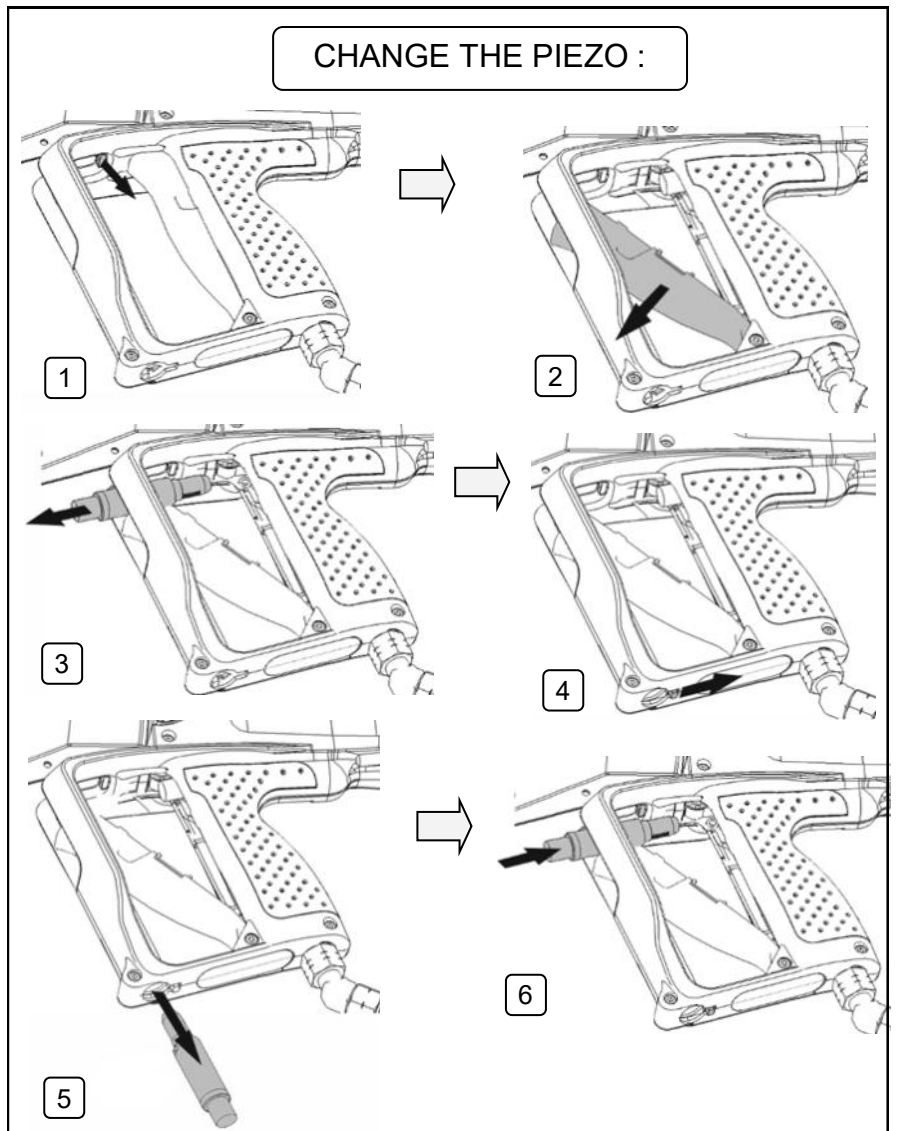


## >> THE THERMAL LANCE IS DIFFICULT TO IGNITE



*The piezo igniter loses its electrical properties with each use.*

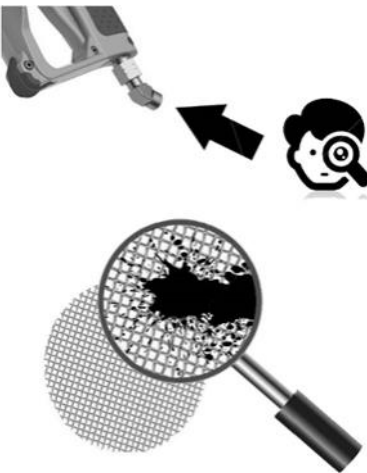
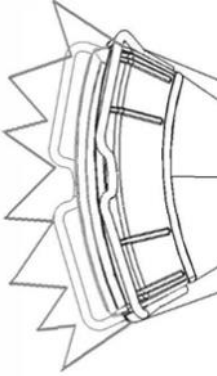
Spare piezo igniter article code:  
**131003RG**



## >> THE THERMAL LANCE IS DIFFICULT TO IGNITE

THE GAS FLOW RATE IS ABNORMALLY LOW  
(Flame is short and weak)

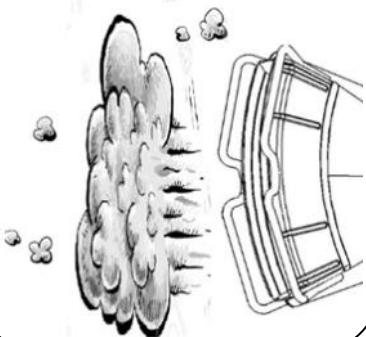
Ignition is difficult



The swivel is equipped with a grid filter.  
This can be obstructed by the pollution of the gas cylinder:

Remove the filter using a needle.  
Refit after cleaning.

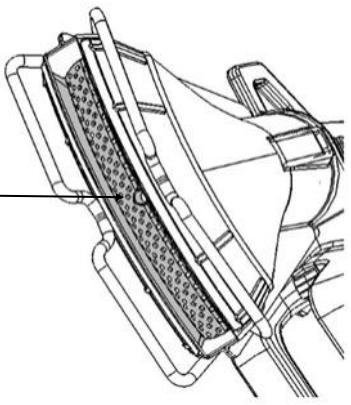
THE COMBUSTION NOZZLE IS POLLUTED



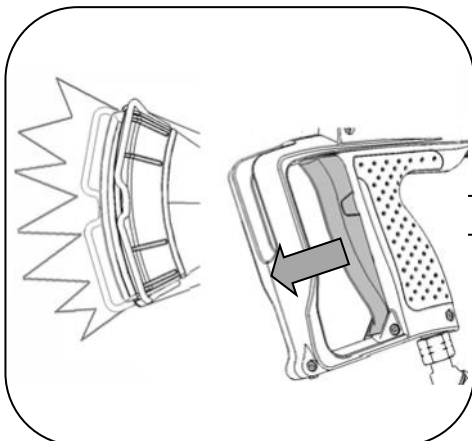
Clean the grid.

Thoroughly clean the housing of the spark plug which is mainly responsible for igniting the flame

We recommend the use of a compressed air blower

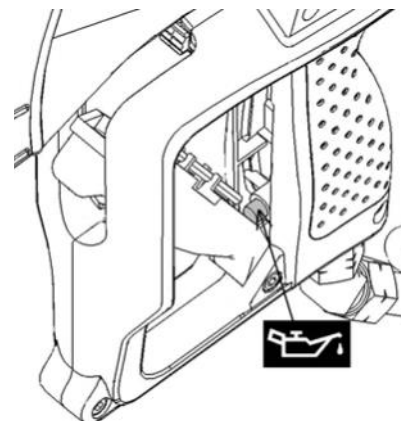


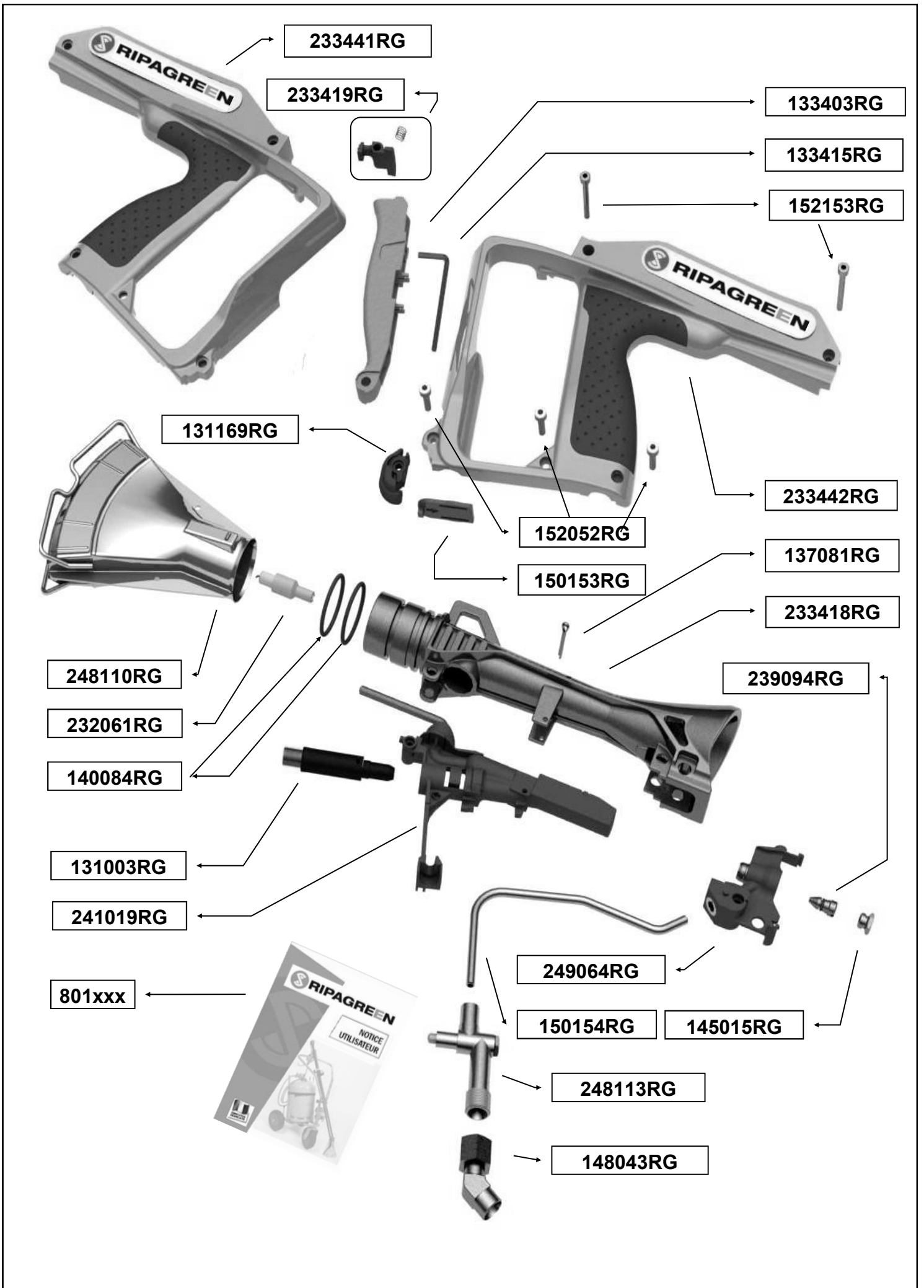
## >> GAS DOES NOT SHUT OFF AFTER THE TRIGGER IS RELEASED:

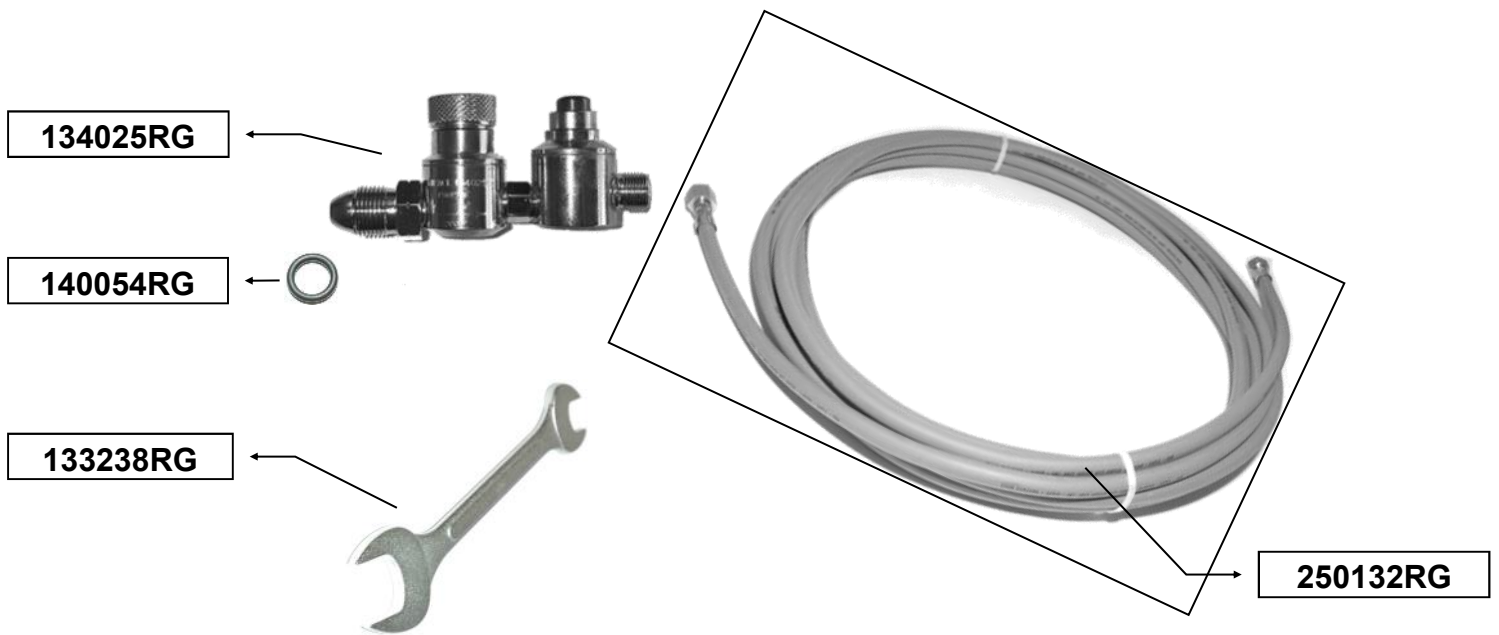
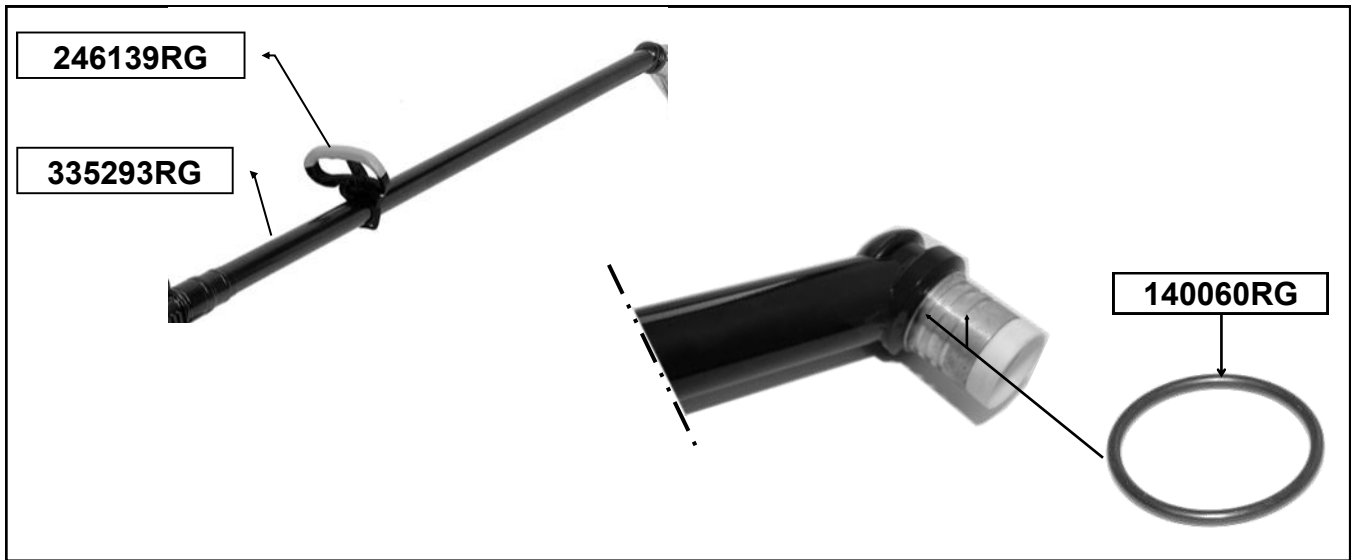


When releasing the trigger, **the combustion nozzle should go out instantaneously**  
Otherwise:

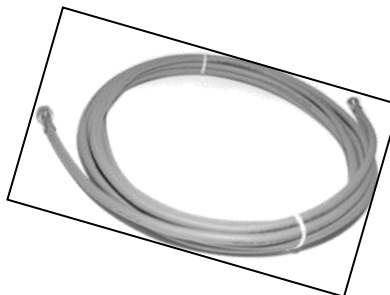
- Open the trigger
  - Grease the tap piston polluted by dust.
- In case of repeated blockage, have the tap changed by your RI-PAGREEN® approved dealer.  
Article code : 248113RG







**OPTION :**  
Gas hose length 8 m  
(standard supplied length: 4m)  
Article code: 250023RG



## SPARE PARTS LIST

Article Code	Description
131003RG	Piezoelectric igniter for RIPAGREEN <sup>®</sup>
131169RG	Bumper
133238RG	Wrench 19/24
133403RG	Trigger
133415RG	Allen key 3 mm
134025RG	Pressure regulator USBS standard, including double safety system
137039RG	Molykote grease
137081RG	Ground pin
140054RG	O-Ring on Pressure regulator USBS
140060RG	O-ring, int. Ø 28,24 x 2,62 for extension
140084RG	O-ring, int. Ø 34,82 x 3,53
145015RG	Jet cover nut
148043RG	Swivel connector
150153RG	Piezo igniter hatch
150154RG	Aluminium gas supply pipe
152052RG	Allen screw M4x16
152153RG	Allen screw M4x35
232061RG	Spark plug
233418RG	Body with O-rings
233419RG	Pawl + spring
233441RG	Right half handle + RIPAGREEN <sup>®</sup> sticker
233442RG	Left half handle + RIPAGREEN <sup>®</sup> sticker
239094RG	Propane jet
241019RG	Electric connection kit
246139RG	Thermal lance handle
248110RG	Combustion nozzle
248113RG	Gas valve
249064RG	Jet bearer complete with jet and cover nut
250023RG	8 meter gas hose, int. Ø 4, with collars and connectors - Optional
250132RG	4 meter gas hose, int. Ø 4, with collars and connectors
335293RG	Thermal lance tube - Mini 92 cm (with handle, electric connection kit, O-rings)
801xxx	User's guide RIPAGREEN <sup>®</sup>

## WARRANTY

Your RIPAGREEN<sup>®</sup> device has undergone numerous tests and inspections during the manufacture.

Each component meets demanding specifications which guarantee performance and adaptability.

For all maintenance and parts replacements, the RIPAGREEN<sup>®</sup> network ensures you will be supplied with spare parts which comply with RIPAGREEN<sup>®</sup>'s specifications, a proof of quality and safety.

RIPAGREEN<sup>®</sup> one year warranty, subject to the conditions:

- ⇒ That the device has been used in compliance with the user's guide;
- ⇒ That it has not undergone dismantling operations other than those described in the user's guide;
- ⇒ That the geometry of the device is intact (e.g. no distortion of the body of the device, protecting wires and combustion nozzle tips, no distortion of threads, etc...).

**The warranty does not apply to the following wear parts:**

- ⇒ **Piezoelectric igniter**
- ⇒ **High pressure hose**

WARRANTY FOR THE ALUMINIUM BODY : 5 years (under the above working warranty conditions).

All replacement parts must be RIPAGREEN<sup>®</sup> original parts. The manufacturer accepts no responsibility or appeal if the above instructions and provisions are ignored.

SEFMAT company, manufacturer of RIPAGREEN<sup>®</sup>, cannot be held liable for accidents caused to persons or assets through incorrect use or use not specifically provided for in the user's guide. In the event of a dispute, the Courts of Bordeaux-France shall alone be competent. No other jurisdiction shall be accepted.

The use or resale of the RIPAGREEN<sup>®</sup> implies full acceptance of the above conditions.

**IF MAKING A CLAIM UNDER THE WARRANTY, PLEASE ATTACH A COPY OF THE INVOICE FROM YOUR SUPPLIER**



**DECLARATION DE CONFORMITE CE  
EC- DECLARATION OF CONFORMITY**



**7 Rue de Betnoms  
33185 LE HAILLAN  
France**

Déclare que le produit :  
*Hereby declares that the product:*

**RIPAGREEN®**

Destiné à la production d'une flamme produite par la combustion de GPL  
*Designed to produce a flame produced by the combustion of LPG*

Est en conformité avec les directives CE  
*Is in conformity with CE regulations*

Fait au Haillan, le 01 Janvier 2016  
*Le Haillan, January 1st, 2016*

Le Président  
*President*

CERTIFICATIONS INTERNATIONALES POUR LA LANCE THERMIQUE  
WORLD CERTIFICATIONS FOR THERMO LANCE



# **Kersten**

**SITE MAINTENANCE EQUIPMENT**

Distributed in UK by  
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