



# ENNIS-FLINT® 3000 EX PROPANE HEAT TORCH USER'S GUIDE



## CARRYING CASE CONTENT

3000 EX



SECURIPACK  
Pressure  
regulator

Hose 7.5 m

Wrench

Swivel  
connector



Memo



Warranty  
Card



User's  
Guide

# 3000 EX

HAND-HELD PROPANE-FIRED TORCH  
FOR ROAD MARKING APPLICATION

## USER'S GUIDE












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## IMPORTANT NOTES



YOU MUST READ THESE INSTRUCTIONS BEFORE USING THE APPLIANCE.

| RISKS  |   |   |
|--|---|---|
|   |    |    |
| Do not use this product in the regulated areas with specific risk of fire or explosion   | Do not use in highly flammable areas .  | Wear equipment appropriate to avoid the risk of burn close to the flame               |
| INSTRUCTIONS   |   |   |
|    |   |   |
| Delimit a working area such as the nozzle of the torch is always at least more than 1.5 m within this area and prevent access to this area in any other person | Prevent and report the work area before starting work.                              | Report his presence in the work area  |
| EQUIPMENTS   |   |   |
|   |  |  |
| Have on hand a fire extinguisher or a water sprayer filled sized and appropriate   | Wear gloves resistant to heat during use of the device                              | Ban the wearing of inflammable clothes, nylon clothes or similar                      |

This appliance is designed for applying preformed thermoplastic road markings.

Users of the 3000 EX torch must read this user's guide completely and must be trained for the applications that require the use of this appliance.

When using torches, basic safety precautions should always be followed:

- a. READ ALL INSTRUCTIONS.
- b. This appliance is meant **exclusively** for professional use.
- c. Before using, check all parts for proper function and damage to component parts.
- d. Do not use this torch to heat, mould or bend plastic sheets, moulding or tubing.
- e. "Hidden areas such as behind walls, ceilings, floors, soffit boards and other panels may contain flammable materials that could be ignited by the heat gun when working in these locations. The ignition of these materials may not be readily apparent and could result in property damage and injury to persons.
- f. When working in these locations, keep the torch moving in a back-and-forth motion. Linger or pausing in one spot could ignite the panel or the material behind it."
- g. not use this torch to remove paint (if the torch can be used to remove paint, items (h) and (i) below shall be used).
- h. **WARNING:** Extreme care should be taken when stripping paint. The peelings, residue and vapours of paint may contain lead, which is poisonous. Any pre-1977 paint may contain lead and paint applied to homes prior to 1950 is likely to contain lead. Once deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause irreversible brain and nervous system damage; young and unborn children are particularly vulnerable. Before beginning any paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who uses a paint analyser to check the lead content of the paint to be removed. **LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED USING A HEAT GUN**
- i. Persons removing paint should follow these guidelines.
  1. Move the work piece outdoors. If this is not possible, keep the work area well ventilated. Open the windows and put an exhaust fan in one of them. Be sure the fan is moving the air from inside to outside.
  2. Remove or cover any carpets, rugs, furniture, clothing, cooking utensils and air ducts.
  3. Place drop cloths in the work area to catch any paint chips or peelings. Wear protective clothing such as extra work shirts, overalls and hats.
  4. Work in one room at a time. Furnishings should be removed or placed in the center of the room and covered. Work areas should be sealed off from the rest of the dwelling by sealing doorways with drop cloths.
  5. Children, pregnant or potentially pregnant women and nursing mothers should not be present in the work area until the work is done and all clean up is complete.

6. Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often.  
**DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.**
7. Use caution when operating the heat gun. Keep the heat gun moving, as excessive heat will generate fumes, which can be inhaled by the operator.
8. Keep food and drink out of the work area. Wash hands, arms and face and rinse mouth before eating or drinking. Do not smoke or chew gum or tobacco in the work area.
9. Clean up all removed paint and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills and any other surface where paint or dust is clinging. **DO NOT SWEEP, DRY DUST OR VACUUM.** Use a high phosphate detergent or trisodium phosphate (TSP) to wash and mop areas.
10. At the end of each work session put the paint chips and debris in a double plastic bag, close it with tape or twist ties and dispose of properly.
11. Remove protective clothing and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.
- j. Crews do not actually come in contact with the hot PREMARK thermoplastic, thereby creating a safer work environment. By putting the material down with the flame of the 3000 EX heat torch directed downwind, you will substantially minimize the amount of heat reaching your body. Although the heat will not "hurt" you, it is always nicer to stay as cool as possible.
- k. Remember there is no reason to touch the PREMARK material while it is molten. The melting point of PREMARK is 400 degrees F. and the material will stick to your skin and cause burns if you touch it when it is molten.
- l. Consequently, skin and eye contact should be avoided. Please refer to the Material Safety Data Sheet for first aid instructions you should follow if you get some molten material on you.
- m. Close the valve of the gas bottle when not in use for long periods of time.
- n. Press the trigger to empty the gas hose and release the pressure.
- o. Never heat a specific area continuously.
- p. Keep the working zone clean and remove all waste (wood, paper, other inflammable materials).
- q. For all work inside professional workshops, the gas bottle must be placed on a mobile trolley that can be manoeuvred easily.
- r. **SAVE THESE INSTRUCTIONS.**

This appliance is designed for applying preformed thermoplastic road markings.

Users of the 3000 EX torch must read this user's guide completely and must be trained for the applications that require the use of this appliance.

This user's guide must be kept for future reference.

Close the valve of the gas bottle when not in use.

Press the trigger to empty the gas hose and release the pressure.

Maintain oversight of the treated area for a time determined by the user depending on use conditions.

This appliance, like all other gas appliances, consumes air and produces combustion fumes that contain CO<sub>2</sub> and CO. Exposure to high concentrations of the latter gas is lethal.

Never work in a basement.

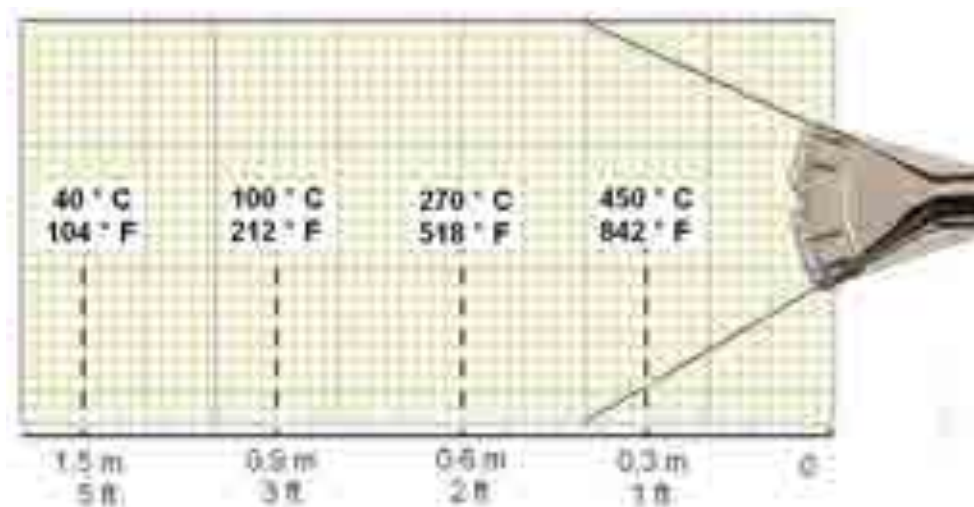


Before using the appliance, make sure that you are conforming to the guidelines for using liquid gas.

In operation, this appliance produces a flame. Do not point the flame towards yourself, other persons or animals, towards the gas bottle or the hose,

In operation, the appliance creates a **danger zone up to 1.5 metres (5 feet)** in front of the fire nozzle.

We draw the attention of operators to the fact that within the danger zone, there is a possible risk of burning for persons and animals, and goods can be damaged or catch fire.



Always contact your FLINT distributor for all maintenance work and spare parts.

Before using your 3000 EX after a storage period check the torch carefully to detect gas leak, clogging of the combustion nozzle or hose cut. please refer to chapter "connections" and "diagnoses malfunctions".

Make sure you comply with the applicable diagnosis regulations on the transport of industrial gas cylinders in the vehicle.

For transporting your gas bottles, make sure::

- Close the valves, even if the bottles are empty .
- Disassemble the equipment for transport.
- Secure your bottle firmly .
- Do not leave bottles stay in your vehicle.
- Use appropriate vehicle (ventilated, separation)



The 3000 EX works with propane according to the principle of atmospheric air burners induced at high speed.

Ignition is performed using a piezoelectric lighter that is activated simultaneously with the release of gas activated by the trigger, which is the sole operating mechanism.

The 3000 EX is a secure torch incorporating several **safety mechanisms**.

- **A security valve system cuts off the gas supply in the event that the hose breaks or tears.**
- **An automatic safety device (so-called dead man's switch) cuts the supply of gas automatically if the trigger is released. This stops the heating immediately. This dead man's device must never be blocked in the open position in any way.**
- **A guard in front of the trigger prevents untimely operation**

## PROPANE GAS APPLIANCE

### TECHNICAL CHARACTERISTICS:

|                                | SI System            |
|--------------------------------|----------------------|
| Pressure (bar)                 | 1.5 to 4             |
| Power (kW)                     | 45 to 88             |
| Consumption (kg/h)             | 2.9 to 5.9           |
| Air intake (m <sup>3</sup> /h) | 39 to 80             |
| CO emission vol %              | 0.0052 to 0.0024     |
| CO <sub>2</sub> emission vol % | 2.81 to 4.6          |
| Noise level                    | <85 dbA              |
| Length                         | 37,5 cm              |
| Weight                         | 1700 g               |
| Energy source                  | Propane Gas          |
|                                |                      |
|                                | Anglo-Saxon System   |
| Pressure (PSI)                 | 21 to 60             |
| Power (btu/h)                  | 153 546 to 303540    |
| Consumption (lbs./h)           | 6.6 to 13.4          |
| Air intake                     | 1340 to 2743 cu.ft/h |
| CO emission vol %              | 0.0052 to 0.0024     |
| CO <sub>2</sub> emission vol % | 4.6                  |
| Noise level                    | <85 dbA              |
| Length                         | 15 inches            |
| Weight                         | 3.75 lb              |
| Energy source                  | Propane Gas          |
|                                |                      |

## OPERATION

Before operating the appliance you must read all the warnings mentioned above and make sure that using the appliance is not forbidden by the manufacturer of the materials that you are going to handle.

With this appliance you must use the ORIGINAL hose and SECURIPACK that were supplied.

| FORBIDDEN WITH 3000 EX  |  |
|---|--|
|  |  |
| <b>LIQUID PROPANE GAS</b><br>(e.g. Fuel for forklift truck)                       | <b>BOTTLE ON ITS SIDE</b>  |

- ☺ The 3000 EX works with **PROPANE gas in gas phase**, contained in bottles of different capacities.

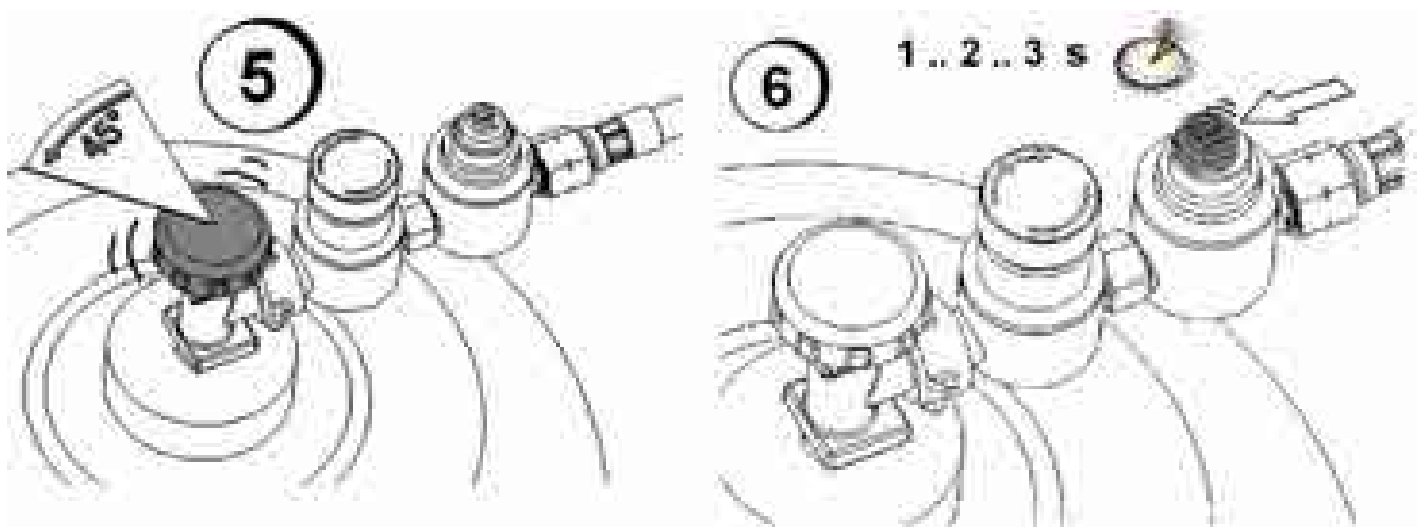
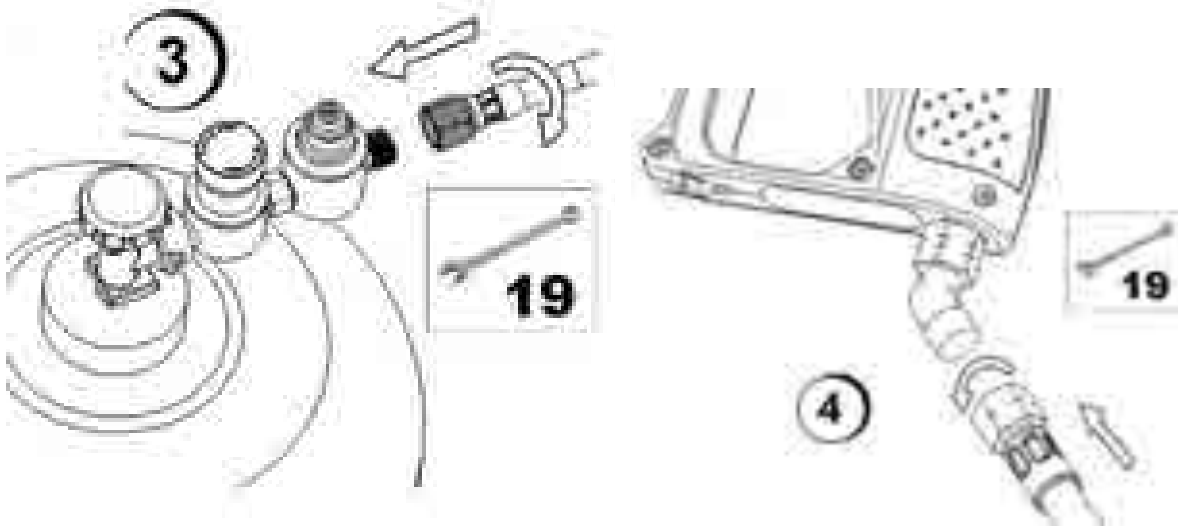
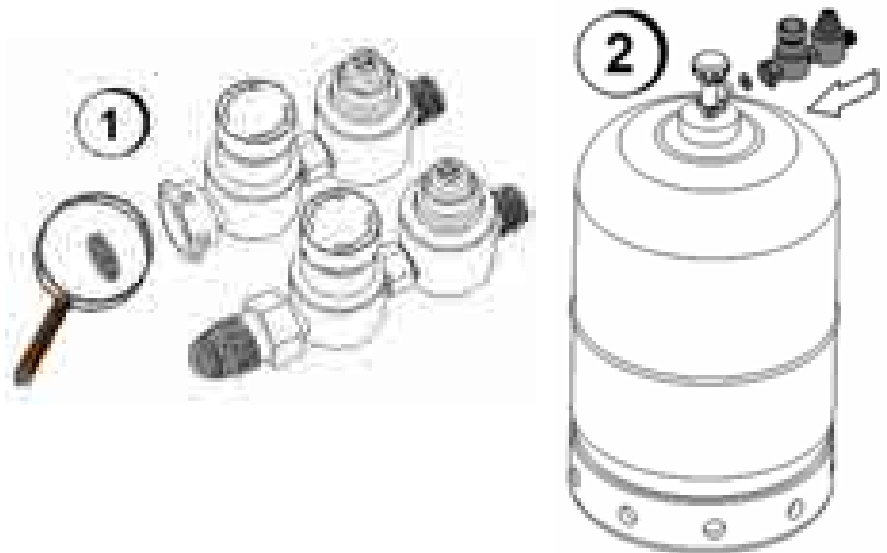
**We suggest to use at least a 13 kg bottle.**

**Always connect and disconnect the bottles a long way from any flames and ignition points.**

## CONNECTIONS

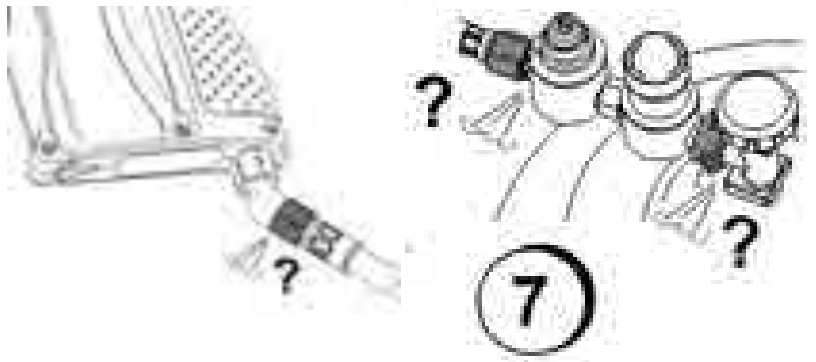
Before connecting the SECURIPACK to the gas bottle, make sure the sealing gasket is positioned correctly for systems using this type of joint.

In other cases, make sure the fitting is clean.

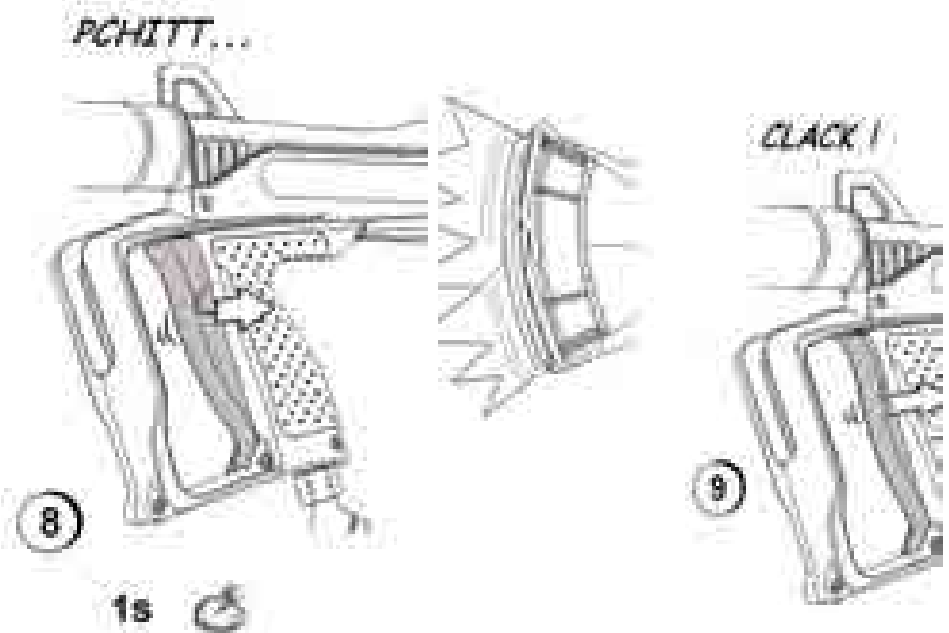


### TIGHTNESS:

Use a bubble spray or some soapy water to check that there are no leaks in the parts that have been screwed together (bottle, hose and gun connections)



### IGNITING THE 3000 EX





## SAFETY

### **NEVER WORK BY MAINTAINING THE RED BUTTON PUSHED**

The SECURIPACK automatically cuts off the supply of gas if the pressure drops below the minimum level necessary for the normal efficiency of the work.

This is the case when:

- The bottle is nearly empty (the gun can only be used for a few more minutes at reduced power: change the bottle);
- The temperature of the bottle has dropped after intensive use (icing): if this is the case, change the bottle temporarily or wait until the normal pressure returns, especially if you are working outside (0°C / 30°F and colder).



### **NEVER HEAT A GAS BOTTLE WITH A FLAME.**

**WHEN YOU HAVE FINISHED WORKING, ALWAYS CLOSE THE GAS BOTTLE VALVE AND EMPTY THE HOSE BY PRESSING THE TRIGGER.**



## ERGONOMICS



### ***HOSE STORAGE***

The swivel connector of the lance is turning. This trick allows by a simple gesture to unravel the loops of the hose.

### ***COMBUSTION NOZZLE ROTATION***

You can rotate the tube for flame orientation.



## WARRANTY

Your 3000 EX appliance has been manufactured with the greatest care using quality materials. Numerous tests and inspections were carried out during production.

Every component meets the requirements of strict specifications in order to guarantee performance and adaptability.

For all maintenance work and spare parts, your 3000 EX dealer ensures the supply of spare parts in accordance with the 3000 EX requirements, guarantee of quality and of safety.

### ENNIS FLINT WARRANTY:

WARRANTY OF OPERATION for one year under the following conditions:

- that the appliance has been used in compliance with the user's guide;
- that the appliance has not been disassembled except for the procedures described in the user's guide;
- that the appliance is physically intact (for example: the body of the appliance, the protective guard and the combustion nozzle grille must not be deformed in any way, and, for example, the thread of the fittings must be intact...).

This warranty does not apply to the following replacement parts:

- Piezo igniter,
- Hose.

ALUMINIUM BODY WARRANTY: 5 years (according to the aforementioned performance warranty conditions) ).

All replacement parts must be original 3000 EX spare parts. The manufacturer shall not be held responsible and shall not be liable for any claims in the event that the aforementioned warnings and instructions are not respected.

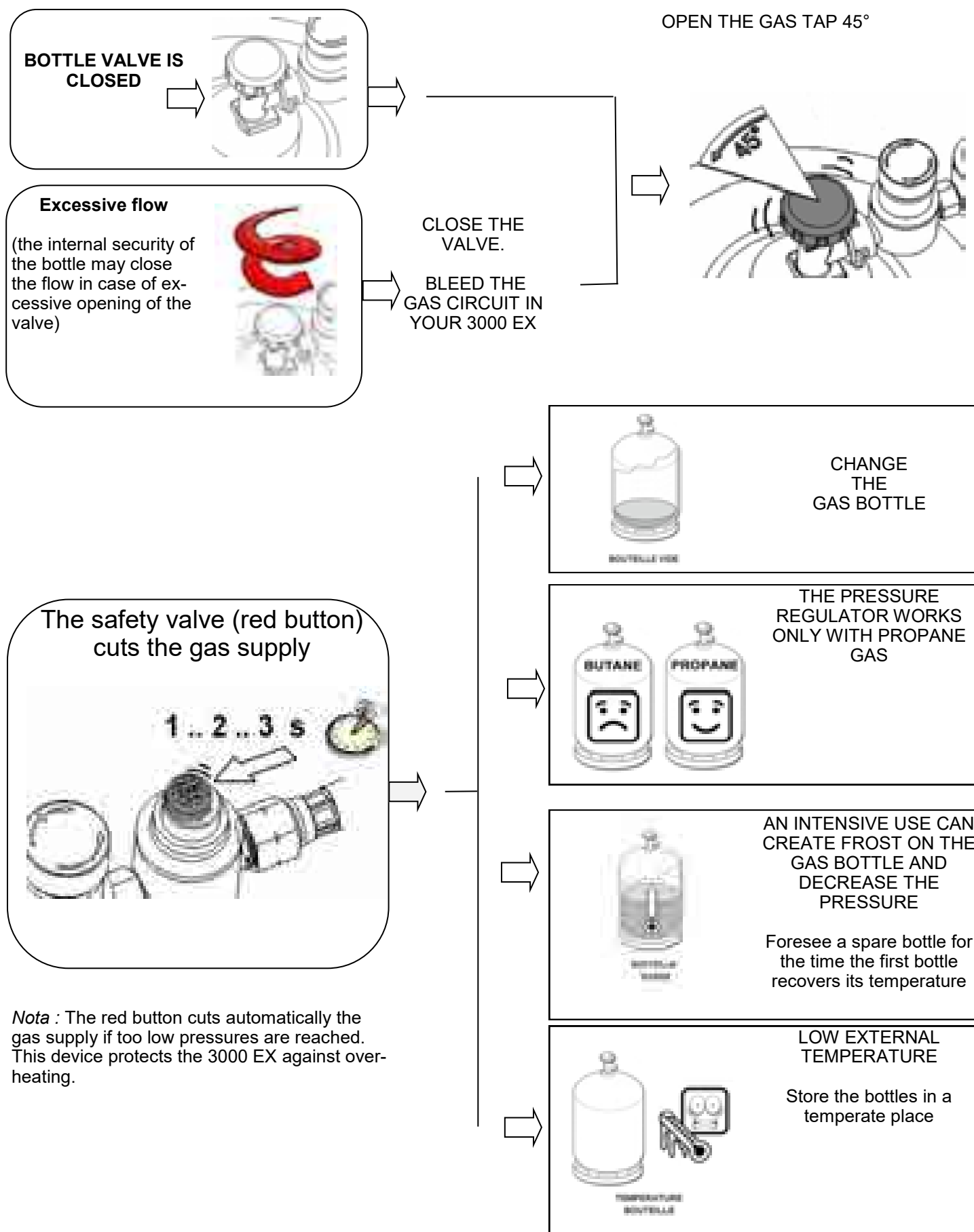
The company SEFMAT shall not be held responsible for accidents involving persons or goods which arise from the incorrect use of the appliance or from using it for an application which is not specifically mentioned in the user's guide. All disputes shall be governed by the courts of Bordeaux - France. No other place of jurisdiction shall be accepted.

The use and the resale of the 3000 EX implies the acceptance of the aforementioned terms and conditions.

IN THE EVENT OF A WARRANTY CLAIM, PLEASE ATTACH A COPY OF  
YOUR SUPPLIER'S INVOICE

## TROUBLESHOOTING GUIDE

### >> NO GAS OUTPUT ON YOUR 3000 EX



*Nota:* The gas pressure in a cylinder is proportional to the gas temperature

## TROUBLESHOOTING GUIDE IGNITION DIFFICULTIES OF YOUR 3000 EX

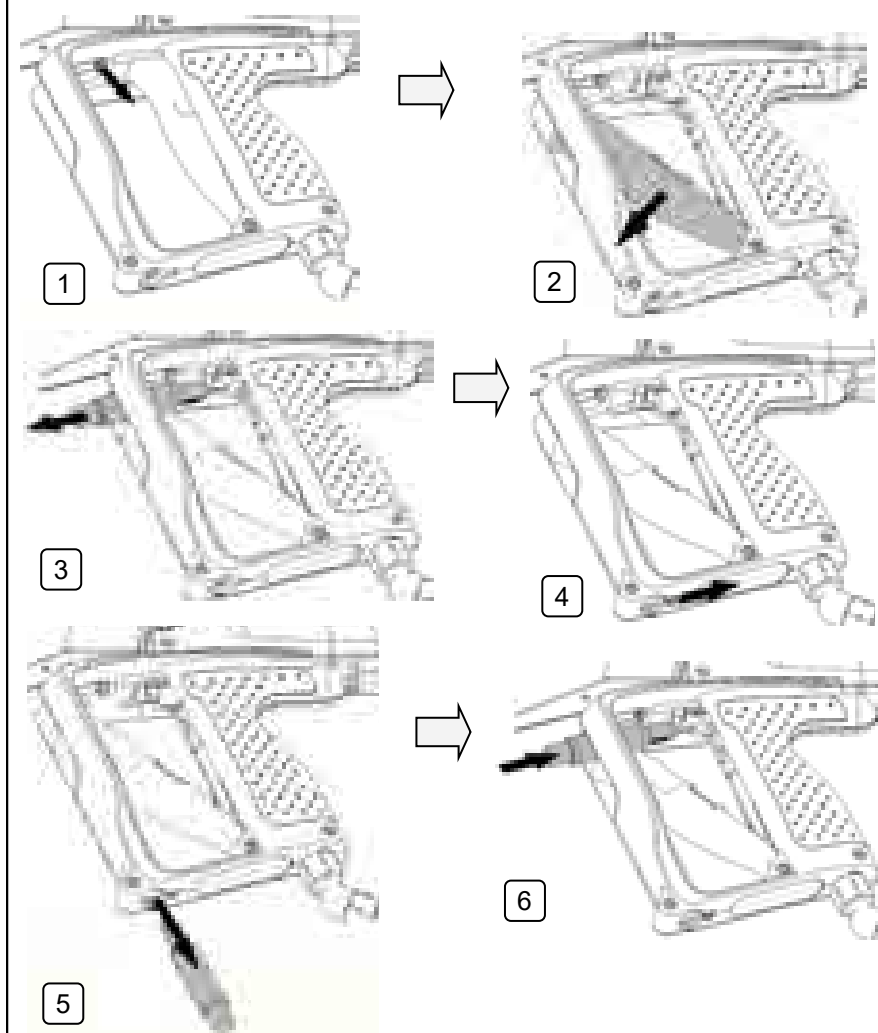
YOUR IGNITER NEEDS TO BE  
CHANGED



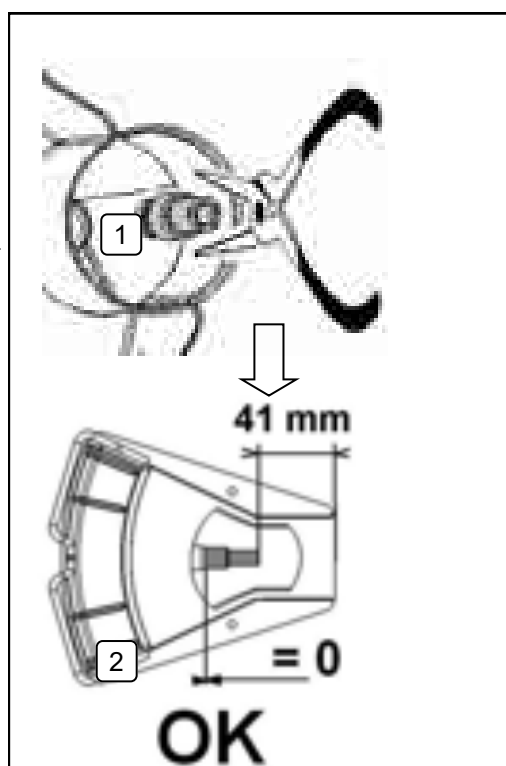
The igniter loses its electrical properties after  
each ignition

Igniter item code:  
**131003**

CHANGE THE IGNITER



VERIFY YOUR SPARK PLUG  
(BREAK, DUST...)



## TROUBLESHOOTING GUIDE IGNITION DIFFICULTIES OF YOUR 3000 EX

THE POWER OF THE FLAME IS  
ABNORMALLY REDUCED  
(short and low flame)

IGNITION IS DIFFICULT



The swivel connector is equipped  
with a gate filter  
It can be obstructed by pollution  
from the gas cylinder:

Remove the filter with a sharp  
needle.  
Reassemble after cleaning

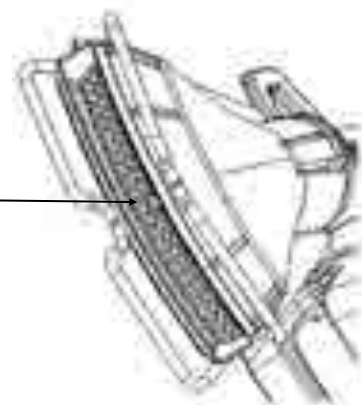
POLLUTED  
COMBUSTION NOZZLE



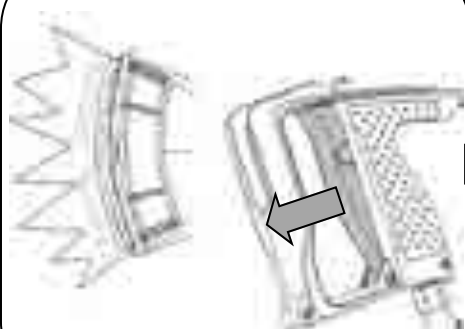
CLEAN THE GRID

Clean the spark plug housing  
which generates  
ignition flame

We recommend  
compressed air  
to clean the nozzle



## TROUBLESHOOTING GUIDE >> NO GAS CUT AFTER TRIGGER RELEASE

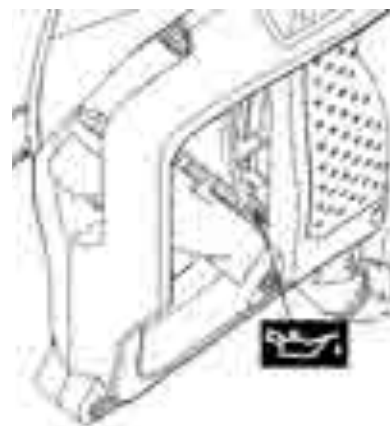


When the trigger is released  
the flame should stop  
instantly

If not :

- Open the trigger and lubricate the  
piston of the gas tap

For repetitive blocking, change the  
gas tap by contacting your  
authorized FLINT dealer



## SPARE PARTS

**Ask your dealer for  
maintenance or repair requiring disassembly  
of your 3000 EX**

The only permitted operations are described in the  
maintenance chapter.

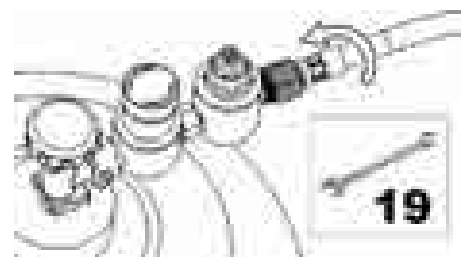


***The SEFMAT company (Producer of ENNIS FLINT  
Brand) shall not be held responsible for disas-  
sembly of the torch by a non qualified person for maintenance operations.***

### ***Control of the SECURIPACK :***

Every 500 hours or every three months , **check the  
operation of the safety device against the hose rup-  
ture** (integrated in the SECURIPACK) **practicing as  
follows:**

1. Go outside, a long way from any flame source, sparks and any objects that ignite.
2. Apply pressure to the appliance. With the spanner supplied, loosen the connecting nut of the hose and unscrew completely: the gas supply will now be cut off automatically. If not, ask for a control of your Securipack by contacting your FLINT dealer.



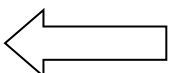
### ***Control of the 3000 EX:***

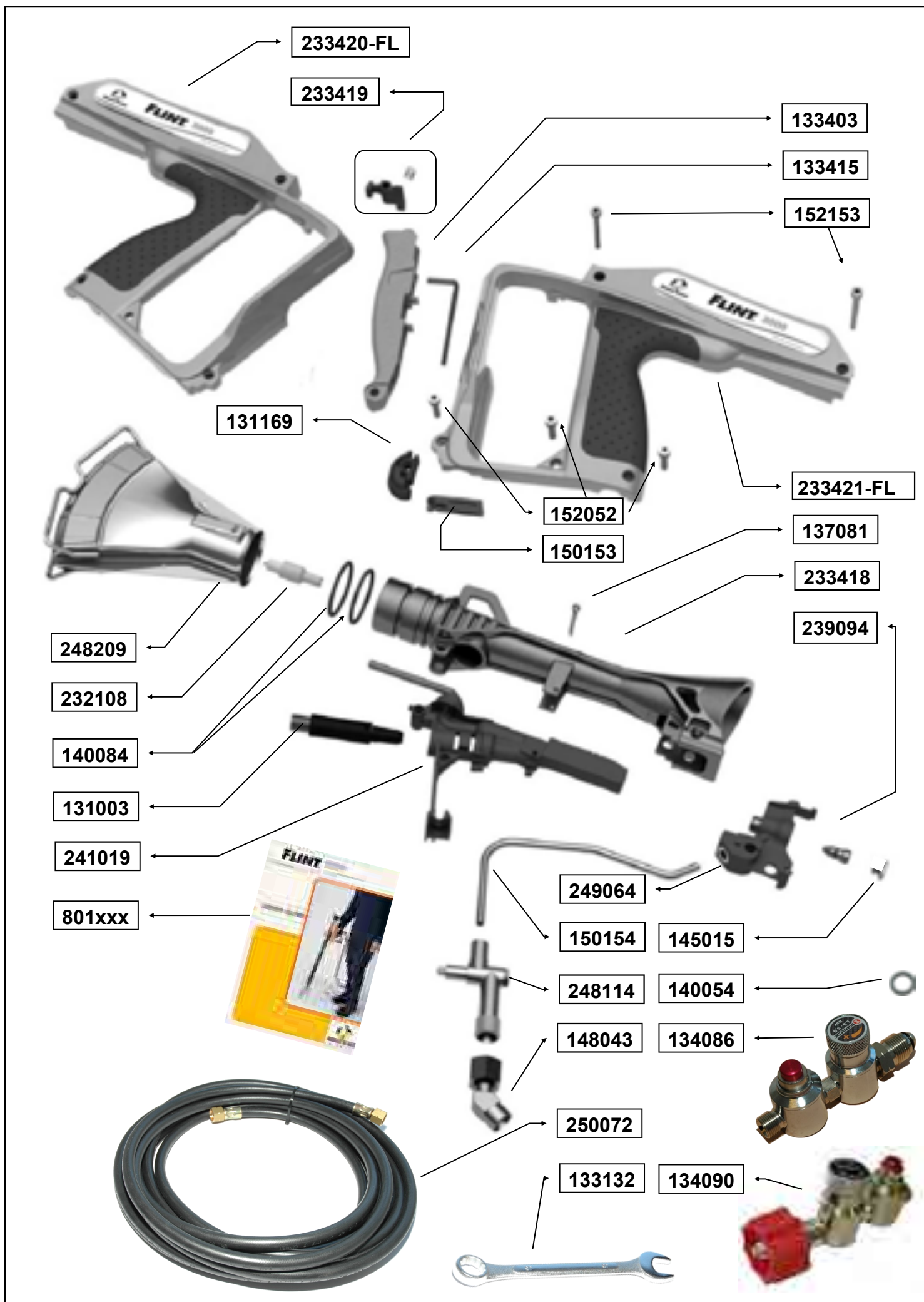
DAILY before starting to work :

1. Check the condition of the hose along its whole length and at the fittings.  
We recommend that you replace the hose in the following cases:
  - When a visual inspection has revealed damage (cuts), even if the damage is superficial.
  - Every 3 years if used intensively.
  - At the latest 5 years after first use.
  - Note: The date on the hose is the manufacture date.

**Only use a replacement hose supplied by SEFMAT with its original fittings!**

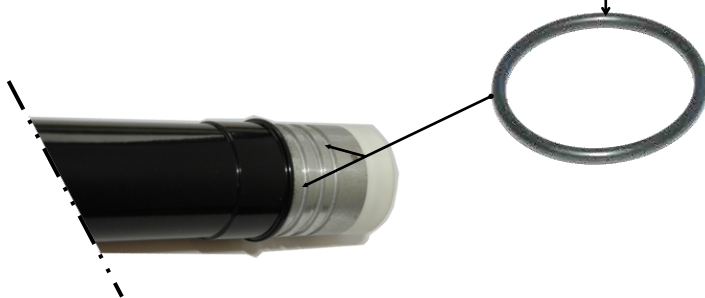
2. Check as follows that the dead man's safety mechanism works correctly:  
See: NO GAS CUT ON previous page





## EXTENSION SPARE PARTS 3000 EX

140061



152197

335 276

152212

| Item Code . | Description                     |
|-------------|---------------------------------|
| 335 276     | Extension 3000 EX               |
| 152197      | Locking neck casing screw       |
| 152212      | Locking combustion nozzle screw |
|             |                                 |

| Art. Code | Description   |
|-----------|---|
| 131003    | Piezo igniter   |
| 131169    | Bumper  |
| 133132    | Wrench 19   |
| 133403    | Trigger   |
| 133415    | Allen key   |
| 134086    | SECURIPACK- including adjustable pressure regulator and double safety, UL standard          |
| 134090    | SECURIPACK- including adjustable pressure regulator and double safety, UL standard BBQ type |
| 137039    | MOLYKOTE grease   |
| 137081    | Ground pin  |
| 140061    | O-ring inside Ø 28.24 x 2.62 UL for extensions  |
| 140084    | O-ring inside Ø 34,82 x 3,53  |
| 145015    | Jet cover nut 3000 EX   |
| 148043    | Swivel connector  |
| 150153    | Piezo Trap  |
| 150154    | Aluminium gas feed tube   |
| 152052    | Screw M4x16   |
| 152153    | Screw M4x35   |
| 232108    | Spark plug for 3000 EX  |
| 233418    | Body with O-rings   |
| 233419    | Pawl + Spring   |
| 233420-FL | Half-handle, right + 3000 EX label  |
| 233421-FL | Half-handle, left + 3000 EX label   |
| 239094    | Standard jet - propane  |
| 241019    | Electrical Connection Kit   |
| 248209    | Combustion nozzle   |
| 248114    | Gas tap, UL   |
| 249064    | Jet bearer complete (includes : bearer, jet, jet cover nut)                                 |
| 250072    | High pressure hose, UL, Length 7.5 meters, with clamps and fittings                         |
| 801xxx    | User's manual 3000 EX   |



7 Rue de Betnoms  
33185 LE HAILLAN  
France

Hereby declares that the product:  
Déclare que le produit :

**3000 EX (EF 3000)**

Designed to produce a flame produced by the combustion of LPG

Destiné à la production d'une flamme produite par la combustion de  
GPL

Is in conformity with UL certification MH 25115  
Est en conformité avec L'homologation UL MH 25115