

# **ELECTRO'FLOR<sup>®</sup>**

**PORTABLE ELECTRONIC FLOWER THINNING MACHINE**



[www.infaco.com](http://www.infaco.com)



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**The following pictograms are used in these instructions:**



Indicates the possible risk of physical injury, danger of death or a risk of damage to the machine if the instructions in this booklet are not followed.



Indicates the presence of electrical voltage



Indicates a inflammable risk.

Read these instructions carefully before you use the machine.

Make sure you have understood how to operate and use the machine.

Maintain the machine in accordance with the instructions so that it is always in good working order.

Keep these instructions and the attached documentation close to the machine.

## USING YOUR MACHINE FOR THE FIRST TIME

We strongly recommend that you ask for assistance from your retailer, who is authorised to give you all the advice you need to use the machine properly and achieve a good output.

He can guide you in your choice of the best brush to suit your needs and the different types of fruit trees that you own.

**Please read these instructions carefully before using the machine.**

### ASSEMBLING THE BRUSH

Prepare the carbon shaft, half-shell and wires required, according to use.

#### Preparing a half-shell:

- Place a lock-nut on each half-shell (supplied with the machine (*Picture 1*)).

**Picture 1**



#### Assembling a unit:

1- Position the wire in the groove of a half-shell.



The wire must be positioned symmetrically.

2- Place the unit on the end of the carbon shaft (*Picture 2*).

3- Pinch the wire with a second half-shell.

4- Tighten the unit with the two screws supplied with the machine (*Picture 3*).

5- Repeat the procedure, with a different of 90° between each shell. Leave approximately 3 cm of space free at the end for fixing the shaft to the chuck (*Picture 4*).

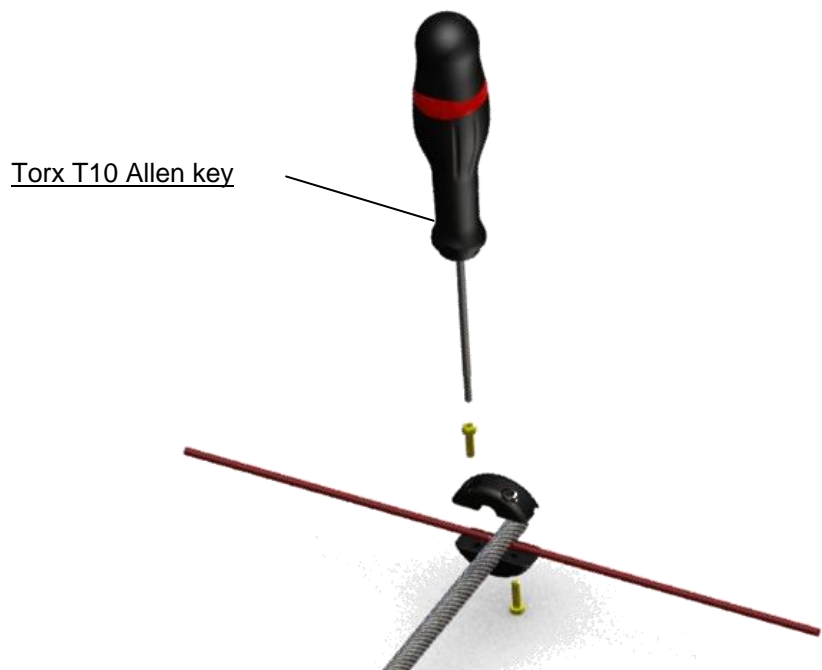


Do not mount more than 8 wires per brush (max wire length 30 cm).

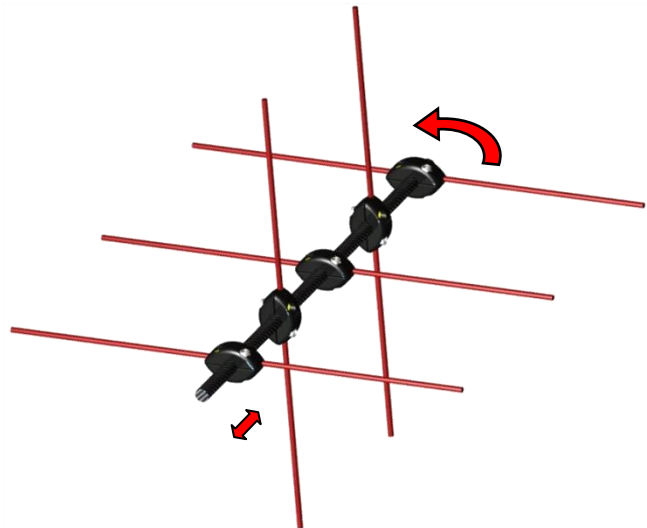
**Picture 2**



**Picture 3**



**Picture 4**



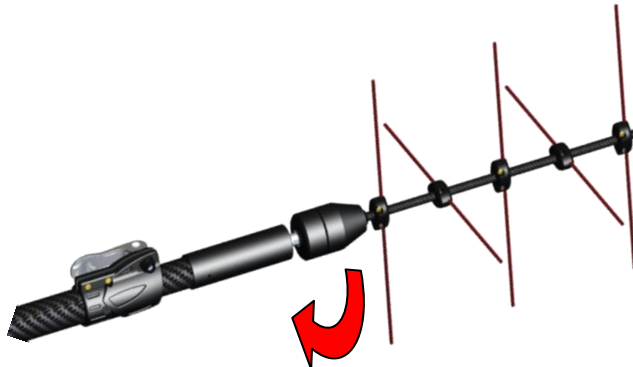
## **FIXING THE BRUSH**

- 1- Position the brush in the chuck (picture 5)
- 2- Tighten the chuck by hand



Before switching the machine on, check that the brush is firmly in place, then tighten.

**Picture 5**



# **USER GUIDE**

## **INSTALLATION AND CONNECTION**

Before putting the belt around your waist, clip the waistcoat clamps No. 18 on to the edges of the waistcoat A and B.

Slip on the waistcoat straps, then the control box base No. 16 on to strap No.14 and, once you have put the waistcoat on, adjust the abdominal straps Nos. 14 and 15 to suit your size.

Connect socket No. 4 of the spiral cable to socket No. 5 on the ELECTRO'FLOR.

**N.B. use the guide rod to make the correct connection.**

Connect socket No. 17 to socket No. 3, place switch No.1 in the "On" position, then press the trigger No. 10 only when you are about to start using the machine. The ELECTRO'FLOR LED No. 7 should light up.

## **USING THE MACHINE**

Press twice on trigger No. 10 every time you use the machine.

### Control method:

1 – Short pressure on the trigger brings the machine into continuous operation. To stop the machine, press briefly on the trigger once again.

2 – Sustained pressure on the trigger brings the machine into continuous operation until you release the trigger.

Every time you disconnect and re-connect socket Nos. 4 and 5, **you MUST press trigger No. 10 twice** to re-prime the safety system.

You can use wheel No. 20 to vary the brush rotation speed according to the fruit tree varieties and the output you require.

When the ELECTRO'FLOR detects that the battery is discharged, LED No. 7 flashes once every half-second, but the machine does not stop.

Stop work as soon as you feel a lack of power and put your battery on charge.

**It will take at least 3 day's use to acquire a sound knowledge of how to operate the machine.**

## USAGE AND SAFETY PRECAUTIONS

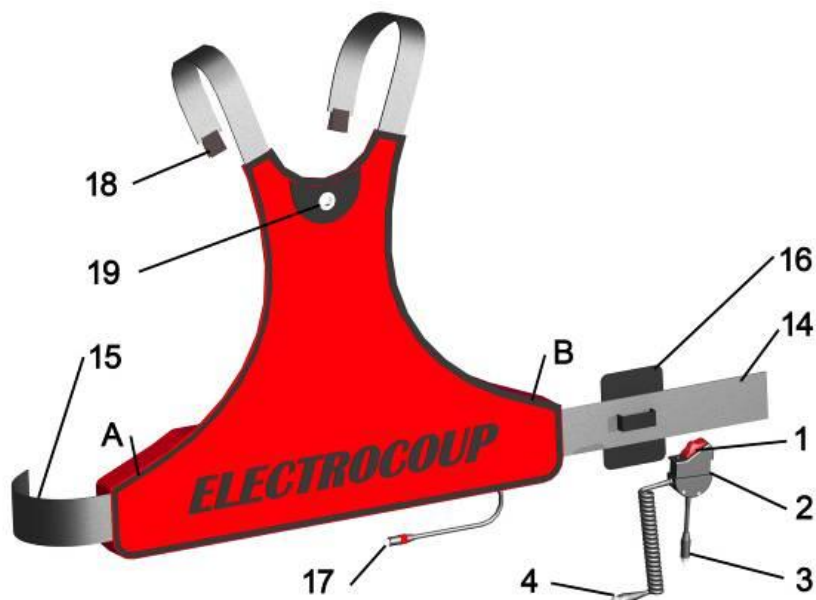
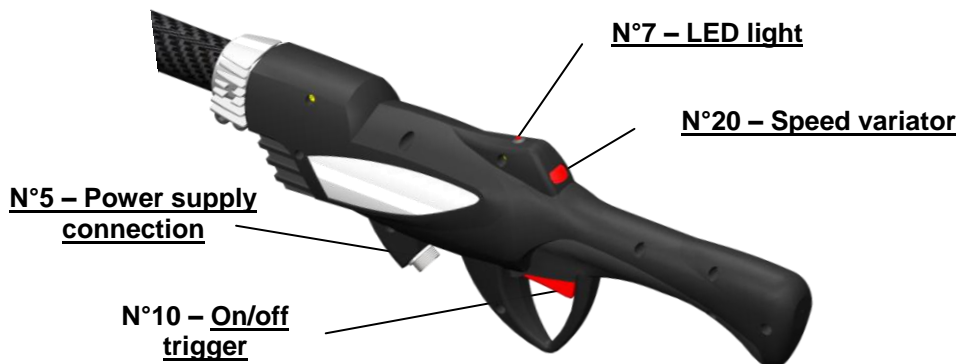
The ELECTRO'FLOR is fitted with an electronic protection system. As soon as the brush meets too much resistance and stops rotating, the electronic system stops the motor. You will need to press the trigger again to restart the machine. For safety and practical reasons, we strongly recommend that you use the case supplied for carrying the battery on your work site. **We also recommend that you keep the machine's protective tube in case you have to send it back to the factory for after-sales service.**

**Always keep your hands away from the brush when the machine is in operation.**

1. Always disconnect the ELECTRO'FLOR at socket Nos. 4 and 5 for all operations other than skimming and **PARTICULARLY IF YOU HAVE TO REPLACE A BROKEN WIRE.**

2. **Every morning, check that the brush is held tightly in the chuck.** To do this, disconnect socket No. 4.

For your safety, the electronic system is equipped with an extra safety system that cuts off the power supply to the ELECTRO'FLOR after it has not been used for 1 minute. You will then need to press trigger No. 10 3 times to switch your machine back on.



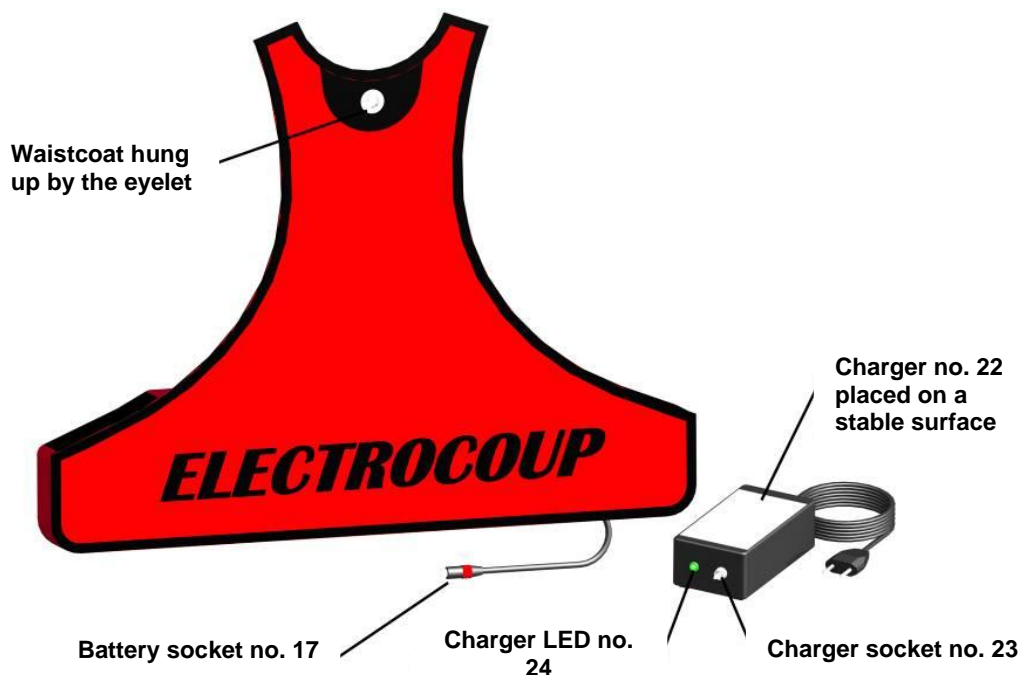
## MAINTENANCE

During the off-season, recharge your battery at least once every two months and store your machine in a dry place at a temperature of between 10° C and 25° C maximum.

We strongly recommend that you carry out our suggested servicing routine every year. This will allow you to start off the following season comfortably and in complete safety.

## RECHARGING THE BATTERY

**For safety reasons, and to ensure that your battery belt works properly, it is very important that you do not recharge it inside its carry-case. It should be recharged in the open air to avoid the possibility of overheating (see picture).**



Connect battery socket No. 17 to charger socket No. 23.

The charger function starts up automatically a few seconds after connection. Indicator light No. 24 lights up and flashes every 30 seconds throughout the charging period. If the charger indicator light does not light up, leave your battery connected and disconnect and re-connect the charger mains socket (230 V) until the light comes on.

When your battery is fully charged, the indicator light flashes rapidly (every 5 seconds). From then on, the charger only provides a maintenance charge.

**Do not leave your battery on charge for more than 15 hours.**

When the battery is charged, disconnect the charger to avoid damage caused by a possible power surge in your electricity supply.

Using a charger or battery other than those made by us is strictly prohibited as there is a risk of breakdown or accident; such use will cancel the manufacturer's guarantee.

**It is essential to recharge the battery at least every 2 months during the off-season.**

For information, it takes about 5 hours to charge up the battery belt.

**Safety instructions for batteries:**

Never try to open it for any reason whatsoever.

Never place it in contact with water.

Check that it is clean and dry before putting it on charge.



**Environmental protection instructions:**

Batteries known under the abbreviation NiCd contain Cadmium; those known under the abbreviation NiMh contain Metal hydride.

Worn or faulty batteries must be recycled in compliance with directive 91/157/EEC.

Do not throw the battery out with the household rubbish; do not throw it into flames or water.

Do not open the battery/ machine.

Drop the battery/ machine off with an ELECTROCOUP approved retailer.



## SAFETY INSTRUCTIONS



N.B. To reduce the risk of electric shock, injury and fire when using electrical tools, please observe the following basic safety rules. Read and follow these instructions before you use the tool and keep these safety instructions!

Disconnect socket No. 4 for all operations other than flower removal.

When not being used for thinning operations, the ELECTRO'FLOR should be stored in its packing tube and the battery waistcoat should be kept in its carry-case.



The ELECTRO'FLOR must be disconnected at rear socket No. 4 for the following operations:

- When you are putting on the battery waistcoat or taking it off.
- When you are changing a wire on the brush.
- For all repair and maintenance work on the machine.

Always keep your hands away from the rotating brush when the machine is in operation.

Never leave your battery on charge for more than 15 hours.

Do not work with the machine if you are tired or if you don't feel well.

Wear non-skid shoes.

Do not leave the machine within the reach of children or visitors.



Do not use the machine if there is a risk of fire or explosion, e.g. the presence of inflammable liquids or gases.



Never carry the charger by its cable and do not pull on the cable to remove the plug.

Keep the cable away from heat, oil and cutting edges.

Never place the charger in contact with water.

Never use the machine at night or in poor light without setting up extra lighting.

When using the machine, keep both feet firmly on the ground and stay as well balanced as possible.



N.B. the pole and brush are made of carbon, which conducts electricity. Do not use the machine near sources of electricity or electrical wires.

## **GUARANTEE CONDITIONS**

ELECTRO'LIV is guaranteed for two years against all faults and manufacturing defects. This guarantee covers normal usage of the machine and does not cover:

- damage caused by poor maintenance or a lack of maintenance,
- damage caused by incorrect usage,
- damage caused by normal wear and tear,
- machines that have been dismantled by unauthorised repairers,
- outside agents (fire, flood, lightning, etc...),
- impacts and their consequences,
- machines for which the guarantee card has not been returned at the time of purchase,
- machines used with a battery or charger other than an ELECTRO'FLOR, ELECTRO'LIV & ELECTROCOUP brand.

In no circumstances will the guarantee give rise to compensation for the fact that the machine is immobilised while it is being repaired.

The guarantee on the machine will no longer be valid if the machine has been worked on by anyone other than an approved ELECTRO'LIV agent.

We strongly recommend that, in the event of a breakdown, users of ELECTRO'LIV equipment should contact the retailer who sold the machine or our after-sales department on **www.infaco.com**.

### **To avoid disputes, please note the following procedure:**

- for equipment covered by the guarantee, please send it to us carriage paid and we will return it at our expense,
- for equipment not covered by the guarantee, but which has been serviced during the previous off-season, please send it to us carriage paid and we will return it at our expense,
- for equipment not covered by the guarantee, and which has not been serviced during the previous off-season, please send it to us carriage paid and we will return it at your expense, cash on delivery. We will send you an estimate if the cost of the repair is more than 80 € ex-VAT.

However, we confirm that the battery life span is five seasons.

If the ELECTRO'LIV & ELECTROCOUP battery does not last for five seasons, and if the unit has always been serviced, we will apply a pro rata rate (except on the SL model).

### **Example:**

Price of the new battery divided by 5 (life span) and multiplied by the number of seasons used.

## **USEFUL HINTS**

### **Keep your working area tidy.**

Untidiness in the working area increases the risk of an accident.

### **Take your working conditions into consideration.**

Do not expose electrical tools to rain. Do not use electrical tools in a damp or wet environment. Make sure that your working area is well lit. Do not use electrical tools if there are inflammable liquids or gases nearby.

### **Protect yourself against electric shocks.**

Avoid physical contact with surfaces linked to the earth, e.g. battery charger, adaptors, etc....

### **Keep children well away**

Don't let other people touch the tool or the cable. Keep them away from your working area.

### **Store your tools in a secure place.**

When not being used, tools should be stored in a dry, closed place, in their original packaging and out of the reach of children.

### **Wear appropriate work clothes.**

Don't wear loose-fitting clothes or jewellery as these may become caught up in moving parts. When working outside, we recommend that you wear rubber gloves and shoes with non-skid soles. If you have long hair, wear a hair-net.

### **Wear protective goggles.**

Also, wear a mask if the work you are doing creates dust.

### **Take care of the power cable.**

Never carry the charger by its cable and do not pull on the cable to remove the plug. Keep the cable away from heat, oil and cutting edges.

### **Take care of your tools.**

Regularly check the condition of the mains socket and cable; if they are damaged, have them changed by a recognised specialist. Keep the machine dry and free of oil and grease.

### **Remove spanners and tools.**

Make sure you have removed all spanners and adjustment tools before switching the machine on.

### **Check whether your machine is damaged.**

Before you use the tool again, check carefully to make sure that the safety systems or slightly damaged parts are working properly.

### **Have your machine repaired by a specialist.**

This machine complies with current safety regulations. All repairs must be carried out by a specialist, using original parts only, otherwise the user's safety may be placed at serious risk.

## **SPECIFICATIONS**

Manufacturer: **INFACO S.A.S. - 81140 CAHUZAC-SUR-VÈRE (FRANCE)**

Type: **ELECTRO'FLOR EC2008\***

Machine weight: **Telescopic model 2370g**

Battery weight: **2400 g (depending on the model)**

Weight of wiring + wired control box + battery waistcoat: **500g environ**

Absorbed power: **150 W**

Battery voltage: **48 Volts**

Primary charger voltage: **230 Volts 50 Hz**

Secondary charger voltage: **56 Volts DC 1A DC max.**

Lower sound level: **< 60 DBA**

These specifications are given for guidance only. They are in no circumstances contractually binding and may be modified for the purpose of improving the product without prior notice.

Patented equipment.

Technical information or After-Sales :

**[www.infaco.com](http://www.infaco.com)**

**Made in France**





**RETAILER SECTION**

**The retailer should keep this section**

Serial no : ..... Purchase date: ..... / ..... / .....

Model:  Alone 48V  With 1 48V Battery  With 2 48V battery

Name : ..... Firt name : .....

Company name : .....

Full address : .....

Postcode : ..... Town : .....

Téléphone : ..... Fax : ..... Portable : .....

E-mail : .....

Customer owner of ELECTROCOUP secateurs:  Yes  No

If yes, serial No: .....

Comment : .....

**CUSTOMER SIGNATURE:**

**RETAILER STAMP:**

*Any coupon not correctly filled in and not sent in time may not be taken into consideration*

**RETURN THIS COUPON TO INFACO AS SOON AS YOU HAVE PURCHASED THE MACHINE**

**RETURN this form IMMEDIATELY, duly filled in, to ensure full guarantee cover.**

Serial no : ..... Purchase date: ..... / ..... / .....

Model:  Alone 48V  With 1 48V Battery  With 2 48V battery

Name : ..... Firt name : .....

Company name : .....

Full address : .....

Postcode : ..... Town : .....

Téléphone : ..... Fax : ..... Portable : .....

E-mail : .....

Customer owner of ELECTROCOUP secateurs:  Yes  No

If yes, serial No: .....

Comment : .....

**CUSTOMER SIGNATURE:**

**RETAILER STAMP:**

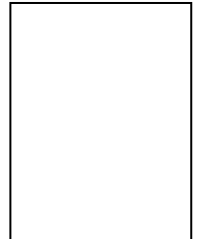
*Any coupon not correctly filled in and not sent in time may not be taken into consideration*

Serial No: .....

**RETAILER**

To be kept  
by the retailer  
for the INFACO  
customer file

***ELECTRO'FLOR***<sup>®</sup>



***ELECTRO'FLOR***<sup>®</sup>



# DECLARATION DE CONFORMITÉ CE DECLARATION OF CONFORMITY ( CE )

INFACO s.a.s déclare que le matériel neuf désigné ci-après :  
*INFACO S.A.S declares that the new equipment designated below :*

Eclaircisseuse électroportative  
*Electronic flower thinner machine*

de marque : **INFACO** – modèle : **ELECTRO'FLOR EC2008\***

with the brand name : **INFACO** – model : **ELECTRO'FLOR EC2008\***

N° de série :

*Serial no:*

Année de fabrication:

*Year of manufacture:*

est conforme aux dispositifs des directives "machines" (directive 98/37/CEE)  
et "chargeurs électriques" (directive 89/336/CEE) et aux réglementations nationales  
les transposant.

*complies with the provisions of the directives for "machines" (directive 98/37/CEE) and  
"electric chargers"  
(directive 89/336/CEE) and with national legislation adapting them.*

L'appareil est également conforme aux dispositions des directives européennes  
suivantes:

*The equipment also complies with the provisions of the following European directives:*

NE EN 61000-3-2

NF EN 61000-4-5

NF EN 550014-2

NF EN 61000-4-2

NF EN 61000-4-6

NF EN 55022

NF EN 61000-4-3

NF EN 61000-4-11

NF EN 55011

NF EN 61000-4-4

NF EN 55014-1

Fait à : CAHUZAC SUR VÈRE

*Signed in (place) :*

Le : Septembre 2007

*Date :*

M. DELMAS Daniel, Président de la  
Société INFACO

*INFACO President*

Signature :

*Signature:*

