



BVcert.6152145





**OTHER LANGUAGES** 



**STANDARD** 











**HOOF TRIMMER** 

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## **PRECAUTIONS BEFORE USE**



**WARNING. Read all the safety warnings and all the instructions.** Failing to heed warnings and follow instructions may lead to an electric shock, a fire and/ or serious injury.

**Keep all warnings and instructions for future reference.** In the warnings, the term "tool" refers to your battery powered electric tool (with power cord).

## **PROTECTION OF THE ENVIRONMENT**



Observe all country-specific waste disposal rules and regulations.

> Power tools must not be disposed of with household refuse.



> Ask the approved INFACO dealer for up-to-date information on the ecocompatible elimination of waste.

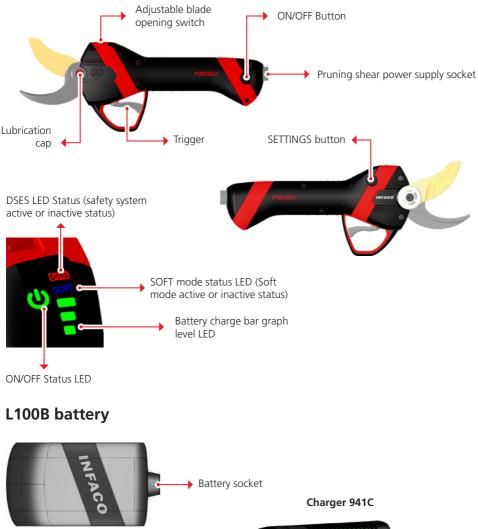


F3020 shears **(Standard or Medium)** A battery (Ref. L100B) A charger A charger power cord A Shear (right) power cord A battery-holder vest (belt + straps) An armband A holster (pruning shear holder) A grease gun and its cartridge (Ref. 952P) A bade tightening tool A spare blade A honing stone (Ref. 350P) A hardware kit An instruction manual



## **GENERAL PRODUCT VIEW**

## F3020 Pruning shears





5



	F3020 STANDARD Pruning Shears	F3020 MEDIUM Pruning Shears	F3020 MAXI PRUNING Shears
Max.	Electric power: 1340 W		
Power supply	Compatible with 36 V and 48 V batteries		
Cutting capacity	1″ 37/64	1″ 49/64	2″ 11/64
Blade speed	44 rpm	32 rpm	15 rpm
Weight	25 oz	29.2 oz	39.1 oz
Dimensions	11″ 1/32	11" 39/64	14" 11/64
	L 100B BATTERY		
Rated voltage	36 V		
Technology	Li-ION - 18/650 - 10S1P mounting		
Capacity	3 Ah / 108 Wh		
Weight	24.6 oz		
Dimensions	5″ 29/32 x 3″ 17/64 x 2″ 9/32		
		CHARGER 941C	
Input	110 V / 230 V - 50/60 Hz		
Output	42 V – 2A		
Power	84 W		
Fuse	3.15 A		

These specifications are given as an indication only. Under no circumstances may they be considered as contractually binding. They are subject to modification without prior notice in the interests of product development.

Patented equipment.

## **USER GUIDE**

### First use

The first time you use the equipment, we strongly recommend you to ask the advice of your dealer, who is qualified to give you all the advice you need for correct use and good output. It is imperative to carefully read the tool and accessory user manuals before handling or powering up the tool.

## Battery

Before using the equipment for the first time and/or following wintering, fully charge the battery (see charging procedure on page 14).



The L100B Lithium battery MUST be recharged using the INFACO Lithium charger (Ref.: 941C).

Using a different charger is prohibited as it may cause to a serious electrical accident (explosion and/or fire)..

## **Compatible batteries**

- The table below lists the batteries that are compatible with the F3020 pruning shears. However, the use of these batteries (other than the L100B) may reduce device performances (see table below).
- Using the L100B 36 V battery is to be preferred to get the best device performances.

COMPATIBLE BATTERIES					
L100B	831B	L850B	L810B		
~	Operational but not optimal	~	~		
COLUMN TO A					
36 V	48 V	48 V	48 V		

• If you want to use your F3020 pruning shears with one of the 48 volt batteries above, an additional configuration parameter is required. Please contact your approved INFACO dealer to find out how to do that.

The F3020 pruning shears are not compatible with the batteries for previous models (F3005 and F3010).

## **Carrying the equipment**

There are several possible carrying methods:

#### 1. With full equipment

- Remove the battery, the batteryholder belt, the straps, the holster, the arm-band and the power cord from the case.
- Fit the battery onto the batteryholder belt with the socket at the top. To do that, slip the two straps through the back battery clips.
- Clip the straps to the belt, slide the power cord through the provided cable passages.



• Armbands can be used to fix the cable using the hook and loop quick fastening. In that way, the cable will run along the arm and will not hinder work.



• Don the vest and adjust the straps: pull the straps to a comfortable position and clip the front clips at the required position.



#### 2. Carrying with the belt and the armband

 It is possible to only use the belt and armband without the straps. In that case, the armband is strongly recommended for better work comfort. The battery must then be fixed with the cable outlet horizontal either on the right or on the left.

## 3. Carrying the battery without the belt and straps

• The battery can simply be worn on a trouser belt. In that case, the armband is strongly recommended for better work comfort. The battery socket should be facing down in that case.

In heavy rain, it is preferable to carry the battery under waterproof clothing to keep it protected from damp.

#### 4. Carrying the pruning shear holster

- Use of the holster is strongly recommended to carry the tool safely when travelling and when not pruning.
- To do that, make sure to attach the holster to the battery belt through the loop provided for this purpose or your trouser belt if you do not wear the vest.
- The pruning shears must be inserted into the holster in the fully closed position in standby mode or switched off, until they reaches the stop.
- To remove the pruning shears from their holster, simply grasp them with one hand, and unlock the latch and remove the shears from their housing with your free hand.

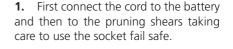


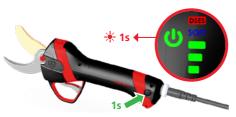
### **Powering on**



Always keep your hands away from the cutting head when the device is powered on.







**2.** Press the pruning shears ON/OFF button until the LEDs light. All the LEDs light for 1 second to test that they are in working order. The pruning shears are ready for initialisation.



**3.** Initialisation phase: Press the trigger twice. The status LED flashes green quickly and the blade opens if not already open.



**4.** Once the blade is open, press the trigger until the blade is fully closed, the status LED will switch to steady green.

The pruning shears are ready for use.

During this phase, if the blade stroke is obstructed by an external element, the detected stop will not be valid. In that case, power off the pruning shears, remove the obstacle from the cutting head and repeat the power-up procedure.

# **PRECAUTIONS FOR USE AND SAFETY**

Before starting the working day, make sure the battery is fully charged (3 LEDs lit on the pruning shears).

Always disconnect the pruning shears from the power cord during handling other than pruning and **ALWAYS WHEN SHARPENING, EDGING OR LUBRICATING THEM**.

Check that the blade is correctly tightened every morning (see page 31).

Do not leave the pruning shears and/or the battery on the ground, and do not expose them to bad weather conditions.

Make sure the battery's protective plastic casing is not cracked and does not seem to have suffered impacts or other aggressions.

When working, it is normal for the battery temperature to rise (as well as when charging).

Recommended operating temperature: 25 to 95°F. Use outside this temperature range may reduce tool performance.

In wet weather, it is imperative to carry the battery under waterproof clothing to keep it protected from the rain.

After using the tool in the rain or in a damp environment, it is strongly recommended to store the (disconnected) device outside its case in a heated and ventilated place.

Always keep the cord away from the cutting zone.





Always keep your hands away from the cutting head when the device is powered on.

### Adjustable blade opening

The pruning shears are equipped with an adjustable blade opening switch which you can use to reduce blade opening by approximately 50 %. The adjusted blade opening position can be set to your needs (see pages 18 and 19).

- 1. To move the blade to the adjustable opening position, press the adjustable blade opening switch.
- 2. Press the trigger until the blade closes.
- **3.** When it reopens, the blade will be in the adjustable open position.



## NORMAL or SOFT mode

There is a choice of two operating modes:

- "NORMAL" mode: the pruning shears operate at maximum speed for optimum blade closing time.
- "**SOFT**" mode: provides a softer blade control feel. The cutting speed is reduced by about 15%. This mode is strongly recommended when learning to prune.
  - 1. To switch from one mode to the other, **quickly** operate the half-opening switch 6 times (3 on and 3 off), the SOFT LED will light or go out depending on the initial state.
  - Press the trigger to check the mode change. 2.



### **Battery charge level**

The battery charge level is indicated by the 3 LEDs on the pruning shear charge indicator.



#### Battery low state:

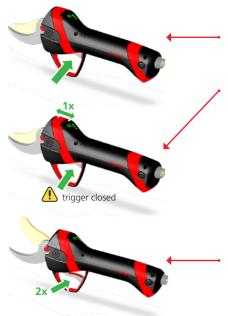
When the last LED flashes, the battery charge is less than 10%.

#### **Battery flat state:**

When the battery is completely flat, the pruning shears stop. The power supply LED switches to quickly flashing and the 3 charge indicator LEDs switch off. The battery must be recharged when in this state (see page 14).

## Activation of the "closed blade" standby mode

The device has a standby mode making it possible to store your pruning shears quickly and safely in the provided pruning shear holder.



**1.** Press the trigger on the pruning shears while keeping the blade closed.

**2.** Operate the adjustable blade opening switch twice (= 1 on and off), without releasing the trigger.

**3.** The device standby mode is activated when the 3 charge level indicators scroll.

**4.** Then release the trigger, the unit is in the "blade closed" standby mode.

**5.** In standby mode, the status LED flashes green. To restart your device, press the trigger twice.

### Automatic standby switching

For your safety, the electronics are equipped with an automatic pruning shear standby mode after 3 minutes of non-use (power LED flashing green). This time can be modified to adapt to your needs by your approved INFACO dealer.

You then need to press the pruning shear trigger twice to start it back up.

#### Stopping the device

To power off your pruning shears, press the ON/OFF button until the pruning shear LEDs turn off. For your safety, it is recommended to power off the pruning shears with the blade closed.



#### Automatic device shutdown

The pruning shears are fitted with an automatic shut down that cuts the power supply to the pruning shears if they are not used for 15 minutes.



## Using the charger

To charge your battery, plug in the charger in a well ventilated area which is free from inflammable products, sources of ignition and damp. The ideal ambient temperature should be between 50°F and 77°F.



1. Connect the power cord to the charger.



2. Connect the power cord to the mains outlet.



**3.** The charger initialises when it is powered on. The status LED (1) alternates between red/green and the wintering LED (2) lights for 3 seconds



**4.** When the LEDs turn off, the charger is ready for use.

## **Charging the battery**



Charging the batteries when the ambient temperature is below  $32^{\circ}$ F or above  $104^{\circ}$ F is strictly prohibited.

Neither the battery nor the charger should be covered, close to a heat source or to inflammable products during charging. Do not obstruct the charger's ventilation fins.

- **1.** Connect the battery to the charger's output cable.
- 2. When the battery is connected, the charger detects it and starts charging., The status LED (1) flashes green.
- **3.** Battery charged: the status LED (1) switches to steady green. The time to fully charge an L100B battery is about 2h.



## Wintering the battery



A battery wintering process is required in the following cases:

- At the end of the pruning season.
- When not in use for over 1 month.
- For transport before the annual servicing.

Wintering makes sure the battery is stored in good conditions. Battery wintering time can be up to 10 hours.

1. Connect the battery to the charger



2. Press the wintering button (3) to start the process. The wintering LED (2) turns blue and the status LED (1) flashes green



**3.** Wintering process completed: the wintering LED (2) is steady blue and the status LED (1) turns steady green.



The battery must be disconnected and stored in the case.

To enable or disable wintering mode, press the wintering button. Wintering mode is automatically disabled when the charger is disconnected from the mains power outlet.



If a power failure occurs in wintering mode, the mode will will be deactivated. When the power is restored, if the battery is still connected, a charge will be carried out. Make sure to repeat the wintering process before storing.

Batteries that are connected to the charger for more than 13 days will automatically switch to the wintering process.

## Case of non-wintered batteries



If the wintering process has not been correctly followed, there may be a loss of autonomy during the first uses.

In that case, complete autonomy will be recovered after several charges. This can be spread over the 1<sup>st</sup> week of work. To do that, make sure the battery stays on the charger for the time needed for full charges.

### **Battery storage instructions**

Store the battery and charger in a well ventilated area, free from freezing temperatures, inflammable products, and ignition or heat sources, and keep out of the reach of children.

Do not store empty batteries. Even when not in use, the battery charge level decreases. If the battery reaches a highly discharged status, it will no longer charge and will be considered out of service.

#### Do not store the battery without carrying out the wintering process.

Do not store out of service batteries. Please return them to your approved INFACO dealer.

Do not store batteries when they are connected to the charger or to a tool.

Do not store the charger connected to the mains power supply.



All failings regarding the storage and safety instructions will void the manufacturer's warranty.



There is a fire hazard if the product suffers damage (impacts, being dropped, exposure to high temperatures, etc.).



According to the 2002/96/EC standard, do not dispose of the battery with household waste, do not burn it or dispose of it in water. Do not open the battery.



Return the battery to an approved INFACO dealer.

Used or defective batteries must be recycled according to the 91/157/EEC directive.

#### Temperature fault: Status LED (1) flashes red

- **1.** Disconnect the battery and wait a few minutes for the battery to cool.
- **2.** Reconnect the battery to the charger cable. If the problem persists, contact your approved INFACO dealer.

#### Defective battery: Status LED (1) steady red

- **1.** Disconnect the battery from the charging cable.
- **2.** Check that the battery and charger contacts are clean and in good condition, then reconnect the battery to the charger cable.
- **3.** If the problem persists, disconnect the defective battery from the charger cable and contact your approved INFACO dealer.





Please remember that the INFACO Lithium charger (Ref.: 941C) is only for use with F3020 Lithium batteries (Ref: L100B). This charger is not suitable for other batteries.



## ADJUSTABLE BLADE OPENING / Blade overlap setting

Always keep your hands away from the cutting head when the device is powered on.

### Access "settings" mode

You can set the adjustable blade opening and the adjustable blade overlap ratio relative to the hook at your convenience. To do that you must access the pruning shears "settings" mode.

The "settings" mode can be accessed at all times except when the pruning shears are in "standby" mode.

- 1. Press the "settings" button on the pruning shears for 3 seconds until the bar graph LEDs flash.
- 2. The blade opens fully.

3. The pruning shears are now in settings mode.

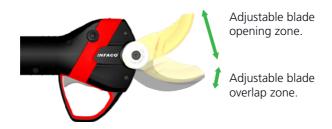
If settings mode is accessed by mistake, pressing the "settings" button again for 3 seconds exits the mode without modifying the saved parameters.



## Setting the adjustable blade opening OR adjustable blade overlap ratio

Once the pruning shears are in "settings" mode, the adjustable blade opening **OR** adjustable blade overlap ratio can be set. The pruning shears have pre-set blade positions:

- 10 adjustable blade opening positions.
- 10 adjustable blade overlap positions.



- 1. Once the pruning shears are in "settings" mode, press and hold the trigger to get the first pre-set adjustment position.
- **2.** Successively press the trigger to move from position to position.



- **3.** If you overshoot the required position, release the trigger to return to the open blade position and begin the procedure from the beginning.
- **4.** Once the adjustable blade opening or adjustable blade overlap ratio has been set, keep the trigger on the position.
- **5.** Confirm the position by switching the adjustable blade opening switch (1 on or 1 off).
- **6.** The pruning shear LEDs must be steady green to confirm the validation. The pruning shears are ready for normal use.



# **DSES WIRELESS SAFETY SYSTEM**

The F3020 pruning shears are equipped with the "WIRELESS" safety system as standard. It is compatible with all the blade kits.

This system, of which the operation is described in the following sections, can be disabled by users at all times.



The user must be aware that the DSES WIRELESS system supplements all mandatory and usual safety rules but does not replace them under any circumstances.

As a result, the user must respect all the safety rules contained in this manual, as well as, more generally, the usual safety rules relating to the use of any cutting tool, in all circumstances,.

### Safety and use

The shears are fitted with a conductive trigger. This trigger must be in contact with the hand holding the shears in order to create an electric contact through the user's body. To guarantee that the system works properly the pruning shears must be in contact with the body.

The human body has specific and changing characteristics depending on each person. For example, damaged hands may cause a delay in the detection by the safety system.

To make sure the system responds correctly for all users, we strongly recommend wearing INFACO conductor gloves. They amplify the signal.

The use of non-INFACO brand conductor gloves is totally prohibited.

Wearing these conductor gloves requires systematic visual inspection as well as regular conductivity level checks. This check is to be carried out during the "DSES check" phase described in the "Checking correct DSES system operation" section (on page 24).

INFACO cannot be held liable for failures due to gloves in poor condition and/or non-compliance with the procedures described in this manual.

To reduce health risks, INFACO recommends that people wearing a pacemaker should consult a doctor and the pacemaker manufacturer before using this system.

## First use

The first time you use the equipment, we strongly recommend seeking the advice of your dealer, who is qualified to provide instructions on the proper use of the system.

To guarantee an optimal level of safety and also to reduce unwanted activations, it is strongly recommended to calibrate the DSES system (see page 24) and to wear an INFACO brand conductor glove on the hand opposite the one holding the pruning shears.

It is essential that users be bare-handed or wearing INFACO brand conductor gloves (ref. GWDSES and/or 355G29). This system is totally incompatible with all other types of gloves and under-gloves.



#### **IMPORTANT:**

The use of INFACO conductor gloves is strongly recommended to:

- Increase the safety system conductivity.
- To make the reactivity consistent on the entire hand surface.
- Reduce unwanted triggering on wet wood and/or wood that is too close to the ground.

## Carrying



**IMPORTANT REMINDER** 

- No other gloves should be used.
- The glove must be in direct contact with the skin.
- Wearing clothing cuffs under INFACO conductor gloves is prohibited.

Wearing a wristwatch or any other object that may reduce the conductivity of the elastic conductor on the wrist of the hand opposite the one holding the pruning shears is prohibited



## Using the DSES safety system

The DSES WIRELESS system is available as standard, which means that the function is active by default. Regular system checks and calibration are required to check it is in working order.



When powering on, check that all LEDs are in working order



During use, the DSES status LED is off = DSES is active



During use, the DSES status LED is red = DSES is inactive. You are not protected.

#### During use, the DSES can be inactive with the status LED red in 2 possible cases:

• Momentary and deliberate stop:



The DSES is inactive for one cut and then automatically reactivates:







You are not protected during the single cut.

• Continuous and deliberate stop:



The DSES is permanently disabled. To reenable it, a 10s long press on the settings button is required.





You are no longer protected.

#### Untimely triggering:

In certain working conditions, the safety system can be triggered during a cut:

- on very wet wood (due to very bad weather for example),
- on cuts close to the ground,
- near metal stakes and wires.

To make those types of cut, use the deactivation functions mentioned above.

#### In those cases, you are no longer protected.

Wearing an INFACO conductor glove combined with safety system calibration reduces the rate of unwanted triggering (see system calibration procedure on page 24).

### Checking DSES system correct operation and calibration

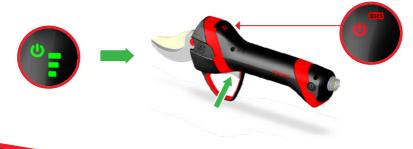
The "DSES check" function is carried out when the pruning shears are in standby mode and checks correct system operation (with bare hands or conductor gloves)

#### This check should be carried out before starting work and several times a day:

- Check the cleanliness of your cutting head. Dirt can alter both the conductivity and the correct operation of the safety system.
- If conductor gloves are worn, the first daily DSES check should be carried out on dry gloves and on the entire glove surface.
- 1. Put the pruning shears on standby



2. Press the trigger and keep it pressed. After one second, DSES check mode is activated. The DSES LED flashes, the power LED turns steady red.



3. While keeping the trigger pressed, place the bottom of the hook in direct contact with the tips of the fingers on the hand opposite the one holding the pruning shears, whether wearing an INFACO conductor glove or not depending on your work configuration.



4. Move over the entire surface of the hand and/or glove in this way (palm of the hand and the five fingers, inside and outside) while keeping the trigger pressed to check the different conductivity levels of your hand, whether gloved or not, using the bar graph:

DSES CHECK AND CALIBRATION					
CONDUCTIVITY Level	Excellent	Good	Acceptable	Low	Insufficient
LED AND Bar graph	G	С С	ڪ ا	<b>С</b>	0

5. When the entire surface has been checked, release the trigger at the area of minimum conductivity while maintaining contact between the hook and the gloved or ungloved hand. The calibration is complete. The pruning shears switch back to standby mode.



Never carry out an operation check by trying to cut the glove, follow the procedure described above. The risk would be to damage your glove.

## **DSES** fault notification

- Insufficient conductivity (hand or glove) reported during the DSES check phase
  - When not wearing an INFACO conductor glove: If an area of your ungloved hand turns the ON/OFF status LED red, you

must wear an INFACO conductor glove to improve your conductivity.

 When wearing an INFACO conductor glove: If an area of the glove turns the ON/ OFF status LED red, the zone is no longer operational. The glove may be dirty, it must be cleaned by hand in clean cold water without detergent and left to dry before repeating the DSES check phase. The glove may also be



worn out and therefore unusable. In that case it must be replaced.

- When wearing two INFACO conductor gloves: To determine which glove has insufficient conductivity, repeat the "glove check" phase twice with a single glove (first remove one glove and then the other). Refer to the "When wearing one INFACO conductor glove" section.



In these three insufficient conductivity cases, the pruning shears work but the user is no longer protected.

- DSES indicator steady red, the DSES is inactive:
  - **Error when starting during pruning shear initialisation:** Do not touch the cutting head when the trigger is first pulled, after powering on, or after exiting from standby mode.



In those cases, the pruning shears must be restarted (see page 10). If the fault persists, check that the "continuous stop" function has not been activated by a long press (< 10 seconds) on the settings button. If the LED will not go out, contact your approved INFACO dealer. **You are no longer protected.** 

- **Temporary safety system stop:** Refer to the "Using the DSES safety system" section (on page 23) to reactivate the safety system.
- Glove not connected to the hard wired system

## Hard wired DSES

The hard wired DSES system remains compatible with the F3020 pruning shears.

To use the hard wired safety system, contact an approved INFACO dealer to obtain a DSES kit.

This modification requires specific pruning shear settings which can only be set by your approved INFACO dealer.



This change will disable the WIRELESS safety system. This change being reversible, you must contact your approved INFACO dealer.

# **LED INDICATIONS**

INDICATION (THE PRUNING SHEARS ARE OPERATIONAL)				
	Green LED on (not flashing).	The device is running normally.		
	Orange LED on (not flashing).	<b>Excessive work:</b> Sharpen the blade. If the problem persists, the kit being used may not be suitable for the work being carried out. Contact your dealer to get personalised advice.		
SOFT	SOFT LED steady blue	SOFT mode active		
DSES	DSES LED steady red	<ul> <li>Safety system inactive or defective:</li> <li>Check that there was no bad initialisation</li> <li>The system is temporarily or permanently inactive</li> </ul>		
SAFETY (TEMPORARY PRUNING SHEAR SHUT DOWN)				
	Orange LED flashing slowly	<b>5 consecutive blocking cuts:</b> After a 5 second pause, the pruning shears automatically return to normal operation.		
0	Red LED flashing slowly	High pruning shear temperature: Leave the pruning shears powered on. The pruning shears automatically switch to normal operation as soon as the device is ready to use again. The bar graph continues to indicate the battery charge level.		
BATTERY FLAT (THE PRUNING SHEARS STOP WORKING)				
Q	Fast flashing red LED + charging indicator off	<b>Battery flat:</b> Red flashing power LED and charge indicator off mean that the battery is flat. The battery must be recharged when in this state (see page 14).		
	Red LED flashing slowly	<b>Device fault:</b> If the pruning shears show a fault, turn them off and back on again. If the problem persists, contact your dealer. <b>The bar graph continues to indicate the battery charge level.</b>		



Always disconnect the pruning shears from the power cord when handling for other purposes than pruning and ALWAYS WHEN SHARPENING, EDGING OR LUBRICATING.



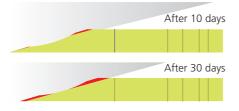
Sharpening

### **Blade sharpening**



2 sharpenings / day + 1 edging / hour

**Sharpening** must be carried out flat on the 2 red slants to always keep the same angle of penetration. (with a sharpening stone or optional A48V3 electric sharpener).



**Edging** consists in restoring the sharp side of the blade and optimises cut quality.

Carry out 4 passes with the carbide edging tool (available from INFACO, ref. 950AF) on the bevel + 1 pass on the counter-bevel (back of the blade).

### **GOOD PENETRATION**

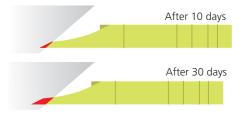
#### **Result:**

- Clean cut
- High cutting capacity
- Quick cutting
- Increased autonomy
- Reduced mechanical fatigue
- Longer blade service life
- Normal motor heating
- Higher yield
- Less strain on the user's wrist

BAD SERVICING



If servicing is carried out by sharpening and/or edging on the cutting edge only, the thin part of the blade is eliminated. You lose the penetration angle.



Important: Edging alone is not enough.

### **BAD PENETRATION**

#### Result:

- Significantly reduced cutting capacity
- Requires pressing the trigger several times for medium cuts
- Much higher electricity consumption Reduced autonomy
- Faster blade wear
- Causes the motor to overheat
- Time wasting
- The user's wrist is more strained (= MSD)

To optimise your blade service life to the maximum while maintaining perfect cut quality, we advise you to use our A48V3 sharpener. You will also save considerable time in your daily sharpening.

## Grease pump

Before using the pump, complete the preparation, grease filling and pump priming steps.

#### • First use of a new pump

Only carry out these steps if you have purchased an extra pump other than the one initially in the case.

- Press the empty pump once to unstick the piston, as it may be stuck (1).
- Remove the plastic film from around the cartridge.
- Remove the caps from the cartridge (2) and the pump.
- Insert the cartridge into thge pump (grease visible on the pump side) (3).
- Press the cartridge piston in the middle to fill the pump to the maximum (4), (5). It is normal for the chamber not to be 100% full.
- Close the pump (6).
- Prime the pump: loosen the shear blade tightening nut (7), (8), (9). The position the grease pump in the hook axis (10) and pump four times (11) up to the spring stop.
- Pump once more to grease the shear, the grease must come out (12) and the chamber must be completely filled.
- Re-tighten the hook nut and screw.

#### Cartridge replacement

- Remove the grease pump cap.
- Remove the empty cartridge. Be sure not to dispose of it in the environment.
- Remove the plastic film and the cap from the new cartridge (2).
- Insert the new cartridge into the pump (grease visible on the pump side) (3).
- Press the cartridge piston in the middle to fill the pump to the maximum (4), (5). It is normal for the chamber not to be 100% full.
- Close the pump (6).
- Prime the pump: loosen the shear blade tightening nut (7), (8), (9). The position the grease pump in the hook axis (10) and pump four times (11) up to the spring stop.
- Pump once more to grease the shear, the grease must come out (12) and the chamber must be completely filled.
- Re-tighten the hook nut and screw.

#### Re-priming

Depending on storage conditions, the pump may have become un-primed (the cartridge contains grease that will not come out, in particular due to air bubbles). In that case, re-prime it. To do that:

- Remove the grease pump cap.
- Press the cartridge piston in the middle to fill the pump to the maximum (4), (5).
- Close the pump (6).
- Prime the pump: loosen the shear blade tightening nut (7), (8), (9). The position the grease pump in the hook axis (10) and pump four times (11) up to the spring stop.
- Pump once more to grease the shear, the grease must come out (12) and the chamber must be completely filled.
- Re-tighten the hook nut and screw.



































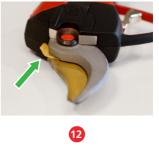














## Always disconnect the pruning shears from the power cord when handling for other purposes than pruning.

## Lubrication

Lubricate at least twice per day (early morning and early afternoon).

For correct lubrication the pruning shear blade must be unlocked. To do that:

- 1. Use the tool to unblock the bolt and the nut.
- **2.** Place the greaser tip in the lubricating cap channel. Hold the greaser upright and activate the pump.
- **3.** Once lubrication is complete, adjust the tightening of the nut until the tool is triggered.
- 4. Block the screw and then check using the correct blade tightening procedure (see below).



## **Blade tightening**

Check the blade tightening every morning. A well tightened blade should not move from left to right. To obtain good blade tightening, it must be possible to close the pruning shear by hand without forcing (pruning shear power socket disconnected).





## To adjust the tightening

**1.** Use the tool to unblock the bolt. You do not need to remove the bolt.

**2.** Unlock and then adjust the nut tightening until the tool is triggered.



**3.** Block the screw and then check the tightness using the previous procedure.

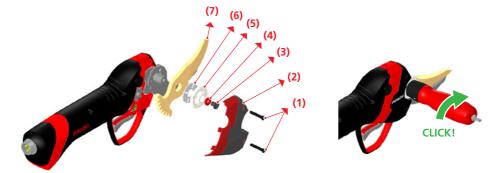


**Note**: It is possible to have a slight gap in the blade closure direction. This gap is normal, it is the gap between the rack and pinion teeth.

## Always disconnect the pruning shears from the power cord when handling for other purposes than pruning.

## Changing the blade

- 1. Using the tool cross tip, unscrew the 2 screws (1) and remove the cover (2).
- 2. Using the tool hex tip, remove the screw (3) and the elastomer washer (4).
- 3. Using the tool, remove the nut (5) and the needle stop (6).
- 4. Remove the blade (7). Replace the blade.
- 5. If necessary, clean around the pinion (warning: do not use chemicals).
- 6. Fit the new blade on the pruning shears in the closed position.
- 7. Fit the needle stop (6) then screw and adjust the nut (5) tightening until the tool is triggered (see page 30).
- 8. Fit the elastomer washer (4) on the screw (3) and screw in the screw (3).
- **9.** If necessary, lubricate the blade teeth using graphite grease.
- **10.** Fit the cover **(2)** on the pruning shears and screw in the 2 screws **(1)**.
- 11. Adjust the blade overlap if necessary (see "Blade overlap" section on page 18).
- **12.** Lubricate as indicated on p32.



## Cleaning and disinfecting the cutting head

It is also possible to clean and/or disinfect the cutting head to prevent any diseases spreading on the wood. To do that, we recommend avoiding the use of corrosive products that could damage the device. Do not hesitate to contact INFACO for the choice of products to be used.

# **YEARLY MAINTENANCE**

At the end of the pruning season, remember to put the batteries in wintering mode to prevent their premature aging during storage (see page 15). Every year, we strongly recommend that you use the annual maintenance service we propose. This will allow you to start the following season in good conditions and in complete safety.

## **TRANSPORT PRECAUTIONS**

The case is certified for the transport of Lithium batteries > 100Wh (UN 3480-3481 standard). However, some rules must be followed when shipping using a carrier:

- The unit must be fully disconnected (pruning shears, cable, battery).
- It is compulsory for the battery to be wintered and placed in the housing provided in the case. The case must be taped shut correctly to prevent any risk of it opening.

## **SAFETY INSTRUCTIONS**

## For any handling other than pruning, the shears must be in the closed position, disconnected from the battery and placed in the battery-holder vest holster.

Caution: when the device is not in use (storage, transport, end of charging, etc.) is it compulsory to disconnect the battery from the power cord. It is imperative to disconnect the pruning shears from the power cord for the following operations:

- When donning or removing the battery-holder vest.
- When sharpening the blade.
- When fitting, removing or lubricating the blade.
- When changing the cutting head.
- For all operations or repairs on the pruning shears.
- For all operations other than pruning.

Handle the cutting edge of the blade very carefully when removing and adjusting it.

Do not try to cut wood that is too thick or materials other than vine wood and tree branches (except when using specific kits).

When the equipment is in operation, always keep your hands well away from the cutting head.

Do not use the pruning shears if you are tired or feel unwell.

Do not use a dirty or non-functional DSES glove.

Wear non-slip footwear. When working at height, use appropriate and adapted resources (scaffolding, platform, etc.).

When using the device, keep both feet on the ground and keep as well-balanced as possible.

In wet weather, protect the battery. When disconnecting, make sure that no moisture enters the battery socket.

Do not use the equipment if there is a risk of fire or explosion, for example in the presence of inflammable liquids or gases.

Keep the cord away from heat, oil and sharp edges.

Never use the equipment at night or in poor light without setting up additional lighting.

Keep the equipment out of the reach of children or visitors.

Keep watch over children to make sure they do not play with the device.

The device is not designed to be used by persons (including children) with reduced physical, sensory or intellectual capacities, or by any person who does not have experience or knowledge, unless they have received prior training or instructions on the use of the device from a person in charge of their safety.

Never carry the charger by the cord, and do not pull it to disconnect it from the socket.

If a cord is defective or damaged, it must be replaced with a genuine cable or set from the INFACO factory or from an approved INFACO dealer.

Never try to open the battery for any reason.

Never make any mechanical alterations to the battery, harness, charger or connectors.

Never let the battery or charger come into contact with water.

Never wear the battery on your back when it is charging.

Never expose the battery or the charger to high temperatures (direct sunlight, heating, etc.) > 140°E.

Never recharge the battery in temperatures below 32°F or above 104°F.

Do not charge the battery near inflammable or explosive materials (fuel, gas, nitrogenated fertilisers. etc.).

Never leave to charge for extended periods without surveillance.

Never use chargers, batteries, cords, etc. other than those sold by INFACO.

Do not use chemicals to clean the device (pruning shears, cords, batteries and charger).

To reduce health risks, INFACO recommends that people wearing a pacemaker should consult a doctor and the pacemaker manufacturer before using this system.



Regardless of the circumstances and WITH or WITHOUT the DSES safety system, users must make sure that the hand not holding the pruning shears is at least 8 inches away from the tool blade.



For your safety, protect your hand opposite the pruning shears by using suitable protection such as hard-shelled gloves or an additional safety device (DSES) with or without a cord

INFACO declines all liability for injuries and/or material damage caused by the use of equipment containing defective parts.



# **WARRANTY CONDITIONS**

INFACO cannot be held liable or accept claims under the warranty, regardless of the cause or legal basis, for any defect, damage and/or prejudice whatsoever resulting from (1) storage, use, maintenance and/or intervention on the equipment by the user contrary to the instructions in this manual (in particular the safety instructions); and/or (2) use of the equipment containing defective parts and accessories. In all cases, the user is required to demonstrate that they have scrupulously respected all equipment storage, use, maintenance and safety instructions.

- The full device warranty is a 1 year warranty (this can be extended to 3 seasons (see red insert below).
- The aluminium head (ref. 904T) has a lifetime warranty.
- The gear motor has a 3 year warranty.

In the framework of the replacement of a battery covered by the warranty, the replacement will be made on condition that the capacity of the battery is less than 70% of its initial capacity.

# The warranty is only applicable when the warranty has been registered with INFACO (warranty card or online declaration on www.infaco.com) at your dealership. Do not hesitate to ask your approved INFACO dealer for assistance in completing your INFACO international manufacturer's warranty declaration.

If the warranty declaration was not made when the tool was purchased, the factory departure date will be used as the warranty start date.

INFACO declines all liability in terms of warranty for devices sold by distributors more than one year from their departure from the factory.

This warranty corresponds to normal use of the equipment and does not cover:

- damage due to poor maintenance or lack of maintenance,
- damage due to incorrect use,
- damage due to normal wear,
- devices that have been dismantled by unauthorized repair agents,
- external factors (fire, flood, lightning, etc.),
- impacts and their consequences,
- devices for which the warranty declaration was not made at the time of purchase,
- devices used with a battery or charger of a brand other than INFACO.

Under no circumstances shall the warranty entitle to compensation for any immobilisation of the equipment during the time required for its repair.

The repair or replacement during the warranty period does not extend or renew the initial warranty.

The warranty covers factory labour (on condition that the device has always been serviced) but does not necessarily apply to dealer labour costs.

All work carried out by persons other than authorised INFACO agents will void the INFACO warranty.

In the event of a breakdown, we strongly recommend users of INFACO equipment to contact the dealer who sold them the equipment, or our customer services by dialling +33 (0)5 63 33 91 49.

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

- equipment covered by the warranty, send it to us at your expense and we will return it at our expense,
- equipment not covered by the warranty but serviced during the previous offseason, send to us at your expense and we will return it at our expense,
- equipment not covered by the warranty and not serviced during the previous off-season, send it to us at your expense and we will return it at your expense, C.O.D. If the cost of the repair were to exceed € 80 excluding VAT, you will be issued a quote.

We propose fixed price servicing at the end of each season.

Warranty extension for your first 3 pruning seasons (1+2) is available. Caution: to benefit from it you must have carried out the paid servicing at the end of the first and second seasons.

If, during the first 3 seasons following the purchase of your equipment, one of the services is not carried out, the warranty extension will be cancelled.

However, we confirm that the battery service life is at least five seasons. If the battery does not last the five seasons, and if the unit has always been serviced, we will apply a pro-rated battery replacement, this will be carried out subject to the capacity provided by the battery is less than 70% of its initial capacity.

For example: Price of the new battery divided by 5 (service life) and multiplied by the number of seasons used.

## Technical information or customer service:

# **WARRANTY DECLARATION OUTSIDE FRANCE**

To obtain the validity of the warranty, declare the warranty WHEN YOU PURCHASE THE TOOL.

This warranty declaration must be made online, on: www.infaco.com

### or using this QR code:



Do not hesitate to ask your approved INFACO dealer for assistance in completing your INFACO international manufacturer's warranty declaration.

## **DEALER PART**

Part to be kept by the dealer.

Serial number >	Ref >
Surname >	
First Name >	
Company name >	
Full address >	
Town/city >	
Postcode >	
Phone number >	customer signature
Purchase date > / /	
Comments >	

## **ADDITIONAL PART**

To validate the warranty, <b>REGISTER IMMEDIATELY</b> ( www.infaco.com, , your warranty declaration or send <b>SOON AS THE TOOL IS PURCHASED</b> .		CK CAPITALS AS
Surname >	First name >	
Company name >		
Full address >		
Town/city >	Postcode >	
Phone number >	Arboriculture	Oil growing
Email >	Wine growing	Parks and gardens
Purchase date > / /	Dealer's s	tamp ———
Serial number $\vee$ - Ref >		
Comments >		

Dealer

# **SERIAL NUMBER**

to be kept

by the dealer

for the INFACO customer file

INFACO:









Manufacturer > *INFACO S.A.S. - 81140 CAHUZAC-SUR-VÈRE (FRANCE)* Type > *ELECTROCOUP* Ref > *F3020* 

# TECHNICAL INFORMATION OR AFTER-SALES

INFACO S.A.S. Bois de Roziès 81140 CAHUZAC-SUR VERE France

*Phone*: (+33) 05 63 33 91 49 - *Fax*: (+33) 05 63 33 95 57 *Email*: contact@infaco.fr

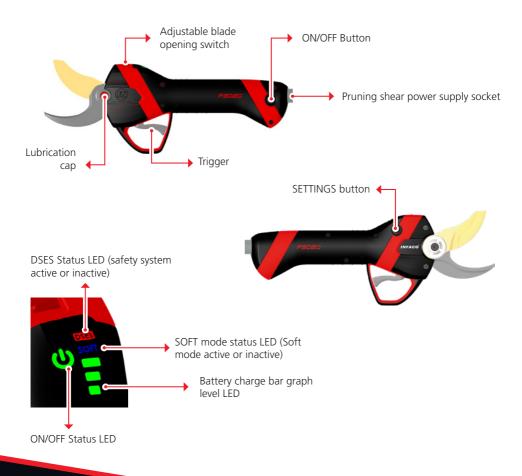
Technical videos available on the website: www.infaco.com

# **SUMMARY OF THE F3020 PRUNING** Shear features

Important: this document is a summary of the device operation. Before using the device, it is essential to read the entire manual.

## **BASIC FUNCTIONS**

### 1. Pruning shear description



## 1. Starting the device



2. SOFT mode activation/deactivation



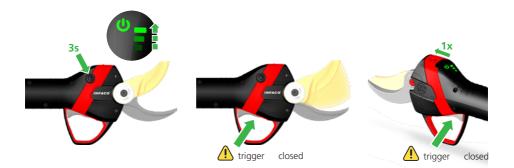


3. Fast standby mode



## SETTINGS FUNCTION

## Adjustable blade opening and blade overlap setting



## SAFETY SYSTEM

## 1. Carrying conductivity check

Pruning shears in standby mode



DSES CHECK AND CALIBRATION							
CONDUCTIVITY Level	Excellent	Good	Acceptable	Low	Insufficient		
LED AND Bar graph	မ ျ	С С	e ال	<b>С</b>	0		

## 2. Momentary and deliberate stop:



3. Continuous and deliberate stop:



## DÉCLARATION DE CONFORMITÉ CE

## DECLARATION OF CONFORMITY (CE) / CE-KONFORMITÄTSERKLÄRUNG

### INFACO s.a.s. déclare que le matériel neuf désigné ci-après :

INFACO S.A.S. declares that the new equipment designated below : INFACO s.a.s. erklärt, dass die im Folgenden bezeichneten neuen Geräte :

### Sécateur portatif électroniquement asservi

Portable pruning shear with electronic control / Elektronisch gesteuerte tragbare Astschere

### De marque > INFACO

Brand name / der Marke

N° de série > Serial no / serien-Nr

### Année de fabrication >

Year of manufacture / herstellungsjahr

### Est conforme aux dispositifs des directives :

Complies with the provisions of the directives for / Folgenden Richtlinien entsprechen :

#### « Machines » (directive 2006/42/CEE).

« appliances » (directive 2006/42/CEE) // Der "Maschinenrichtlinie" (Richtlinie 2006/42/EG).

 « Émissions sonores machines utilisées en extérieur » directive 2000/14/CE (arrêté du 18 mars 2002) modifiée par la 2005/88/CE (arrêté du 22 mai 2006).

Directive 2001/14/EC « on the noise emission by equipment for use outdoors » (order of 18 march 2002) modified by the directive 2005/88/EC (order of 22 may 2006).

Der Richtlinie zu "Geräuschemissionen von Maschinen, die im Freien verwendet werden", Richtlinie 2000/14/EG (Beschluss vom 18. März 2002), geändert durch die Richtlinie 2000/14/EG (Beschluss vom 22. Mai 2006).

Electrocoup F3020 Standard - F3020 Medium			
Niveau de pression acoustique pondéré A au poste de travail, LpA (NF EN 60745-2-11 : 2009) Sound pressure level LpA // Schalldruckpegel A-bewerteter Schalldruckpegel am Arbeitsplatz, LpA	59 dB(A)		
Incertitude Uncertainty // Messunsicherheit	KwA 3 dB(A)		
Valeur mesurée d'émission vibratoire, ah (NF EN 12096) Measured vibration emission value, ah // Gemessener Schwingungsemissionswert, AH	0.9 m/s <sup>2</sup>		
Incertitude Uncertainty // Messunsicherheit	1,5 m/s²		

#### « Chargeurs électriques » (directive 2004/108/CEE) et aux réglementations nationales les transposant.

"Electric chargers" (directive 2004/108/CEE) and with national legislation adapting them. "Elektrische Ladegeräte" (Richtlinie 2004/108/EG) und den nationalen Bestimmungen, die diese umsetzen.

### • La personne autorisée à constituer le dossier technique au sein d'INFACO est M. ALVAREZ Grégory.

The person authorised to compile the technical file within the company INFACO is Mr. Gregory ALVAREZ. Die für die Erstellung der technischen Unterlagen bei INFACO berechtigte Person ist ALVAREZ Grégory

### Fait à > CAHUZAC SUR VERE

Signed in // Ausgestellt in

### M. DELMAS Davy, Président de la Société INFACO

INFACO Managing Director // Geschäftsführer des Unternehmens INFACO

## INFACO s'engage à fournir aux autorités nationales les informations pertinentes concernant la machine.

INFACO undertakes to provide national authorities with all relevant information concerning the machine.

INFACO verpflichtet sich, den zuständigen nationalen Behörden die einschlägigen Angaben zur Maschine zur Verfügung zu stellen **LE > 01/02/2022** Date // Datum

Signature Signature // Unterschrift

A

### Modèle > ELECTROCOUP F3020

Model / modell



## www.infaco.com

EN - User manual - Electrocoup F3020

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