

Clear-Choice®



WARNING: Read these instructions before using the machine

CHAINSAW SHARPENER

MODEL NO: ECSS2

PART NO: 3402077

OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC1020 -REV 1

INTRODUCTION

Thank you for purchasing this Chainsaw Sharpener.

Please read this manual thoroughly, before attempting to operate, and carefully follow all instructions given.

It is vitally important that ALL precautions are taken, as specified, which will not only provide protection for yourself and that of others around you, but will also ensure that the product will give you long and satisfactory service.

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not affect your statutory rights.

SPECIFICATIONS

Operating Voltage:	230 V @ 50Hz
Nominal Power	85 Watts
No Load Speed	4800 rpm
Disc Diameter	108 mm
Protection Class	II
Sound Pressure Level LpA	77 dB
Sound Power Level LWA	90 dB
Vibration	2.69 m/s ²
Dimensions (L x W x H)	200 x 230 x 315 mm
Weight (kg)	2.9 kg

SAFETY PRECAUTIONS



WARNING: READ ALL INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS LISTED BELOW MAY RESULT IN ELECTRIC SHOCK, FIRE AND/OR SERIOUS INJURY. THE TERM "POWER TOOL" IN ALL WARNINGS LISTED BELOW REFERS TO YOUR CHAINSAW SHARPENER.

WORK AREA

1. **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges or refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
2. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
3. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in personal injury.
2. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, or hearing protection used for appropriate conditions will reduce personal injuries.
3. **Avoid accidental starting. Ensure the switch is in the off position before connecting to the power supply.**
4. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

5. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

POWER TOOL USE AND CARE

1. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate which it was designed.
2. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the battery before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
4. **Store idle tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
6. **Keep cutting tools sharp and clean.** Poorly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Use the power tool and accessories in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from intended could result in a hazardous situation.

SERVICING

1. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

ADDITIONAL SAFETY INSTRUCTIONS FOR CHAINSAW SHARPENERS

1. Remember that the wheel continues to rotate after the tool is switched off
2. The sharpener is designed for sharpening all common chainsaw chains. Do not use it for any other purpose.
3. Do not sharpen damaged chainsaw chains.
4. Do not operate the sharpener without the protective cover in place and make sure that all parts are firmly assembled before starting the sharpener.
5. Do not operate the sharpener if it does not work correctly or has been dropped.
6. Do not disassemble the sharpener and do not try to repair it yourself. Contact your Clarke customer service.

ENVIRONMENTAL PROTECTION



Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment.

ELECTRICAL CONNECTIONS



WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230V AC 50Hz. Connecting it to any other power source may cause damage.

This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

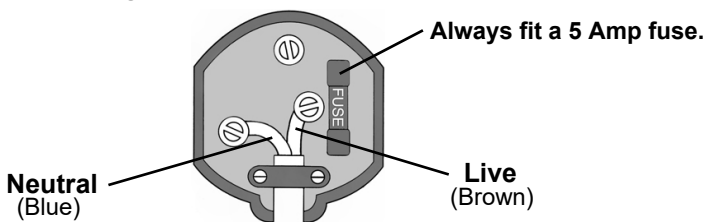


**WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
BLUE = NEUTRAL BROWN = LIVE**

If the colours of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

- The **Blue** wire must be connected to the terminal marked **N** or coloured **Black**.
- The **Brown** wire must be connected to the terminal marked **L** or coloured **Red**.

Plug must be BS1363/A approved.



Ensure that the outer sheath of the cable is firmly held by the clamp

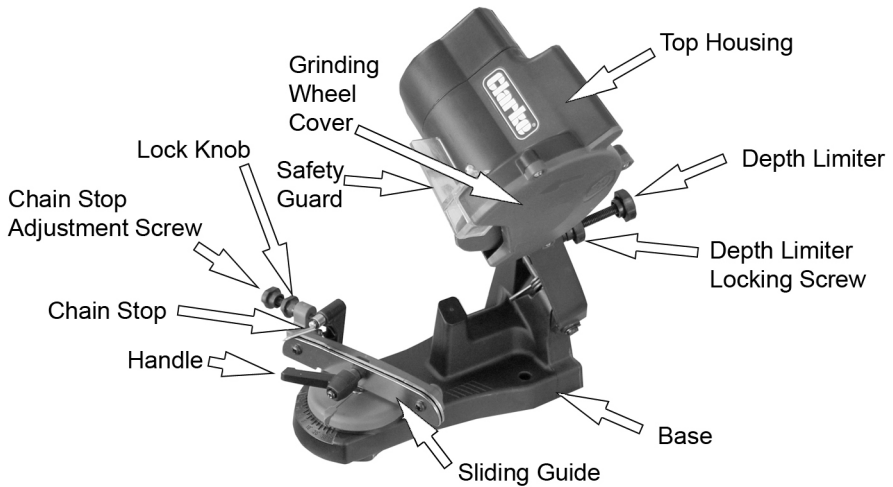
We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.



This symbol indicates that this is a Class II product, and does not require an earth connection.

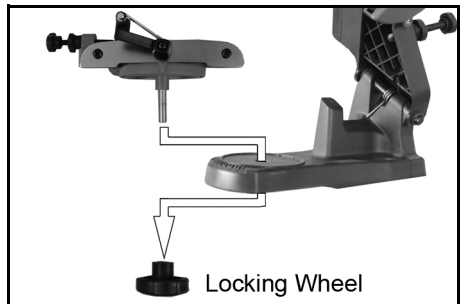
OVERVIEW



ASSEMBLY

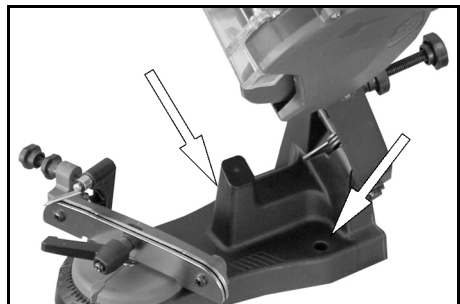
Insert the chain holder assembly into the base as shown and secure from below using the Locking Wheel supplied.

- Make sure the pointer is positioned pointing forwards (away from the grinding wheel).



MOUNTING THE SHARPENER

1. Place the base on a solid, level surface, e.g. a workbench.
 2. Mount the chainsaw sharpener using the mounting holes on the base (bolts not supplied).
- The sharpener must overhang the workbench to allow access to the locking wheel.



BEFORE USE / SETUP

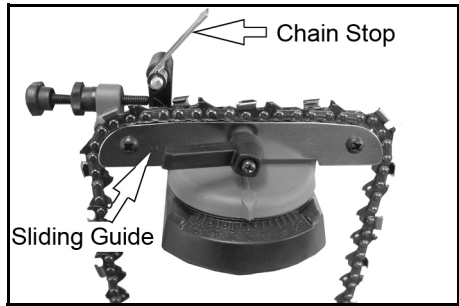


WARNING: MAKE SURE THE SHARPENER IS NOT CONNECTED TO THE MAINS POWER SUPPLY DURING SETUP.

1. Clean the chain before sharpening. Wash it with a non-flammable solvent. Do not use petrol. Dry the chain.

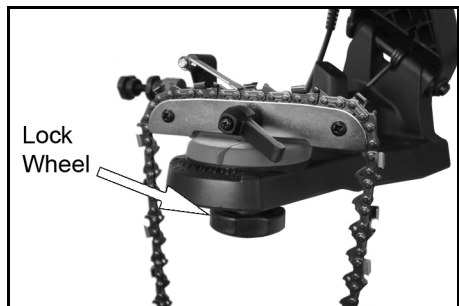
FITTING THE CHAIN

2. Lift up the chain stop and place the chain in the sliding guide as shown.
 - Look at each tooth on the chain and start with the most worn tooth. Position this tooth roughly in the centre of the sliding guides. All other teeth will be ground to the same depth.



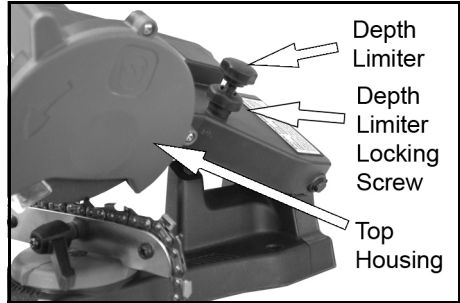
ADJUST THE SHARPENING ANGLE

1. Loosen the locking wheel to allow the chain holder assembly to turn.
2. Check with your chain manufacturer to determine the angle you need.
3. Rotate the chain holder assembly to the angle required.
4. Tighten the locking wheel.
 - Do not rotate the chain holder assembly when the grinding disc is moving.



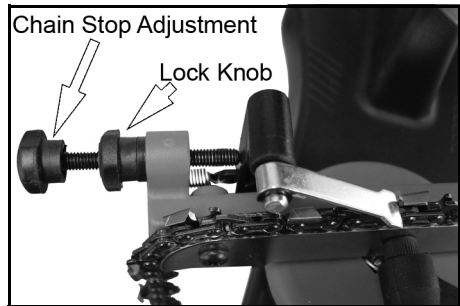
LIMITING THE DEPTH OF CUT

1. Lower the top housing so that the grinding wheel skims the chain tooth.
2. Hold it at that position while you tighten the depth limiter until it touches the stop on the base.
 - The grinding wheel will only go down to that point from now on.
3. Tighten the depth limiter locking screw against the main body to secure.



LIMIT THE AMOUNT OF MATERIAL REMOVED

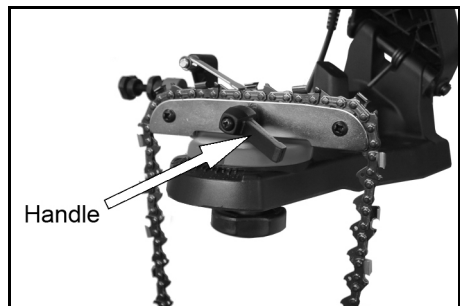
1. Depending on the amount of material you wish to remove, tighten or loosen the Lock Knob and adjust the chain stop adjustment screw.
 - This will determine how much material is removed. Once you set the chain stop adjustment screw, fully tighten the lock knob.



2. Lower the chain stop so that it drops behind the tooth that you want to start with.

FINALLY

1. Lock the chain in the sliding guide by turning the handle clockwise. The handle should be positioned so that you can easily release and tighten it.
 - You will need to release it each time you move to the next tooth, and tighten it to sharpen each tooth.



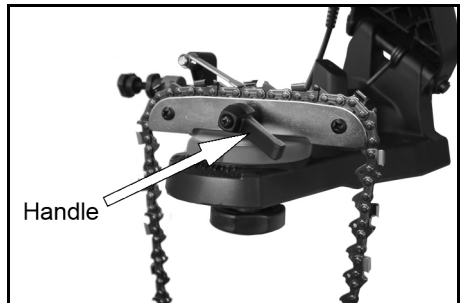
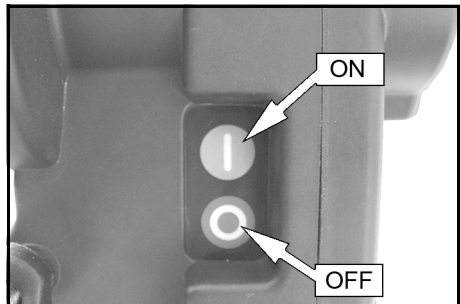
SHARPENING A CHAIN

WARNING: WHEN SHARPENING, ALWAYS WEAR SAFETY GOGGLES.



NOTE: Sharpen all the teeth on one side first (every other tooth) before adjusting the angle to complete the job.

1. Put on your protective goggles and make sure the immediate area is clear of bystanders.
2. Plug in the power cable and push the (I) button to turn on the sharpener.
3. Slowly lower the grinding wheel to sharpen the tooth.
 - If you notice slight errors in your settings, turn off the sharpener and unplug it before you make your adjustments.
4. After sharpening the tooth, release the top housing and turn off the sharpener.
5. Rotate the handle anti-clockwise, and move the chain so that the next tooth on that side of the chain (every other tooth) is positioned against the chain stop.
6. Re-tighten the handle to lock the chain in place.
7. Turn the sharpener back on and repeat this process until you have sharpened all of the teeth on this side (every other tooth) of the chain.
8. Loosen the locking wheel and rotate the chain holder assembly to the same angle on the other side of the 0 on the scale then retighten the locking wheel.
9. Place the first tooth that hasn't been sharpened in position against the chain stop.
10. Repeat the sharpening procedure for the remaining teeth on the chain.

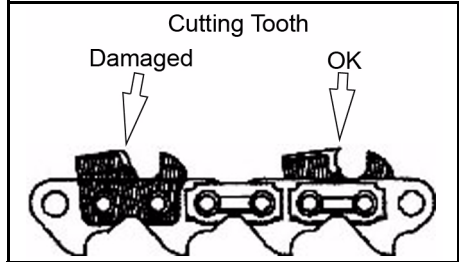


OPERATING HINTS

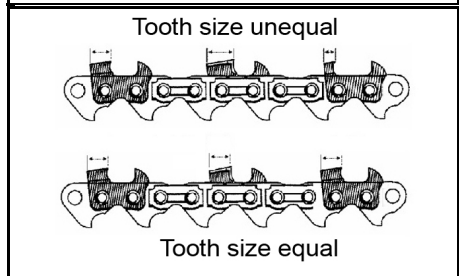
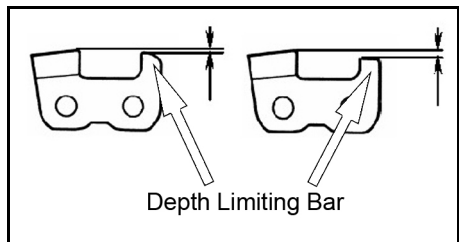
- Before you sharpen the chainsaw chain check it for damage, such as:- bent or abraded chain links.- broken cutting teeth, loose rivets or broken rivet heads.

If any damage is found, replace the entire chain.

- A sharp chainsaw produces wood chips and pulls itself into the timber being cut. When it becomes blunt, sawdust will start being produced during cutting operations.
- You should sharpen the chain if you notice that you have to use force to cut through the timber, i.e. if the saw does not "pull" anymore.
- Sharpen all cutting teeth as uniformly as possible. This will ensure smooth operation with a minimum of vibration.
- Blunt cutting teeth or parts damaged by stones may cause an inclined cut during chain saw operation, and may also increase the wear on the running face of the cutting teeth.



- The depth limiter bars must be profiled by hand. Ensure that all depth limiter bars are equal in height.
- Ensure that all cutting teeth are sharpened to the same cutting angle.
- During sharpening occasionally check that the cutting-angle is set correctly, as this setting may go out of adjustment due to vibration.
- Make sure that all teeth are sharpened as evenly as possible. Only sharpen the teeth, never sharpen the chain links.



- Sharpening teeth to unequal lengths can cause a side drift when sawing.

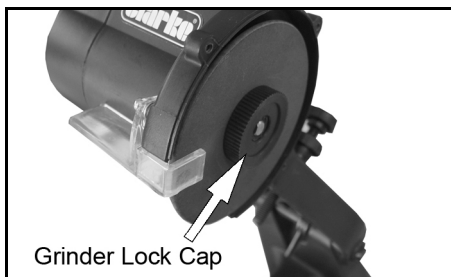
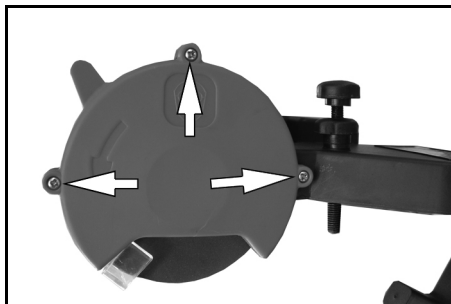
CLEANING AND MAINTENANCE



WARNING: BEFORE STARTING ANY CLEANING OR MAINTENANCE PROCEDURES, DISCONNECT THE PLUG FROM MAINS SUPPLY.

CHANGING THE GRINDING DISC

1. Remove the three screws holding the Grinding Wheel Cover. Set the cover aside.
2. Unscrew the Grinder Lock Cap that holds the Grinding Wheel in place.
3. Install the new wheel on the Grinding Wheel Base, making sure it fits properly.
4. Replace the Grinder Lock Cap.
5. Replace the Grinding Wheel Cover.
 - Only use grinding discs with a diameter of 108 mm.
 - Replacement grinding disc speed must meet or exceed the RPM rating of the sharpener.
 - Replacement discs are available from your Clarke dealer part number (3402079)

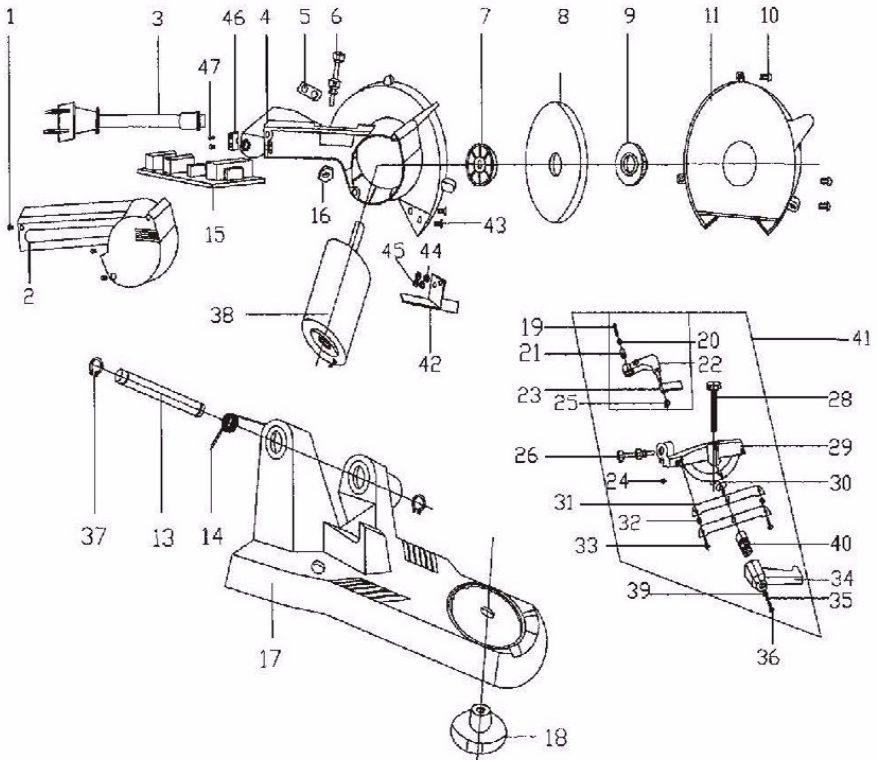


NOTE: Do not use a grinding wheel if it is chipped, cracked, or worn.



WARNING: NEVER OPERATE THE SHARPENER WITHOUT THE GRINDING WHEEL COVER IN PLACE.

PARTS DIAGRAM



PARTS LIST

No	Description
1	Screw
2	Motor Cover
3	Power Cable
4	Top Housing
5	Switch Plate
6	Lock Stop
7	Grinding wheel base
8	Grinding Wheel
9	Grinder Lock Cap
10	Screw
11	Grinding Wheel Cover
13	Punching Axis
14	Torsion Spring
15	Switch Circuit Board
16	Nut
17	Base
18	Lock Wheel
19	Screw
20	Washer
21	Bearing
22	Swing Arm
23	Chain Stop
24	Tension Spring

No	Description
25	Retaining Ring
26	Lower Knob
27	Screw
28	Bolt
29	Chain Saw Frame
30	Square Neck Screw
31	Sliding Guide
32	Pad
33	Screw
34	Handle
35	Spring
36	Lock Screw
37	Retaining Ring
38	Motor
39	Washer
40	Nut
42	Safe Guard
43	Screw
44	Spring Washer
45	Nut
46	Pressure Panel
47	Screw

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemnal Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

- 2006/42/EC *Machinery Directive.*
- 2014/30/EU *Electromagnetic Compatibility Directive.*
- 2014/35/EU *Low Voltage Equipment Directive.*
- 2011/65/EU *Restriction of Hazardous Substances (amended by (EU) 2015/863).*

The following standards have been applied to the product(s):

- EN 61029-1:2009+A11:2010, EN 61029-2-10:2010+A11:2013, EN ISO 12100, EN 55014-1:2017,
- EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2009

Product Description: Electric Chain Saw Sharpener
Model number(s): ECSS2
Serial / batch Number: N/A
Date of issue: 19/10/2020

Signed:

J.A. Clarke
Director

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