

# CA 150

**Cultivator attachment  
Accessoire de cultivateur  
Accesorio de cultivador**



**GB Operator's manual  
FR Manuel d'utilisation  
ES Manual de instrucciones**

# KEY TO SYMBOLS

## Symbols

WARNING! The machine can be a dangerous tool if used incorrectly or carelessly, which can cause serious or fatal injury to the operator or others.



Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



Always wear:

- Approved hearing protection
- Protective goggles or a visor



This product is in accordance with applicable EC directives.



Warning: rotating cutter. Keep hands and feet clear.

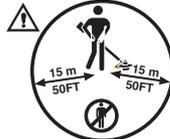


Warning: the cutter continues to rotate even after the engine has stopped.

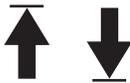


When the engine has stopped, stop the cutter from rotating by lowering the cutter onto the ground. The arrow indicates the direction of rotation.

The operator of the machine must ensure, while working, that no persons or animals come closer than 15 metres.



Arrows which show limits for the position of the guard.



Always wear approved protective gloves.

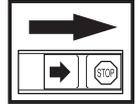


Wear sturdy, non-slip boots.



Other symbols/decals on the machine refer to special certification requirements for certain markets.

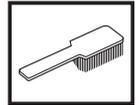
Switch off the engine by moving the stop switch to the STOP position before carrying out any checks or maintenance.



Always wear approved protective gloves.



Regular cleaning is required.



Visual check.



Protective goggles or a visor must be worn.



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## Note the following before starting:

Jonsered has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

Long-term exposure to noise can result in permanent hearing impairment. So always use approved hearing protection.

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.

These instructions supplement the instructions that were included with the machine. For other procedures, please refer to the operating instructions for the machine.



**WARNING! Under no circumstances may the design of the machine be modified without the permission of the manufacturer. Always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.**



**WARNING! This accessory may only be used together with the intended clearing saw/trimmer, see under heading "Approved accessories" in chapter Technical data in the machine's Operator's Manual.**

The machine is only designed for cultivating.

# SAFETY INSTRUCTIONS

## Personal protective equipment

**IMPORTANT!** You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.



**WARNING!** Listen out for warning signals or shouts when you are wearing hearing protection. Always remove your hearing protection as soon as the engine stops.

### GLOVES

Gloves should be worn when necessary, e.g., when fitting cutting attachments.



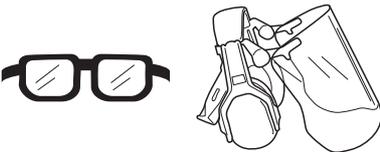
### HEARING PROTECTION

Wear hearing protection that provides adequate noise reduction.



### EYE PROTECTION

Always wear approved eye protection. If you use a visor then you must also wear approved protective goggles. Approved protective goggles must comply with standard ANSI Z87.1 in the USA or EN 166 in EU countries.



### BOOTS

Wear sturdy, non-slip boots.



### CLOTHING

Wear clothes made of a strong fabric and avoid loose clothing that can catch on twigs and branches. Always wear heavy, long pants. Do not wear jewellery, shorts sandals or go barefoot. Secure hair so it is above shoulder level.

### FIRST AID KIT

Always have a first aid kit nearby.



## Machine's safety equipment

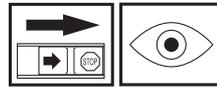
This section describes the machine's safety equipment, its purpose, and how checks and maintenance should be carried out to ensure that it operates correctly. See the "What is what?" section to locate where this equipment is positioned on your machine.

The life span of the machine can be reduced and the risk of accidents can increase if machine maintenance is not carried out correctly and if service and/or repairs are not carried out professionally. If you need further information please contact your nearest service workshop.



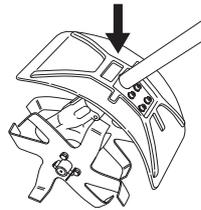
**WARNING!** Never use a machine that has faulty safety equipment! Carry out the inspection, maintenance and service routines listed in this section.

## Cutting attachment guard



This guard is intended to prevent loose objects from being thrown towards the operator. The guard also protects the operator from accidental contact with the cutting attachment.

- Ensure that the guard is undamaged and is not cracked.

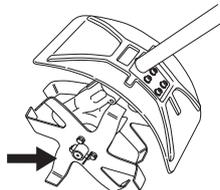


- Replace the guard if it has been exposed to impact or is cracked.

## Cutting equipment

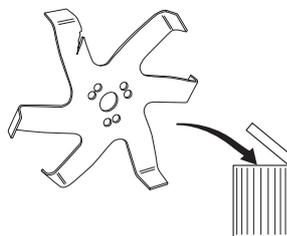


The tines are designed and machined to withstand the loads resulting from cultivating.



The two basic rules:

- 1 Only use cutting attachments with the guards we recommend! See the chapter on Technical data.
- 2 Check the cutting attachment for damage or cracks. A damaged cutting attachment should always be replaced.



# SAFETY INSTRUCTIONS



**WARNING! Always stop the engine before doing any work on the cutting attachment. This continues to rotate even after the throttle has been released. Ensure that the cutting attachment has stopped completely and disconnect the HT lead from the spark plug before you start to work on it.**



**WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.**

## General safety precautions

### IMPORTANT!

Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination.

Wear personal protective equipment. See instructions under the heading Personal protective equipment.

Never use a machine that has been modified in any way from its original specification.

Never use the machine in extreme weather conditions such as severe cold, very hot and/or humid climates.

Never use a machine that is faulty. Carry out the checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists. See instructions under the heading Maintenance.

All covers and guards must be fitted before starting. Ensure that the spark plug cap and ignition lead are undamaged to avoid the risk of electric shock.



**WARNING! Faulty blades can increase the risk of accidents.**

- Never allow children to use the machine.
- Ensure that no-one comes closer than 15 m while you are working.
- Never allow anyone else to use the machine without first ensuring that they have understood the contents of the operator's manual.

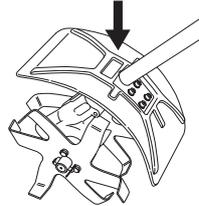
## Safety instructions before starting work

- Inspect the working area. Remove all loose objects, such as stones, broken glass, nails, steel wire, string, etc. that could be thrown out or become wrapped around the cutter or cutter guard.
- Keep unauthorised persons at a distance. Children, animals, onlookers and helpers should be kept outside the safety zone of 15 m. Stop the machine immediately if anyone approaches.

- Check the entire machine before starting. Replace damaged parts. Check that there are no fuel leaks and that all guards and covers are complete and fastened securely. Check all nuts and screws.
- Check that the tines are undamaged and show no signs of cracking or other damage. Replace the tines if necessary.



- Make sure the cutter guard is fitted and not damaged.



- Check that the tines and tine guard are secured correctly.
- When adjusting the carburettor, make sure that the tines are held against the ground and that no one else is in the vicinity.
- Check that the blades do not move when the engine is idling.
- Make sure the handle and safety features are in order. Never use a machine that has any parts missing or has been modified in relation to the specification.
- Only use the machine for the purpose it was intended for.

# SAFETY INSTRUCTIONS

## General working instructions

### IMPORTANT!

This section takes up the basic safety precautions for working with a cultivator.

If you encounter a situation where you are uncertain how to proceed you should ask an expert. Contact your dealer or your service workshop.

Avoid all usage which you consider to be beyond your capability.

## Basic safety rules



- 1 Look around you:
  - To ensure that people, animals or other things cannot affect your control of the machine.
  - To ensure that people, animals, etc., do not come into contact with the cutting attachment or loose objects that are thrown out by the cutting attachment.
- 2 Do not use the machine in bad weather, such as dense fog, heavy rain, strong wind, intense cold, etc. Working in bad weather is tiring and can lead to dangerous conditions, e.g. slippery surfaces.
- 3 Make sure you can move and stand safely. Check the area around you for possible obstacles (roots, rocks, branches, ditches, etc.) in case you have to move suddenly. Take great care when working on sloping ground.



- 4 The engine must be switched off before moving.
- 5 Never put the machine down with the engine running unless you have it in clear sight.

**CAUTION!** Do not use the machine unless you are able to call for help in the event of an accident.

## Basic working techniques



- Always ensure you have a safe and stable working position.
- Always hold the machine with both hands. Hold the machine on the right of your body.



- When the engine is switched off, keep your hands and feet away from the blades until they have stopped.



- Make sure your hands and feet do not come near the cutter when the engine is running.
- Always keep the tines close to the ground.
- Always slow the engine to idle speed after each working operation. Long periods at full throttle without any load on the engine (i.e. without the resistance that the cutting attachment exerts on the engine when you are using the machine) can lead to serious engine damage.
- Pay extra attention when pulling the cultivator towards you while working.
- If heavy vibration occurs, stop the machine. Disconnect the HT lead from the spark plug. Check that the machine is not damaged. Repair any damage.



**WARNING!** At times grass and stones can become caught in the tines. Always stop the engine when cleaning.

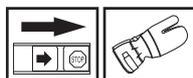


**WARNING!** Watch out for thrown objects. Always wear eye protection. Never lean over the cutting attachment guard. Stones, rubbish, etc. can be thrown up into the eyes causing blindness or serious injury.

Keep unauthorised persons at a distance. Children, animals, onlookers and helpers should be kept outside the safety zone of 15 m. Stop the machine immediately if anyone approaches.

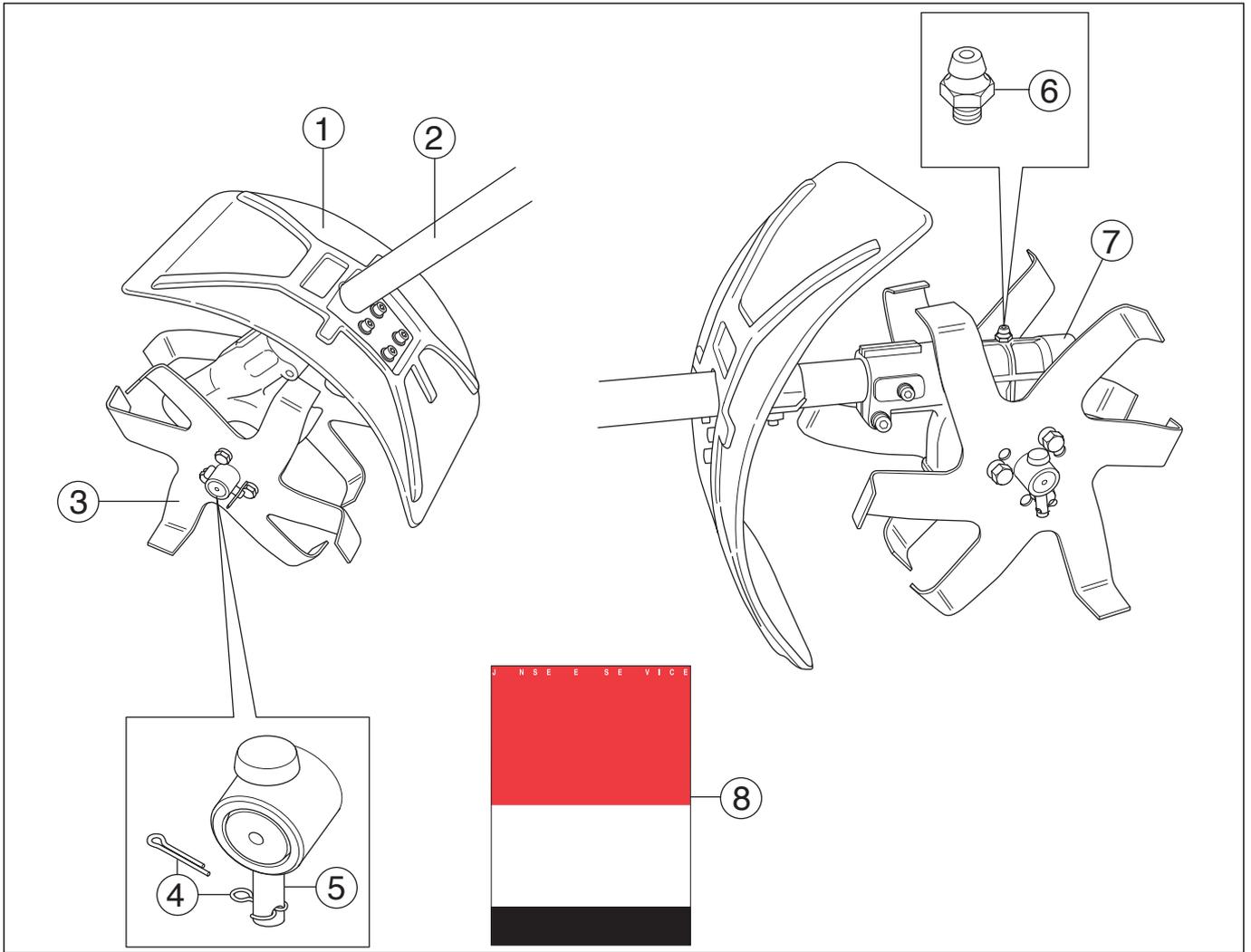
The bevel gear can get hot during use and may remain so for a while afterwards. You could get burnt if you touch it.

## Safety instructions after completing work



- Make sure the cutting attachment has stopped before cleaning, carrying out repairs or an inspection. Disconnect the HT lead from the spark plug.
- Wear heavy-duty gloves when repairing the cultivator.
- Store the machine out of reach of children.
- Use only original spare parts for repairs.

# WHAT IS WHAT?



## What is what on the cultivator attachment?

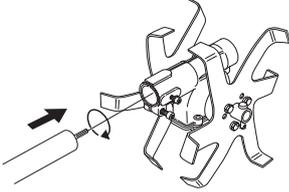
- |               |                                 |
|---------------|---------------------------------|
| 1 Blade guard | 5 Cotter pin                    |
| 2 Shaft       | 6 Grease filler cap, bevel gear |
| 3 Blades      | 7 Bevel gear                    |
| 4 Split pin   | 8 Operator's manual             |

# ASSEMBLY

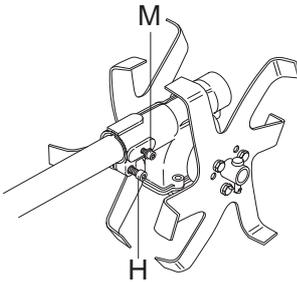
## Fitting the bevel gear



- Assembling the angle gear on the shaft. Turn the shaft so that the splines on the drive axle mate in the angle gear.

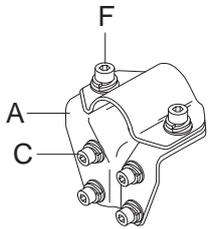


- First tighten the screw H and then the screw M.

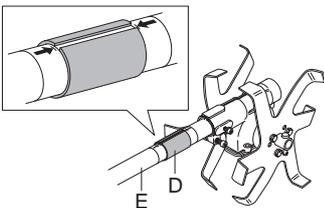


## Assembling the guard.

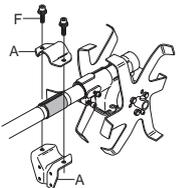
- Remove the four screws C and the two screws F from the bracket A.



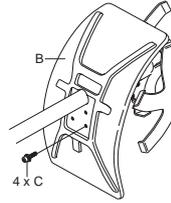
- Place the rubber sleeve D on the shaft E. The rubber sleeve should sit between the arrow markings on the shaft.



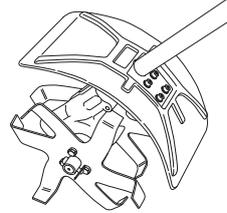
- Place the bracket A around the rubber sleeve and fit the screws F loosely.



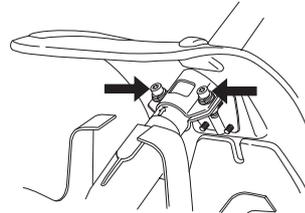
- Guide the guard B onto the shaft so that the hole in the guard aligns with the hole in the bracket. Tighten the screws C.



- Align the bracket with guard so that it sits straight in relation to the tines.



- Tighten the screws F.

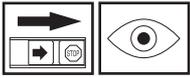


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# STARTING AND STOPPING

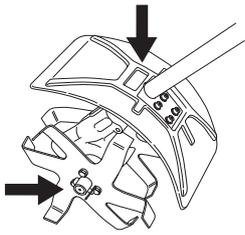
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## Check before starting



For safety reasons follow these recommendations!

- Inspect the working area. Remove any objects that could be thrown out.
- Check that the machine is in perfect working order. Check that all nuts and screws are tight.
- Check the tines and tine guard to ensure they are undamaged and show no signs of cracking. Replace the tine and tine guard if they have been exposed to impact or are cracked.

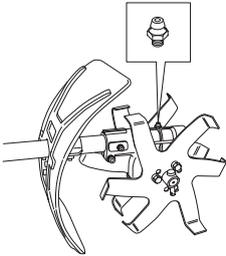


# MAINTENANCE

## Bevel gear



The bevel gear is filled with the right quantity of grease at the factory. However, before using the machine you should check that the bevel gear is filled three-quarters (40g) full with grease. Use JONSERED special grease.



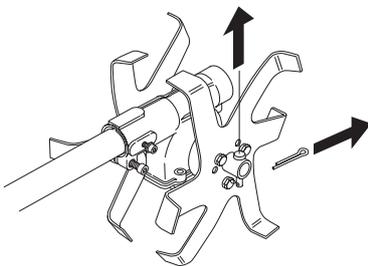
**CAUTION!** The gear housing must not be filled completely with grease. The grease expands as the machine heats up during operation. If the gear housing was completely filled with grease it could damage the seals and lead to leakage of grease.

The grease in the bevel gear does not normally need to be changed except if repairs are carried out.

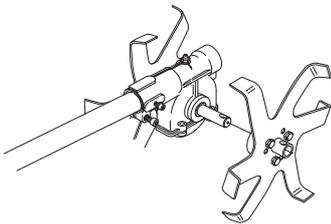
## Replacing the tine



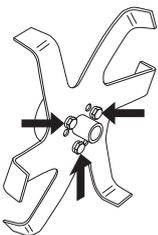
Loosen the split pin and cotter pin.



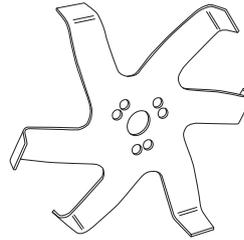
Remove the tine unit from the angle gear's output axle.



Loosen the 3 screws holding the tine.



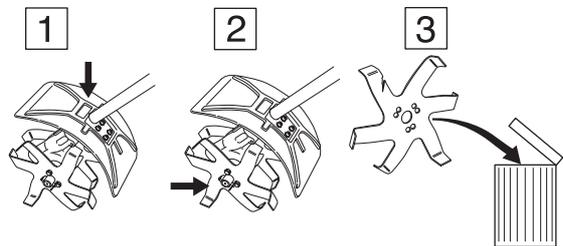
Replace the tine with a new and assemble in the reverse order.



## Maintenance schedule

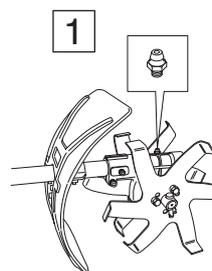
Below you will find some general maintenance instructions. If you need further information please contact your service workshop.

### Daily maintenance



- 1 Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.
- 2 Check that the blades do not move when the engine is idling or when the choke is in the start throttle position.
- 3 Check that the tines are undamaged and show no signs of cracking or other damage. Replace the tines if necessary.

### Weekly maintenance



- 1 Check that the bevel gear is filled three-quarters (40g) full with lubricant. Fill if necessary using special grease.

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# TECHNICAL DATA

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## Technical data

<b>Technical data</b>	<b>CA 150</b>
<b>Weight</b>	
Weight, kg	2,9
<b>Blades</b>	
Diameter tines, mm	220
Working width, mm	150
Tine speed at engine speed 10,500 r/min	215





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