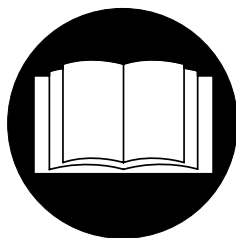
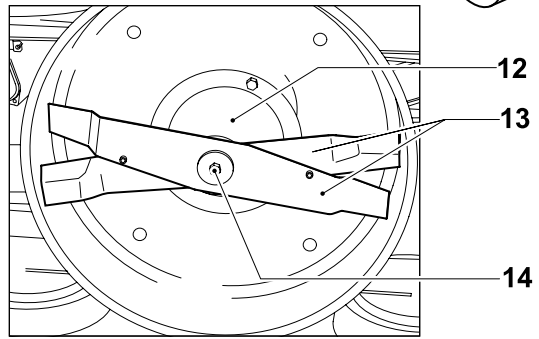
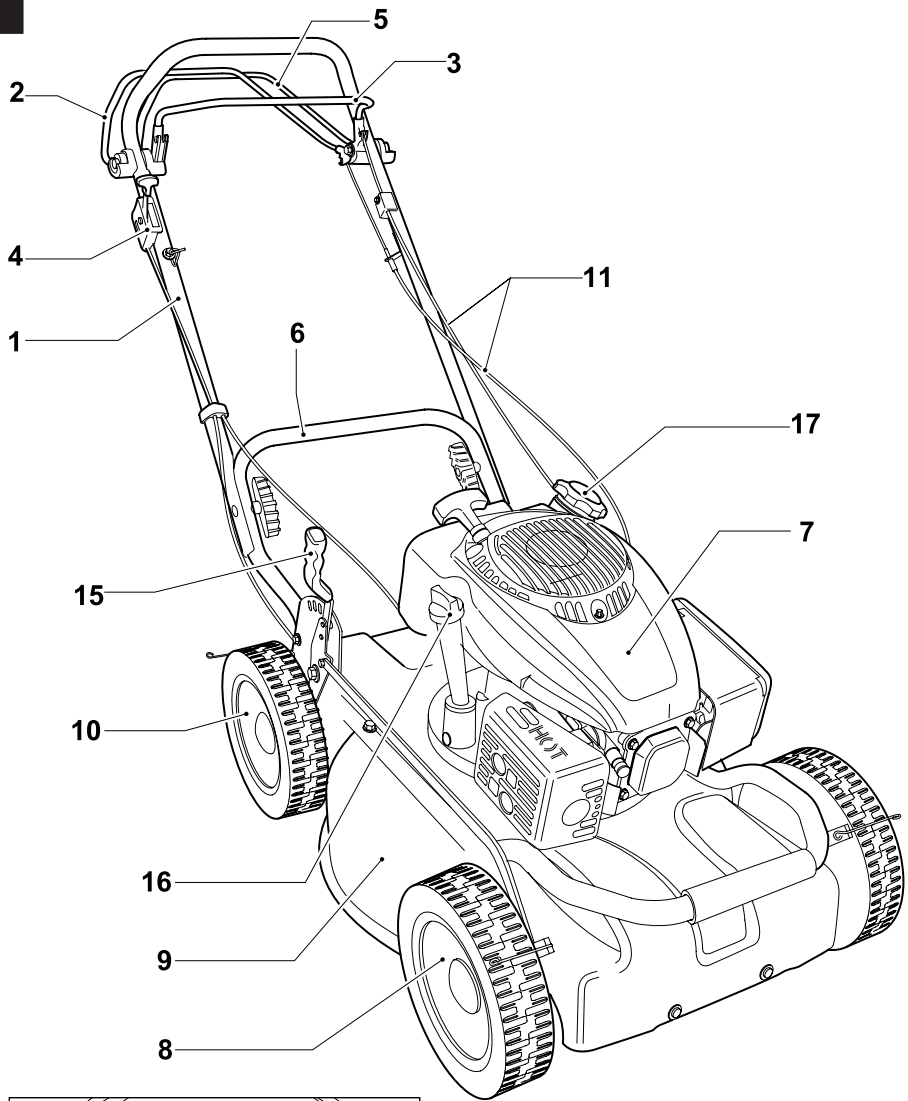


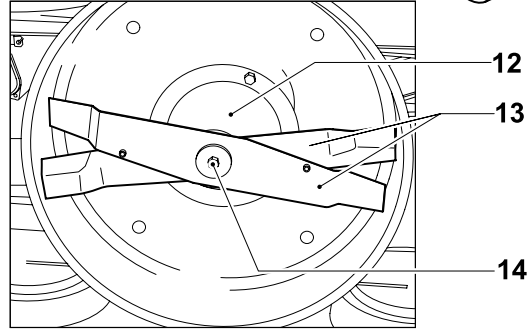
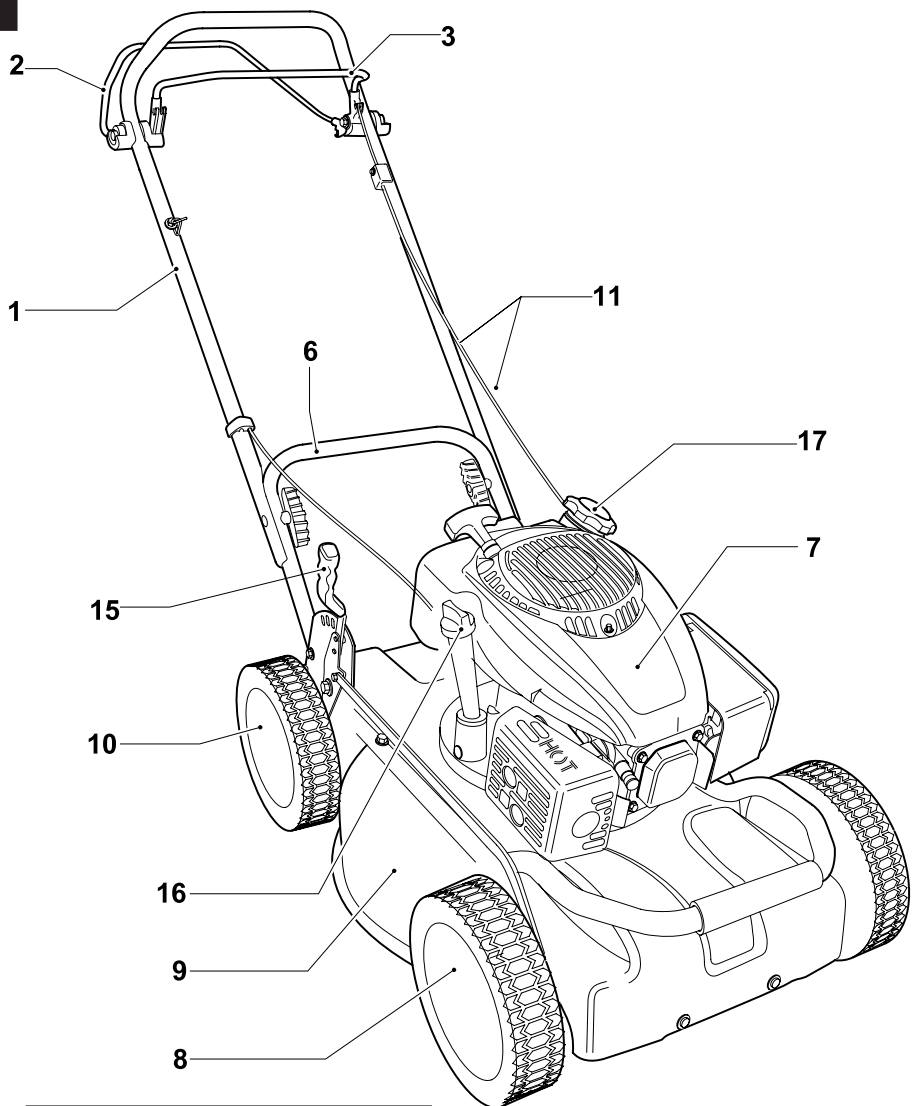
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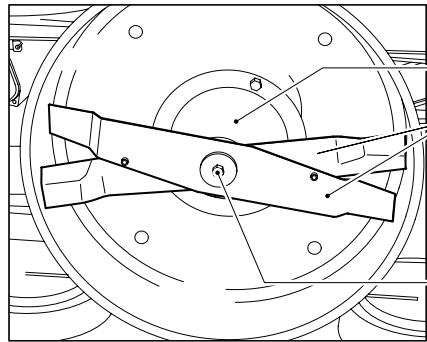
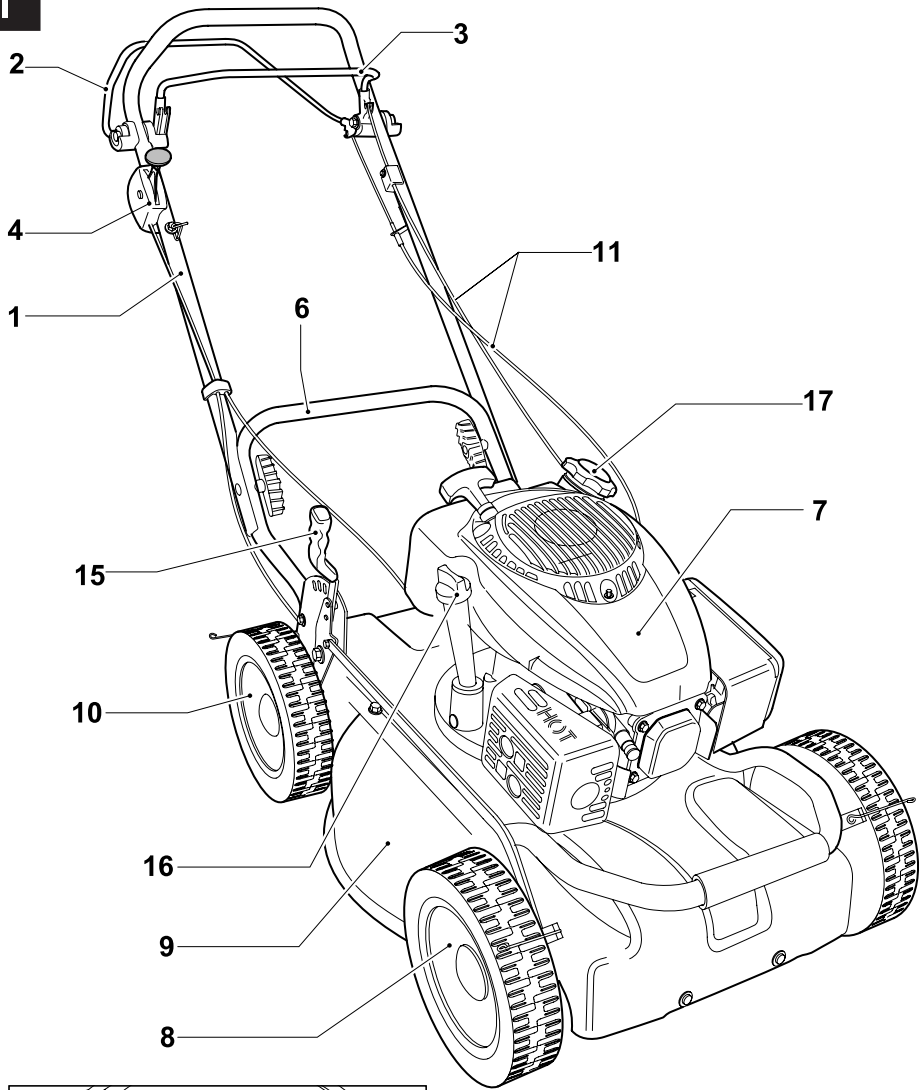
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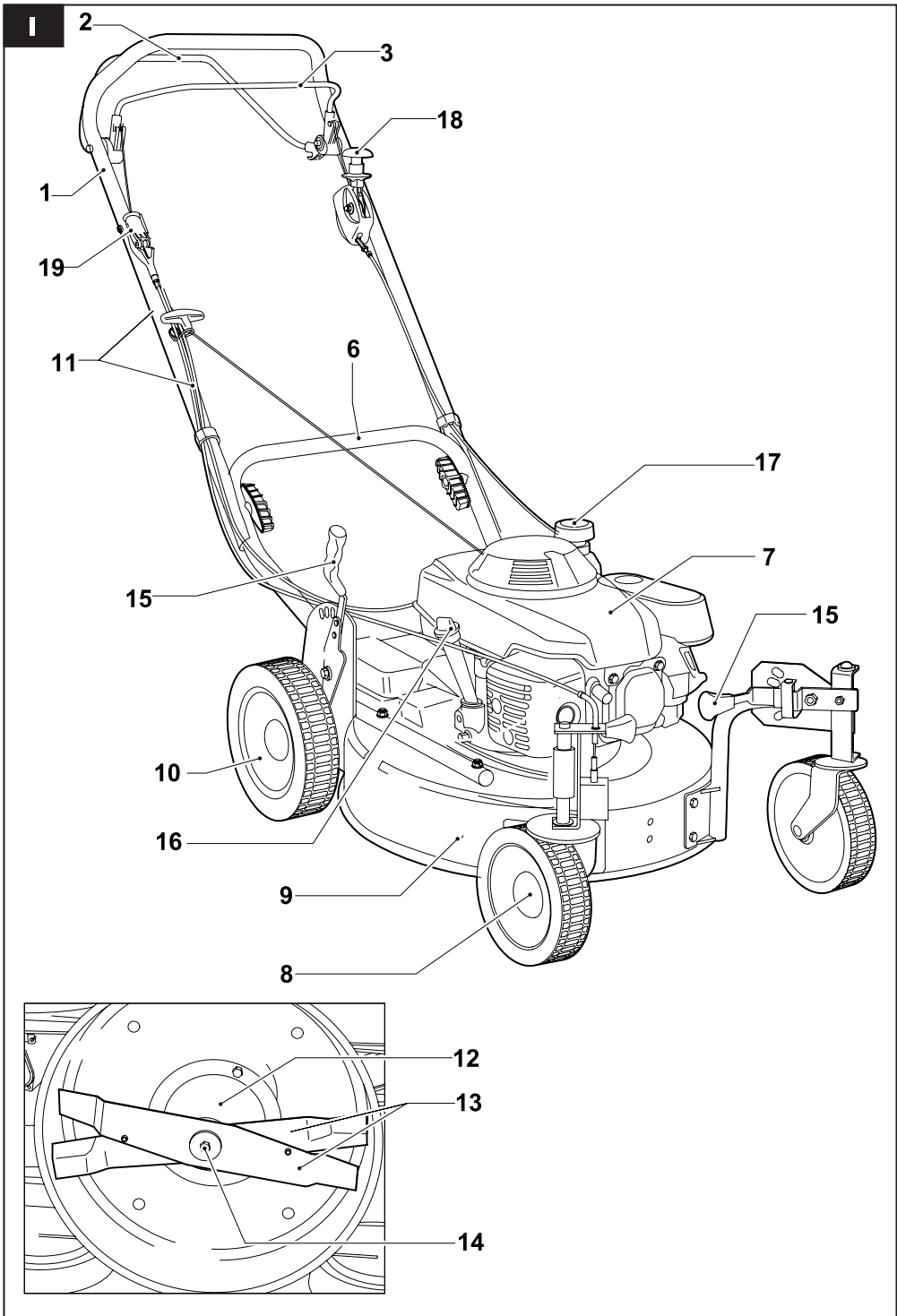


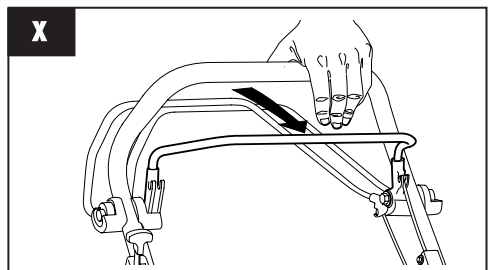
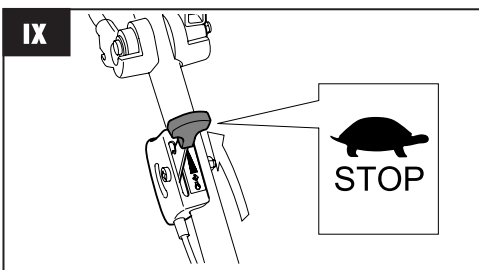
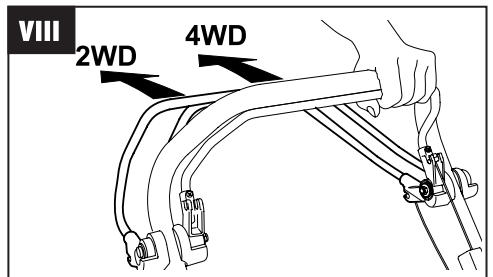
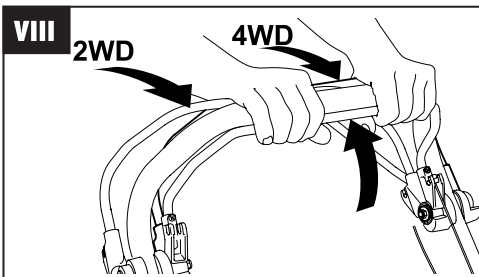
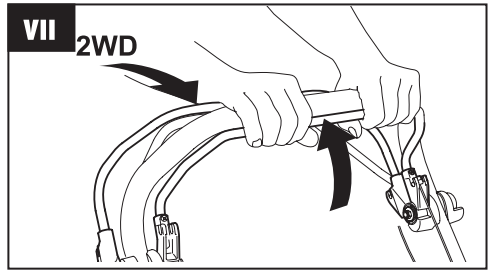
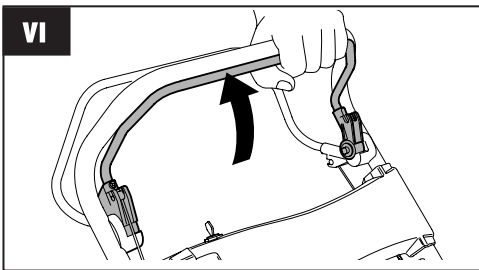
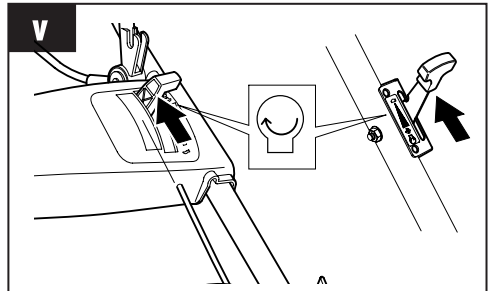
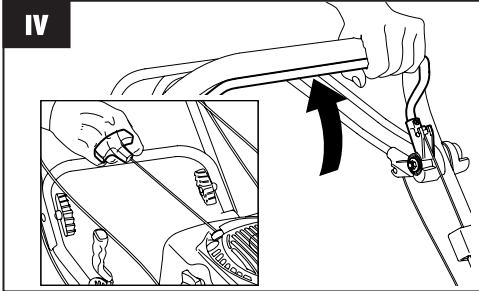
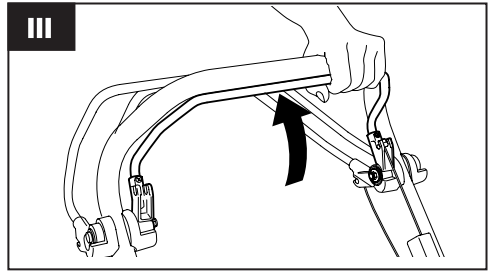
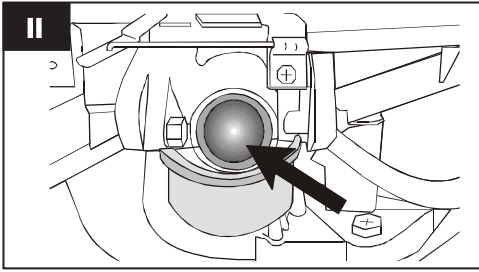
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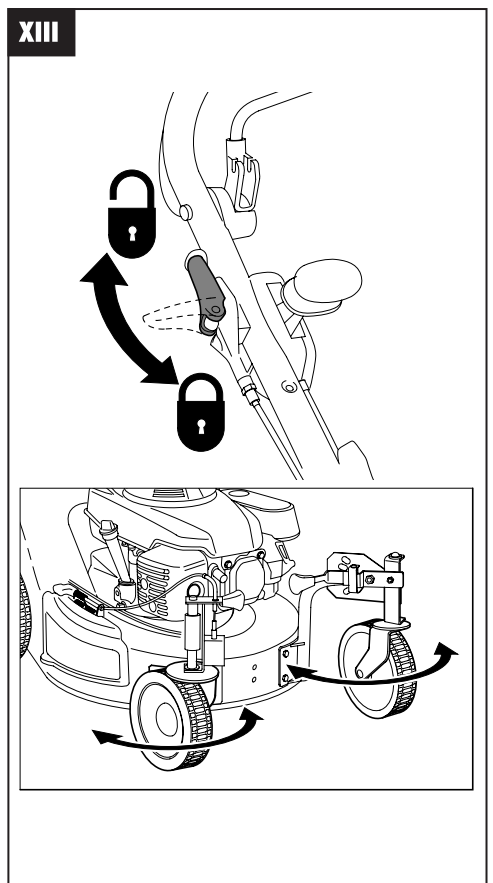
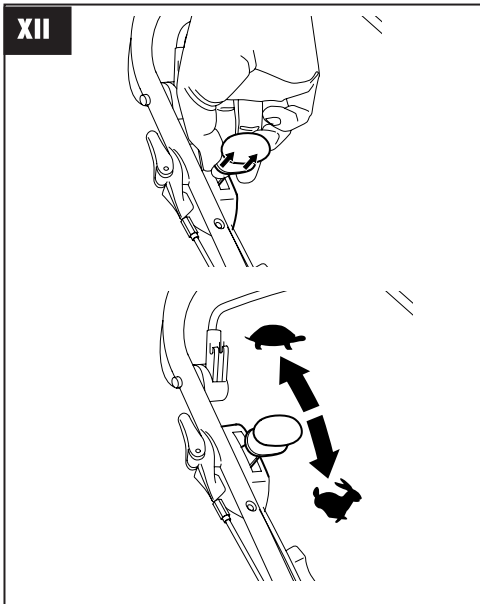
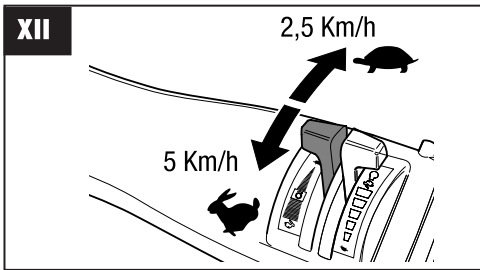
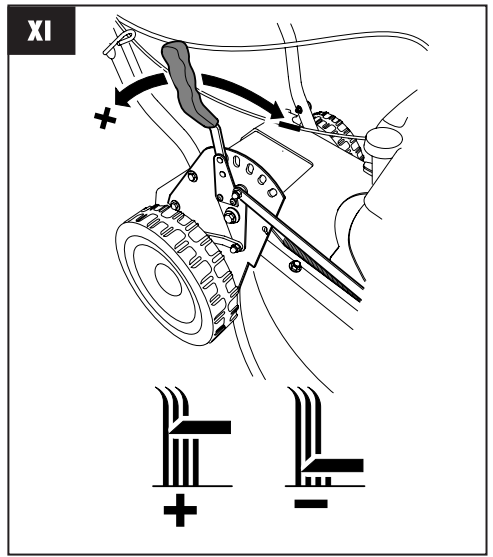
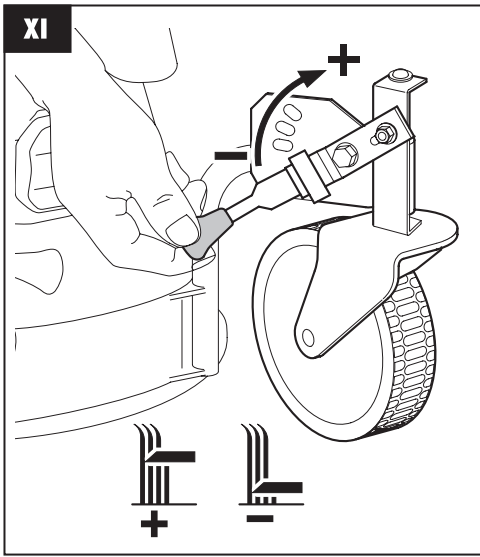


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1	SAFETY INSTRUCTIONS	1
2	EXPLANATION OF THE SYMBOLS ON THE UNIT	2
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1 SAFETY INSTRUCTIONS

When using lawn mowers, comply with the following basic safety instructions to protect against risk of injury:

- Read and then comply with the operating manual.
- Keep the operating manual for subsequent use or for the next owner.
- Follow the safety instructions and warnings on the unit.

Users

- Children and young people under 16 years old and who are not familiar with the operating instructions must not use the unit. Local regulations may specify the minimum age.
- Wear long, tight-fitting trousers and non-slip footwear.

Working area

- Carefully check the whole working area. Remove all foreign objects such as stones, sticks, wire, bones, etc.
- Do not use the lawn mower if there are any persons (caution: children) or animals (including wildlife) in the working area.

Operating times

- Observe national operating times for lawn mowers (noise prevention).
- Use the lawn mower only in daylight or if the working area is well illuminated.

Operation

- Always visually inspect the lawn mower before use.
- Before the use visually inspect the good condition of the blades, the adapter and the fixing screws. Damaged or worn parts must be replaced only in set to keep correct and balanced work conditions
- Do not use the lawn mower in case of defective or damaged protection devices, never when

the safety devices, as the deflectors or the grass catcher, shouldn't be in place or in correct positions

- Switch off the engine and pull off the spark plug connector:
 - Before to remove any obstruction or clean the discharge chute
 - After the mower strikes an object
 - If the mower suddenly start to vibrate
- Keep nuts, bolts and screws tight, to guarantee a safety use of the lawn mower
- Frequently check the grass catcher shouldn't worn or damaged

Before performing **any** work on the unit:

- Switch off the engine, wait until the blade has come to a standstill and pull off the spark-plug connector.
- Damaged or worn parts must be replaced immediately.
- Use the unit only in a technical condition stated by the manufacturer.
- The user of the unit is responsible for any accidents involving other persons or their property.
- Switch off the engine before crossing surfaces other than the surface which is being mown.
- Do not start the motor if you are standing in front of the discharge channel (side discharge mower).
- Use the lawn mower on lawns only.
- Do not disable the safety equipment or protective equipment on the lawn mower.
- The cutter must be freely rotatable before the lawn mower is started. Disengage any drives.
- If the lawn mower has to be lifted before it can be started, the cutter must be facing away from the user.
- Keep hands and feet away from rotating parts.

- The lawn mower may only be used in compliance with the safety distance provided by the guide handle.
- Ensure that you have a secure footing.
- Never lift or carry the lawn mower while the motor is running. Wait until the cutter has come to a standstill and pull off the spark-plug connector.
- Always cut across a slope. Never mow up or down slopes or at an incline greater than 15°.
- Caution when changing direction of travel or when mowing backwards.
- Guide the lawn mower at walking pace only.
- Keep muffler and engine free of leaves, grass and any spilt oil
- Do not leave the lawn mower unsupervised.

Warning! Petrol is highly flammable!

- Store petrol in designated containers only.
- Fill up with petrol outdoors only. Do not smoke while filling up with petrol!
- Do not open the tank cap or refill with petrol while the engine is running or when the machine is hot.
- If petrol overflows, do not start the engine. Clean the unit and do not start the engine until the petrol vapours have dispersed.
- For reasons of safety replace a damaged petrol tank and/or tank cap.
- When filling up with petrol, use a funnel or filling tube to prevent fuel running from tank onto the engine, the housing or the lawn.



Risk of burns!

The exhaust and the areas around the exhaust may rise to and they can reach high temperatures.

Replace damaged mufflers.

- Do not change the governor settings of the engine.
- Never leave a combustion engine running in closed areas. Risk of poisoning!

Maintenance and storage

Before performing **any** work on the unit:

- Switch off the engine, wait until the blade has come to a standstill and pull off the spark-plug connector.
- If working near the blade, always wear protective gloves.

- If there is petrol in the tank, never store the lawnmower in buildings in which petrol vapours may come into contact with a naked flame or sparks – **Risk of explosion!**
- The petrol tank should be drained outdoors only.
- Before storing the machine in a closed room, leave the engine to cool down.
- Do not spray the lawn mower with water.
- The lawn mower must be repaired by authorised specialist companies only.

Spare parts and accessories

- Use original spare parts and accessories only.
- We reserve the right to introduce changes to the design and model without prior notice.

Safety devices

Safety lever

Release the safety lever in case of danger. Motor and cutter will stop in few seconds.

Do not disable the function of the safety lever.

Protective devices

Rear flap (gravel guard)

Protective devices prevent injury from objects ejected by the cutter.

Do not operate the lawn mower without protective devices.



Do not operate the machine in the rain or during thunder storms, particularly when there is a risk of lightning strike.

The risk of accidents is higher if the ground is damp due to increased danger of slipping.

Particular caution should be exercised during working in order to prevent slipping.

If possible, avoid using the machine when the ground is damp.



Always wear hearing protection when working with the machine.



Caution: Danger to health due to vibrations!

Excessive exposure to vibrations can result in damage to the cardiovascular or nervous system, particularly in persons with cardiovascular problems. Please consult a physician if you experience symptoms that may have been caused by vibrational loads.

Symptoms of this kind principally affect the fingers, hands or wrists and include (incomplete list):

- numbness,
- pain,
- muscular weakness,
- skin discolouration,
- unpleasant tingling sensation.

Transporting the machine

Always wear gloves in order to prevent injuries due to sharp-edged and hot components.

Do not transport the machine with the engine running. Switch off the engine, let the blades come to a standstill and remove the spark plug socket prior to transport.

Only transport the machine once the engine has cooled down and with an empty fuel tank.

Use suitable loading aids (loading ramps, lifters).

Secure the machine and any machine components being transported (e.g. grass catcher box) on the load floor using fastening material of adequate size (belts, ropes etc.).

Avoid contact with the mowing blade when lifting and carrying the machine.

When transporting the machine, always observe regional legislation, especially regarding load security and the transport of objects on load floors.

Remember that when loading or unloading the mower, do not tilt it in any direction, as this may cause contamination of the oil filter or oil leakage.

Procedure with used machinery, environment protection.

If one day you come to the conclusion that your device needs to be replaced or you do not need it anymore, remember to protect the environment and dispose of in an environmentally safe manner, in accordance with local regulations. Some authorized Service Points and sales outlets accept old equipment and utilize it in an environmentally safe manner. In case of any uncertainties or doubts concerning the operation of the device, please contact an authorized service center or the seller.

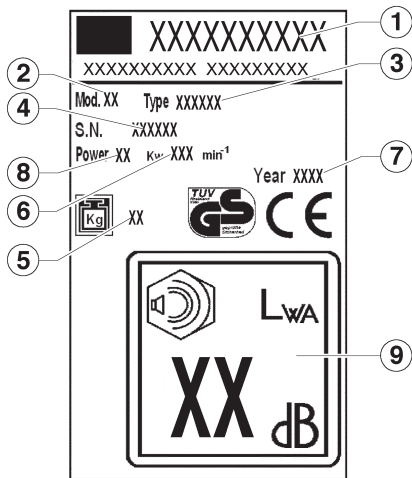


Additional information on the operating instructions for the unit, section entitled “For your safety”.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

2 EXPLANATION OF THE SYMBOLS ON THE UNIT

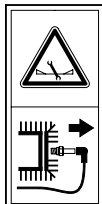
- | | | | |
|---|---------------|---|-------------------|
| 1 | Manufacturer | 6 | Revs |
| 2 | Model | 7 | Year built |
| 3 | Type | 8 | Power |
| 4 | Serial number | 9 | Sound power level |
| 5 | Net weight | | |



Before using the lawn mower for the first time, read the operating manual!



Keep other people out of the working area!



Before working on the cutter, pull off the spark-plug connector!



Warning Danger! Keep hands and feet away from the cutters!



Danger of intoxication. Do not use in closed areas.



Danger of explosion. Switch off the engine when filling up fuel.



Danger. Do not touch hot parts.



DO NOT USE Pressure Washers to clean mechanical parts, bearings and seals.

In this operating manual



Danger! Non-compliance could result in personal injury.



Do not wear clothes that could get caught in the wood, in the scrub or in the moving parts of the equipment. Do not wear scarves, ties or jewellery. Always keep long hair tied and protected (wear a scarf, hat, helmet, etc).



Danger of death by suffocation!

Never let children play with the packaging material, they may risk death by suffocation. Keep the packaging material out of the reach of children.



Wear working boots with non-slip sole and steel tip. Never work barefoot or, for example, with sandals.

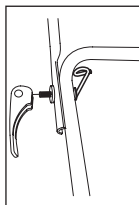


Do not tamper with this machine to increase the engine or electric motor's power or rpm



To reduce the risk of eye injury, wear well-fitting EN 166 compliant safety glasses. Pay attention to the correct position of the safety glasses. Wear the safety helmet in thinning work, when working in tall scrub and in places with danger of falling objects. Always wear safety glasses before sharpening the blade!

Instructions for correct assembly of the starter cord guide hook for petrol engine lawnmowers.



Lawnmowers with quick release levers

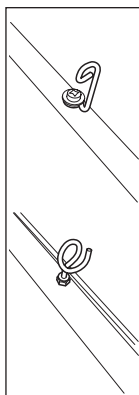
The starter cord guide hook must be mounted on the right side and inside the handle as shown



Always wear hearing protection when using this equipment.



Always wear sturdy work gloves made of resistant material (e.g. leather). Work gloves will protect you from accidental injuries. Never underestimate all possible dangers. Always wear gloves when using this lawnmower.



Lawnmower with handle locking knobs.

The starter cord guide hook must be mounted on the right side of the handle as shown.

3 DESCRIPTION

- 1 upper handle
- 2 self propulsion lever 2WD
- 3 brake lever
- 4 accelerator lever
- 5 self propulsion lever 4WD
- 6 lower handle
- 7 engine
- 8 front wheel
- 9 chassis
- 10 back wheel
- 11 flexible cables
- 12 blade support
- 13 blade
- 14 blade screw
- 15 adjusting levers for cutting height
- 16 oil cap
- 17 fuel cap
- 18 speed variator lever
- 19 pivoting wheel lock / unlock

4 INTENDED USE

This lawn mower has been designed for cutting grass. Any other use is not permitted.

The lawn mower is suitable for private use in the garden only. Lawn mowers for private use are those which are used for cutting grass and lawns in the garden, however not for cutting grass in public parks, playing fields or on farms or in forests.

Non-permitted users:

Persons who are not familiar with the operating manual, children, young people under the age of 16 as well as persons under the influence of alcohol, drugs or medication must not operate the unit.

Operating times for petrol lawnmowers

(in compliance with the Control of Pollution Act). Please also observe the municipal regulations on the operation of lawn mowers!

Monday – Saturday

7.00 – 12.00

15.00 – 19.00

Not allowed on Sundays and bank holidays!

5 ASSEMBLY



When assembling this appliance, please follow the instructions for assembly printed towards the end of the manual.

Protection of the environment, disposal

Packing elements (plastic bags, polystyrene foam, nails, boxes, etc.) must not be left within the reach of children, as they are potentially dangerous. Packing materials are potential environmental pollutants.

Dispose of through authorised waste disposal companies.

Marked on the machine rotation speed during the rpm test.

6 SWITCHING ON THE UNIT

Do not switch on the unit until it has been completely assembled.

Always comply with the petrol engine operating manual supplied by the engine manufacturer.

Before switching on the machine for the first time, fill up with oil and petrol!

Petrol: Standard petrol – lead-free

Engine oil: See operating manual supplied by the engine manufacturer.

Filling up with petrol: The tank cover is situated on the petrol tank and is identified by the symbol “petrol pump” (petrol station).

Filling up with oil: Capacity approx. 0.6 litres

Starting the engine

The engine cannot be started until the blade has been attached (balance weight)!


Starting the engine manually


a) Without throttle remote control

1) Press the primer button 3x at intervals of approx. 2 seconds. 

At temperatures below 10 °C press the primer button 5x.

If the engine is warm, do not press the primer button!


2) Pull the engine brake handle towards the upper handle and hold in position – the engine brake handle does not lock into position 

3) Quickly pull out the starter cable and then let it slowly wind up again. 



The engine has a fixed throttle setting. Speed control is therefore not possible.



b) With throttle remote control

- 1) Throttle to  position (start) **V**
- 2) Press the primer button 3x at intervals of approx. 2 seconds. **II**

At temperatures below 10 °C press the primer button 5x.

If the engine is warm, do not press the primer button!

- 3) Pull the engine brake handle towards the upper handle and hold in position – the engine brake handle does not lock into position. **III**
- 4) Quickly pull out the starter cable and then let it slowly wind up again. **IV**

As soon as the engine is running, position the throttle between  (start) and  (stop) according to the desired engine speed.

Switching on the wheel drive

Applies only to units with a wheel drive!
Do not engage the gears while the engine is at a standstill!


- 9) Press the gear switch lever against the upper handle and keep hold – the gear switch lever does not lock into position. **VII**


Driving speed: approx. 3,7 km/h

Switching off the wheel drive

- 10) Release the gear switch lever. **VIII**

Switching off the motor

- 11) push the throttle to position  (stop). **IX**
- 12) Release the engine brake handle. **X**

 **When the motor has been switched off, the cutter continues running for several seconds – therefore do not touch the underside of the mower until the cutter has come to a standstill!**

Setting the cutting height

XI

All wheels must be at the same height!

Speed advancing variator (VV) **XII**

On lawn mowers with VVmark you have the possibility to change the advancing speed from 2,5 to 5 Km/h. This advancing speed can be modified only when engine is working. In order to do it you have to start the left-hand lever on the operating panel. The tortoise symbol on the operating panel means slow, the hare symbol means fast.


3-speed transmission (3V)

Models marked with the 3V symbol have transmission that makes it possible to choose between 3 different advancing speeds:

- 1st speed - 2.5 km/h
- 2nd speed – 3.5 km/h
- 3rd speed – 4.5 km/h


The advancing speed can only be changed while the engine is running. To do this, you must activate the left-hand lever, located on the operating panel, setting it to the desired speed.

7 MAINTENANCE AND CARE

 **Before carrying out any maintenance or cleaning work, pull off the sparkplug connector!**

Do not spray the unit with water. Water which gets into the ignition system or the carburettor may result in malfunctions.

Clean the unit with a cloth, hand brush, etc.

 **When the mower is tilted to the side, the carburettor must be pointing upwards!**

Expert inspection is required:

- if the lawn mower strikes an object
- if the motor stops suddenly
- if the blade is bent (do not align!)
- if the motor shaft is bent (do not align!)
- if the gears are damaged
- if the V-belt is defective

Changing the oil / air filter / spark plug


See operating manual supplied by the engine manufacturer.

Drive gears

The gears are maintenance-free.

Replacing and sharpening the mowing blade


At the end of the mowing season always sharpen the mowing blade or, if required, replace the mowing blade with a new one. Always have the mowing blade sharpened or replaced by a customer service centre (measurement of imbalance).

 **Unbalanced blades will cause the lawn mower to vibrate violently – risk of accident!**

8 TROUBLESHOOTING



Before carrying out any maintenance or cleaning work, pull off the spark-plug connector!

Fault	Remedial action
Engine does not start	Fill up with petrol Move throttle to position  (start) Pull the engine brake handle towards the upper handle Check the spark plug and, if required, replace Clean the air filter Start on short grass or on an area which has already been mown Clean discharge channel / housing → the mowing blade must rotate freely Recharge the starter battery
Motor power drops	Correct the cutting height Sharpen/replace the mowing blade → customer-service centre Clean discharge channel / housing Clean the air filter Reduce the stepping speed
Inexact cut	Sharpen/replace the mowing blade → customer-service centre Correct the cutting height
Grass catcher is not filled sufficiently	Correct the cutting height Allow the lawn to dry Sharpen/replace the mowing blade → customer-service centre Clean the grille on the grass catcher Clean discharge channel / housing
Wheel drive does not function	Adjust the flexible cable V-belt defective → customer-service workshop Transmission defective → customer-service centre
Wheels do not turn when the transmission is engaged	Retighten wheel bolts Wheel hub defective → new wheel V belt or defective transmission → customer-service centre
Faults which cannot be rectified with the aid of this table may be rectified by a specialist company only (customer service centre).	

EC DECLARATION OF CONFORMITY

MA.RI.NA. Systems srl - via F. Baracca 3, 24034 Cisano Bergamasco (Bg) – Italy

Declare that the machine lawnmower with internal combustion engine (Dir. 2000/14CE All. I punto 32)

- Model (a)
- Power (b)
- Cutting width (c)
- Weight (d)
- Serial number (e)

n compliance with the requirements of the following EC directives

- 1) 2006/42/EC
- 2) 2000/14/EC + 2005/88/EC
- 3) 2014/30/EU
- 4) 2011/65/EC

In accordance with the following norms:

- 1) EN ISO 12100:2010
- 2) EN ISO 5395-1:2013+ A1:2018; EN ISO 5395-2:2013+A1:2016+A2:2017
- 3) EN ISO 3744:1995

Also declares that the technical manual is kept at:

MA.RI.NA. Systems srl - via F. Baracca 3, 24034 Cisano Bergamasco (Bg) – Italy

Directive 2000/14/EEC : conformity valuation procedure followed (Annex VI - procedure 1)
tested by : (n)

- Measuring conditions (f)
- Grip vibrations (g): EN ISO 5395-1:2013+ A1:2018 - (measuring uncertainty)
- Measured sound power (h)
- Guaranteed sound power (k)
- Sound pressure at operator's ear: EN ISO 5395-1:2013+ A1:2018 - (measuring uncertainty)

Cisano Bergamasco, 12/12/2019



Christian Rivolta
C.E.O.

Consult the levels measured and shown on the label on the last page

EN Assembly

FR Montage

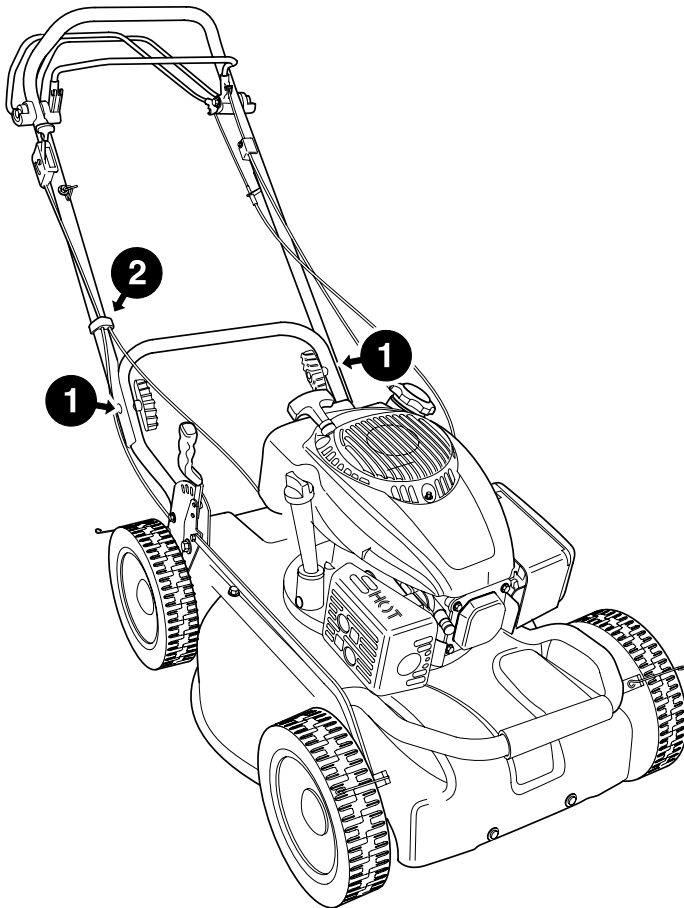
IT Montaggio

TR Montaj

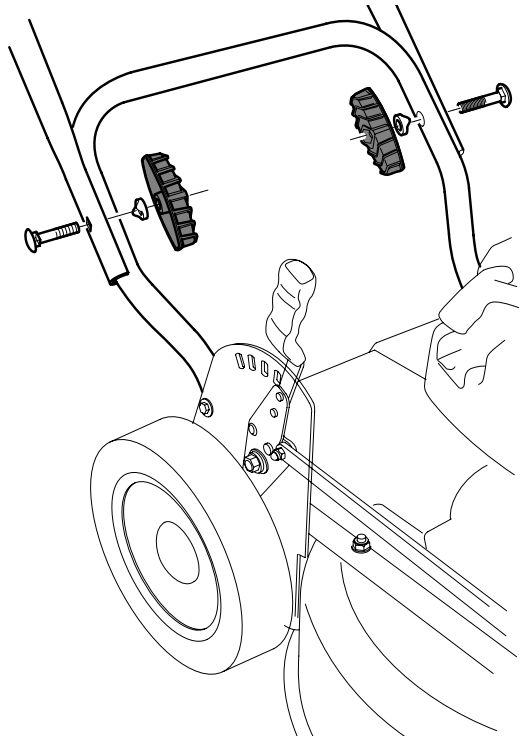
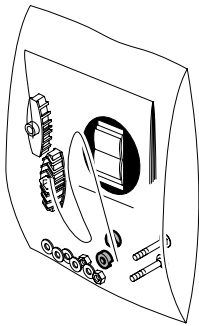
NO Montering

FI Asennus

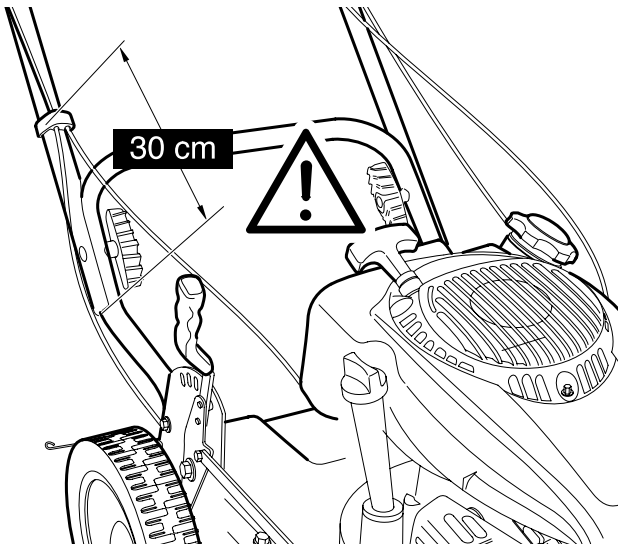
SE Montering



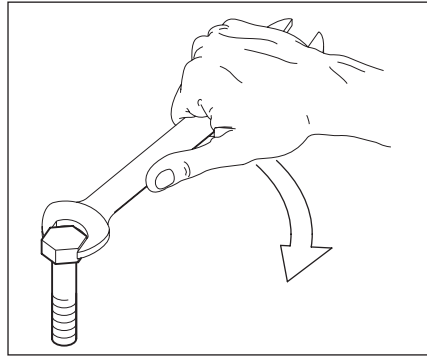
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2



Valori di serraggio vite lama
Blade screw tightening values



Apparecchio Device	Serraggio vite lama Nm Blade screw tightenin max torque	
	min	max
<p>Rasaerba a scoppio Con vite Lama 3/8 UNF classe resistenza 10.9 Petrol engine Lawnmower With blade screw 3/8 UNF class 10.9</p>	60	70
<p>Rasaerba elettrico Con vite Lama M9 classe resistenza 4.8 Electric Lawnmower With blade screw M9 class 4.8</p>	25	35
<p>Scarificatore Con vite Lama M8 classe resistenza 8.8 Aerator With blade screw M8 class 8.8</p>	35	45

TECHNICAL DATA - DONNÉES TECHNIQUES
DATI TECNICI - MŰSZAKI ADATOK -
TEKNISKE DATA - TEKNISSET TIEDOT - TEKNISKA DATA -

- Model (a)
- Power / displacement (b)
- Cutting width(c)
- Weight (d)
- Serial number (e)

- Measuring conditions (f)
- Vibration of the handle (g): EN ISO 5395-1:2013+A1:2018 measurement uncertainty (y)
- Measured sound power (h)
- Guaranteed sound power (k)
- Sound pressure at operator's ear: EN ISO 5395-1:2013+A1:2018 measurement uncertainty (y)

