

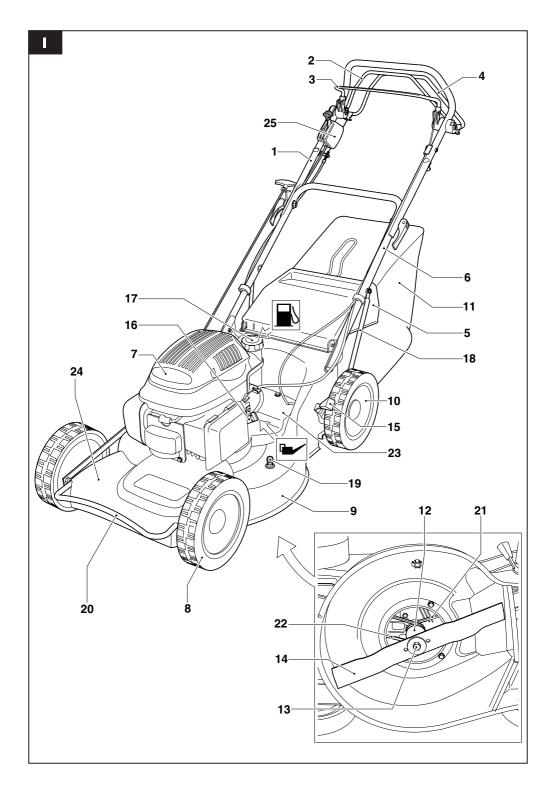


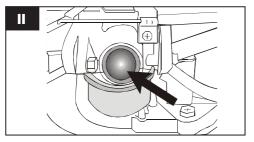
MARINA SYSTEMS SRL

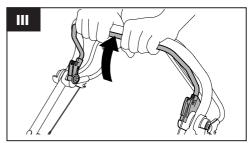
VIA F. BARACCA, 3 24034 CISANO BERGAMASCO BG

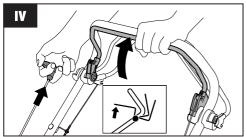
info@marinasystems.it www.marinasystems.it

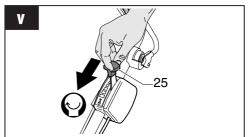


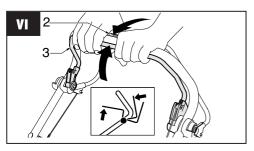


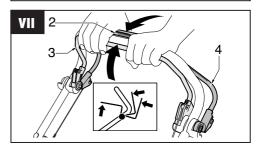


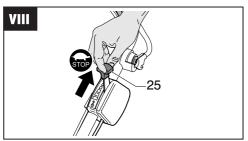


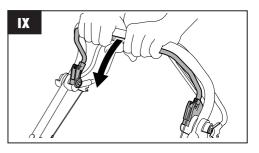


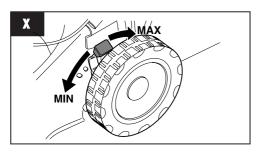


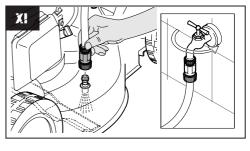












#### Translation of the original instructions

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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 muffer 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.

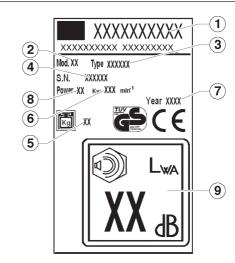


# Additional information on theoperating instructions for the unit, section entitled "For your safety".

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





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



Danger of intoxication. Do not used in closed areas.



Keep other people out of the working area!



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



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



Danger. Do not touch hot parts.



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

In this operating manual



Danger! Non-compliance could result in personal injury.

# 3 DESCRIPTION |

- 1 upper handle
- 2 back wheel self-motion lever
- 3 safety lever
- 4 front wheel self-motion lever
- 5 stone guard
- 6 lower handle
- 7 engine
- 8 front wheel
- 9 chassis
- 10 back wheel
- 11 collection basket
- 12 blade support
- 13 blade screw
- 14 blade
- 15 adjusting knobs for cutting height
- 16 oil cap
- 17 fuel cap
- 18 reinforcement handlebar
- 19 underbody cleaning joint
- 20 lift handle
- 21 back drive belt
- 22 front drive belt
- 23 back belt case
- 24 front belt case
- 25 accelerator lever

#### **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 requlations on the operation of lawn mowers!

Monday - Saturday Not allowed on Sundays and bank holidays!

7.00 - 12.00

15.00 - 19.00

# 5 ASSEMBLY



When assembling this appliance, please follow the instructions for assembly printed towards the first 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 Engine without dipstick:

Fill up to the upper edge of the inlet nozzle.

#### Engine with dipstick:

Fill up to the mark between "FULL" and "ADD" on the dipstick.

The oil level is checked with the dipstick screwed in.

# 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  $^{\circ}\text{C}$  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 (25) to position (start)
- 2) 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!

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

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

# Do not engage the gears while the engine is at a standstill!

#### Back wheel drive

5) Press the gear switch lever (2) against the upper handle and keep hold – the gear switch lever does not lock into position.

Driving speed: approx. 3,7 km/h

#### Back/front wheel drive

6) Press the gear switch lever (4) against the upper handle and keep hold – the gear switch lever does not lock into position

By acting on self-motion lever (4), the 4-wheel drive will be engaged.

# Switching off the wheel drive

7) Release the drive lever to cut off the front wheel drive.

Release drive levers (2-4) to cut off the front/back engine drive.

#### Switching off the motor

8) ove the throttle to position (stop).



9) Release the engine brake handle.





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



All wheels must be at the same height!

## 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.



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

# Cleaning under the bodywork

With machine at a standstill and off.

- Attach fitting (19) on the deck to the water supply tap. Turn on the tap.
- start up the motor (blade in rotation), allowing it to warm up for a few minutes.
- at the end of cleaning switch off the motor, turn off the tap, detach the tube from the deck connection.

#### Drive gears

The gears are maintenance-free.

# Replacing and resharpening the mowing blade

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



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

# Storing the unit

After mowing, clean the unit thoroughly.

Store the unit in a dry room – allow the motor to cool down beforehand.

To reduce storage space, the upper handle can be folded down. Unscrew the wing nuts by approx. 6 revolutions.

Caution: do not bend or deform flexible cables.

# **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	Correct the cutting height	
sufficiently	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	Retighten wheel bolts	
transmission is engaged	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

- 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
- 5) 2012/46/EU

In accordance with the following norms:

- 1) EN ISO 12100:2010
- 2) EN ISO 5395-1:2013; EN ISO 5395-2:2013
- 3) EN ISO 3744:2010

Also declares that the technical manual is kept at:

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

Tested by: (m)

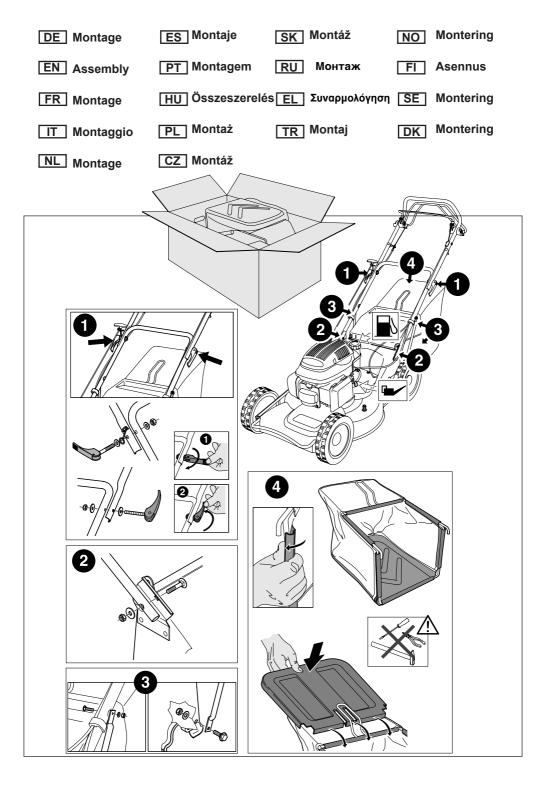
Directive 2000/14/EEC: conformity valuation procedure followed (Annex VI) tested by: (n)

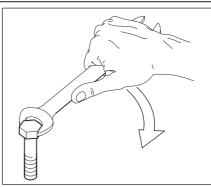
- Measuring conditions (f)
- Grip vibrations (q)
- Measured sound power (h)
- Guaranteed sound power (k)
- Sound pressure at operator's ear (measuring uncertainty 2dB) (y)

Cisano Bergamasco, 18/01/2017

Christian Rivolta C.E.O.

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





# Valori di serraggio vite lama Blade screw tightening values

Apparecchio <i>Devic</i> e	Serraggio vite lama Nm Blade screw tightenin max torque	
	min	max
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	60	70
Rasaerba elettrico Con vite Lama M9 classe resistenza 4.8 Electric Lawnmower With blade screw M9 class 4.8	25	35
Scarificatore Con vite Lama M8 classe resistenza 8.8 Aerator With blade screw M8 class 8.8	35	45