



English

# MULTIPLE MOWER - WGM

## Operation and Maintenance Manual



**Designed for the maintenance  
of green areas**

TRANSLATED INSTRUCTIONS

903280002~01 03/2022





# SUMMARY

<b>1. INTRODUCTION</b>	<b>5</b>
1.1 SOME NOTES ON THE USER MANUAL	5
1.2 DECLARATION OF CONFORMITY	6
1.3 GENERAL DELIVERY NOTES	7
1.4 WGM MOWER IDENTIFICATION AND MANUAL CODE	8
1.5 WGM MOWER MAIN PARTS	9
<b>2. SAFETY</b>	<b>10</b>
2.1 GENERAL NOTES	10
2.2 LIST OF RESIDUAL RISKS	10
2.3 SAFETY PRESCRIPTIONS	10
2.4 DEFINITIONS	11
2.5 CONVENTIONAL SYMBOLISM	11
2.6 OPERATOR REQUISITES	12
2.7 CLOTHING AND PPE	12
2.8 SAFE USE OF THE MACHINE	12
2.9 INTENDED USE	13
2.10 ENVIRONMENT OF USE	13
2.11 IMPROPER USE	13
2.12 REASONABLY PREDICTABLE INCORRECT USE	13
2.13 SAFETY DEVICES	14
2.14 LOCATION OF PICTOGRAMS ON THE MACHINE	14
2.15 SAFETY PRESCRIPTIONS	15
<b>3 WGM MOWER UNLOADING AND UNPACKING</b>	<b>17</b>
3.1 WGM MOWER PROTECTED BY HEAT SHRINK	17
3.2 THE WGM MOWER IN THE WOODEN CRATE	18
<b>4 TECHNICAL SPECIFICATIONS</b>	<b>19</b>
<b>5. START-UP</b>	<b>20</b>
5.1 WGM MOWER CENTRAL BODY ASSEMBLY	20
5.2 ASSEMBLING THE SIDE MOWER	21
5.3 ASSEMBLING THE REAR MOWER	22
5.4 MAIN CARDAN ENGAGEMENT (HOMOKINETIC)	22
5.5 CONNECTING THE WGM MOWER TO THE TRACTOR	23
5.6 CARDAN SHAFT CONNECTION	24
5.7 ROAD TRANSPORT	25
<b>6. ADJUSTMENTS</b>	<b>26</b>
6.1 HYDRAULIC CONNECTIONS	26
6.2 ADJUSTING THE CENTRAL BODY Multiple mower	26
6.3 ADJUSTING THE CUTTING HEIGHT	26
6.4 ADJUSTING THE BELT TENSION	27
<b>7 USO</b>	<b>27</b>
7.1 PREVENTIVE MAINTENANCE	27
7.2 WORKING	28
<b>8 STOPS</b>	<b>29</b>
8.1 TEMPORARY STOP	30
8.2 END-OF-DAY STOP	30
8.3 LONG DOWNTIME PERIODS	30
8.4 EMERGENCY STOP	30



<b>9. ROUTINE MAINTENANCE</b>	<b>31</b>
9.1 CHECKING AND REPLACING THE OIL IN THE GEARBOX UNIT	32
9.2 BLADE CHECK AND REPLACEMENT	32
9.3 REPLACING THE TRANSMISSION BELTS	33
<b>10 GREASINGS</b>	<b>33</b>
10.1 WGM MOWER SUPPORTS GREASING	33
10.2 CARDAN SHAFT	34
<b>11 CLEANING</b>	<b>34</b>
<b>12 STORAGE AND WINTERING</b>	<b>34</b>
<b>13 SCRAPPING</b>	<b>35</b>
<b>14 QUICK CONSULTATION TABLES</b>	<b>35</b>
<b>15 TIGHTENING TORQUES TABLE</b>	<b>35</b>
<b>16 TROUBLE-SHOOTING TABLE</b>	<b>36</b>
<b>17 MAINTENANCE TABLE</b>	<b>36</b>
<b>18 SPARE PARTS</b>	<b>36</b>
<b>19 WARRANTY</b>	<b>37</b>
<b>20 NOTES</b>	<b>38</b>



Thank you for purchasing an

## WGM MULTIPLE MOWER

The WGM Mower is produced by SICMA S.p.A., which has been producing agricultural machinery for over 40 years.

The WGM Mower meets all the safety and quality requirements that are imposed for this type of equipment.

Remember that in order to obtain the best performance and to maximise the performance characteristics, it is necessary to know and follow the instructions and information contained in this manual.

### 1. INTRODUCTION

The SICMA multiple mower consists of 3 independent modules that can be combined in different solutions in order to guarantee high reliability, excellent cutting quality and uniform grass ejection over the entire cutting surface.

#### 1.1 SOME NOTES ON THE USER MANUAL

Remember that the USER MANUAL is not an accessory of the WGM Mower but is an INTEGRAL part and a SAFETY MEASURE (EN 12100-1).

For this reason:

- Keep the manual in a good state;
- store it in the vicinity of the equipment itself;
- deliver it to any new operator, user, maintenance technician, handler or owner (in case of change of ownership);

In this way the WGM Mower can be used in the best way possible for all the functions for which it was designed and with maximum safety.

The manual must not be damaged, it must remain intact (do not tear out the pages), it must be kept away from humidity and heat; during consultation, it must not be covered in grease nor must its legibility be impaired.

If this manual is lost or damaged, request a copy from the manufacturer or the dealer nearest to you.

To facilitate consultation, the manual has been divided into parts so that every phase is well described.

With these measures, SICMA intends to draw unequivocally the operator's attention to the hazardous situations that may arise.

It should be remembered that all the technical values refer to the WGM Mower ("TECHNICAL SPECIFICATIONS" - Chap.4) and that the drawings and any other document delivered together with the WGM Mower are the property of SICMA, which reserves all rights and recalls that they cannot be made available to third parties without its written approval.

Therefore, any reproduction, even partial, of the text and illustrations is strictly prohibited.

Some of the devices described in this manual may not be present on your machine, as they vary depending on the chosen set-up and the destination market.

The information, descriptions and illustrations contained in this manual reflect the state of the art of the machine at the moment it was put on the market.

The Manufacturer reserves the right to make, at any time, any changes to the machines for technical or commercial reasons. These changes do not require the Manufacturer to act on vehicles sold so far, nor to consider the present publication inadequate.

Any additions that the Manufacturer deems appropriate to provide later, will need to be kept with the manual and considered to be part of it.



## 1.2 DECLARATION OF CONFORMITY

The machine is delivered and accompanied by the following Declaration of Conformity.

### CE DECLARATION OF CONFORMITY in accordance with Directive 2006/42/EC

The company:

**Sicma S.p.a.** - C.da Cerreto, 39 - 66010 Miglianico (Ch) - Italy  
Tel.: +39 0871 95841 - Fax: +39 0871 950295  
e-mail: info@sicma.it - http://www.sicma.it

declares under its own responsibility that the machine:

Type: MOWER  
Model: WGM  
Serial number:

complies with the essential health and safety requirements pursuant to Directive 2006/42/EC.

For the verification of the conformity referred to in the directive mentioned above, the following harmonised standards were consulted:

- UNI EN 745:2010, UNI EN ISO 4254-12:2018, UNI EN ISO 12100-1:2009, UNI EN ISO 12100-2:2009.

National and International Standards and Technical Specifications:

- ISO 5718-2013, ISO 17101-1:2012;

The person authorized to compile the Technical File is Mr. Marcello Aurora.



Miglianico, 01/08/2020

**Chiara Aurora**  
Sole director

A handwritten signature in black ink, appearing to read "Chiara Aurora".



1



2



## MULTIPLE MOWER - WGM

Operation and Maintenance Manual



Designed for the maintenance of green areas

TRANSLATED INSTRUCTIONS  
903280001-01 00/2022



### 1.3 GENERAL DELIVERY NOTES

The WGM Mower is normally delivered by truck or container.

On receiving the machine check that the delivery corresponds to the order specifications (see delivery note or packing list) and that there is no damage to the WGM Mower or to the accessories.

The spare parts or equipment supplied are sometimes in separate containers.

In the event of damage or missing parts immediately inform SICMA or its local representatives, the carrier or its insurance agent, providing details and/or photos.

The WGM Mower is delivered by SICMA fitted with the following equipment:

- 1 - PTO DRIVE SHAFT;
- 2 - MOWER USE AND MAINTENANCE MANUAL;
- 3 - PTO DRIVE SHAFT USE AND MAINTENANCE MANUAL;
- 4 - EC DECLARATION OF CONFORMITY.

3

## Manuale di uso e manutenzione



EN Users manual  
DK Brugsanvisning  
S Instruktionsmanual  
N Instruktionsmanual  
IN Käyttöohje  
PL Instrukcja obsługi

Com:1140017-D



**EUROCARDAN**  
ENERGY ON THE MOVE

4

### CE DECLARATION OF CONFORMITY

in accordance with Directive 2006/42/EC

The company: **Sicma S.p.a.** - C.da Cerreto, 39 - 66010 Miglianico (Ch) - Italy  
Tel.: +39 0871 95841 - Fax: +39 0871 950295  
e-mail: info@sicma.it - http://www.sicma.it

declares under its own responsibility that the machine:

Type: MOWER  
Model: WGM  
Serial number:

complies with the essential health and safety requirements pursuant to Directive 2006/42/EC.

For the verification of the conformity referred to in the directive mentioned above, the following harmonised standards were consulted:

- UNI EN 745:2010, UNI EN ISO 4254-12:2018, UNI EN ISO 12100-1:2009, UNI EN ISO 12100-2:2009.

National and International Standards and Technical Specifications:

- ISO 5718-2013, ISO 17101-1:2012;

The person authorized to compile the Technical File is Mr. Marcello Aurora.



Miglianico, 01/08/2020  
**Chiara Aurora**  
Sole director

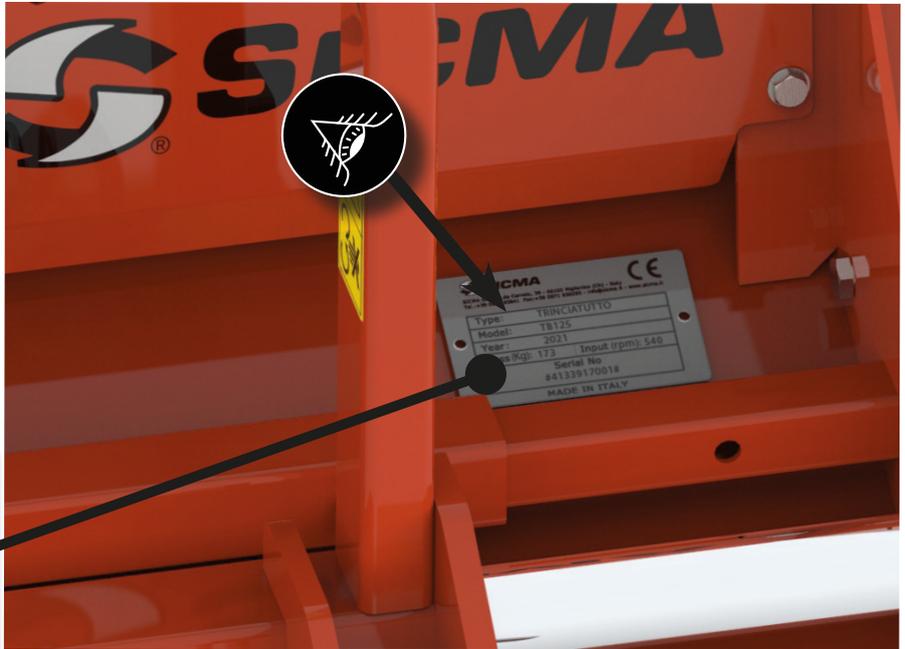
*Chiara Aurora*





#### 1.4 WGM MOWER IDENTIFICATION AND MANUAL CODE

For any further assistance or information regarding the WGM Mower, contact SICMA or its service centres, always detailing the model and serial number on the data plate of the machine. The identification code of this manual is indicated on the cover. Write the number in a different safe place so that if this manual is lost or damaged, another copy can be requested from SICMA or from the nearest dealer by also stating the serial number visible in the marking.

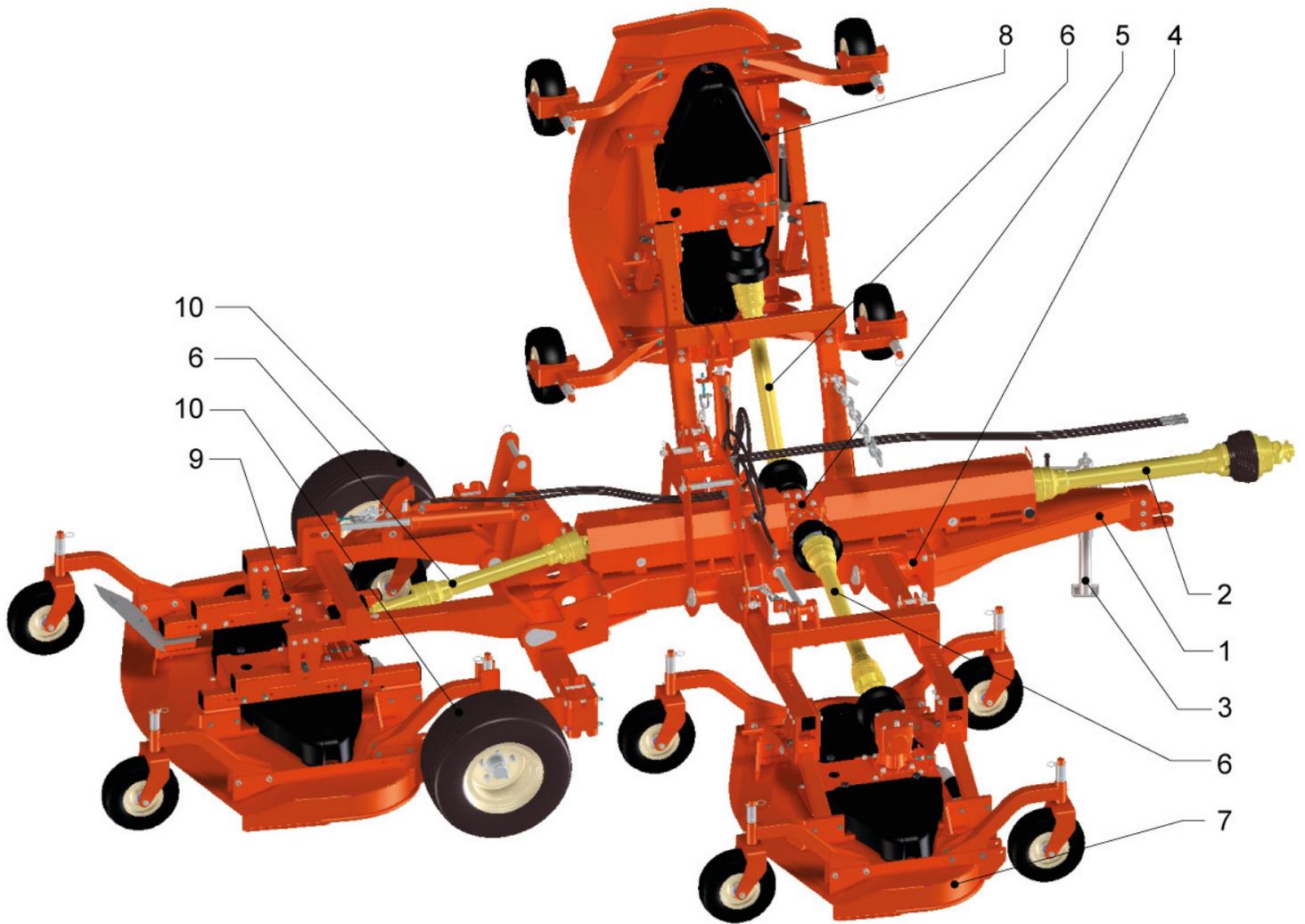


**SICMA** CE  
 SICMA SPA - C.da Cerreto, 39 - 66100 Miglianico (Ch) - Italy  
 Tel.: +39 0871 95841 Fax: +39 0871 950295 - info@sicma.it - www.sicma.it

Type:	MOWER
Model:	WGM 72-72-72
Year:	2022
Mass (Kg):	1980
Input (rpm):	540
Serial No #4133917001#	
MADE IN ITALY	



## 1.5 WGM MOWER MAIN PARTS



No.	Description	No.	Description
1	Drawbar	8	Left mower
2	Cardan Joint	9	Rear Mower
3	Parking foot	10	Adjustable wheels
4	Central body	11	
5	Three-output unit	12	
6	Secondary cardan joints	13	
7	Right mower	14	

## 2. SAFETY

### 2.1 GENERAL NOTES

The WGM Mower has been manufactured in accordance with 2006/42/EC Directive and was designed observing the guidelines of technical standards for mowers.

Therefore, the machine does not represent a danger for the operator if used according to the instructions in this manual and on condition that the safety devices are kept constantly efficient.

#### WARNING!!

**SICMA INFORMS THAT ANY CHANGES OR ALTERATION TO THE WGM MOWER, OR ANY OPERATION PERFORMED AND NOT STRICTLY REPORTED IN THIS MANUAL, ESPECIALLY THE NON-COMPLIANCE WITH SAFETY INSTRUCTIONS, NOT ONLY VOID THE WARRANTY, BUT ALSO RELIEVE SICMA FROM ANY RESPONSIBILITY FOR DAMAGE TO PROPERTY AND PERSONS.**

### 2.2 LIST OF RESIDUAL RISKS

As SICMA has complied with all the directives, laws and regulations in force and has done everything possible to ensure the WGM Mower remains in line with the state of the art in terms of safety, there still exist, albeit only a few, residual risks:

- **DANGER OF CUTTING/SHEARING DUE TO CONTACT WITH TOOLS (BLADES);**
- **DANGER OF ENTANGLEMENT/Dragging ( CARDAN SHAFT);**
- **OVERTURNING/CRUSHING HAZARD (MOWER);**
- **BURN HAZARD (MULTIPLIER GEARBOX);**

Therefore, those who use the machine or maintain it must be educated persons and aware of the fact that the machine still poses residual risks that, despite all the safety guards used to try to minimize them, it has not been possible to eliminate entirely.

#### WARNING!!

**The WGM Mower operators must read and understand the use and maintenance manual and ALWAYS ensure it is readily available in order to be able to consult it for any requirement.**

The use and maintenance manual reports all the information required by section 1.7.4 (Instructions for Use) of Annex 1 of the Machinery Directive, and its consultation is specifically requested in order to avoid accidents that may cause personal injury.

### 2.3 SAFETY PRESCRIPTIONS

You will find some symbols when consulting this use and maintenance manual, and on the equipment itself whose meaning is illustrated below. Any operator, before using the equipment, **MUST** categorically have read and understood the safety instructions and the entire manual.

- The machine is not suitable for use in sectors other than in agriculture and the maintenance and care of green areas: use other than that specified is considered improper.
- The manual must always be readily available so that it can be consulted if necessary. If it is lost or damaged, it will be necessary to request a replacement copy from SICMA.
- Under no circumstances climb, sit or lean on the equipment even when it is in the Zero Energy State.
- The operator must ensure that during operation of the machine no person or animal is standing within or passing through its range of action.



## 2.4 DEFINITIONS

### HAZARD

A potential source of physical injury or damage to health.

### HAZARDOUS ZONE

Any area within and/or in proximity of a machine in which the presence of a person constitutes a risk for the safety and health of the same. The hazardous area is the area around the machine (connected to the tractor) up to a distance of 1 metre.

### EXPOSED PERSON

Any person that is found wholly or partly in a dangerous area.

### CRITICAL AREA

The critical area is that between the tractor and the equipment (PTO drive shaft area).

### ZERO ENERGY STATE

The state to which the WGM Mower must be brought before performing any cleaning, lubrication and maintenance operation. The WGM Mower is at ZERO ENERGY STATE when it is positioned on level ground, disconnected from the cardan shaft and resting on its parking feet.

## 2.5 CONVENTIONAL SYMBOLISM

During consultation of this user and maintenance manual and on the equipment itself, it is possible to find several symbols whose meanings are illustrated below.



### RECCOMENDATION

It refers to a work mode tried out in the field, aware that every operator will develop their own way of operating.



### ATTENTION GENERAL HAZARD

Informs the staff assigned that the operation described has the risk of physical injury if not performed with respect to the Safety Standards.



### NOTE

Draws the attention of staff to information considered to be of high importance.



### WARNING

Draws the attention of staff to information, which, if not respected, may cause slight injury to persons or damage to the machine.



### MACHINE OPERATOR OR DRIVER

Identifies the qualified staff, i.e. with specific skills, as the operations are completely manual. Therefore, the preparation and sensitivity of the machine operator are referred to in order to obtain the best qualitative results. The operator is therefore strictly forbidden from performing tasks that should be performed by the maintenance technician.



### MECHANICAL TECHNICIAN

Qualified technician who works on mechanical components to carry out all the necessary adjustments, maintenance operations and repairs.



### UNSCHEDULED MAINTENANCE WORK

Any maintenance interventions highlighted by the symbol on the side must be requested to the Manufacturer or directly to authorized service centres.



### PERSONAL PROTECTIVE EQUIPMENT (PPE)

If any of these symbols are present on the side panel, suitable personal protection equipment must be worn by the operator as the risk of accident is implicit.

## 2.6 OPERATOR REQUISITES

- The machine must be used by a single operator driving the tractor.
- The machine must only be used by authorised personnel, educated and properly trained. The operator, in addition to having read and understood the instructions contained in this manual, must have gained a sufficient preparation on the proper use of the machine and must be in possession of a driving license. We remind the operator to contact the retailer or the manufacturer if they are unsure about the use of the machine and the interpretation of this manual.
- The operator must ensure that during operation of the machine no person is standing within its range of action. Never operate the machine near people standing or passing within the operating range of the machine.
- Do not use the machine if you are tired, ill or under the effects of alcohol, medicines or drugs.
- The correct working position, the operator must have, is at the driving station of the tractor. From this position he must also control that there are no persons exposed in the dangerous area in the work phase.

## 2.7 CLOTHING AND PPE

Personnel should use safety equipment and personal protective equipment during use and maintenance of the vehicle.

The correct clothing to be worn during maintenance operations and during use of the WGM Mower is:

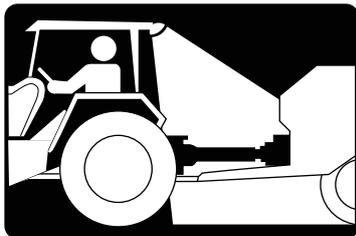
- Gloves;
- Overalls with elasticated wrists, ankles and waist;
- Accident-prevention shoes or boots with iron toe-cap;
- Goggles.

Furthermore:

- given that the machine can generate emission of dust during processing, if the tractor is not equipped with enclosed cab, the operator must wear a dust mask (especially on dry and dusty ground);
- If the tractor is not equipped with a soundproofed cab, the operator must wear noise protection headphones;
- the operator assigned to the machine must not wear items of clothing that can cause entanglement (scarves, belts, wide sleeves, etc.).

## 2.8 SAFE USE OF THE MACHINE

- The machine is usually used during the day. If night-time use is exceptionally requested or use in conditions of reduced visibility, a tractor lighting system or an auxiliary lighting system must be used;
- Carefully check the correct operation of the machine before the start of work each time;
- Check daily that the bolts are correctly tightened (consult the table "TIGHTENING TORQUES" - Chap. 15) and tighten them, if necessary;
- Check the condition of the metal structures and in case of excessive wear arrange to have them repaired or replaced;
- Make sure that the hooks of the chains retaining the PTO drive shaft guard are hooked to the appropriate slot, so that the plastic guard remains fixed and does not rotate driven by the same PTO drive shaft;
- Before leaving the tractor, and before any maintenance operation, operate the parking brake, stop the engine, remove the ignition key from the dashboard and keep it safe;
- When the machine is running the tools rapidly rotate: therefore keep a safe distance to prevent accidental contact with them or with any moving objects thrown up.





#### **WARNING!!**

It is absolutely forbidden to tamper with the equipment for any reason.

**Any unauthorised modification to this machine exempts SICMA from any liability for damage or injury that may result to operators, third parties and properties.**

#### **2.9 INTENDED USE**

The WGM Mower has been designed to be used exclusively in the agricultural sector and in the maintenance of grassy fields, for cutting grass and for finer shredding, depending on the type of tool being used. The machine is moved by the tractor by means of attachment of the drawbar with the tow bar, and acts on the ground by means of the rotation of the blades parallel to the ground, activated by the power take-off of the tractor by means of a cardan connection.

The machine is not suitable for use in sectors other than in agriculture and for the maintenance and care of green areas.



#### **RISK OF INJURY!!**

**Given the particular stress to which the equipment is subjected, if it is necessary to replace certain parts of the components, request only original spare parts from the appropriate reserved area at the address [www.sicma.it](http://www.sicma.it).**



#### **WARNING!!**

**The use of non-original spare parts exempts SICMA from any responsibility for damage or injuries caused to operators, third parties and property and causes immediate forfeiture of the warranty.**

#### **2.10 ENVIRONMENT OF USE**

The WGM Mower works:

- In open grassy fields, on non-crumbly, non-stony soils and with a maximum slope of 3°;
- In environments with a temperature from 0° - 50°C.

#### **2.11 IMPROPER USE**

Any use different to that declared is to be considered improper.

#### **2.12 REASONABLY PREDICTABLE INCORRECT USE**

It is possible that the operator could use the WGM Mower incorrectly. The incorrect methods of use are listed below.

The operator must not:

- Combine the WGM Mower with vehicles of inadequate power or weight;
- Connect the WGM Mower to a Cardan Shaft of inadequate power;
- Work in reverse gear;
- Perform makeshift repairs in order to complete the work;
- Use the WGM Mower to transport and/or lift persons, animals or objects;
- Work on land with a slope greater than 3°.

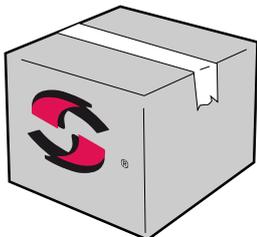
Sicma disclaims any responsibility for any accidents caused by disregard of the requirements indicated above.

For safety reasons, given the particular stress to which the equipment is subjected, in case of replacement of damaged parts, only request original spare parts.



#### **WARNING!!**

**Any arbitrary change made to this machine releases SICMA from any liability for damage to operators, third parties or property.**



### 2.13 SAFETY DEVICES

Before using the machine, make sure that all safety devices are positioned correctly and in good condition.

Should the protections become faulty or damaged, replace them immediately.

Do not tamper with or bypass the safety devices for any reason.

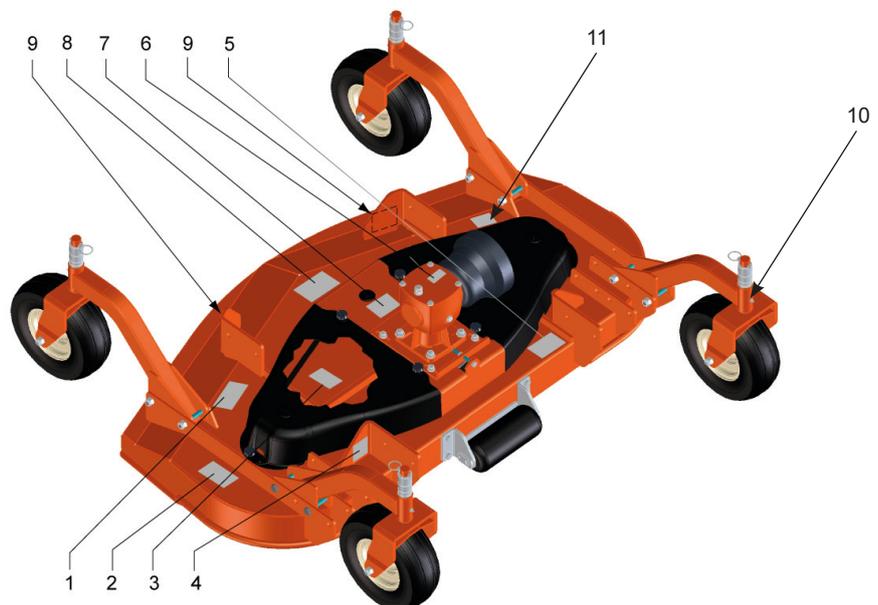
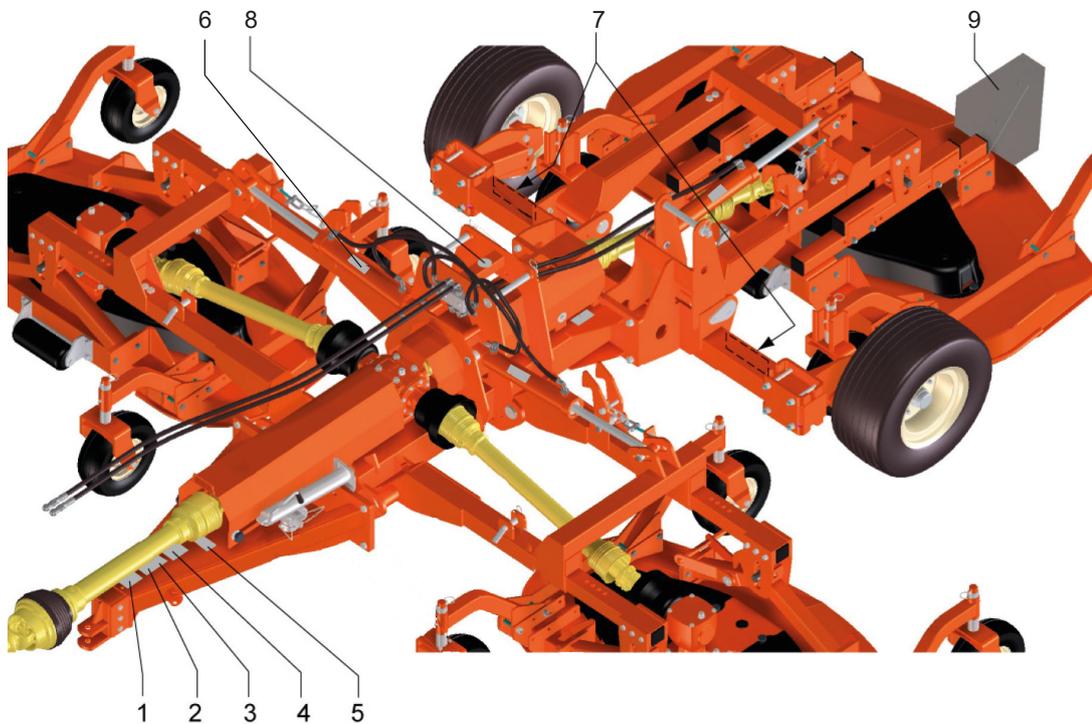
After every cleaning and maintenance intervention, all of the safety devices must be restored and\*or all protection housings closed.

Also verify that there are no tools, rags or other materials inside the transmission compartments.

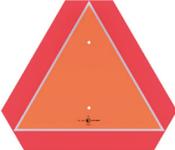
The signs applied to the machine provide a number of important indications: **their observance is a guarantee of your safety.**

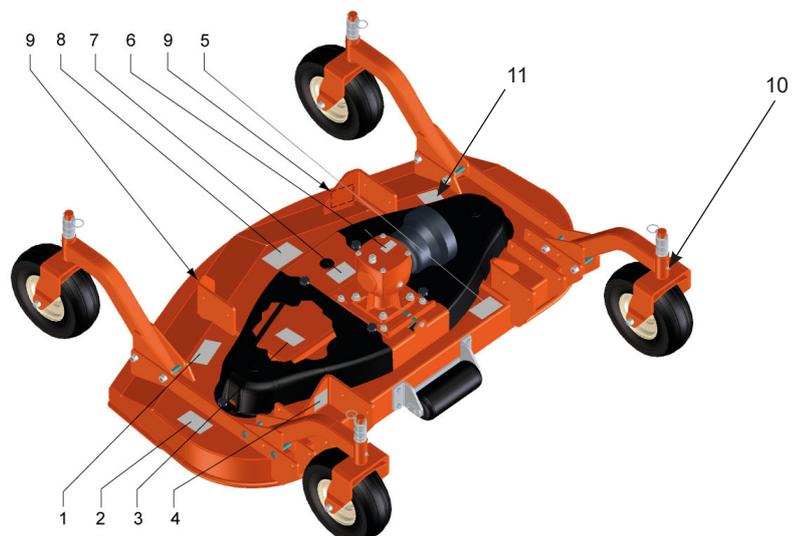
Ensure the good condition of the safety pictograms. If pictograms are damaged, they must be replaced with other original ones requested from the manufacturer and placed in the position indicated by the user and maintenance manual.

### 2.14 LOCATION OF PICTOGRAMS ON THE MACHINE



## 2.15 SAFETY PRESCRIPTIONS

REF.	STICKER	DESCRIPTION	CODE
1		<b>MOVEMENT AREA HAZARD</b> Stay away from the articulation area while the engine is running.	4781005 Qt. 1
2		<b>CAUTION</b> Do not disconnect the hydraulic pipes, pressure circuit.	4781042 Qt. 2
3		<b>CAUTION</b> Read all instructions and safety rules carefully before using the machine. Switch off the engine and remove the key before carrying out maintenance or repairs.	4781029 Qt. 2
4		<b>PTO RPM</b> PTO at 540 rpm.	5782702 Qt. 1
5		<b>CAUTION</b> Do not climb onto or sit on the machine.	5782705 Qt. 2
6		<b>CAUTION</b> Avoid pressurised fluid leaks. Consult the technical manual for maintenance procedures.	4781043 Qt. 1
7		Retro-reflector	4781721 Qt. 2
8		<b>HOOKING POINT</b> Fixing point for lifting the machine.	4781031 Qt. 2
9		Triangular retro-reflector	5782832 Qt. 1



REF.	STICKER	DESCRIPTION	CODE
1		<b>CAUTION</b> Do not climb onto or sit on the machine.	5782705 Q.ty 2
2		<b>CAUTION</b> Danger of contact with sharp elements.	5782706 Q.ty 2
3		<b>CAUTION</b> Do not open or remove the protective shields while the engine is running.	5782708 Q.ty 2
4		Retro-reflector.	4781720 Q.ty 2
5		<b>CAUTION</b> Before connecting the power take-off, check the correct number of revolutions.	5782702 Q.ty 1
6		<b>OIL</b> Oil filling point	4781008 Q.ty 1
7		<b>CAUTION</b> Before carrying out maintenance work, read the use and maintenance manual provided by the supplier.	5782704 Q.ty 1
8		<b>CAUTION</b> Maintain a safe distance from the machinery while it is working.	4781019 Q.ty 1
9		Retro-reflector.	4781721 Q.ty 2
10		<b>GREASE</b> Indication for injection of lubricating grease.	4781009 Q.ty 4
11		<b>USE ONLY ENI LUBRICANTS</b> For the hydraulic system: <b>oil ISO 46-68;</b> For gears: <b>oil 80W90;</b> For greasing: <b>LITHIUM grease EP -2</b>	4781093 Q.ty 1

### 3 WGM MOWER UNLOADING AND UNPACKING

#### ATTENTION!!

Remember that although the equipment is stable, during subsequent transportation, it must **ALWAYS** be securely fastened to the means of transport and positioned in the centre of the trailed box and not on the sides to avoid losing the equipment from the vehicle if it tips up.



#### ATTENTION DANGER OF CRUSHING!!

The WGM Mower must only be unloaded from the transport vehicle and moved to the place of work by qualified personnel who have read and fully understood the safety regulations.

A person in charge of operations must always be present during loading and unloading. In each case carefully follow the instructions outlined in this manual.

Make sure there are no people, animals or objects in the unloading area.

The WGM Mower is usually transported on a truck, sometimes unpacked, sometimes protected by heat shrink and sometimes in wooden crates.

#### ATTENTION!!

Ensure the "SAFETY INSTRUCTIONS" have been properly read and understood (par. 2.3) before transporting and unpacking the WGM Mower.

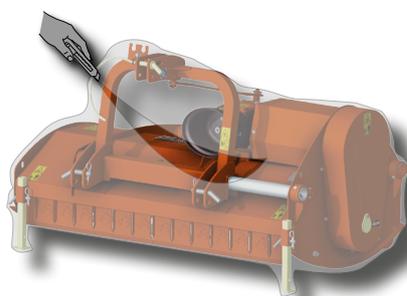


#### 3.1 WGM MOWER PROTECTED BY HEAT SHRINK

##### NOTE!!

Before proceeding with the unloading of the truck read this entire sequence, so as to be prepared in time for the unexpected.

Release the WGM Mower from any fastening devices used to make it integral with the means of transport.



#### ATTENTION DANGER OF CRUSHING!!

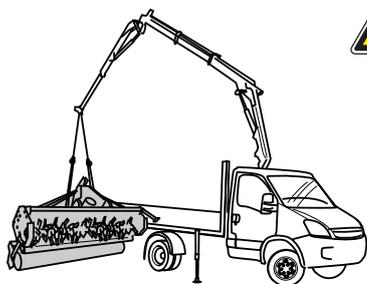
The unloading operations of the WGM Mower must be performed slowly, making sure that there are no persons, animals and objects exposed in the unloading area.

#### ATTENTION DANGER OF SWINGING AND CRUSHING!!

Before lifting:

- Ensure the good condition of the ropes or chains used for the operation.
- Use ropes/chains with an adequate load-bearing capacity; bear in mind that each individual rope/chain must be able to lift the weight of the WGM Mower (see "Technical specifications" par. 4)
- Make sure that the shackles are tight;
- In the case of chains with shorteners, make sure that they are securely connected too.

After securing the WGM Mower with ropes and/or chains, lift the equipment a few centimetres to check that it is correctly balanced and if not, place the equipment on the ground and correct the tension of the ropes/chains.



#### ATTENTION DANGER OF SWINGING AND CRUSHING!!

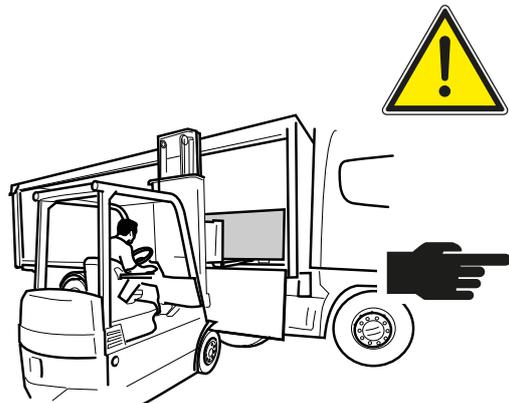
- Lift the WGM Mower from the walkable surface of the means of transport to a maximum height of 30 cm, unless in the case of obstacles, so that it does not swing.
- Place the WGM Mower on the ground near the tractor.
- Once on the ground, remove the chains or ropes and proceed to unpack the equipment as described below.



#### ATTENTION DANGER OF CUTTING!!

If the WGM Mower arrives wrapped in a protective film, remove it using a suitable cutter; therefore be careful not to injure yourself and not to damage the actual equipment.





To do this safely, the operator must wear cut-resistant gloves.

**ATTENTION DANGER OF CONTAMINATION HAZARD!!**

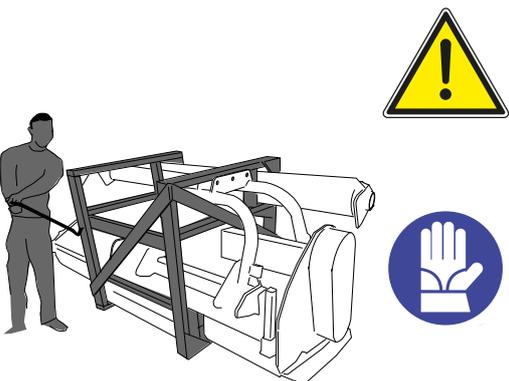
After unpacking, do not disperse the packaging into the environment but contact authorised centres for disposal. Check the transport document or packing-list supplied and, if necessary, act as described in the part "GENERAL DELIVERY NOTES" (par. 1.3).

**3.2 THE WGM MOWER IN THE WOODEN CRATE**

**NOTE!!**

Before unloading the equipment from the truck, read this entire sequence in order to be prepared for all events.

In the event that the WGM Mower is contained within wooden packaging, use a forklift with a capacity suitable for the weight of the machinery shown in chap. 4 "TECHNICAL SPECIFICATIONS" or use the truck's lifting boom.



**DANGER OF OVERTURNING AND CRUSHING!!**

Unloading operations must be carried out with extreme caution, making sure that no persons, animals or property are exposed in the unloading area.

Insert the forks into the slots of the footboard on which the crate is rested:

- Lift the crate off the loading bed to a height of about 30 cm, unless obstructed by obstacles;
- Place the crate on the ground in the vicinity of the tractor;
- Wear protective gloves and disassemble the wooden packaging with a dedicated tool;

To move the WGM Mower, use a forklift with a capacity suitable for its weight chap. 4 ("TECHNICAL SPECIFICATIONS").

After securing the WGM Mower with ropes or chains, lift the equipment a few centimetres to check that it is correctly harnessed.



**DANGER OF POLLUTION!!**

Once unpacked, do not dispose of the packaging in the environment but rather contact authorised waste centres, or save it for future deliveries.

When the WGM Mower is decommissioned, carefully select all the items that could be a risk to health and the environment.

The materials constituting the machine are subjected to separate collection according to the material and the hazards:

- Steel;
- Hydraulic oil;
- Rubber;
- Plastic.



**DANGER OF OVERTURNING!!**

Remember that although the equipment is stable, during subsequent transportation, it must ALWAYS:

- Be properly secured to the truck;
- Be positioned in the centre of the truck and not on the edges in order to avoid any overturning on corners or on uneven roads.



## 4 TECHNICAL SPECIFICATIONS

Below is the table with the technical characteristics of the WGM Mower.



MODEL	WGM 48-48-60	WGM 60-60-72	WGM 72-72-72	WGM 84-84-84
TRANSPORT LENGTH (mm)	2300 (7 ft. 6 in.)	2500 (8 ft. 2 in.)	2650 (8 ft. 8 in.)	2900 (9 ft.6 in.)
WORKING WIDTH (mm)	3600 (12 ft)	4500( 15 ft. 9 in. )	5000 (16 ft. 5 in.)	6000 (19 ft. 8 in.)
TRANSPORT WHEELS	23x10.5x12	23x10.5x12	23x10.5x12	23x10.5x12
TRANSPORT HEIGHT (mm)	2000 (6 ft. 7 in.)	2400 (7 ft. 10 in.)	2650 (8 ft. 8 in.)	3100 (10 ft. 2 in.)
PTO SPEED (rpm)	540 rpm	540 rpm	540 rpm	540 rpm
TRACTOR POWER (HP)	35-80 HP	35-80 HP	35-80 HP	35-80 HP
MAXIMUM OVERALL DIMENSIONS (mm)	3750 (12 ft. 4 in.)	4550 (15 ft.)	5150 (16 ft. 11 in.)	6100 (20 ft.)
MAXIMUM LENGTH (mm)	4550 (15 ft.)	4700 (15 ft. 5 in.)	4800 ( 15 ft. 9 in.)	5000 (16 ft. 5 in.)
PRIMARY CARDAN SHAFT	Series 6-Omocin./Free wheel	Series 6-Omocin./Free wheel	Series 6-Omocin./Free wheel	Series 6-Omocin./Free wheel
COUPLING ADJUSTMENT	4 positions	4 positions	4 positions	4 positions
GROUND PRESSURE (Bar)	0.50 kg/cm <sup>2</sup> (7.1 lb./sq.in.)	0.52 kg/cm <sup>2</sup> (7.1 lb./sq.in.)	0.54 kg/cm <sup>2</sup> (7.1 lb./sq.in.)	0.70 kg/cm <sup>2</sup> (7.1 lb./sq.in.)
TRANSMISSION RATIO	1:2.83 (spiral entrances)	1:2.83 (spiral entrances)	1:2.83 (spiral entrances)	1:2.83 (spiral entrances)
SECONDARY CARDAN JOINT	Eurocardan series 4	Eurocardan series 4	Eurocardan series 4	Eurocardan series 4
TYPE OF TRANSMISSION	Multiplier and belts	Multiplier and belts	Multiplier and belts	Multiplier and belts
MOWER THICKNESS (mm)	Steel 4 mm (0.16 inch.)	Steel 4 mm (0.16 inch.)	Steel 4 mm (0.16 inch.)	Steel 5 mm (0.20 inch.)
MOWER COVERING	150 to 240 mm (6 to 9 in.)	150 to 240 mm (6 to 9 in.)	150 to 240 mm (6 to 9 in.)	150 to 240 mm (6 to 9 in.)
LIFTING PISTONS	60x310 (2.5x12) Double acting	60x310 (2.5x12) Double acting	60x310 (2.5x12) Double acting	60x310 (2.5x12) Double acting
CUTTING HEIGHT (mm)	30 to 120 mm (1 to 5 in.)	30 to 120 mm (1 to 5 in.)	30 to 120 mm (1 to 5 in.)	30 to 120 mm (1 to 5 in.)
MOWER WIDTH CENTRALE (mm)	1500 mm (60 in.)	1800 mm (72 in.)	1800 mm (72 in.)	2100 mm (84 in.)
MOWER WIDTH SIDE (mm)	1200 mm (48 in.)	1500 mm (60 in.)	1800 mm (72 in.)	2100 mm (84 in.)
MOWER INDIVIDUAL WHEELS	12 (11x4.00-5 wheels)	12 (11x4.00-5 wheels)	12 (11x4.00-5 wheels)	12 (13x5.00-6 wheels)
BLADE TANGENTIAL SPEED (m/s)	69.5 m/s - 71.5 m/s	71.5 m/s - 72.1 m/s	72.1 m/s	77.6 m/s
BLADE TANGENTIAL SPEED (fpm)	13677 fpm - 14084 fpm	14084 fpm - 14198 fpm	14198 fpm	15274 fpm
ROTATION SPEED (rpm)	3130 rpm - 2648 rpm	2648 rpm - 2236 rpm	2236 rpm	2027 rpm
BELT ADJUSTMENT	Single screw on sliding plate, without tensioner	Single screw on sliding plate, without tensioner	Single screw on sliding plate, without tensioner	Single screw on sliding plate, without tensioner
BLADE SIZE (mm and inches)	6x60x424 (1/4x2; 1/3x16 3/4) 6x60x516 (1/4x2; 1/3x20 1/3)	6x60x516 (1/4x2; 1/3x20 1/3) 6x60x616 (1/4x2; 1/3x24 1/4)	6x60x616 (1/4x2; 1/3x24 1/4)	8x60x731 (1/4x2; 1/2x28 3/4)
WEIGHT IN WORK ORDER	1600 Kg (3527 lb.)	1700 Kg (3747 lb.)	1800 Kg (3968 lb.)	2000 Kg (4409 lb.)





## 5. START-UP

### ATTENTION!!

Only qualified operators having read and understood the safety instructions can perform the operations described below. Moreover, they must check that there are no persons, animals and properly exposed in the area where the connection is made to the tractor.

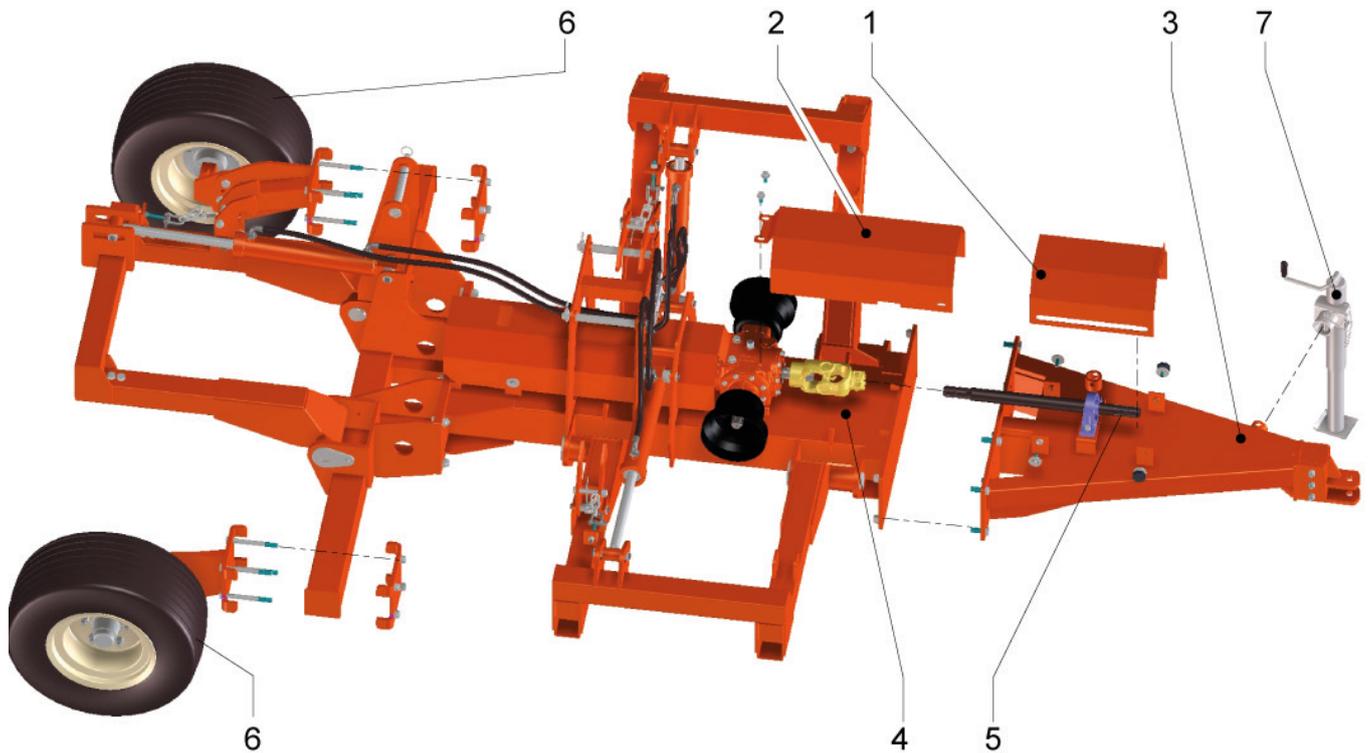
The WGM Mower can only be moved if connected to the tractor.

The operator and any assistants must have PPE (Personal Protection Equipment) available and use it as required.

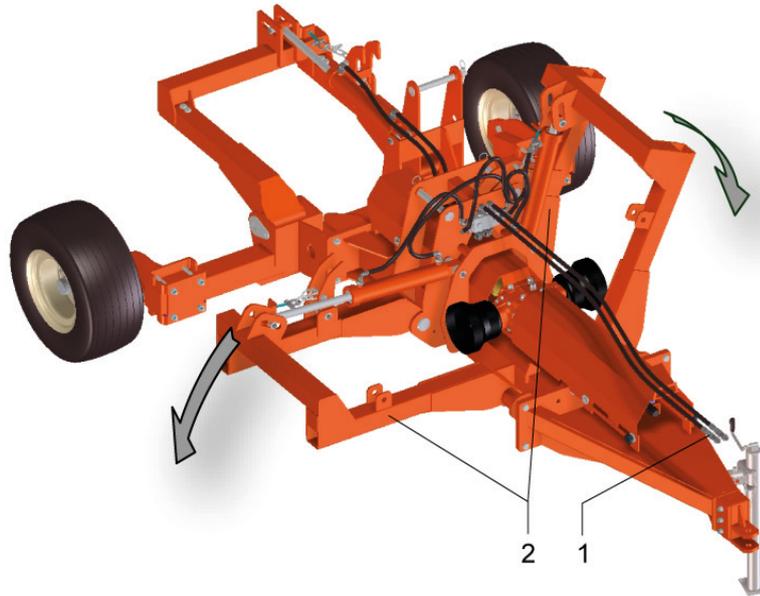
### 5.1 WGM MOWER CENTRAL BODY ASSEMBLY

It is advisable to read the user manual carefully before carrying out assembly and commissioning.

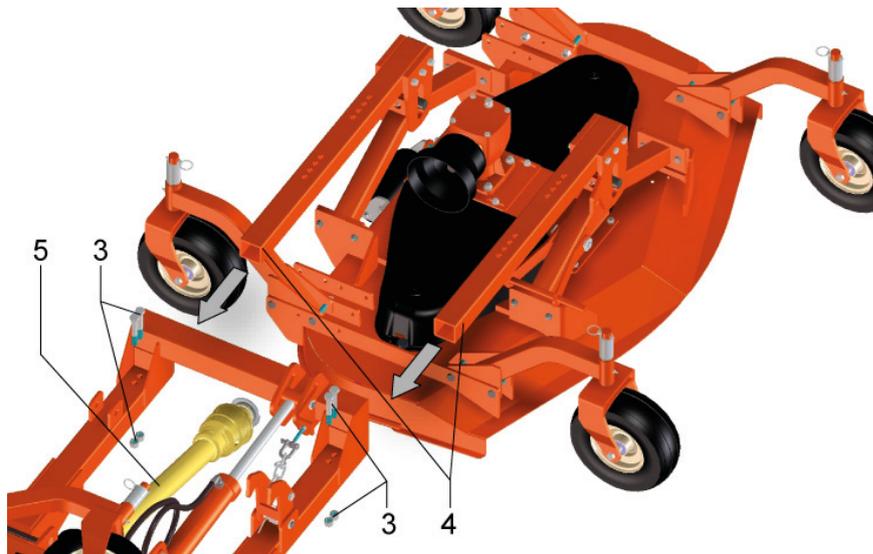
- Remove the protection (1) and the protection (2) from the central body (4);
- Attach the drawbar (3) to the central body (4) using the bolts already present in the anchoring holes and simultaneously insert the transmission shaft (5) in the cardan joint;
- Turn the wheels (6), already pre-assembled to the central body, extracting the screws from the shaped plates and fixing the wheels themselves to the frame in the desired position;
- Insert the support foot (7) and adjust it so that the central body (4), previously assembled to the drawbar 3, is horizontal and parallel to the ground;



## 5.2 ASSEMBLING THE SIDE MOWER



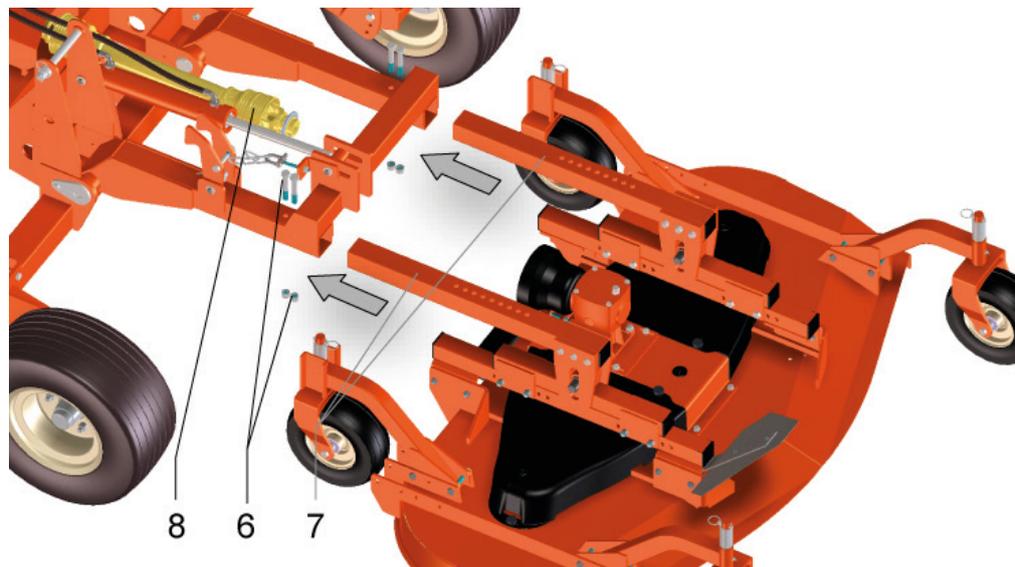
- Connect the quick couplings (1) to the tractor's hydraulic utilities;
- Rotate the lateral swing frames (2) downwards by means of the hydraulic cylinders by operating the control levers of the tractor;



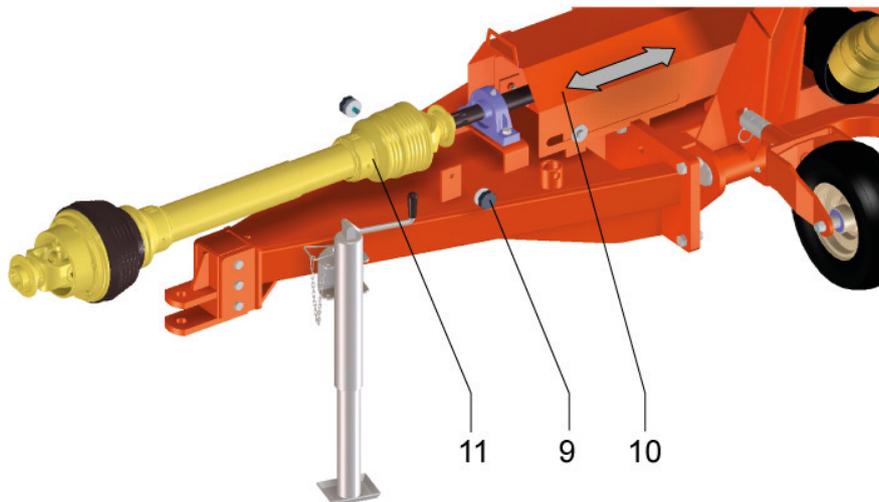
- Unscrew the bolts (3);
- Insert the square tubes (4) of the side mowers into the corresponding square tubes of the swinging frames, leaving out the number of holes according to the table "POSITIONING OF HOLES ON SQUARE TUBES";
- Refit and tighten the bolts according to the "TIGHTENING TORQUES" table in Chap.15;
- Connect the cardan joints (5).

POSITION OF HOLES ON SQUARE TUBES				
GROUP	4860	6072	7272	8484
SIDE	0	4	0	5
REAR	0	0	0	2

### 5.3 ASSEMBLING THE REAR MOWER



- Unscrew the bolts (6);
- Insert the square tubes (7) of the rear mower into the corresponding square tubes of the swinging frame until the front wheels of the Mower are aligned with the wheels of the central body;
- Refit and tighten the bolts according to the "TIGHTENING TORQUES" table in Chap.15;
- Connect the cardan joint (8);



### 5.4 MAIN CARDAN ENGAGEMENT (HOMOKINETIC)

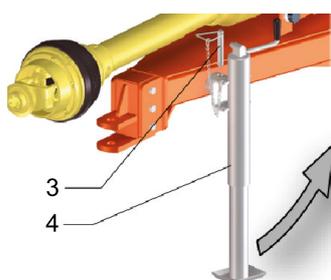
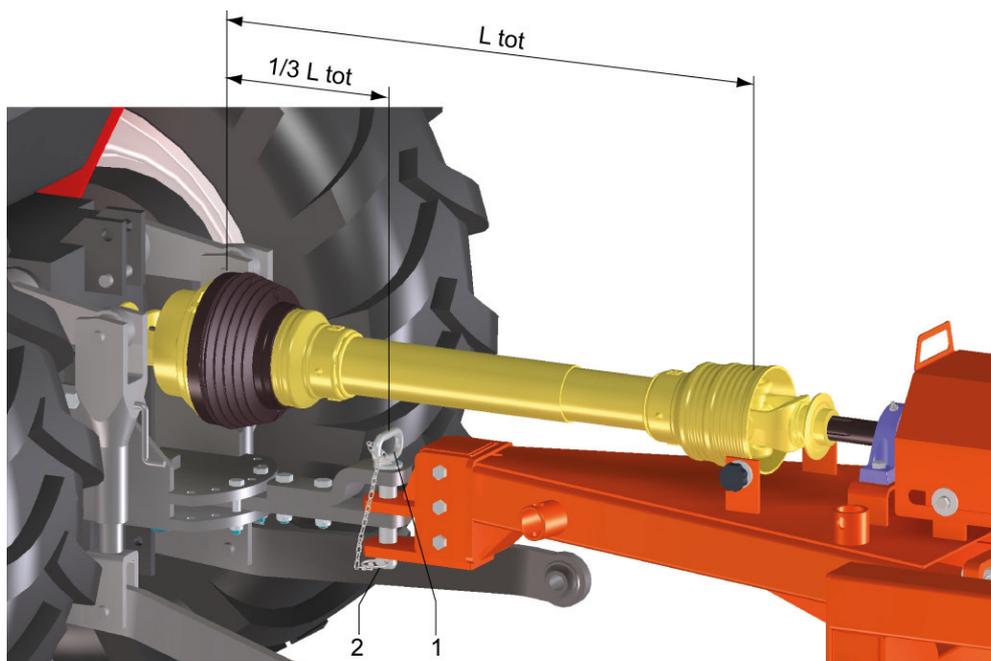
- Unscrew the knobs (9);
- Push behind the protection (10);
- Insert the cardan shaft (11) from the single joint side;
- Reposition the protection (10);
- Screw the knobs (9) back on;

## 5.5 CONNECTING THE WGM MOWER TO THE TRACTOR

The SICMA multiple mowers are built to be associated with any tractor equipped with a dedicated tow bar and quick-connect hydraulic utilities. The machine can be connected to a tractor with a power take-off operated at 540 rpm and of suitable weight and power.

Before carrying out the connection operation to the tractor:

- Position yourself on flat and well-levelled ground and make sure that there are no persons between the tractor and the WGM Mower;
- Slowly approach the tractor to the multiple mower aligning the tractor joint pin coupling hole with the mower drawbar one;
- Turn off the engine and pull the handbrake;
- In order for the cardan shaft to work correctly, adjust the towbar in such a way as to position the rotation pin (1) at approximately 1/3 of the total length of the shaft (from the tractor side cross to the equipment side cross) as shown in the figure;



- Rotate the parking foot (4) from the vertical position (parking position) to horizontal (transport position);
- Insert the pin (1) provided in the appropriate coupling hole and insert the safety pin (2);
- Adjust the central body of the Mower so that it is parallel to the ground (see par. 6.2);
- Adjust the cutting height of the mowers according to the work requirements (See par. 6.3).



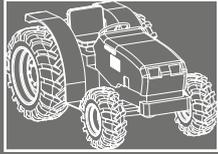
### ATTENTION!!

At the end of this type of operation, it is always advisable to check that all the nuts and bolts are correctly tightened (refer to the "TIGHTENING TORQUES" table in Chap.15).



### DANGER!!

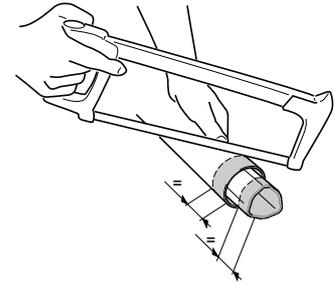
These operations must only be performed exclusively on the work ground with the engine off, PTO disconnected and hand brake engaged. If necessary, lift the machine from the ground, but make sure it rests on supports in order to ensure the safety of all persons and to prevent any falls.



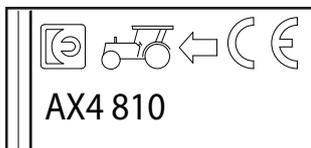
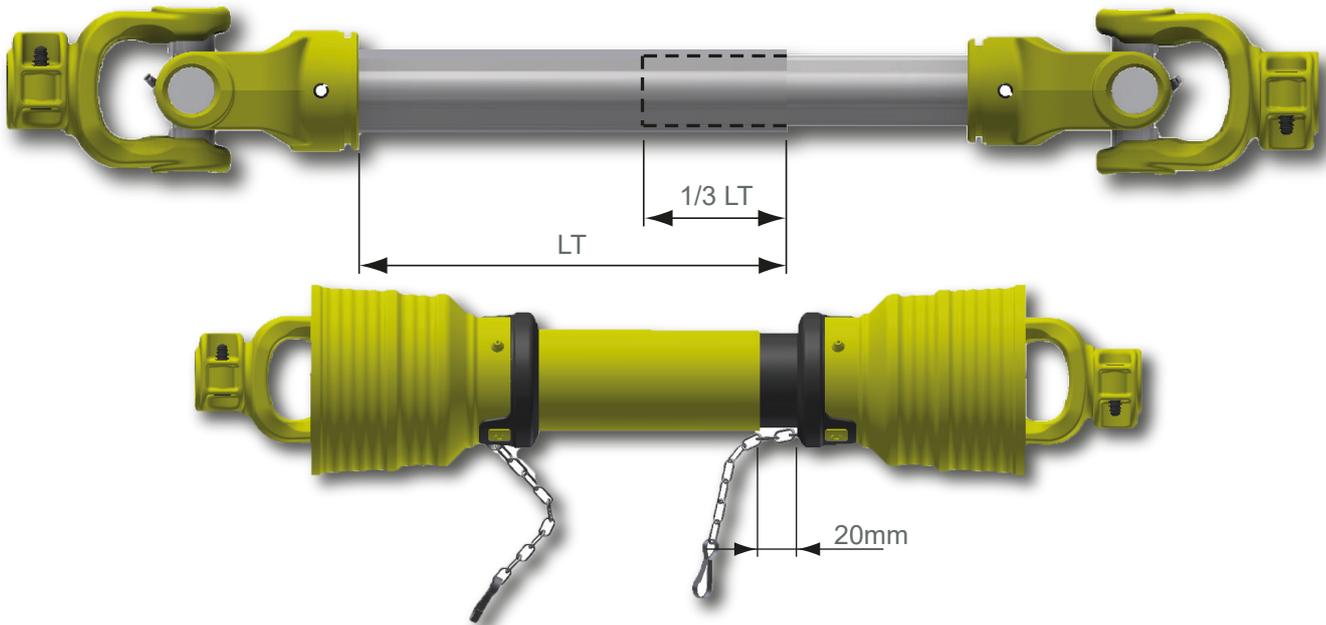
## 5.6 CARDAN SHAFT CONNECTION

Before attaching the PTO drive shaft, the operator must:

- Read the PTO drive shaft and tractor manual.
- Make sure that the number of revolutions of the tractor PTO match those of the WGM Mower (the choice of the number of revolutions of the WGM Mower must be made at time of purchase). Otherwise, contact support.

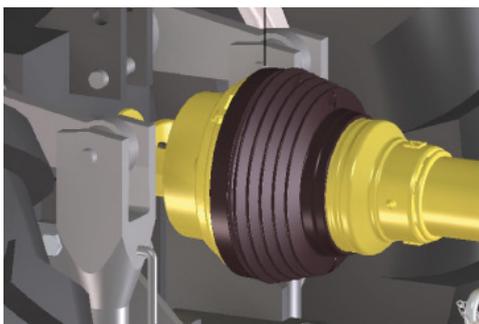


- Check that the minimum and maximum length of the Cardan Shaft are those required by the WGM Mower-tractor coupling. Remember that when at maximum extension, the pipes must overlap at least 1/3 of the length of the internal pipe. Moreover, in the maximum closure position of the pipes, the minimum clearance allowed of the plastic protections must be at least 2 cm. in order to prevent damage to the protections and to the gear transmission. If not, it is necessary to shorten the pipes by cutting off the amount necessary;
- Consult the use and maintenance manual of the Cardan Shaft or contact the authorised dealer who will deal with the matter.



Connect the Cardan Shaft as follows:

- Orient the Cardan in the correct direction referring to the figure of the tractor stamped on the external protection pipe.
- Insert the first hub of the drive shaft on the PTO of the WGM Mower while pressing the pin or safety collar of the fork;
- Release it and reverse with the drive shaft until it engages with an audible “click” in its seat;
- Then, repeat the operation with the opposite hub of the shaft, inserting it into the tractor PTO.
- Do the same on the tractor by hooking the chain wherever possible.



## 5.7 ROAD TRANSPORT



Articles 61 and 104 of the Highway Code prescribe that the maximum width of vehicles on roads is 2.55 metres. Consequently, of the 4 available sizes of the RG-BIO, only the first two sizes (WGM 48-48-60 and WGM 60-60-72 which have a maximum size of 2.30 and 2.50m) are authorised for road transport, in compliance with the other provisions of the Highway Code. The remaining measures: "They are considered exceptional agricultural machines and must be equipped, for road travel, with the authorisation that is valid for one year and renewable, issued by the relevant A.N.A.S. department for state roads and by the relevant region for the remaining road network" (from Art.104 of the Highway Code). "For exceptional agricultural machines that exceed the width of 3.20 m, the authorisation prescribes technical escort. This escort can be provided with vehicles available to the agricultural company [...]" (according to Art.104 of the Highway Code). For more information it is advisable to consult the Highway Code.

It is therefore necessary to follow the procedures described to ensure maximum safety:

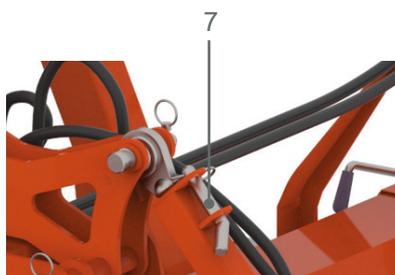
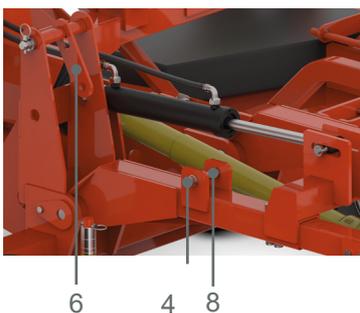
- The right and left mowers (1) must be positioned perpendicular to the body of the machine;

For models 360,450,500:

- Turn the side mower (1) away from the lower part of the same from the central body, until it is possible to position the locking lever (2) in its seat for the models described above;
- Also block the rear mower once it has reached the perpendicular position to the machine body using the safety arm (6) and the safety pin with its relative lock pin (5) present in the anchoring seat (8);

For the 600 model:

- Turn the side mower (1) away from the lower part of the same from the central body, until it is possible to position the locking lever (2) in the appropriate seat for the model described above;
- Then lock the two telescopic safety arms (3) using the locking pins supplied (4) and the relative lock cotter pins (5);
- Also block the rear mower once it has reached the perpendicular position to the machine body using the safety arm (6) and the safety pin with its relative lock pin (5) present in the anchoring seat (8).
- While working in the field, insert the pins described previously in the appropriate parking seats located on the safety telescopic arms (7).



## 6. ADJUSTMENTS

### 6.1 HYDRAULIC CONNECTIONS

Your machine is equipped with hydraulic lifting of the side and rear mowers:

- Connect the ends of the delivery and return pipes of the hydraulic system, equipped with quick coupling, to the tractor's hydraulic utilities.
- Check the tightness of the connections and ensure familiarity with the movement commands.

Before using the machine it is essential to be familiar with the controls and with the relevant working capacities.

In all circumstance always remain with all parts of the body inside the tractor cab to minimise the possibility of exposure to any external dangers.

Before getting off the tractor and before any maintenance and adjustment operation, proceed as follows:

- Engage the parking brake;
- Turn off the engine and pull the handbrake;
- Remove the ignition key from the dashboard and wait for all moving parts to stop.

The safety of the operator and of the persons present nearby depends on their judgement and prudence in using the machine.

It is therefore essential to be familiar with the location and function of all the controls.

The machine must always be in perfect working condition and must be repaired using only original spare parts.

### 6.2 ADJUSTING THE CENTRAL BODY Multiple mower

For correct operation of the multiple mower it is essential that the central body is well adjusted so that it works horizontally.

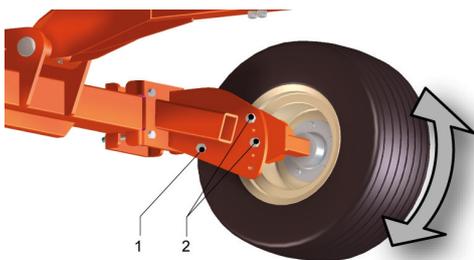
To perform this adjustment, proceed as follows:

- Adjust the height of the front part of the central body according to the position of the tractor tow bar by raising or lowering the parking foot;
- If necessary, also adjust the height of the drawbar head.



Now proceed with adjustment of the rear of the multiple mower, changing the height of the wheels, as described below:

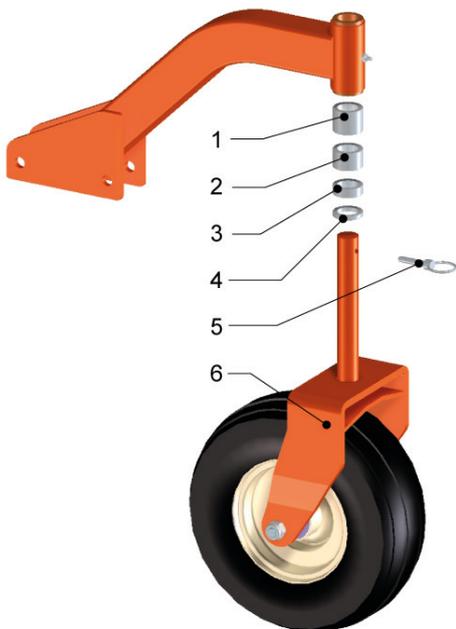
- Lift the frame using a hydraulic jack and loosen the bolt (1), undo and remove the screws (2);
- Rotate the hub support around the screw (1) until reaching the desired position;
- Refit and tighten all the previously unscrewed bolts according to the indications in the "Tightening Torques" table in Chap.15.



### 6.3 ADJUSTING THE CUTTING HEIGHT

The multiple mower has three mower bodies and all bodies must be set at the same height to obtain an even mow.

The working height of the mower bodies is determined by the position of the four wheels (6) of each individual mower.



Raising the wheels, the blades approach the ground, lowering them, they move away from the ground. Make sure that after changing the working height, the blades do not touch the ground because direct contact would result in their rapid wear.

Also make sure that the four wheels on each individual mower body are positioned at the same height and that all three mowers have the same cutting height.

To adjust the cutting height of the mowers, remove the pin (5) and adjust the height of the wheels according to the spacer bushings (1, 2, 3, 4) which have respective heights of 32mm, 25mm, 12.5mm and 6mm.

When these spacers are all positioned on the upper part, the mower bodies cut the grass at the lowest height which is approximately 30mm.

When the adjustment has been completed, reinsert the pin (5).

#### 6.4 ADJUSTING THE BELT TENSION

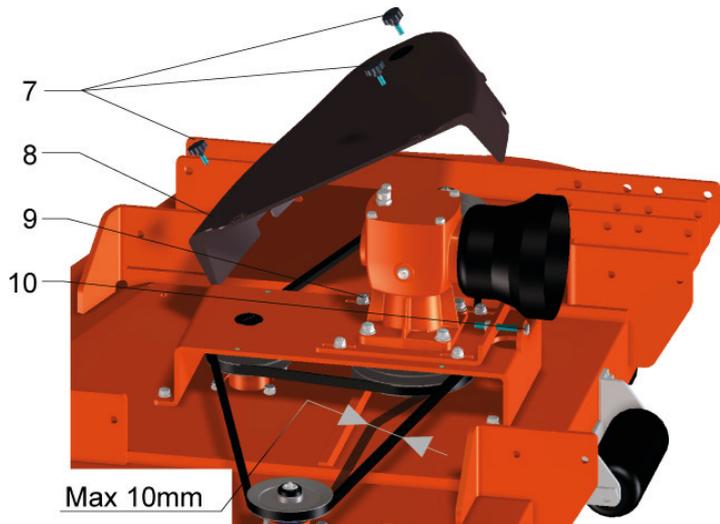
In the mowers it is possible to adjust the tension of the belts; the correct tension of the belts ensures that the machine works correctly, reducing wear on the rotating parts.

To adjust the tension of the belts:

- Undo the fixing screws of the safety casing (7);
- Remove the belt covers (8);
- Loosen the bolts (9);
- Adjust the tension by acting on the screw (10) after having loosened the locking nut.

Make sure that the oscillation of the belts does not exceed 10mm as shown in the image above.

Then perform the reverse procedure for reassembly.



#### ATTENTION!!

Never operate the WGM Mower without first repositioning all the protections in their original places.

#### ATTENTION!!

It is absolutely forbidden to engage the power take-off with the mower bodies raised.

### 7 USO

#### 7.1 PREVENTIVE MAINTENANCE

Before using the machine for the first time, or after a long period of inactivity, carry out the following:

- Check that the machine is not damaged;
- Check the mechanical parts are in good condition and not rusted;
- Check the wear and tear condition of the tools;
- Carefully grease all mobile parts;

- Check that there is no oil leakage coming from the transmission unit;
- Check that all the protections are correctly positioned;
- Visually inspect the machine before each use;
- If the bolts have come loose, tighten them according to the "TIGHTENING TORQUES" table in Chap.15;
- Check the level of the oil in the gear transmission box and top-up if necessary to the correct level (see chap. 9 "Routine maintenance");

Use the following lubricants for lubrication:

**Oil: 80W90**

**Grease: Litium Grease EP-2**

## 7.2 WORKING

Once all the checks, adjustments, hydraulic connections and the Cardan Shaft fitting have been performed, with the tractor connected to the WGM Mower (by means of the tow hitch), start the tractor and move to the work area, remembering to keep the Mower with the relative safety fasteners inserted as described in paragraph 5.8 "ROAD TRANSPORT".

### CAUTION!!

**To activate the WGM Mower, the operator must refer to the tractor manual as the commands are positioned inside the tractor cab.**



### WARNING!!

**Before starting work, make sure that no persons or animals are within the radius of action of the machine.**

**Make sure all equipment protections are present and efficient.**

The machine must only be used by one operator positioned inside the tractor driving cab.

Make sure that there are no ties to prevent movement.



### NOTE!!

Before using the WGM Mower, read this entire sequence in order to be prepared in time for any eventuality.

It is good practice to start the equipment in reduced normal conditions especially in cold environments, to allow the system to run-in and to prevent equipment malfunctioning.

Once in the work place, the operator must:

- Assume a position along the line of work;
- Turn off the tractor and pull the handbrake;
- Remove the ignition key and keep possession of it;
- Get off the tractor and remove the locking pins of the mowers and insert them in the parking seats located on the telescopic arm described in paragraph 5.8;
- Get back on the tractor
- Start the tractor;
- Operate the hydraulic controls in the tractor cab to lower the side and rear mowers;
- Operate the power take-off;
- Work at a forward speed based on the quality of mowing to be obtained.



### RECOMMENDATION!!

Keep the tractor engine running at a rev speed that assures the machine the needed power for the job it is performing.

Drive a short distance with the WGM Mower activated and check the quality of the work carried out; if this is not satisfactory, review the machine adjustment operations.



### WARNING DANGER OF SHEARING!!

**Keep hands and feet away from the blades when the machine is in action.**

**WARNING!!**

During operation, the machine can project material from the back. Make sure that persons and animals are at least 50 metres from it.

When changing direction, turning and reversing, disengage the power take-off and lift the side and rear mowers off the ground to avoid damage to the structure.

Once the work is completed, the operator must:

- Disengage power take-off;
- Raise the side and rear mowers;
- Engage the hand brake;
- Switch the engine off;
- Remove the ignition key and keep possession of it;
- Climb down off the tractor;
- Lock the side and rear mowers using the safety pins with relative cotter pins located on the telescopic arms (see par. 5.8 "ROAD TRANSPORT");
- Climb onto the tractor and release the hand brake;
- Start the tractor;
- Bring the WGM Mower into the warehouse, ensuring when handling that there are no persons, animals or objects exposed to danger;

**WARNING!!**

Check that the access lanes of the places where the machinery is kept comply with the dimensional requirements (height, length and width) indicated in Chap. 4 "TECHNICAL SPECIFICATIONS".

Having reached the depot, the operator must:

- Engage the hand brake;
- Switch the engine off;
- Remove the ignition key and keep possession of it;
- Get off the tractor, disconnect the hydraulic utilities and the Cardan Shaft;
- Bring the parking foot to a vertical position, adjusting the height of the telescopic body so that the tractor drawbar can be extended (see Par. 5.5 "CONNECTING THE WGM MOWER TO THE TRACTOR");
- Get on the tractor, start the engine and carefully move away from the machinery;
- Clean the WGM Mower (see chap. 11 "CLEANING");
- Check that there are no oil leaks caused by damage or malfunction and where necessary have them repaired (danger of contamination of the soil);
- Check and if necessary, replace any worn parts (see chap. 9 "ROUTINE MAINTENANCE");

**WARNING!!**

Check that the access lanes of the places where the machinery is kept comply with the dimensional requirements (height, length and width) indicated in Chap. 4 "TECHNICAL SPECIFICATIONS".

**NOTE!!**

If the equipment stops during the work, refer to Chap. 16 "TROUBLESHOOTING TABLE".

**8 STOPS****ATTENTION DANGER OF SHEARING OF LIMBS!!**

**ONLY QUALIFIED OPERATORS AND THAT HAVE READ AND UNDERSTOOD THE SAFETY REQUIREMENTS (PAR. 2.3) MAY PERFORM THE OPERATIONS DESCRIBED BELOW.**

Moreover, they must check that there are no exposed persons, animals or objects in the hazardous area.

The equipment must be stopped in the following ways:

- Temporary stop;
- Day end stop;
- Long downtime period;
- Emergency stop.

Here following describes how to behave in each case.



### 8.1 TEMPORARY STOP

To momentarily stop the WGM Mower, simply deactivate the rotation of the tractor's PTO by pressing the appropriate button on the tractor's control panel.

If the operator needs to climb down off tractor, they must:

- Disengage the power take-off;
- Engage the hand brake;
- Switch the engine off;
- Remove the ignition key and keep possession of it;
- Climb down off the tractor.

### 8.2 END-OF-DAY STOP

- Disengage power take-off;
- Raise the side and rear mowers;
- Engage the hand brake;
- Switch the engine off;
- Remove the ignition key and keep possession of it;
- Climb down off the tractor;
- Lock the side and rear mowers together using the safety pins with relative cotter pins located on the telescopic arms (see par. 5.8 "ROAD TRANSPORT");
- Climb onto the tractor and release the hand brake;
- Start the tractor;
- Bring the WGM Mower into the warehouse, ensuring when handling that there are no persons, animals or objects exposed to danger;



### 8.3 LONG DOWNTIME PERIODS

When the machine is parked for long periods of time, you must:

- Position the WGM Mower;
- Engage the tractor parking brake;
- Stop the engine of the tractor;
- Remove the ignition key from the control panel and store it;
- Climb down from the drive position;
- Disconnect the Cardan Shaft and the hydraulic utilities;
- Bring the parking foot to a vertical position, adjusting the height of the telescopic body so that the tractor drawbar can be extended (see Par. 5.5 "CONNECTING THE WGM MOWER TO THE TRACTOR");
- Remove the locking pin of the tractor joint with that of the WGM Mower drawbar;
- Make sure that the locking pins with the relative cotter pins are inserted correctly in the housings located on the telescopic arms of the side and rear mowers (see par. 5.8 "ROAD TRANSPORT");
- Get back on the tractor;
- Start the tractor and move away carefully;
- Reposition the pin in the hole of the WGM mower drawbar;
- Clean the WGM Mower (see Chap. 11 "Cleaning");
- Lubricate all unpainted parts of the WGM Mower with a rust preventative product;

The land on which the WGM Mower is parked must be flat and within a protected area in order to prevent unauthorised personnel from approaching it.



### **WARNING!!**

**Check that the access lanes of the places where the machinery is kept comply with the dimensional requirements (height, length and width) indicated in Chap. 4 "TECHNICAL SPECIFICATIONS".**

### 8.4 EMERGENCY STOP

To perform the emergency stop of the WGM Mower simply:

- Stop rotation of the tractor PTO via the relevant control in the tractor control panel;
- Engage the hand brake;
- Switch the engine off, remove the ignition key and keep possession of it;

- Determine the cause that generated the emergency stop. If necessary, consult section 16 “TROUBLESHOOTING TABLE”.

Decide:

- if it is necessary to place the equipment in a zero energy state;
- if to call for technical assistance;
- if the equipment can be repaired

After remedying the cause that prompted the emergency stop then restart the equipment.

## 9. ROUTINE MAINTENANCE

### ATTENTION GENERIC DANGER!!

**Only qualified operators and that have read and understood the safety requirements (par. 2.3) may perform the operations described below. Moreover, they must check that there are no exposed persons, animals or objects in the hazardous area.**

The operator must know and scrupulously follow the indications and must have put the machine out of service.

The periodic controls and the maintenance operations described in this chapter must be performed in the times and ways established and are the operator's responsibility.

Failure to comply with the Standards and maintenance times compromises the good functioning of the machine and its duration and as a consequence the validity of the warranty.

For any other maintenance work, consult Chap. 16 “TROUBLESHOOTING TABLES” or contact the manufacturer or the authorised service centres.

Given the complexity of the equipment, repairs, modifications, special maintenance other than those listed below should NOT take place without consulting the manufacturer or its service centre. Depending on the circumstances, these will provide authorisation and all necessary instructions, or alternatively they will recommend an intervention by one of their own technicians.

These precautions are due to the fact that, incorrect or untimely operations can lead to anomalous operating conditions, damage to the equipment and risks for staff.

### WARNING GENERIC DANGER!!

**Before performing maintenance, read this entire section to be prepared for all possible events.**

### WARNING DANGER OF TIPPING OVER!!

**Make sure that the equipment (tractor and WGM Mower) is stable before performing any maintenance (the limit of maximum tilt of the land should be 3°).**

Before carrying out any maintenance operation, the operator must bring the WGM Mower to zero energy status (see par. 2.4).

The maintenance technician and any aids must have PPD available (Personal Protection Equipment) and wear it as required.

Do not carry out repairs for which the procedure is not well known. Always follow the instructions. If they are missing, contact the supplier or expert personnel.

Do not use lifting points other than those prescribed.

Make sure that the lifting device chosen is suitable to perform the operations in accordance with the safety regulations.

Do not hold the tractor engine running in closed areas without a suitable ventilation system to dispose of harmful exhaust gases that are concentrated in the air.

Avoid prolonged or repeated skin contact with lubricants because they could create skin disorders or other syndromes.

Do not swallow fuel/lubricants/fluids. In the event of accidental contact with eyes, wash them well with water.

Do not weld in closed or inadequately ventilated areas.

Do not weld on coated surfaces, to prevent the development of toxic vapours.



Remove paint with suitable products and then wash the surfaces and let them dry.



**SICMA INFORMS THAT ANY CHANGES OR ALTERATION TO THE WGM MOWER, OR ANY OPERATION PERFORMED AND NOT STRICTLY REPORTED IN THIS MANUAL, ESPECIALLY THE NON-COMPLIANCE WITH SAFETY INSTRUCTIONS, NOT ONLY VOID THE WARRANTY, BUT ALSO SICMA FROM ANY RESPONSIBILITY FOR DAMAGE TO PROPERTY AND PERSONS.**

## 9.1 CHECKING AND REPLACING THE OIL IN THE GEARBOX UNIT

### ATTENTION BURN HAZARD!!

Wait for the gear unit box to cool down before touching it.

### ATTENTION DANGER OF PRESSURISED OIL!!

The operator must be careful with regard to oil leaks caused by faults and, where appropriate, arrange for immediate repair; the same must also be careful not to spill oil on the ground during topping-up or oil change operations.

Checking of the oil level in the multiplier gearbox and in the central transmission box must be performed through the inspection hole (1) on the side of the unit. If the oil is not visible through the inspection hole then it is necessary to top up the oil from the Filling/Drainage cap (2).

If it is necessary, top up with the following steps:

- Using a suitable wrench, unscrew the oil filling/drainage cap (2);
- Top up with 80W90 oil using a funnel until the level of the oil is visible from the filling/drainage cap(2);
- Reinsert the Filling/Drainage cap(2) and tighten it according to the indications in the "TIGHTENING TORQUE" table, Chap.15.

If necessary, top up the central transmission body as follows:

- Using a suitable wrench, unscrew the "Drainage" cap located under the transmission box (4). Once the oil has been drained, screw on the drainage cap as indicated in the "TIGHTENING TORQUES" table in Chap.15;
- Using a suitable wrench, unscrew the filling/drainage cap (3);
- Top up with 80W90 oil using a funnel until the level of the oil is visible from the filling/drainage cap(3);
- Reinsert the Filling/Drainage cap(3) and tighten it according to the indications in the "TIGHTENING TORQUE" table, Chap.15.

The oil change of the multiplier gearbox must be performed:

- The first time after the first 50 working hours;
- Then, every 500 working hours.

Recover the used oil and dispose of it properly in appropriate collection centres because, according to the current laws, it should not be released into the environment because it is classified as hazardous waste. It is therefore necessary to contact the "Consorzio Obbligatorio Oli Usati" ([www.coou.it](http://www.coou.it); toll free line 800-863048).

For the other countries, refer to the relative anti-pollution regulations in force.

## 9.2 BLADE CHECK AND REPLACEMENT

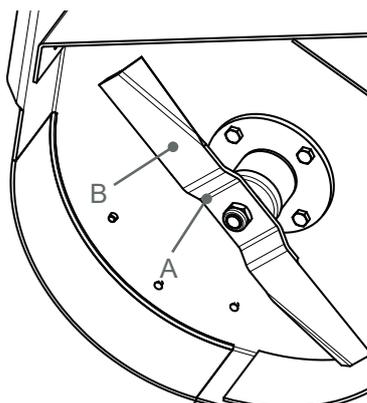
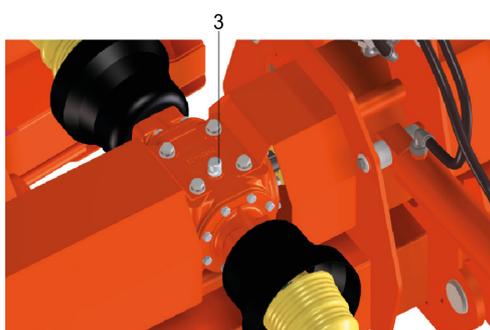
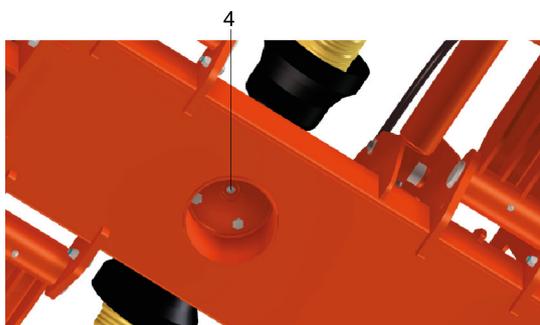
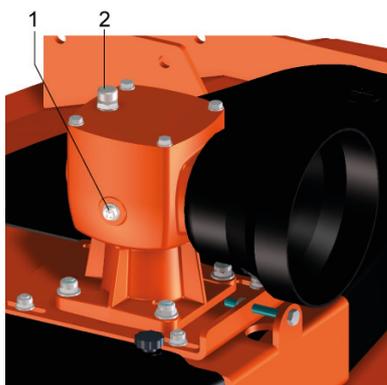
To obtain perfect operation of the machine it is necessary to frequently check that the mower blades are in a good condition, sharp and perfectly fixed by the tightening bolts. Proceed as follows to replace the blades:

- Place the mower on solid supports;
- Unscrew nuts "A" while keeping the blades "B" still;
- Remove the blades "B";
- Replace the old blades with a new set;
- Reassemble the new blades in their original position;
- Tighten the self-locking nuts "A" thoroughly keeping the blades "B" stationary.

### WARNING!

When even a single blade is worn or damaged, replace the entire set of blades.

Failure to replace all blades will cause hazardous imbalances.





### NOTE!!

Whenever the blades are disassembled from their supports, the self-locking securing nuts must be replaced with new equivalents. Replace the blades and their clamping nuts with original spare parts by contacting your nearest dealer. Not mounting the original blades may result in abnormal vibrations of the machine.



### WARNING!

Sicma disclaims all liability from harm that may arise from non-compliance with the requirements described above.

### 9.3 REPLACING THE TRANSMISSION BELTS

Frequently check the state of wear of the belts (every 30 working hours) and replace them all even if one or both are deteriorated.

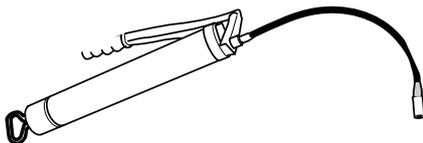
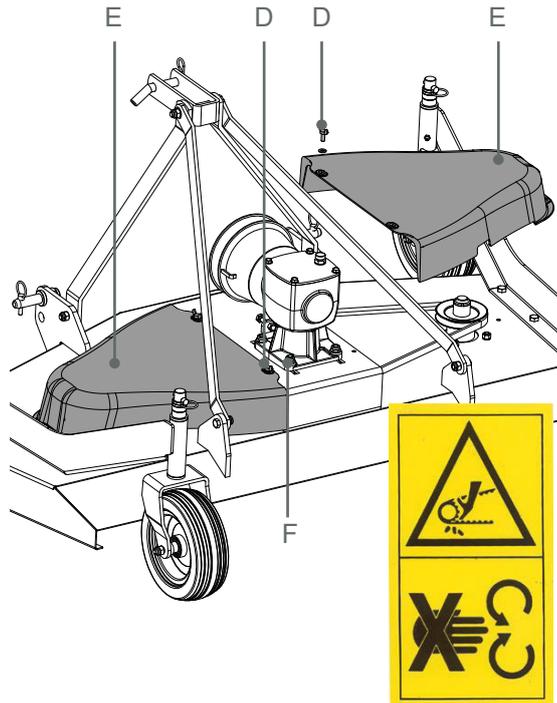
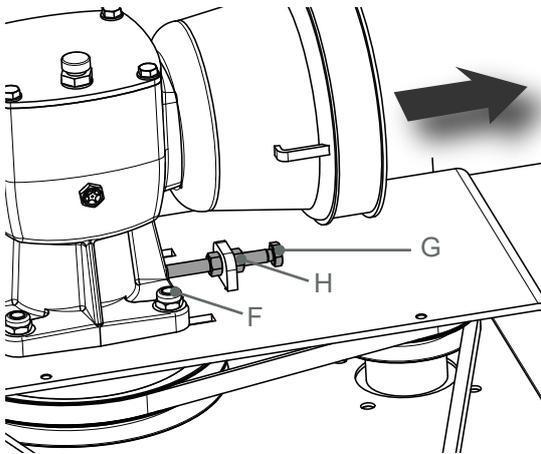


### DANGER INJURY TO HANDS!

Wear protective gloves.

To replace the drive belts, proceed as follows:

- Loosen the 6 screws "D" to remove the two plastic protection casings "E" of the belts;
- Loosen the screws "F" of the multiplier gearbox in order to allow movement along the adjustment slot;
- Loosen the lock nut "H" while holding the tension screw "G";
- Loosen the tension of the belts by completely loosening the screw "G";
- Extract the belts and replace them with a new set;
- Re-position the new belts in the exact original configuration;
- tension the belts as described in sec. 6.4 "ADJUSTING THE BELT TENSION";
- Refit the protective casings.



### 10 GREASINGS

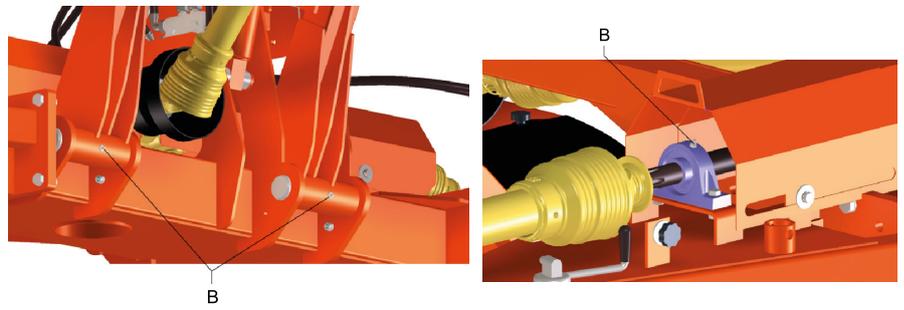
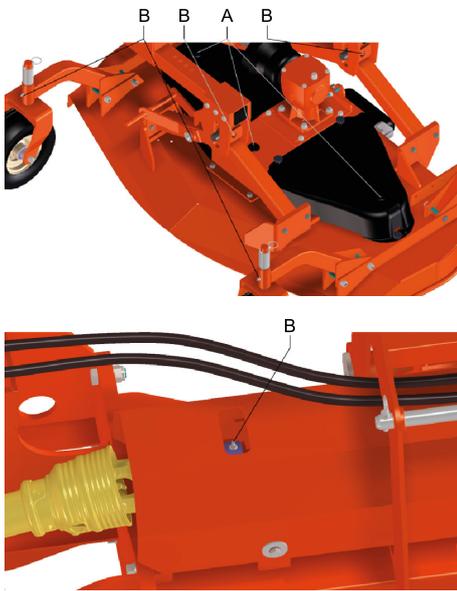
Greasing is performed using a manual greasing pump (as example in the figure) using **Litium Grease EP-2** after having cleaned the greasing nipples thoroughly.

### 10.1 WGM MOWER SUPPORTS GREASING

(Every 20 working hours)

To grease supports proceed as follows:

- Inject the specific grease into the grease nipple "A" located on the upper surface of the belts protection casing;



- Inject the specific grease into the grease nipple "B" located on the moving parts of the WGM Mower as shown in the figure;

To obtain perfect operation of the machine it is necessary to check frequently (at least every 50 hours of work) that the blades of the WGM Mower are all in a good condition and perfectly fixed by the tightening bolts as indicated in the "TIGHTENING TORQUES" table Chap.15; if they are worn or damaged, they should be replaced with new and original spare parts.



**NOTE!!**

Do not mount the original tools may result in abnormal vibrations of the machine.

Always use original spare parts supplied by Sicma in order to guarantee a tight tolerance on the weight of the tools.

**10.2 CARDAN SHAFT**

For both lubrication and maintenance operations on the Cardan Shaft supplied with the WGM Mower, proceed as described in the respective use and maintenance manual supplied with it by the manufacturer.

**11 CLEANING**

**ATTENTION GENERIC DANGER!!**

Only qualified operators and which have read and understood the "SAFETY PRESCRIPTIONS" (Chap. 2.3) can carry out the operations described below. They must also ensure that there are no people, animals and objects exposed within the danger zone.

**WARNING GENERIC DANGER!!**

During cleaning use cut-proof gloves and accident-prevention shoes. The operator must clean the WGM Mower on flat, firm ground, bringing the WGM Mower to the zero energy state.

If compressed air is being used to clean the machine, appropriate goggles are required.

Every time you stop working it is advisable to wash the exterior of the equipment with a jet of water (pressure washer), especially in the following parts:

- Chassis surface;
- Adjustable wheels;
- Side and Rear Mowers
- Blades;
- Cutting compartment;

After washing, protect the unpainted metal parts with a brush of lubricating oil

**12 STORAGE AND WINTERING**

If the machine is prepared for long downtime periods, it is necessary to store it in a place protected from weathering so as to prevent damage. Before storage it is recommended to thoroughly clean the entire machine and properly lubricate all mechanical parts to protect them from rust.

Before putting the machine in long downtime periods, it is advisable to proceed as follows:

- Free the cutting compartment and the tools from any residual cuttings;
- Thoroughly clean the machine;



- Perform an overall visual check on the machine to identify any structural damage, deep abrasions on the painted surfaces, the presence, integrity and readability of the original safety pictograms, and that they are fitted in their original positions;
- Grease all mechanical parts including fastening pins;
- If possible, place the machine in a covered area, on a flat and consistent surface;

### 13 SCRAPPING

In the event of scrapping, the machine must be disposed of in suitable waste disposal sites, in compliance with the Law in force.

In Italy, prior to the destruction, it is necessary to separate the parts of plastic or rubber from metal ones. Parts made up of only plastic, aluminium and steel materials can be recycled, if collected by dedicated centres.

Recover any waste oils and dispose of them at relevant collection centres. Used oil must be properly recovered and should not be released into the environment because, according to current legislation, it is classified as hazardous waste and as such must be delivered to designated collection centres. For the collection of waste oil it is required to consult the "Waste Oil Mandatory Consortium" ([www.coou.it](http://www.coou.it), Green no. 800-863048);

For the other countries, refer to the relative anti-pollution regulations in force.

### 14 QUICK CONSULTATION TABLES

The following sections state the information necessary to speed up the interventions described up to this point in table form, both regarding maintenance and troubleshooting.

### 15 TIGHTENING TORQUES TABLE

Check the tightness of nuts and bolts daily. If necessary, replace them by repositioning them (screws, washers, nuts) respecting the disassembly sequence.

TIGHTENING TORQUES				
Threading	Bolt class			
	8.8		10.9	
	Nm	Lb-ft	Nm	Lb-ft
M6	11	8.5	17	12
M8	28	20	40	30
M10	55	40	80	60
M12	95	70	140	105
M14	150	110	225	165
M16	240	175	305	225
M18	330	250	475	350





## 16 TROUBLE-SHOOTING TABLE

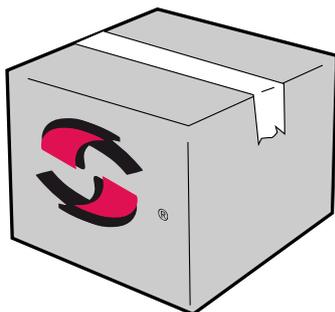
### NOTE!!

Before applying the suggested remedies, make another attempt to see if the problem persists. In this case, start from the most elementary solutions. If the fault persists despite having taken the necessary measures, contact the service centre.

FAULT	CAUSE	REMEDY
<b>Oil leakage from the box multiplier</b>	<ul style="list-style-type: none"> <li>• Too much oil in the box</li> <li>• Breather plug with faulty valve</li> <li>• Top-up/drain/level caps loose</li> <li>• Damaged gaskets</li> </ul>	<ul style="list-style-type: none"> <li>• Restore the proper oil level</li> <li>• Replace the breathing cap</li> <li>• Tighten the top-up/drain/level caps</li> <li>• Replace the gaskets</li> </ul>
<b>Non-uniform cutting</b>	<ul style="list-style-type: none"> <li>• Worn or damaged blades</li> <li>• Machine not well adjusted (mowing bodies)</li> <li>• Machine clogged</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the blades</li> <li>• Carry out adjustments</li> <li>• Free the Blades and decrease the forward speed</li> <li>• Clean cutting chamber</li> </ul>
<b>Overheating of the conical couple unit</b>	<ul style="list-style-type: none"> <li>• Insufficient oil</li> <li>• Finished oil</li> <li>• Hard to cut the material</li> </ul>	<ul style="list-style-type: none"> <li>• Restore the oil level</li> <li>• Reduce advancement speed</li> </ul>
<b>Premature tool wear</b>	<ul style="list-style-type: none"> <li>• Stony ground</li> <li>• Tools cutting height too low</li> </ul>	<ul style="list-style-type: none"> <li>• Patrol the ground previously</li> <li>• Adjust the cutting height</li> </ul>
<b>Machine noise or vibrations</b>	<ul style="list-style-type: none"> <li>• Worn bearings</li> <li>• Tools damaged, worn or missing</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the bearings</li> <li>• Replace the tools</li> </ul>

## 17 MAINTENANCE TABLE

	INTERVAL IN HOURS	DESCRIPTION OF THE INTERVENTION
<b>A</b>	AFTER THE FIRST 50 WORKING HOURS	<ul style="list-style-type: none"> <li>• Check the correct tension of the drive belts</li> <li>• Check the correct tightness of the nuts and bolts</li> <li>• Replace the oil in the multiplier gearbox</li> </ul>
<b>B</b>	EVERY 20 WORKING HOURS	<ul style="list-style-type: none"> <li>• Grease the pulley supports</li> <li>• Grease the PTO shaft crossing bearings transmission</li> </ul>
<b>C</b>	EVERY 50 WORKING HOURS	<ul style="list-style-type: none"> <li>• Check the correct tension of the drive belts</li> <li>• Check the correct tightness of the nuts and bolts</li> <li>• Check the state of wear of the blades</li> <li>• Check the oil level in the multiplier gearbox and eventually fill to restore the level</li> <li>• Grease the rear wheel supports (if any)</li> <li>• Grease the pulley supports</li> </ul>
<b>D</b>	EVERY 500 WORKING HOURS	<ul style="list-style-type: none"> <li>• Check the correct tightness of the nuts and bolts</li> <li>• Replace the oil in the multiplier gearbox</li> </ul>
<b>E</b>	EVERY 1000 WORKING HOURS	<ul style="list-style-type: none"> <li>• Replace the drive belts</li> </ul>



## 18 SPARE PARTS

Repairs and replacements must be performed using original spare parts, which must be requested from the Dealer. Remember that the spare parts order must be properly filled in and complete with the following information:

- Machine Type;
- Serial number;
- Code and description of the spare part;
- Request can be found in the exploded view of the spare parts;
- Requested quantity.

Given the particular stress to which the equipment is subjected and for safety reasons, if pieces are replaced, only use original spare parts.



## 19 WARRANTY

In order to make use of the contractual warranty supplied by the Manufacturer, the operator must scrupulously comply with the precautions indicated in the Use and Maintenance Manual and in particular:

- Respect the limits for use set forth by the Manufacturer;
- Must not make any changes or modifications to the machine without the written approval of the Manufacturer;
- Must always perform all the maintenance required;
- Must only use original spare parts;
- Make sure that the staff assigned to using the vehicle meet the necessary skills and training requirements.

The warranty shall not apply if the above conditions are not complied with, even if only partially.

The use of spare parts not approved by the manufacturer will void any warranty and exempts the Manufacturer or the Retailer from liability for malfunctions or accidents.

The removal or the modification of guards and protections relieves the Manufacturer from all liability due to damage/injury caused to objects and/or persons.









**Sicma S.p.A**

Contrada Cerreto, 39

66010 Miglianico (Chieti) – Italy

Tel. +39 0871 958 41 – [www.sicma.it](http://www.sicma.it)