

MOWER

FA /1200-1500-1800-2100 USER AND MAINTENANCE MANUAL



TRANSLATED INSTRUCTIONS 903183002~01 12/2020



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Thank you for purchasing an

FA Mower

The FA mower is built by SICMA SpA, which has been producing agricultural machinery for over 40 years.

The FA mower meets all the safety and quality requirements that are required for this type of equipment.

Remember that to get the best performance and to maximize the productivity features, you must thoroughly know the instructions and information contained in this manual and follow them.

1. INTRODUCTION

1.1 SOME NOTES REGARDING THE USER MANUAL

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

For this reason:

- store and keep it in good condition;
- keep it near the equipment (document holder CANISTER);
- deliver it to any new operator, user, maintainer, handler or owner (in case of change of ownership).

In this way, the mower can be used in the best way possible, for all the purposes for which it was designed and in the safest conditions.

The manual must not be damaged, it must remain intact and complete with all its pages; it must be kept protected from moisture and heat. When consulting, avoid accidentally greasing it or reducing its legibility.

In the event of loss or damage to this document, request a copy from the Manufacturer or the nearest dealer.

To facilitate consultation, the manual has been divided into parts so that each stage is well described to make it easier to understand.

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

It should be remembered that the drawings and the text in this document are the property of SICMA, which reserves all rights and strictly prohibits disclosure to third parties without prior written approval.

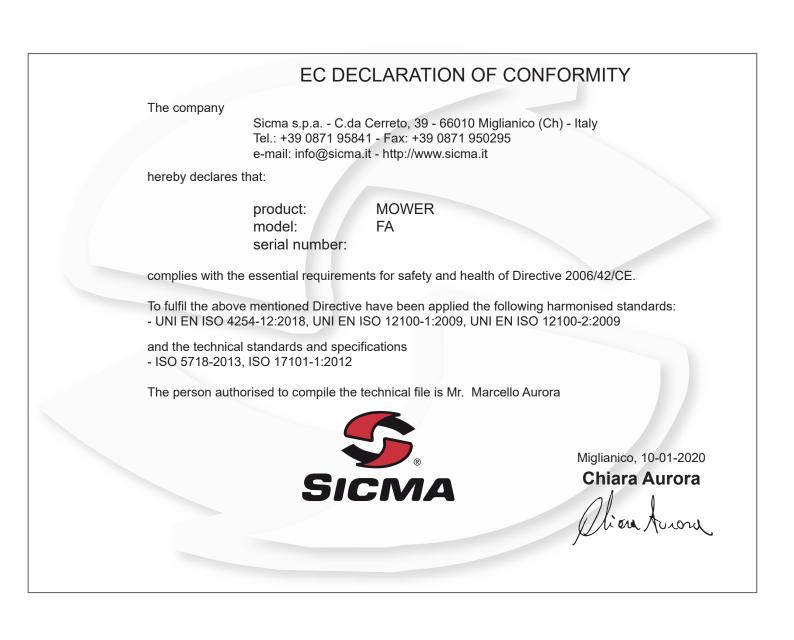
Any reproduction, even partial, of the text and illustrations contained in this manual is therefore strictly prohibited.





1.2 DECLARATION OF CONFORMITY

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







1.3 GENERAL DELIVERY NOTES

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

The machine therefore does not present any danger to the operator if used according to the instructions of this manual, provided that the safety devices are kept effective working order.

SICMA POINTS OUT THAT ANY CHANGES TO OR TAMPERING WITH THE MOWER OR ANY OPERATION PERFORMED THAT IS NOT IN ACCORDANCE WITH THAT OUTLINED IN THIS MANUAL, IN PARTICULAR FAILURE TO COMPLY WITH THE SAFETY REQUIREMENTS, AS WELL AS INVALIDATING THE WARRANTY, EXEMPTS SICMA FROM ANY LIABILITY FOR DAMAGE TO PROPERTY OR INJURY TO PERSONS.

The information, descriptions and illustrations contained in this document reflect the state of the art at the time of machine marketing.

The Manufacturer reserves the right to make any changes to the machines at any time due to 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.

The mower, its parts and accessories, are normally shipped by lorry or container. Upon receipt of the machine, check that the delivery corresponds with the order specifications (see delivery note or packing-list) and that there is no damage to the mower or to its accessories.

Spare parts or ancillary equipment are sometimes placed 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 mower is delivered by SICMA with the following equipment:

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

4		EC D	ECLARATION OF	CONFORMITY
*	The company			
		Tel.: +39 0871 9	da Cerreto, 39 - 66010 Migli 5841 - Fax: +39 0871 95029 na.it - http://www.sicma.it	
	hereby declares	s that:		
		product: model: serial number:	MOWER FA	
	complies with the	ne essential requiren	nents for safety and health o	of Directive 2006/42/CE.
			ive have been applied the fo N ISO 12100-1:2009, UNI E	llowing harmonised standards: N ISO 12100-2:2009
		al standards and sp 3, ISO 17101-1:201		
	The person aut	horised to compile th	ne technical file is Mr. Marce	ello Aurora
				Miglianico, 10-01-2020
		-	CMA	Chiara Aurora
		SI	СМА	
				Pliere turora
				period



MOWER

3-blade rear mower

MOWER

Serial No #4134216002# MADE IN ITALY

FA

2020

NSLATED I

Type:

Model:

Year:

SICMA

Mass(Kg): 340

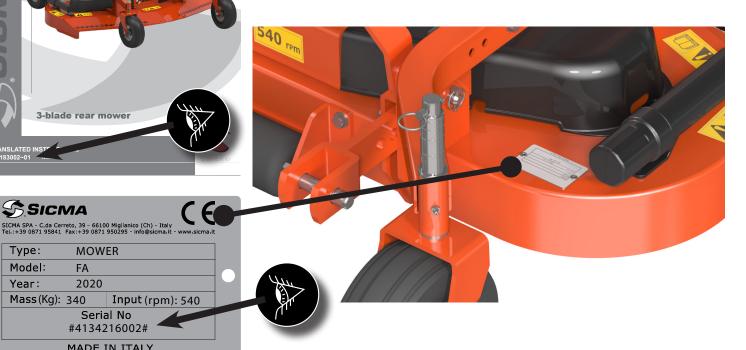


1.4 MOWER IDENTIFICATION AND MANUAL CODE

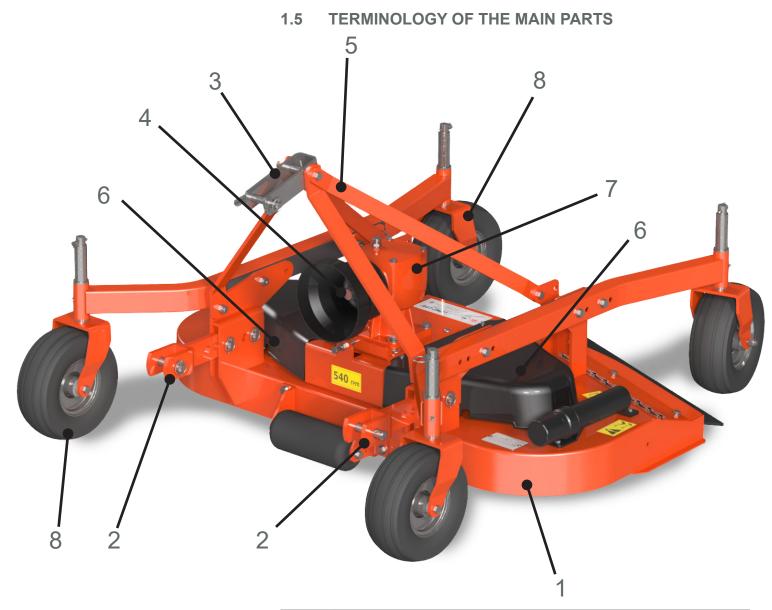
For further support or information regarding the mower, contact SICMA or its support centres, providing the model and serial number on the CE nameplate of the machine.

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 on the CE marking.







No.	Description
1	Body
2	Lower 3-point hitch
3	Upper 3-point hitch
4	Power Take-Off PTO
5	Upper 3rd point mast
6	Belt protective casing
7	Multiplier gearbox
8	Pivoting wheels







2. SAFETY

2.1 LIST OF RESIDUAL RISKS

Although SICMA has done everything possible to ensure that the equipment is in line with the state of the art in the field of safety and in compliance with all the directives, laws and regulations in force, certain residual risks persist:

- RISK OF CUTTING DUE TO CONTACT WITH TOOLS (blade);
- RISK OF ENTANGLEMENT/DRAGGING (blades and PTO drive shaft);
- OVERTURNING/CRUSHING HAZARD (mower movement);
- BURN HAZARD (multiplier gearbox).

Therefore, whoever uses the machine or maintains it, must be a trained person aware that, despite using all the protections provided for by current regulations, there is still the possibility of the persistence of risks for the physical safety of operators and for the integrity of the equipment itself.

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 describes in detail all the indications in section 1.7.4 (User instructions) of Annex 1 of the Machinery Directive, and a specific request is made to comply with the requirements to avoid the occurrence of accidents which could cause personal harm.

2.2 **DEFINITIONS**

In this user and maintenance manual, a number of technical definitions are included whose meanings are illustrated below.

HAZARD:

A potential source of physical injury or damage to health.

HAZARDOUS AREA:

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 one 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 in which the mower must be placed before performing any cleaning, lubrication and maintenance operation.

The mower is in the ZERO ENERGY STATE when it is positioned on flat land and disconnected from the PTO drive shaft.



2.3 CONVENTIONAL SYMBOLS



meanings are illustrated below.

RECOMMENDATION: It refers to a working method implemented in the field, knowing well that each operator will then develop their own way of working.

This operation and maintenance manual includes a number of symbols whose



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 people or damage to the machine.

CAUTION HAZARD:

Informs the personnel concerned that the operation described, if not carried out in compliance with safety regulations, may seriously endanger their physical safety.

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 MAINTENANCE TECHNICIAN:

Qualified technician able to intervene on the mechanical parts to perform the necessary adjustments, maintenance and repairs.

NON-ROUTINE INTERVENTIONS:

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 (P.P.E.):

The presence of one or more symbols next to it requires the use of the corresponding personal protective equipment by the operator, since the risk of injury is implicit.

2.4 SAFETY PRESCRIPTIONS

Although SICMA has applied all the safety measures required by the regulations to the equipment, it should be remembered that, if used incorrectly, it can cause danger to users and exposed persons. It is therefore recommended to carefully read and observe the safety instructions listed below.

Before using the equipment, any operator MUST have read and understood the safety instructions and the entire user manual that must always be kept at hand, so that they can consult it if necessary. In case of loss or damage, request a replacement copy from SICMA.

Under no circumstances climb, sit or lean on the equipment whether it is operating or in a Zero Energy State.

Make sure that during the operation of the machine no person or animal stands in the range of the machine. Never operate the machine near people standing or passing within the operating range of the machine.



2.5 OPERATOR REQUIREMENTS

The machine must be used by only one operator driving the tractor, instructed and appropriately trained.

The designated operator, in addition to having read and assimilated the instructions contained in this manual, must be sufficiently prepared on correct use of the machine and must be in possession of a driving licence. We remind the operator to contact the retailer or the manufacturer if they are unsure about the use of the equipment and the interpretation of this manual.

Do not use the machine if you are tired, ill or under the effects of alcohol, medicines or drugs.

2.6 CLOTHING AND PPE

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

The correct clothing to wear during use and maintenance of the mower is as follows:

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

Furthermore:

- Since the machine can generate dust during use, if the tractor is not equipped with a closed cab, the operator must wear a dust mask (especially on dry and dusty ground)
- When the tractor is not equipped with a sound-proof cab, the operator should wear hearing protection for noise control (especially on stony ground).
- It is recommended that the operator using the equipment not wear clothing that may cause entanglement such as scarves, belts, wide sleeves, etc.

2.7 SAFETY DEVICES

- Before using the machine, make sure that all the safety devices are correctly placed in place and in good condition and in the event of faults or damage to the guards, replace them immediately.
- Do not tamper with or bypass the safety devices for any reason. After every cleaning and maintenance, 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 series of important indications: their observance is essential to preserve the safety of the various operators.

2.8 POSITION AND MEANING OF THE PICTOGRAMS

Periodically check the good condition of the safety pictograms and, if they are damaged, they must be replaced with new and original ones to be requested from the manufacturer indicating the corresponding codes.

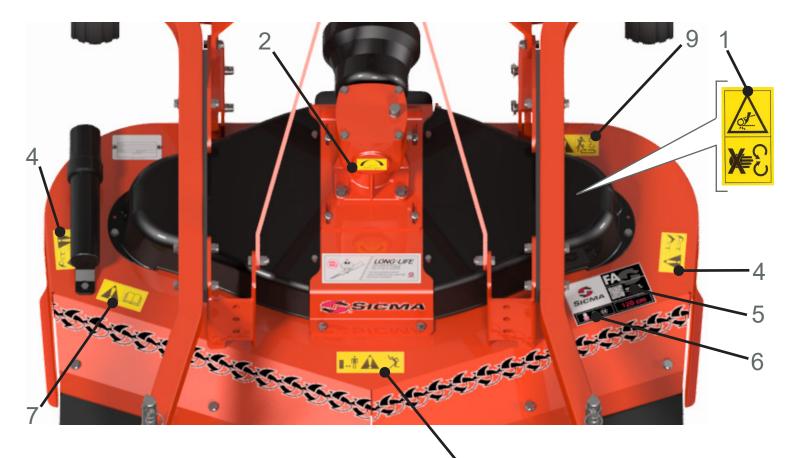
Completely eliminate damaged ones and affix the new ones in the position indicated in this use and maintenance manual.















MEANING OF PICTOGRAMS

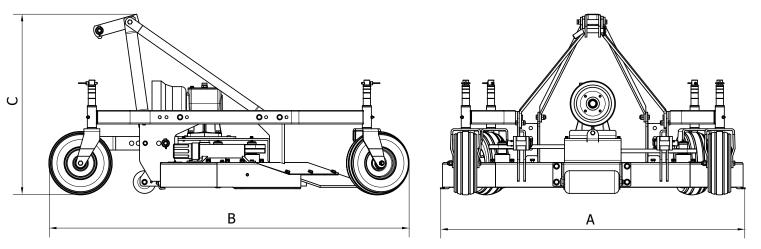
REF.	STICKER	DESCRIPTION	CODE
1	<u>S</u> €	CAUTION Keep hands away from moving transmission parts.	5782708
2	orario clockwise 540 rpm	CAUTION Clockwise PTO rotation at 540 rpm	4781064
3		CAUTION Remain at a safe distance protected from projected debris.	5782707
4		HAZARD Keep a safe distance from rotating tools.	5782706
5		MACHINE INFO	5782746
6	🚆 💁 🤃 🚺 180 cm	WIDTH INFO	000-120 000-150 000-180
7		CAUTION Read all instructions and safety rules before using the machine.	5782704
8	540 rpm	INPUT 540 RPM PTO 540 rpm.	5782702
9		HAZARD Do not get on, do not sit on the machine.	5782705



3. TECHNICAL SPECIFICATIONS

The equipment, towed by the tractor by means of a three-point hitch of the first category, acts on the turf to be mowed owing to the high rotation speed of three sharp blades driven by belts. These are mechanically driven by the tractor power take-off by means of a PTO drive shaft.

The following table displays the salient technical data of FA mowers



TECHNICAL SPECIFICATIONS

MOD	Pov	wer	PTO	Operatio	nal width	Cutting	ı height	Blades	Blade speed	Coupling type	We	ight
FA	Нр	kW	rpm	mm	Inch	mm	Inch	No.	rpm	Cat.	kg	Lbs
1200	15 - 60	11 - 44	540	1200	47	20 - 110	0.8 - 4.5	3	280		178	392
1500	15 - 60	11 - 44	540	1500	59	20 - 110	0.8 - 4.5	3	280		196	432
1800	15 - 60	11 - 44	540	1800	70	20 - 110	0.8 - 4.5	3	280		214	472
2100	15 - 60	11 - 44	540	2100	82	20 - 110	0.8 - 4.5	3	330	I	330	728

4. MACHINE USE

INTENDED USE

The FA mower has been designed to be used exclusively in the agricultural sector, for mowing grass.



The mower is usually used during the day; if night-time use or in conditions of reduced visibility are required, use the tractor's lighting system or an auxiliary if necessary.

The operator must:

- Carefully check the machine before each use.
- Check the tightness of all the screws daily and tighten them if necessary (see tightening table sec. 11.1).
- Check that the metal structures are in a good condition and, if necessary, repair them.
- Make sure that the snap hooks of the PTO shaft guard retaining chains are coupled to the appropriate slot so that the plastic guard is secure and does not rotate with the PTO drive shaft itself.
- Before leaving the tractor, and before any maintenance, engage the parking brake, stop the engine, remove the ignition key from the dashboard and keep it safe.



When the machine is running, the blades are in rapid rotation: keep a safe distance to prevent accidental contact with them or with any objects projected from the rear of the mower.

The equipment is not suitable for use in sectors other than agriculture.



USE ENVIRONMENT

The mower works in open fields, on non-friable, non excessively stony soils, with a maximum slope of 3° , in environments with temperatures between 0° and 50° C.

4.1 REASONABLY PREDICTABLE INCORRECT USE

IMPROPER USE

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

During use, the operator must not:

- Use a PTO drive shaft with inadequate transmission capacity;
- Combine the mower with inadequate power and weight vehicles;
- Work in reverse gear;
- Assemble the mower without having locked the shock absorbing tie-rods of the three-point hitch of the tractor lift;
- Lift the equipment when the power take-off is rotating;
- Carry out makeshift repairs in order to perform the work;
- Use the machine to carry and/or lift persons, animals or objects;
- Work on land with slopes greater than 3°.

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

WARNING!

It is absolutely forbidden to tamper with the equipment for any reason. Any arbitrary modification made to this machine relieves SICMA from any liability for damage or injury caused to operators to third parties or property.

INJURY HAZARD!

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.

WARNING!

Using non-original spare parts relieves SICMA from any liability for damage or injury caused to operators, third parties or property.

4.2 UNLOADING AND UNPACKING THE MOWER



PLEASE NOTE!

Before proceeding with unloading of the equipment, read the following part in its entirety in order to be prepared in time for any eventuality.



INJURY HAZARD!

Unloading, unpacking and handling of the equipment must only be carried out by qualified personnel who have read and understood the safety regulations, directed by a manager who coordinates these activities.

The mower is delivered either unpackaged, protected by shrink wrapping, or packed in wooden crates. Releasing the mower from any devices that secure it to the means of transport.



CRUSHING HAZARD!

Handling operations should be carried out cautiously and scrupulously, making sure that there are no persons, animals or objects exposed in the unloading area.

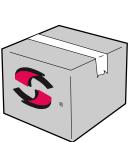
MOWER WITH NO WOODEN CRATE

Check the state of all the securing mechanisms (snap hooks, shackles, etc.) and the ropes/chains used for lifting; each must be able to lift the weight of the machine (see weight in sec. 3 "Technical specifications").

Once harnessing has been carried out, lift the equipment a few centimetres to check its correct balance.

Raise the mower from the walking surface of the transportation vehicle to a maximum height of 30 cm, unless in the presence of obstacles, in order to prevent dangerous tilting.







Place the equipment near the tractor on the ground and free from chains or ropes. Once on the ground, unpack the equipment.



CUTTING HAZARD!

In the event that the mower arrives wrapped in a protective film, remove the latter with the aid of a cutter and take care not to injure yourself or damage the mower itself.



CONTAMINATION HAZARD!

Do not discard the packaging in the environment but dispose of it as differentiated plastic waste.

MOWER IN WOODEN CRATE.

If the mower is contained in a wooden crate, to unload, use the lorry's hoist or a forklift with adequate capacity (see weight in sec. 3 "Technical specifications").

Insert the forks of the forklift into the slots in the crate and lift it above the walking surface of the transportation vehicle to a maximum height of 30 cm, unless in the presence of obstacles.

Place the crate on the ground near the tractor and dismantle the wooden packaging.

CONTAMINATION HAZARD!

Do not dispose of the packaging in the environment but contact specialist collection agencies or keep it for other transportation.

4.3 START-UP

INJURY HAZARD!

Only qualified operators who have 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 operator and any assistants must have PPE (Personal Protective Equipment) available and use them as required.

The mower can only be moved and used if coupled to a tractor; to be able to connect it, carefully follow the instructions listed below in the order indicated:

- MOWER ASSEMBLY (if necessary);
- COUPLING OF THE MOWER TO THE TRACTOR (3-point hitch);
- CONNECTING THE PTO DRIVE SHAFT (power take-off).





4.4 ASSEMBLY

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For transportation convenience and packaging, the mower may delivered separately from the wheel support arms, the 3-point hitch mast, the PTO driveline shield, the support roller and the rear straps.

It is therefore necessary to arrange for their assembly in the following manner:

• Fit the wheels "A" to the 2 wheel support arms "B";

Mount the 3-point hitch unit "G" onto the frame "C";

С

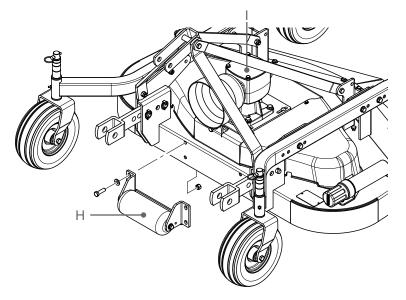
Mount the two wheel support arms "B" complete with wheels onto the frame "C";

۰B

- Mount the lower fittings "D" onto the frame "C";
- Apply the cap "E" to the multiplier gearbox;
- Mount the rear straps "F" onto the frame "C";

G

- Mount the support roller "H" onto the frame "C";
- Fill the multiplier gearbox "I" with oil as described in sec. 8.1.

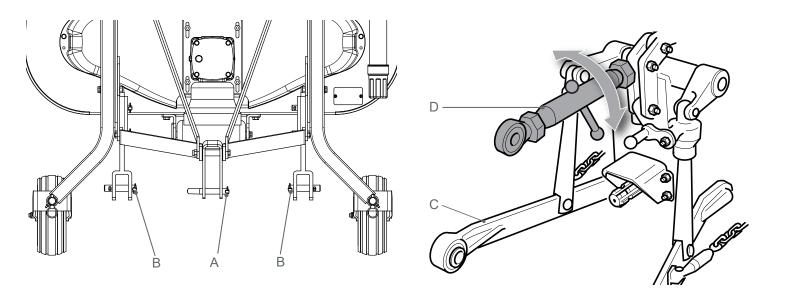


4.5 ATTACHING THE MOWER TO THE TRACTOR

The machine must be connected to tractors of adequate weight and power, with 3-point hitch of 1st standard category.

To connect the mower to the tractor using the 3-point hitch:

- On a flat surface, carefully approach the tractor in reverse to the front of the mower;
- Remove the 3 spring plugs from their pins and remove the pins from their housings;
- Position the joints of the lifting arms "C" of the tractor in correspondence with the holes of the lower coupling arms and replace the pins "B";
- Position the adjustment rod hole "D" of the tractor to the pin hole "A" and reinsert the related pin;
- Replace all the spring safety pins into the holes of the 3 pins "A" and "B";
 - Adjust the upper tie-rod "D" if necessary: the 4 wheels must be fully resting on the ground.





Manual tractor





4.6 PTO DRIVE SHAFT COUPLING

Before mounting the PTO drive shaft, the operator must read the use and maintenance manual of the PTO drive shaft and the tractor; therefore, ensure that the number of revolutions and the direction of rotation of the tractor PTO correspond to those of the mower. Otherwise, contact support.

WARNING:

Use PTO shafts with adequate power transmission capacity.

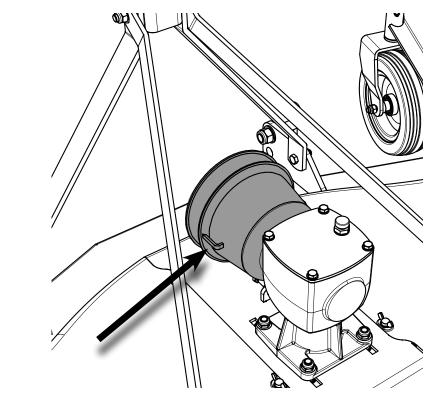


Check that the minimum and maximum length of the PTO drive shaft are those required by the mower-tractor coupling.

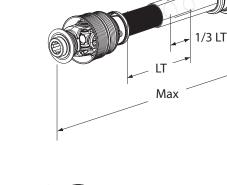
Remember that when at maximum extension, the pipes must overlap at least 1/3 of the length of the internal pipe. Moreover, in the maximum closure position of the pipes, the minimum clearance allowed of the plastic protections must be at least 2 cm. in order to prevent damage to the protections and to the gear transmission.

If this is not the case it is necessary to shorten it appropriately, cutting it as necessary; consult the use and maintenance manual of the PTO shaft or contact the authorised dealer who will perform this.

- Position the shaft in the right direction, making reference to the figure of the tractor embossed on the external protection pipe.
- Insert the first hub of the PTO shaft on the mower's PTO shaft while keeping the fork safety pin or collar fully pressed; release the pin or collar and move the PTO drive shaft back until it engages with an audible "click" in its housing.
- Then repeat the operation with the opposite hub of the shaft, inserting it into the tractor PTO.
- Then hook the snap hook of the retaining chains of the PTO drive shaft protection into the seat of the driveline shield on the mower PTO as shown.
- Do the same on the PTO of the tractor.

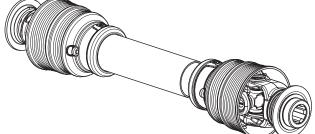


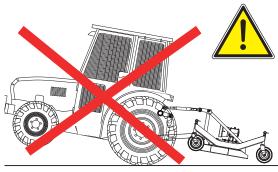




Min

Min 20mm





4.7 CHECK THE STABILITY OF THE TRACTOR-MOWER COMBINATION

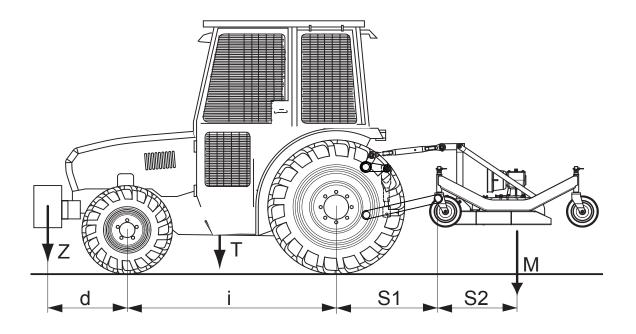
INSTABILITY AND OVERTURNING HAZARD

The weight of the mower changes the stability of the tractor-shredder unit, influencing the ability of steering and braking. As such proceed at a moderate speed. In particular, it must be borne in mind that the front axle must always be loaded with at least 20% of the weight of the tractor-mower combination.

Check the lifting capability and tractor stability using the following formula and, if necessary, apply ballasts on the front.

M x (S1+S2) ≤ 0.2 T x i+Z x (d+i) M ≤ 0.3T

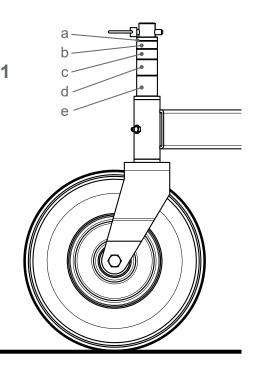
wheelbase i. = distance between the front axis and the ballasts d = distance between centre of the rear axle and centre of the lower **S1** = connection points distance between the centre of lower coupling points and centre of **S2** = gravity of the mower weight of the tractor + 75Kg (operator) т = Ζ mass of the ballast Μ mower mass =



4.8 ROAD TRANSPORT

Before transport on public roads it is essential to consult the Highway Code, and in particular art. 61 and 104. For other countries please refer to the applicable code.





5. ADJUSTMENTS

5.1 WORK HEIGHT ADJUSTMENT

The cutting height is determined by the vertical position of the pivoting wheels "A".

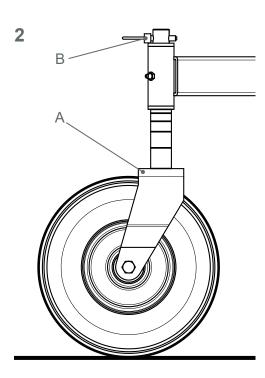
Lifting the wheels, the blades approach the ground and, vice versa, lowering them, the tools will move away from the ground.

Adjusting the height of the pivoting wheels:

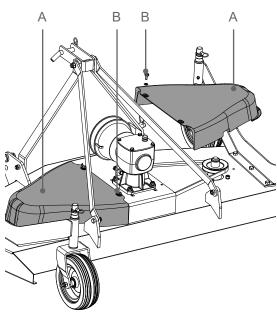
- Disengage the power take-off and disconnect the PTO drive shaft;
- Lift the mower and place it on supports to ensure stability;
- Keep wheel "A" forcefully high, and its entire support "A";
- Remove the snap-pin "B";
- Slide the wheel, complete with fork "A", and the spacers that regulate its height out;
- Properly reposition the spacers at the bottom of the wheel support pin in order to properly adjust its height (see diagram below);
- Insert the wheel support pin into its seat and place the remaining spacers (if any), at the top of the pin;
- Reinsert the snap-pin "B";
- Repeat the procedure on the remaining rotating wheels ensure that the spacers are positioned exactly like those of the first wheel.

Cutting height (mm)						
Pos. Height						
1 Minimum 20						
2	2 Maximum 110					

Height of swivel wheels spacers (mm)						
Ref.	Height					
а	6					
b	12.5					
С	16					
d	25					
е	32					







5.2 ADJUSTING BELT TENSION

The rotating blades are driven in rotation by a double belt drive with manually adjustable fixed tensioner on the multiplier gearbox unit.

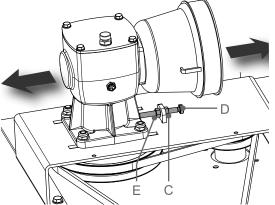
Proper tensioning of the belts ensures that the machine operates normally reducing wear on the rotating parts.

Belt tensioning must be checked every 30 working hours.

The straps are correctly tensioned when, applying a force of approx. 15kg in the their centre, they yield approx. 10mm.

If necessary, to adjust the tension of the drive belts, proceed as follows:

- Unscrew the bolts "B" to remove the two protective guards "A" of the belts;
- Loosen the locking nut "C" keeping the adjustment screw "D" stationary;
- Loosen the locknut "E";
- Screw the tensioning screw "D" if the belts are slow, unscrew it if they are too tight;
- Tighten the locknuts "C" and "E" keeping the tensioning screw "D" stationary;
- Replace and secure the two previously removed protective casings.



10_{mm} 15кд ©



usare esclusivamente						
use only user exclusivement						
olio idraulico hydraulic oil huile hydraulique	OSO 15-32-46-68					
riduttore gear oil huile pour engranages	Blasia 150					
lubrificazione a grasso grease lubrication	Grease MU EP 2					

In the event of wear of even a single belt, it is strongly recommended to replace both, proceeding as described in sec. 8.3.

5.3 PREVENTIVE MAINTENANCE

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

- Carry out a visual check of the machine to verify that it is free of damage and, if necessary, repair it accordingly;
- Check that the mechanical parts are in good condition and are not rusted;
- Check the state of wear of the blades and replace them if necessary;
- Carefully grease all mobile parts;
- Check that there are no oil leaks from the multiplier gearbox;
- Check that all the protections are correctly positioned;
- Check the tightness of the bolts and, if necessary, tighten them according to the tightening torque table in sec. 11.1;
- Check the oil level of the multiplier gearbox unit and top up if necessary (see sec. 8.1).

To lubricate use the following lubricants:

Oil:AGIP-ENI BLASIA 150Grease:AGIP GREASE MU EP 2

5.4 PROCESSING

Once all the checks and adjustments have been made, go to the work area with the mower connected to the tractor, by means of the three-point hitch, but with the PTO drive shaft disconnected.

During transit, keep the mower raised so that it is not subject to damage by striking the ground (at least 20 cm).

WARNING!



Before mowing the turf, it is essential to check the ground and remove all objects that may be hidden in the vegetation, which may damage the mower or pose a hazard to the operator such as logs, medium-sized and large stones, metal scrap, etc.





WARNING!

Before using the mower, ensure that there are no persons or animals within the range of the machine.

Make sure that all guards are in place and efficient.

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

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

USE

At the location of operation, the operator can then connect the PTO drive shaft (sec. 4.6) with parking brake on, engine off and starter keys removed and kept on their person.

With the PTO drive shaft connected to the mower, the operator can:

- Start the tractor's engine;
- Release the hand brake;
- Proceed with tractor advancement at a maximum speed of 6 km/h;
- Activate the power take-off and lower the mower; reduce the speed by about 2 km/h in the presence of particularly high or dense grass.

Keep the engine of the tractor at a speed that ensures that the mower has the power necessary for a proper mowing of the turf.

Drive a short distance with the mower operational and check the quality of the work; if it is not satisfactory, repeat and review the machine adjustment procedures.



LIMB INJURY HAZARD!

Always keep a safe distance from the cutting chamber when the mower is in operation and never allow hands or feet near the blades.



HAZARD OF EJECTED ITEMS!

When working on the ground, the mower may eject material from the rear: ensure that animals and persons are at least 50 metres from the machine in operation.

In the operations in reverse direction, disengage the PTO and slightly lift the mower off the ground to avoid damage to the structure.

When the work is complete, the operator must:

- Engage the parking brake;
- Stop the engine;
- Remove the ignition key and keep it on themselves;
- Disconnect the PTO drive shaft from the power take-off of the tractor and mower and keep it protected from atmospheric agents;
- Start the tractor to transport the mower to the depot taking care that there are no exposed persons, animals or objects.

Once the depot has been reached, the operator must:

- Engage the parking brake;
- Stop the engine;

NOTF!

- Remove the ignition key and keep it on themselves;
- Provide adequate cleaning of the mower (see sec. 6);
- check and if necessary replace worn parts (see sec. 8 "Routine maintenance");
- Check that there are no oil leaks and if necessary repair;



If during the work the equipment stops, refer to section 11.2 "Troubleshooting".



5.5 STOPS

The equipment must be stopped in the following ways:

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

TEMPORARY STOP

To stop the mower temporarily, simply deactivate rotation of the tractor PTO by using the control on the tractor command panel.

If it is necessary to leave the tractor, the operator must always apply the parking brake, stop the engine, remove the starter key and keep it on their person.

DAY END STOP

- Deactivate the power take-off;
- Engage the parking brake;
- Stop the engine;
- Remove the ignition key and keep it on themselves;
- Disconnect the PTO drive shaft from the tractor's PTO;
- Clean the mower (see sec. 6 "Cleaning")
- Check that there are no oil leaks, repair if required (soil pollution hazard);
- Check and if necessary replace worn parts (see sec. 8 "Routine maintenance")

LONG DOWNTIME PERIODS

- Engage the parking brake;
- Stop the engine;
- Remove the ignition key and keep it on themselves;
- Disconnect the PTO drive shaft and store it carefully;
- Disconnect the mower from the tractor by using the pins of the 3-point hitch;
- Start the tractor and move away carefully;
- Clean the mower (see sec. 6 "Cleaning");
- Lubricate all unpainted mower parts with an anti-rust substance



WARNING:

It is required that the ground on which the mower rests is level and inside a protected area, in order to prevent unauthorised personnel from approaching.

EMERGENCY STOP

Emergency stop, which consists of the rapid deactivation of the tractor power take-off, is usually necessary in the event of a failure.

Therefore, after activating the parking brake, stopping the engine and removing the key from the control panel, identify the cause that led to the emergency stop by consulting sec. 11.2 "Troubleshooting".

Then decide:

- Whether it is necessary to place the equipment in a zero energy state;
- Whether to call for technical assistance;
- Whether it is possible to repair the equipment.

Once the cause that led to the emergency stop has been eliminated, restart the equipment and continue mowing.

6. CLEANING



LIMB INJURY HAZARD!

Only qualified operators who have read and understood the safety requirements (sec. 2) can perform the operations described below. They must also ensure that there are no people, animals and objects exposed within the danger zone.



CUTTING HAZARD!



During cleaning use cut-proof gloves and accident-prevention shoes. If compressed air is used to clean the machine, use protective eyewear.

The operator must clean the mower on a ground not saggy and flat and bring the machine to the zero energy state.

At the completion of mowing, it is advisable to wash the equipment with a jet of water (pressure washer), especially the surface of the frame, the blades, the 3-point hitch and the blade compartment.

When washing is complete, protect unpainted metal parts with brush strokes of lubricating oil to prevent corrosion.

7. STORAGE AND WINTERING

If the machine is immobilised for lengthy periods, it must be stored in a place protected from atmospheric agents and protected to avoid possible 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:

- Remove any mowing residue from the blades;
- Thoroughly clean the machine;
- Carry out a general visual check of the machine to detect any structural damage, the presence, integrity and legibility of the safety pictograms and that they are located in their original positions;
- Lubricate all mechanical parts including locking pins;
- If possible, take the machine to a covered area, on a flat and consistent surface.

8. ROUTINE MAINTENANCE



INJURY HAZARD!

Only qualified operators who have read and understood the safety requirements (sec. 2) may perform the operations described below. Moreover, they must check that there are no exposed persons, animals or objects in the hazardous area.



WARNING!

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 Standards and maintenance times jeopardises the good functioning of the machine and its duration and as a consequence the validity of the warranty.



Given the complexity of the equipment, repairs, modifications, special maintenance other than those listed below must NOT be carried out without first consulting the manufacturer or its support 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 necessary because incorrect or inappropriate operations may cause operating faults, putting personnel in charge at risk.



INJURY AND DAMAGE TO EQUIPMENT HAZARD!

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



OVERTURNING HAZARD!



Before carrying out any maintenance, ensure the effective stability of the equipment by placing the mower in the zero energy state (see sec. 2.2) on consistent and level ground.

The maintenance technician and any assistances must have the PPE (Personal Protective Equipment) available (Personal Protective 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 and repeated skin contact with lubricants as they could cause skin disorders or other types of syndromes.

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

Do not weld in enclosed or inadequately ventilated environments.

WARNING!

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:

SICMA POINTS OUT THAT ANY CHANGES TO OR TAMPERING WITH THE MOWER OR ANY OPERATION PERFORMED THAT IS NOT IN ACCORDANCE WITH WHAT IS PRESCRIBED IN THIS MANUAL, IN PARTICULAR FAILURE TO COMPLY WITH THE SAFETY REQUIREMENTS, AS WELL AS INVALIDATING THE WARRANTY, **EXEMPTS SICMA FROM ANY LIABILITY FOR DAMAGE TO PROPERTY OR INJURY TO PERSONS.**

8.1 CHECKING AND CHANGING THE OIL IN THE MULTIPLIER GEARBOX



BURN HAZARD!

Do not handle the multiplier gearbox unit after using the mower: wait for it to cool.

CONTAMINATION HAZARD!

Make sure that there are no oil leaks caused by possible faults and, if necessary, arrange for immediate repair. Do not spill oil on the ground when topping up or replacing it.

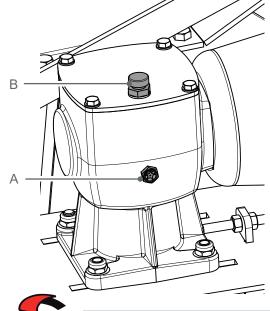
Use AGIP-ENI BLASIA 150.

OIL LEVEL CHECK.

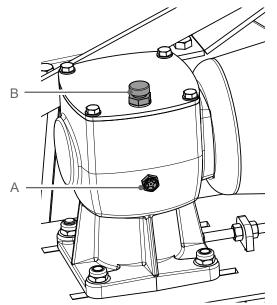
With the mower positioned on flat ground, check that the oil in the multiplier gearbox is clearly visible from the window of cap "A". If a top-up is required:

- Unscrew the oil filler/vent cap "A";
- Add AGIP-ENI BLASIA 150 type oil with the aid of a funnel until it is visible from the window of cap "A";
 - Replace and tighten the oil cap "B";









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OIL CHANGE.

The gearbox oil must be changed:

- The first time after the first 50 working hours
- Every 500 hours of work

To change the oil:

- Unscrew oil cap "B" with the mower level;
- Drain the spent oil with an oil pump from the hole of cap "B";
- Dispose of used oil in special containers for spent oils;
- Fill the box with AGIP-ENI BLASIA 150 type oil using a funnel until the oil level is restored, which must be visible from the window of cap "A";
- Replace and tighten the oil cap "B".



WARNING!

Correctly recover the used oils and dispose of them at the appropriate collection centres, as, according to current regulations, it must not be dispersed into the environment because it is classified as hazardous waste. It is therefore necessary to contact the "Consorzio Obbligatorio Oli Usati" (www.coou.it; green line **800-863048**). For the other countries, refer to the relative anti-pollution regulations in force.

8.2 GREASING

To grease the grease points, use a manual pump, since the grease nipples are HYDRAULIC type "A" UNI 7663.

For greasing, use only AGIP GREASE MU EP 2 grease.

PIVOTING WHEEL SUPPORT GREASING.

Inject grease into the grease nipples "C" (every 50 working hours) located on the front of the pivoting wheel supports.

8.3 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.



INJURY HAZARD TO HANDS! Wear protective gloves.

Proceed as follows to replace the drive belts:

- Loosen the 6 "D" screws to remove the two plastic protection guards "E" on the belts.
- Loosen the locknut "E" while keeping the tensioning screw "G" stationary
- Loosen the belt tension by completely unscrewing screw "D"
- 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. 5.2
- Refit the protective casings

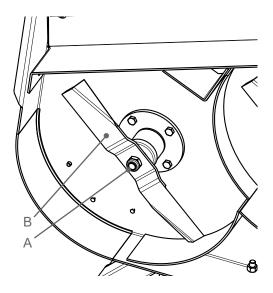
	CODES FOR ORDERING BELTS						
Μ	ower	CODE	Description	Qt			
FA	1200	6722057	B-57 belt	2			
FA	1500	6722068	B-68 belt	2			
FA	1800	6722074	B-74 belt	2			



E

D

D



8.4 CHECK AND REPLACING THE BLADES

To obtain optimal machine operation, frequently check (every 50 working hours) that the mower blades are in good working order, sharp and completely secured by the locking bolts.

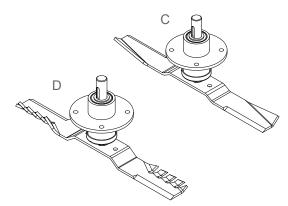


CUTTING AND CRUSHING HAZARD!

Wear cut-resistant gloves and secure the mower on solid supports.

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.



Refer to the table below to identify the correct blade code.

	SPARE BLADES CODES							
REF	Description	Mower	Code	Qt				
		FA1200	5812701	3				
С	Standard blade	FA1500	5812702	3				
		FA1800	5812703	3				
		FA1200	5812712	3				
D	MULCHING blades	FA1500 5812713	5812713	3				
	(optional)	FA1800	5812714	3				

When even a single blade is worn or damaged, replace the entire set of blades. Failure to replace all blades will cause hazardous imbalances.



Whenever the blades are disassembled from their supports, the selflocking securing nuts must be replaced with new equivalents.

Replace blades and their securing elements 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. PTO DRIVE SHAFT

For both lubrication and maintenance of the PTO drive shaft supplied with the mower, proceed as described in the corresponding use and maintenance manual.

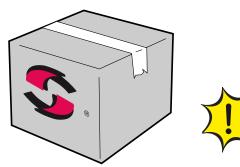
10. SCRAPPING

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 scrapping, plastic or rubber parts must be separated from metal parts. 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 appropriately recovered and must not be dispersed in the environment as, according to current regulations, it is classified as hazardous waste and as such should be taken to the appropriate collection centres. For the collection of used oils it is essential to contact the "Obliged Obligatory Consortium" (www.coou.it, green number 800-863048);

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







11. 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.

11.1 TABLE OF TIGHTENING TORQUES

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

	TIGHTENING TORQUES							
	Bolt class							
Threading	8	.8	1().9				
Theading	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				



11.2 TROUBLESHOOTING TABLE



NOTE

Before applying the suggested remedies, make another attempt to see if the problem persists. In this case, start by attempting the most basic remedies. If, despite the attempts, the fault persists, contact a technical support centre.

FAULT	CAUSE	REMEDY
Oil leakage from the box multiplier	 Too much oil in the box Breather plug with faulty valve Top-up/drain/level caps loose Damaged gaskets 	 Restore the proper oil level Replace the breathing cap Tighten the top-up/drain/level caps Replace the gaskets
Uneven mowing	 Worn or damaged blades Wheels are not properly adjusted Machine clogged 	 Replace the blades Carry out adjustments Decrease tractor advancement speed Clean cutting chamber
Multiplier gearbox overheated	Insufficient oilFinished oilTurf mowing difficult	Restore the oil levelReduce advancement speed
Premature wear of the blades	Stony groundBlades too close to the ground	Patrol the ground previouslyAdjust the cutting height correctly
Machine noise or vibrations	 Unbalanced blades unit Worn bearings Damaged or worn blades 	 Replace the blade support bearings Replace the blades



11.3 MAINTENANCE TABLE

Maintenance can only be performed after the entire mower manual has been read and understood.

For lubrication, use only ENI AGIP products.

OI: AGIP GREASE MU EP 2

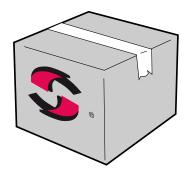
	INTERVAL IN HOURS	DESCRIPTION OF THE INTERVENTION
A	AFTER THE FIRST 50 WORKING HOURS	 check the correct tension of the drive belts check the correct tightness of the nuts and bolts replace the oil in the gear box housing
В	EVERY 50 WORKING HOURS	 check the correct tension of the drive belts check the correct tightness of the nuts and bolts check the state of wear of the blades Check the oil level in the gear box housing and eventually fill to restore the level grease the pivoting wheel supports
С	EVERY 500 WORKING HOURS	replace the oil in the gear box housing
D	EVERY 1000 WORKING HOURS	replace the drive belts

В

В

D





12. SPARE PARTS

Repairs must be carried out solely using original spare parts requested from authorised dealers or through the website www.sicma.it in the "Spare Parts" section. Please note that the purchase request for spare parts must be accompanied by the following indications:

- Machine Type;
- Serial number;
- Code and description of the spare part that can be consulted from the exploded spare parts;
- Requested quantity.

Given the particular stresses to which the equipment is subject and for reasons of safety, in case of replacement of parts, request only original spare parts.

13. 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:

- must comply with the limits for use provided by the Manufacturer;
- do not make changes to the machine without the written approval of the manufacturer;
- always perform all maintenance required;
- only use original spare parts;
- make sure that the personnel assigned to use the vehicle have 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.





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