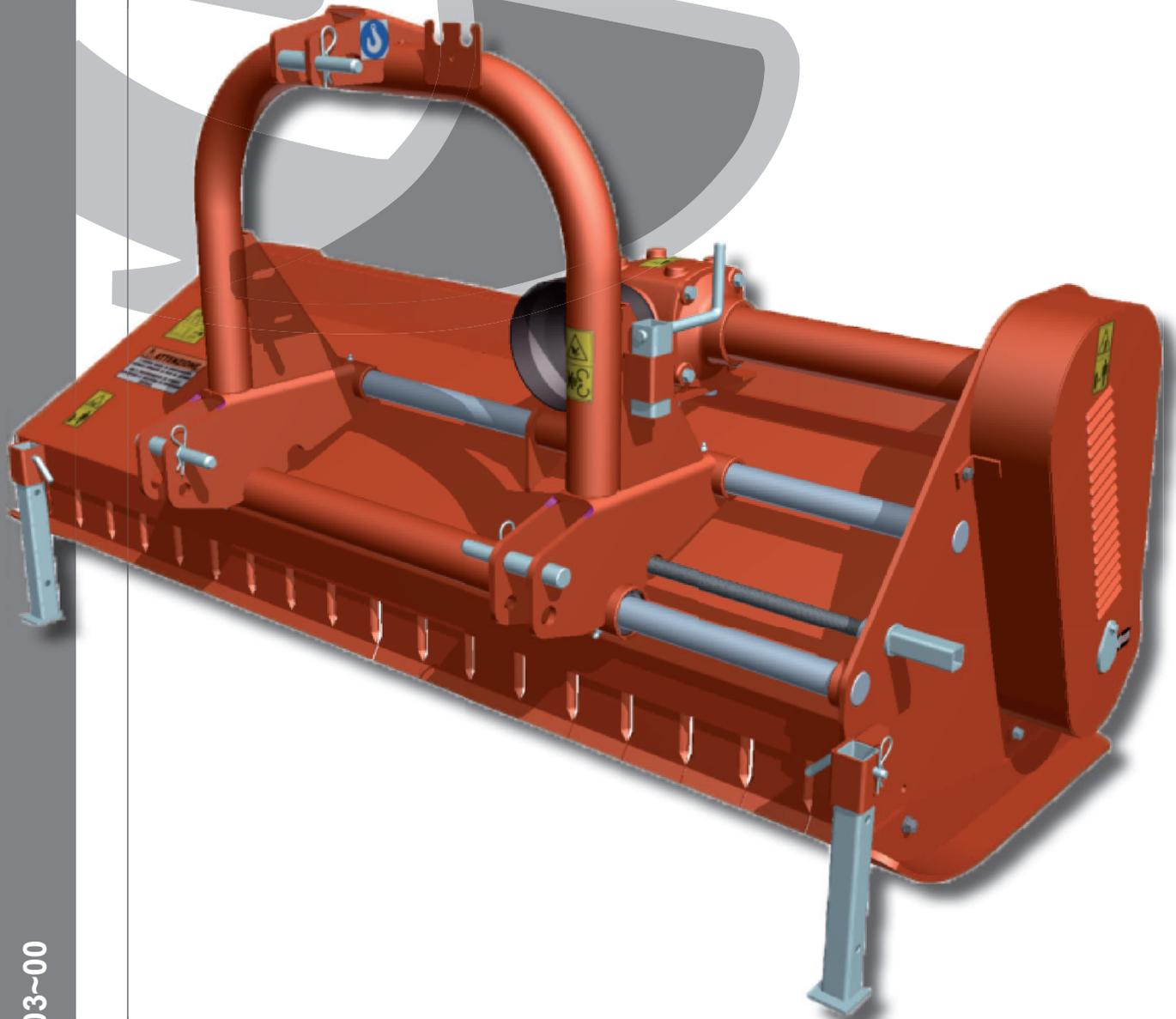


CE



Shredder

TRX 140•160•185•220

USE AND MAINTENANCE MANUAL

TRANSLATION OF ORIGINAL INSTRUCTIONS



MADE IN ITALY

SICMA

® 903632003~00



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Congratulations on your purchase of the

Shredder

The TRX shredder is manufactured by SICMA S.p.A, which has been producing agricultural machines for over 40 years. The TRX shredder has all safety and quality requisites required for this type of equipment. Remember that to obtain the best performance and make the best of the production features, it is necessary to know the instructions and information contained in this manual and follow the same.

1. INTRODUCTION

1.1 SOME NOTES REGARDING THE USER MANUAL

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

For this reason:

- kept in a good state;
- it must be kept near to the equipment;
- pass it to any operator user, maintenance technician, handler or successive owner.

In this way, the shredder can be used in the best way for all functions for which it has been manufactured and in maximum safety.

The manual must not be damaged, it must remain integral (do not rip the sheets), must be kept away from humidity and heat. During consultation it must not be covered in grease or its legibility deteriorated.

If this manual is lost or damaged, ask for a copy from the Manufacturer or nearest Dealer.

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

With these arrangements, SICMA intends to unmistakably call the operator's attention to the dangerous situations that may occur.



1.2 DECLARATION OF CONFORMITY

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

EC DECLARATION OF CONFORMITY

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>

hereby declares that:

product: SHREDDER
model: TRX
serial number:

complies with the essential requirements for safety and health of Directive 2006/42/CE.

To fulfil the above mentioned Directive have been applied the following harmonised standards:
- UNI EN 745:2010, UNI EN ISO 4254-1:2010, UNI EN ISO 12100-1:2009, UNI EN ISO 12100-2:2009

and the technical standards and specifications
- ISO 11684:1995, ISO 13852:1996, UNI 9456:1989.

The person authorised to compile the technical file is Mr. Lorenzo Aurora (amministratore unico)



Miglianico, 10-01-2014

Lorenzo Aurora
AMMINISTRATORE UNICO





1.3 LIST OF RESIDUAL RISKS

Even though SICMA has done everything possible to be in line with state-of-the-art safety and in compliance with all Directives, Laws and Standards available, some residual risks still exist:

- CUT/CRUSHING HAZARD DUE TO CONTACT WITH TOOLS (rotor)
- ENTANGLEMENT/Dragging HAZARD (rotor and Cardan shaft)
- PERICOLO OVERTURNING/CRUSHING HAZARD (shredder)
- BURNS HAZARD (gear transmission box)
- CUT/SHEARING HAZARD

Therefore, anyone using the machine or performing maintenance on the same, must be trained and aware of the fact that dangers exist and in spite the use of protections to reduce them, it is not possible to eliminate them totally. The staff assigned to these operations must always have the use and maintenance manual available for consultation.

The use and maintenance manual states all indications requested from point 1.7.4 (User instructions) of Attachment 1 of the Machinery Directive and specific request is made to comply with the prescriptions, so as not to cause accidents that can injure persons.

1.4 GENERAL DELIVERY NOTES

The shredder has been manufactured in compliance with the 2006/42/CE Directive and has been designed observing the guide lines of the Technical Standards relative to the shredder.

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.

SICMA INFORMS THAT ANY MODIFICATION OR TAMPERING OF THE SHREDDER OR ANY OPERATION PERFORMED IN DISAGREEMENT WITH WHAT WRITTEN IN THIS MANUAL, ESPECIALLY FAILURE TO COMPLY WITH THE SAFETY PROVISIONS, AS WELL AS MAKING THE WARRANTY NULL AND VOID, RELIEVES SICMA FROM ANY LIABILITY FOR DAMAGE TO OBJECTS AND INJURY TO PERSONS.



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

It must be remembered that all technical values refer to the standard shredder (see Chap. 4 “Technical Features”) and the drawings and any other document delivered along with the shredder are the property of SICMA, which reserves all rights and reminds that they cannot be made available to third parties without its written approval.

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

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, at any time, to apply modifications to the machinery for technical or commercial reasons. Such modifications do not oblige the Manufacturer to intervene on machines sold up until that moment, nor to consider this publication inadequate. Any integration that the Manufacturer will consider opportune to supply later on must be preserved together with the manual and be considered an integral part of the same.

The shredder and its parts and/or accessories are normally delivered by lorry or container.

On receipt of the machine, check that:

- the supply corresponds with the order specifications (see transport document or packing-list);
- there is no damage to the shredder or accessories;
- in the event of damage or missing pieces, inform the SICMA or its area representatives, the carrier or its insurance immediately in detail and/ or with photos;
- the spare parts or equipment supplied are sometimes in separate containers.



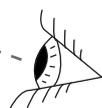
1.5 SHREDDER IDENTIFICATION AND MANUAL CODE

For any after-sales requests or information regarding the shredder, contact SICMA or its after-sales centres always stating the model and the serial number given on the plate.

The identification code of this manual is written on the cover. Write the number in a safe place so that if this manual is lost or damaged, another copy can be requested from SICMA or the nearest dealer by also stating the serial number visible in the marking.



SICMA		CE
SICMA SPA - C.de Carreto, 39 - 66100 Miglianico (Ch) - Italy Tel.: +39 0871 95841 Fax: +39 0871 950295 - Info@sicma.it - www.sicma.it		
Type	Shredder	
Model	TRX 185	
Serial No	00218	
Year	2012	
Mass	536 Kg	
Input	540 rpm	
MADE IN ITALY		



1.6 DECLARED USE

The TR shredder has been designed to be used exclusively in the agricultural sector, for mowing grass, maize stalks, maize and branches up to a diameter of about 8 cm. according to the type of tool used.

The machine is carried by the tractor via 3-point hitch and acts on the material via the rotation of the tool-holder shaft, which turns at high speed activated by the tractor PTO via cardan connection.

The machine is not suitable to be used in other sectors than in agriculture.

USE ENVIRONMENT

The shredder works:

- in open fields, on non friable land, not excessively stony with a maximum gradient of 3°;
- in environments with a temperature from 0° ÷ 50° C.

IMPROPER USE

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

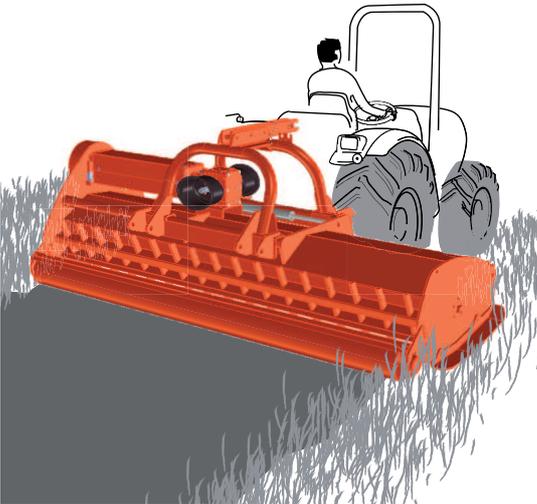
Sometimes the operator uses the shredder incorrectly, below find some examples the must NOT BE PERFORMED.

The operator must not:

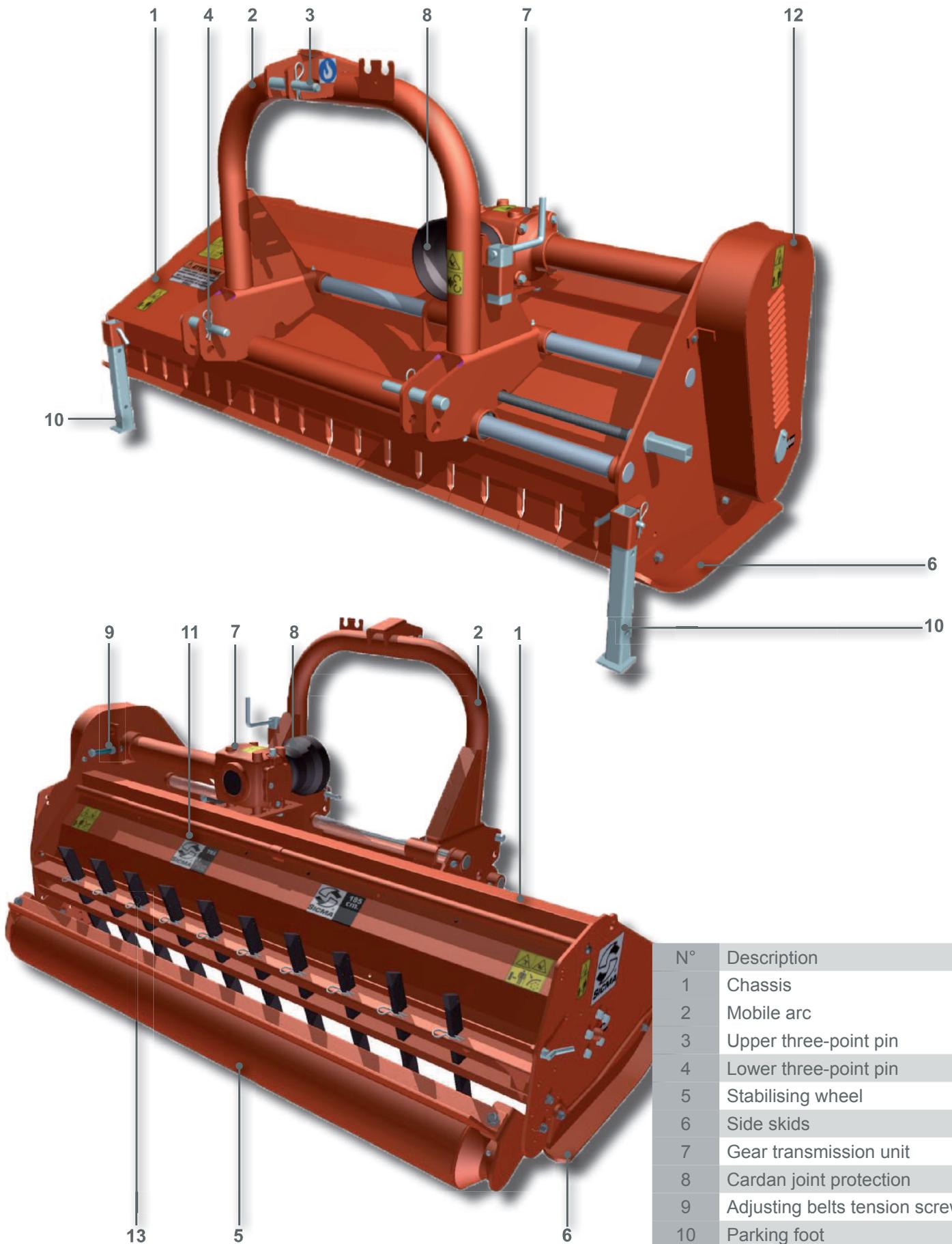
- connect the shredder to a Cardan shaft with high or lower power transmission capacity;
- work in reverse gear;
- couple the shredder to vehicles of unsuitable power or weight;
- assemble the shredder without securing the rebound tie rods of the three-point hitch of the tractor's elevator;
- lift the equipment when the PTO is rotating;
- make curves or reverse with the shredder lowered.

Remember that the shredder is developed only for the purpose of the declared use.

Any other use is to be considered improper.

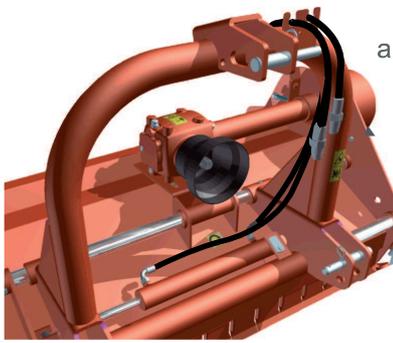


1.7 SHREDDER COMPOSITION



N°	Description
1	Chassis
2	Mobile arc
3	Upper three-point pin
4	Lower three-point pin
5	Stabilising wheel
6	Side skids
7	Gear transmission unit
8	Cardan joint protection
9	Adjusting belts tension screw
10	Parking foot
11	Rear bonnet
12	Belt drive guard
13	Rear crampons





a



b

1.8 OPTIONAL

Below find a list of the different optionals which can be requested according to personal requirements:

a) HYDRAULIC JACK FOR MOBILE ARC

The hydraulic jack replaces the hand screw in the displacement of the shredder chassis.

b) SWIVELLING REAR WHEELS

They are used instead of the rear roll and allow to keep the the outlet of the shredded material completely free, thus preventing annoying clogging, which would lead to obstruction of the expelling area.

2. SAFETY

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

2.1 DEFINITIONS

DANGER

A potential source of physical injury or damage to health.

DANGEROUS 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 dangerous area is the area around the machine (attached to the tractor) up to a distance of 1 metre.

EXPOSED PERSON

Any person that is totally or partially inside a dangerous area.

CRITICAL AREA

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

ZERO ENERGY STATE

The state into which the shredder must be taken before any cleaning, lubrication and maintenance operation is performed. The shredder is at the ZERO ENERGY STATE when it is positioned on fl at land, disconnected from the Cardan Shaft and resting on its safety feet.

2.2 CONVENTIONAL SYMBOLS



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

Informs the staff assigned of information whose content is of relevant consideration and importance.



WARNING

Informs the staff assigned of information whose content can cause slight injury to persons or damage to the machine if not respected.



MACHINE OPERATOR OR DRIVER

Identifies qualified staff, i.e. with specific skills, as the operations are completely manual, therefore refer to the preparation and sensitivity of the machine driver to obtain the best qualitative results. It is therefore prohibited for the operator to perform operations that are the responsibility of the main-

tenance technician.



MECHANICAL MAINTENANCE STAFF

Qualified technician able to intervene on mechanical parts in order to make all regulations, maintenance interventions and repairs necessary.



EXTRAORDINARY INTERVENTIONS

Any maintenance interventions highlighted by the symbol at the side are to be requested from the manufacturer or authorised workshops.



PERSONAL PROTECTIONS (PPE)

The presence of one of the symbols at the side imposes the use of the corresponding PPE by the operator, as the risk of accident is implicit.



RECOMMENDATION

It refers to a work mode experimented on field, knowing well that every operator will develop his own way of operating.



2.3 SAFETY PRESCRIPTIONS

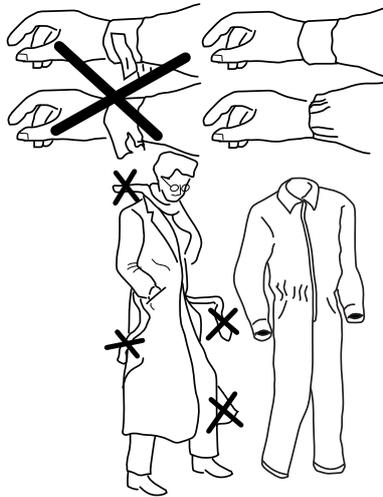
Even though SICMA has applied all possible safety devices on the equipment, it must be remembered that it can be dangerous for health if not used correctly. It is therefore advised to read and comply with the safety prescriptions listed below.

Before using the equipment, all operators **MUST** have read and understood the safety prescriptions and the entire user manual.

- The machine is not suitable to be used in other sectors than in agriculture.
- Any use different to that specified is to be considered improper.
- The manual must always be on hand, in a way to consult it when necessary.
- If it should be lost or damaged, request a replacement copy from SICMA.
- Do not climb onto, sit on or rest on the equipment for any reason, whether it is on or in the zero energy state.

2.4 OPERATOR REQUISITES

- The machine must only be used by one operator driving the tractor.
- The machine must be used exclusively by authorised, instructed and trained operators. The operator, besides having read and understood the instructions contained in this manual, must also be sufficiently prepared on the proper use of the machine and must have a driving license. The operator must contact the dealer or the manufacturer if in doubt regarding use of the machine or interpretation of this manual.
- The operator must make sure that no person or animal stops within the radius of action of the same during machine functioning. Never activate the machine near to persons standing or transiting within the radius of action of the machine.
- Do not use the machine if you are tired, ill or under the effect of alcohol, medicines or drugs.
- The correct operator position is in the tractor driving seat. From this position he must also control that there are no persons exposed in the - 15 - TR shredder dangerous area in the work phase.



2.5 CLOTHING AND PPE

- Staff must use the safety supplies and PPE during use and maintenance of the vehicle.

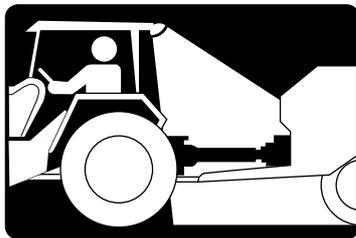
The correct clothing to be worn during maintenance operations and use of the shredder is:

- gloves
- accident-prevention shoes or boots with steel toe-cap glasses
- overall with elastic on the wrists, ankles and around the waist.

Moreover:

- given that the machine can generate emissions of dust during working, if the tractor does not have a closed cab, the operator must wear an anti-dust mask (especially on dry and dusty land)
- if the tractor does not have a sound-proof cab, the operator must wear hearing protections (especially on stony land)
- the operator assigned to the machine must not wear items of clothing that can cause entanglement (scarves, belts, wide sleeves, etc.).

2.6 MACHINE USE



- 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.
- Any arbitrary modification made on this machine lifts Sicma from any responsibility for damage or injuries that could result to operators, third parties or to objects.
- Check the machine thoroughly before each start-up.
- Check the tightness of all bolts daily (consult torque table par. 13.1), tighten them if necessary and also check the metal structures and repair, if required.
- Check that the retainer chains snap hooks of the Cardan shaft protection are hooked in the appropriate slot, in a way that the plastic protection remains at a standstill and does not turn with the Cardan shaft itself.
- Before getting out of the tractor and before any maintenance operation, activate the parking brake, turn the engine off, remove the ignition key from the dashboard and keep it.
- The tools rotate rapidly when the machine is functioning: stay at a safe distance to prevent accidental contact with moving tools or with thrown objects.

2.7 SAFETY DEVICES

- Before using the machine, make sure that all safety devices are properly in place and in good conditions. If there are failures or damage to the guards, replace them immediately.
- Do not tamper with or bypass safety devices for any reason. After every cleaning and maintenance intervention, all of the safety devices must be restored and/or all protection guards closed. Check also that tools, cloths or various materials do not remain in the drive compartments.
- The signs applied to the machine supply a series of important indications: compliance with the same is for your safety.
- Make sure the safety pictograms are in good conditions. If the pictograms has deteriorated, they must be replaced with other original versions requested from the manufacturer and placed in the position indicated by the use and maintenance manual.

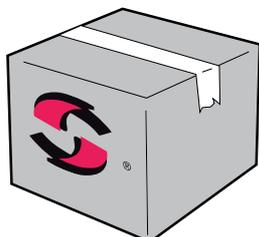
2.8 REASONABLY PREDICTABLE INCORRECT USE

The operator must not:

- connect the shredder to a Cardan shaft with higher or lower power transmission capacity;
- work in reverse gear;
- make modifications to the equipment that could jeopardise safety;
- perform makeshift repairs in order to work.

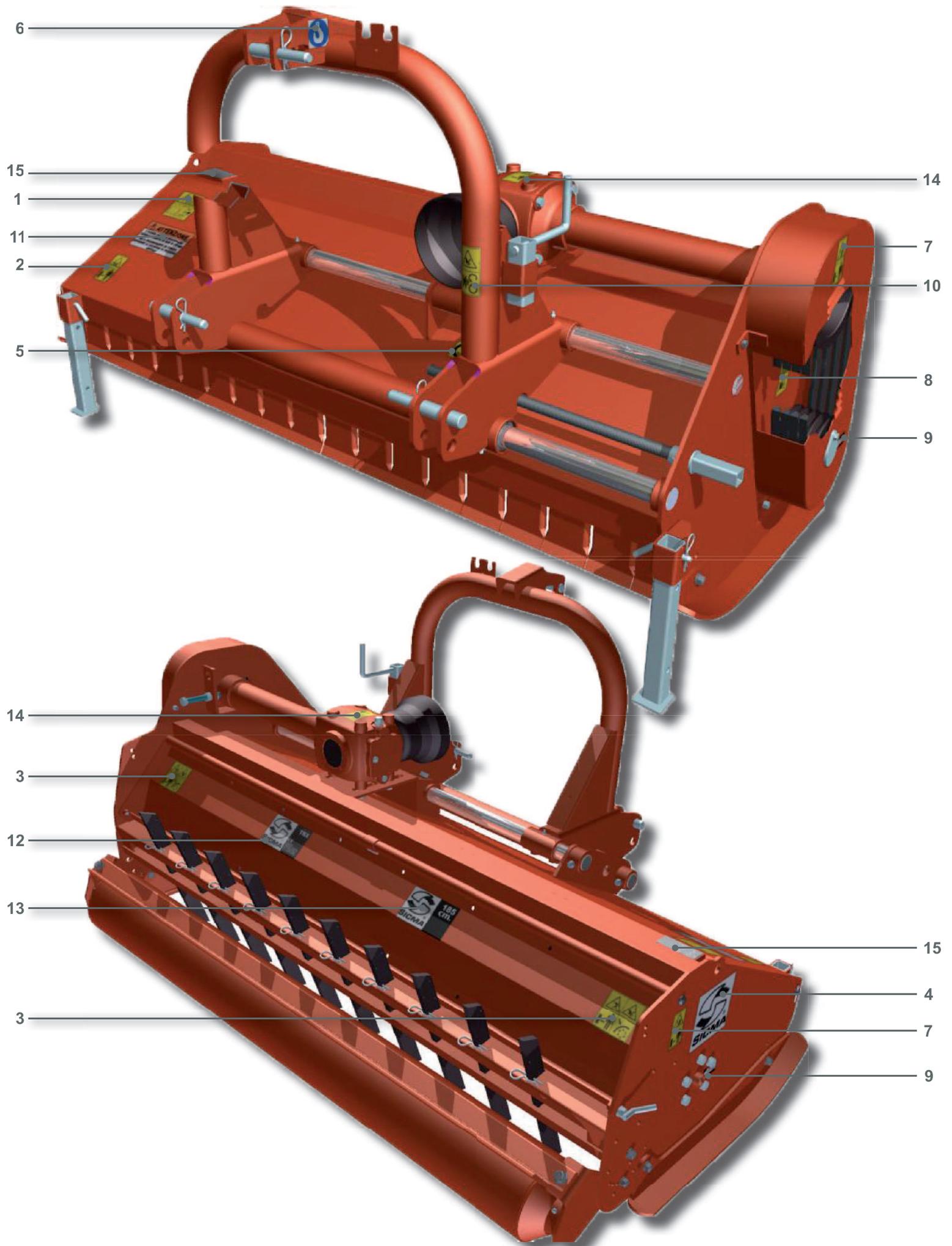
Moreover, it is prohibited to:

- couple the shredder to vehicles of unsuitable power or weight;
- assemble the machine without securing the rebound tie rods of the three-point hitch of the tractor's elevator;
- lift the equipment when the PTO is rotating;
- use the machine to transport and/or to lift persons, animals or objects;
- work on ground with gradient over 3°.



Sicma declines any liability for accidents deriving from the failure to comply with the prescriptions indicated below. Given the particular stress to which the equipment is subjected and for safety reasons, if pieces are replaced, only use original spare parts.

2.9 POSITION OF PICTOGRAMS ON THE MACHINE



<p>1</p> 	<p>4781029 ATTENTION Read all instructions and safety rules carefully before using the machine. Stop engine and remove key before starting maintenance or repairs.</p>	<p>9</p>  <p>4781009 GREASE Indication of lubricant grease injecting point</p>
<p>2</p> 	<p>4781011 FOOT INJURY HAZARD Rotating tools: keep a safety distance from the machine.</p>	<p>10</p>  <p>4781013 HAND INJURY HAZARD Rotating parts: keep a safety distance from the machine.</p>
<p>3</p> 	<p>4781019 THROWN OBJECTS ON ENTIRE BODY Keep at a safe distance from the machine. Hand injury hazard: do not open or remove safety guards while the machine is operating.</p>	<p>11</p>  <p>4781802 ATTENTION Machine damage hazard</p>
<p>4</p> 	<p>4781016 SICMA LOGO</p>	<p>12</p>  <p>5786601 MACHINE INFO</p>
<p>5</p> 	<p>4781010 INPUT 540 RPM Use of a 540 rpm power takeoff.</p>	<p>13</p>  <p>000-140; 000-160; 000-185; 000-220; LENGTH INFO</p>
<p>6</p> 	<p>4781031 HITCH POINT For lifting the machine.</p>	<p>14</p>  <p>4781045 DANGER OF BURNS Wait for the gear transmission box to have cooled down before touching it.</p>
<p>7</p> 	<p>4781012 FOOT INJURY HAZARD Keep at a safe distance from the machine.</p>	<p>15</p>  <p>4780001 CE MARKING PLATE</p>
<p>8</p> 	<p>5782708 ENTANGLEMENT HAZARD Keep safety guards in position while operating.</p>	



3. UNLOADING AND UNPACKING THE SHREDDER

ATTENTION

Qualified staff that has read and understood the safety prescriptions must unload the shredder from the lorry and handle the equipment in the work place.

A person in charge of operations must always be present during loading and unloading. In all cases, make sure that there are no persons, animals or objects in the unload area and behave as described in this manual.

The shredder is normally transported on a lorry, sometimes without packaging, sometimes protected by heat shrinkable film and other times in wooden cases.

ATTENTION

Read and fully understand “Safety prescriptions” (par. 2.3) before starting to transport and unpack the shredder.

3.1 SHREDDER PROTECTED BY HEAT-SHRINKABLE FILM

NOTE

Before starting to unload the equipment from the lorry, read the entire sequence in a way to be prepared for every inconvenience in time.

Release the shredder from any fixing devices used to fasten it to the means of transport.

ATTENTION

Shredder unloading operations must be performed very slowly and the operator must make sure that there are no persons, animals and objects exposed in the unloading area.

ATTENZIONE

Before starting lifting:

- check the good state of preservation of the ropes or chains used to lift the machine
- use ropes/chains with suitable capacity. Keep in mind that each individual rope/chain must be able to lift the weight of the shredder (see Part 3 “Technical features” par. 4);
- make sure that the hook bolts are fastened well;
- in the event of chains with shorteners, make sure that this are also fastened correctly.

After having fastened the shredder with ropes and/or chains, lift the equipment by a few centimetres to check correct harnessing.

ATTENTION

Lift the shredder from the deck of the means of transport to a height of about 30 cm. unless obstacles are present, so that it does not swing. Position the shredder on the ground in proximity of the tractor

Remove chains or ropes.

Once on the ground, unpack the equipment as described below.





ATTENTION DANGER OF CUTTING

ATTENTION DANGER OF CUTTING

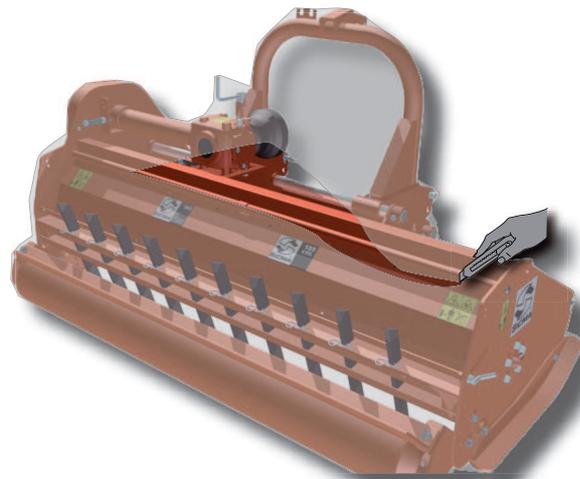
If the shredder arrives wrapped in a protective film, cut it using a Stanley knife; pay attention not to cause injury and not to damage the shredder itself.

To perform this operation in safety, the operator must:

- wear cut-proof gloves;
- be equipped with a Stanley knife;
- cut the protection, paying attention not to cause injury or damage the shredder.

ATTENTION POLLUTION HAZARD

Once unpacked, do not disperse the packaging in the environment but contact a specialised agency for its withdrawal. Check the transport document or packing-list supplied and, if necessary, act as described in part 1 “General Delivery Notes” (par. 1).



3.2 SHREDDER IN WOODEN CRATE

NOTE

Before starting to unload the equipment from the lorry, read the entire sequence in a way to be prepared for every inconvenience in time.

If the shredder is contained inside wooden packaging, use a fork-lift truck with suitable capacity to unload it (consult technical features table to see shredder weight) or use the lorry’s lifting arm.

ATTENTION

shredder unloading operations must be performed very slowly and the operator must make sure that there are no persons, animals and objects exposed in the unloading area.

Insert the fork lift forks as indicated in the figure. Lift the crate from the deck of the means of transport to a height of about 30 cm. unless obstacles are present. Position the crate on the ground in proximity of the tractor.

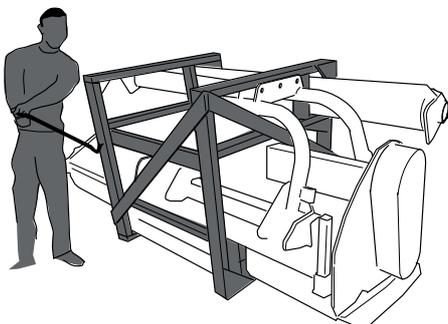
Wear gloves and use a suitable tool to disassemble to wooden packaging. Use a fork lift truck with suitable capacity (see par. 4 “Technical features”).

After having fastened the shredder with ropes and/or chains, lift the equipment by a few centimetres to check correct harnessing.

Use ropes/chains with suitable capacity to lift the shredder.



WARNING DANGER OF CRUSHING AND ENTRAPMENT



WARNING DANGER OF SWINGING AND CRUSHING





**WARNING DANGER
OF TILTING**

ATTENTION POLLUTION HAZARD

once unpacked, do not disperse the packaging in the environment but contact a specialised agency for its withdrawal or keep it for other transports. Check the transport document or packing-list supplied and, if necessary, act as described in part 1 "General Delivery Notes" (par. 1.4).

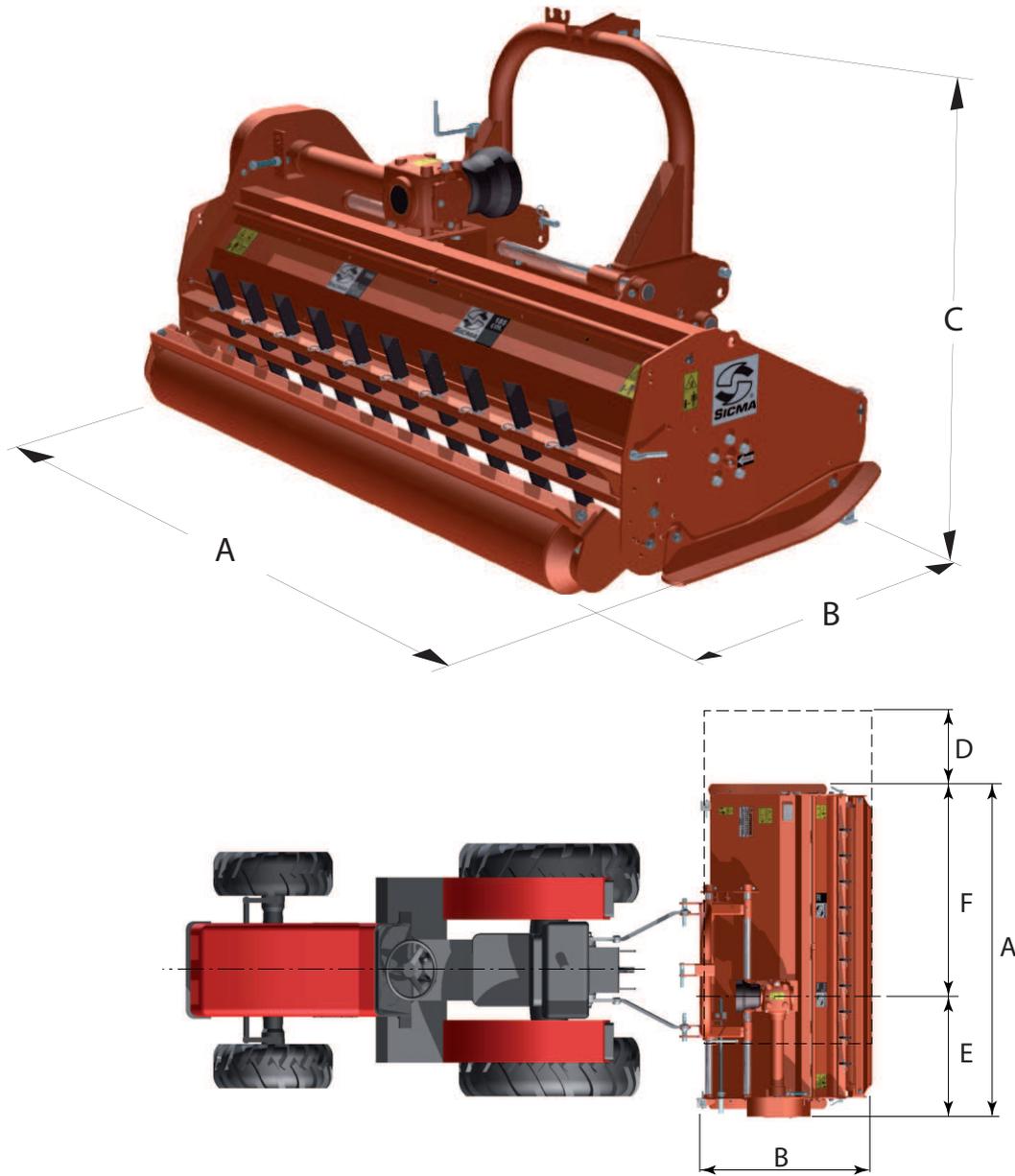
ATTENTION

Remember that no matter how stable the equipment, during successive transport operations, it must ALWAYS:

- be fastened well to the lorry;
- be positioned at the centre of the lorry, not at the edges in a way to prevent overturning hazards at curves or uneven roads.

4. TECHNICAL FEATURES

Below find the table stating the technical features of the TRX shredder.



TECHNICAL FEATURES

TRX

Rif.	Description	140	160	185	220
	Working width (mm)	1550	1800	2000	2200
A	Overall width (mm)	1830	2045	2285	2530
B	Overall length (mm)	1155	1155	1155	1155
C	Height (mm)	1040	1040	1040	1040
	Mass – Weight (Kg)	600	660	710	760
	Number of revs. (giri/min)	540-1000	540-1000	540-1000	540-1000
	Power requested (HP)	60 - 90	60 - 90	60 - 90	60 - 90
	Power requested (Kw)	45 - 67	45 - 67	45 - 67	45 - 67
D	Movement (mm)	370	370	450	450
E		775	857	907	907
F		1055	1187	1377	1621
	Standard Y knives	36	42	48	54
	Standard Hammer	12	14	16	18



5. START-UP



**WARNING GENERIC
DANGER**

ATTENTION

Only qualified operators and which have read and understood the safety prescriptions can carry out the operations described below. Moreover, they must check that there are no persons, animals and objects exposed in the area where the connection is made to the tractor..

The operator and any aids must have PPE (Personal Protective Equipment) available and wear them as required.

The shredder can only be moved when connected to the tractor; scrupulously follow the instructions given below in order to perform hitching:

- 3-POINT HITCH CONNECTION TO THE TRACTOR
- CARDAN SHAFT CONNECTION

5.1 3-POINT HITCH CONNECTION

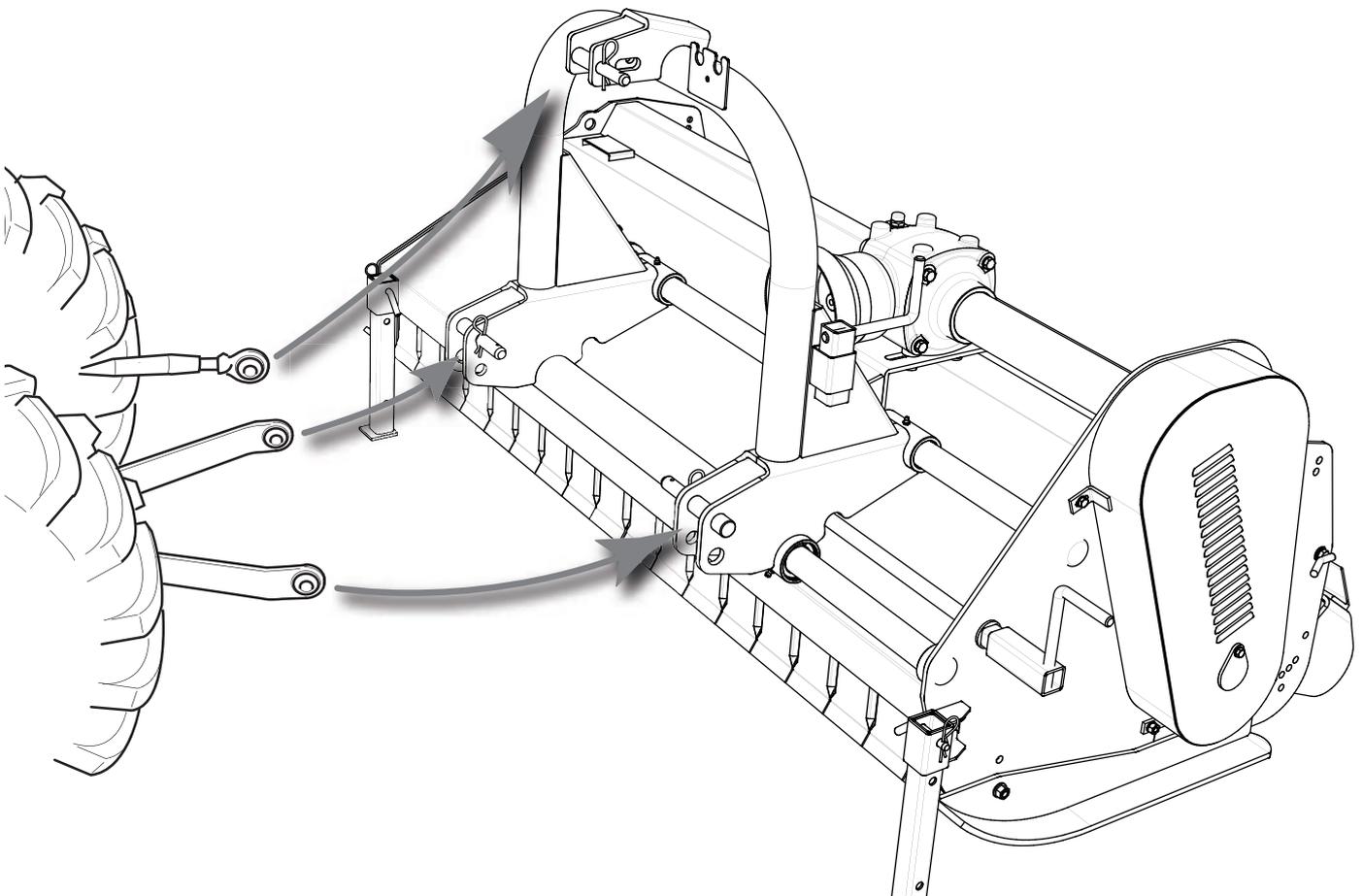
The machine must be hitched to tractors with suitable weight and power and with 2nd category standard hitch.

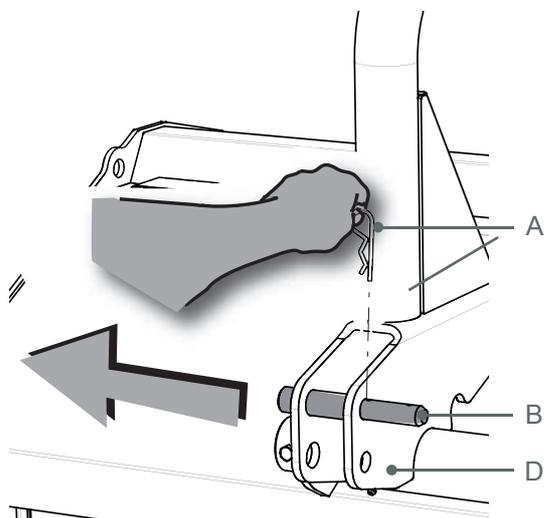
To connect the Cardan shaft, the operator must:

Slowly approach the tractor to the shredder, position in a way that the lifting device arms of the tractor are aligned with the two lateral pins of the shredder.

Once in position, engage the hand brake, switch the engine off, remove the key and keep it and climb down from the tractor.

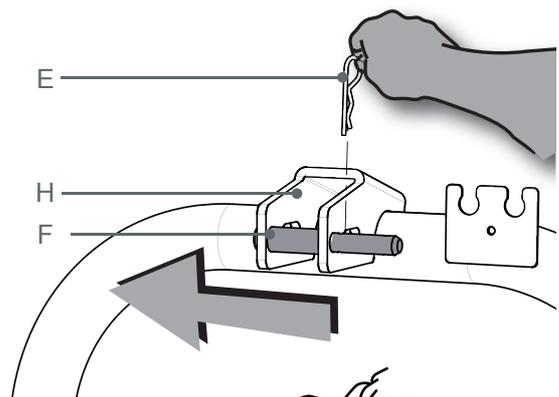
Check that the Cardan shaft protection is integral. If this is not the case, act accordingly consulting the relative user manual.





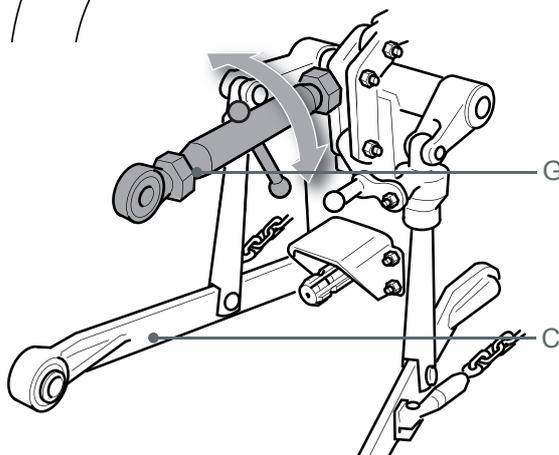
Proceed as follows to hitch the machine to the tractor:

- remove the split pin A of pin B on both sides;
- slide the pins B out;
- climb onto the tractor and switch the engine on;
- disengage the brake and reverse slowly until the tractor lifting device;
- arm joint C combines with the lower third point of the shredder D;
- switch the engine off, engage the hand brake, remove the key and keep it and climb down from the tractor;
- insert the pin B into the hole of the lower third point D of the shredder;
- and into the hole of the tractor arm joint C;
- re-insert the split pin A;
- proceed in the same way with the other lower hitch;
- block the rebound tie-rods of the tractor lifting arms to prevent the machine oscillating laterally, compromising the transversal stability of the complex.



To connect the upper third point, the operator must:

- remove the split pin E of the pin F of the upper third point of the shredder;
- slide pin F out;
- release the tie-rod G of the tractor upper third point and insert it into the upper third point H of the shredder;
- re-insert the pin F and the split pin E into the shredder upper third point and into the tractor tie-rod joint;
- if the floating upper third point is used, make sure that it allows the machine to bend forward and backwards and that the PTO shaft is parallel to the ground;
- if the floating upper third point is not used, adjust the length of the tierod in a way that the PTO shaft is parallel to the ground.



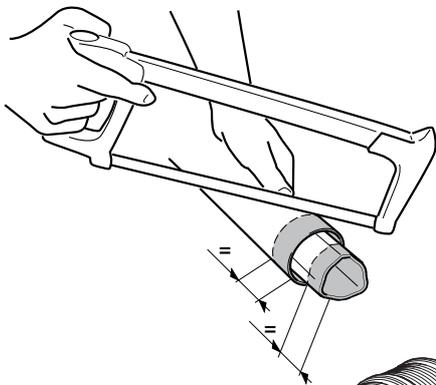
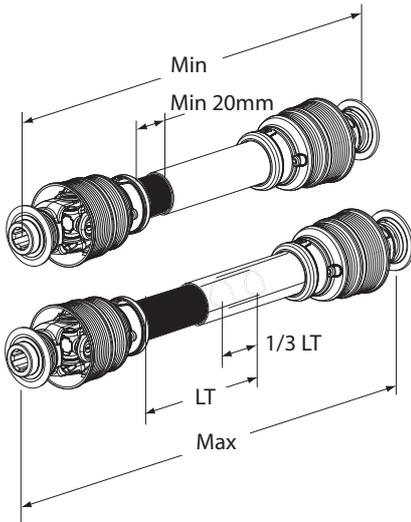
It is always good practice to make sure that the shredder PTO axis is parallel to the ground thus reducing the stress to a minimum on the power takeoff and extending the working life of the shredder.



5.2 CARDAN SHAFT CONNECTION

Before assembling the Cardan shaft, the operator must:

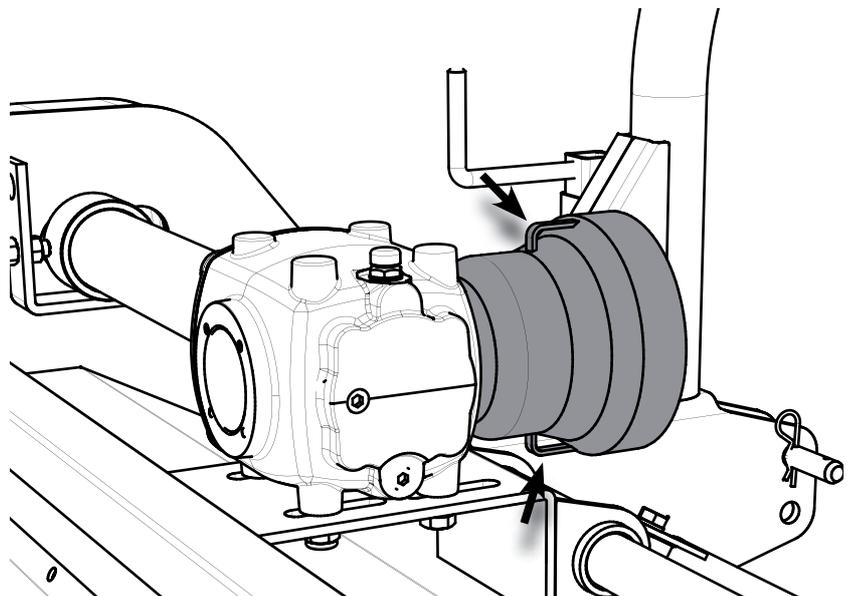
- Read the Cardan shaft and tractor manual.
- Make sure that the number of revs. of the tractor PTO correspond to those of the shredder (the choice of the number of shredder revs. must be made in the purchase phase). If this is not the case, contact after-sales.
- Check that the Cardan shaft minimum and maximum lengths are those required by shredder-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 play allowed of the plastic protections must be at least 2 cm. in order to prevent damage to the protections and the gear transmission. If this is not the case, it must be shortened suitably by cutting it accordingly. Consult the Cardan shaft use and maintenance manual or contact the authorised dealer.
- Use Cardan shafts with power/torque drive capacity and number of revs. suitable for that recommended.



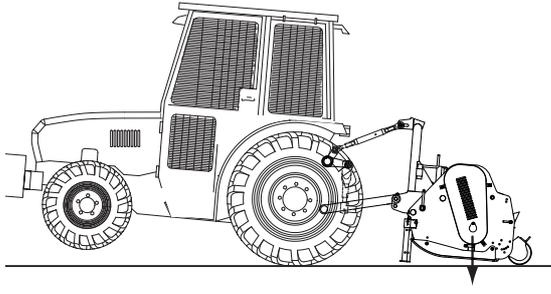
Position the Cardan in the right direction, making reference to the figure of the tractor embossed on the external protection pipe.

Insert the first hub of the Cardan shaft onto the shredder PTO, holding the safety pin or safety collar pressed. Release the pin and retract with the Cardan until the pin itself engages in the relevant seat with an audible “clack”. Repeat the operation successively with the hub opposite the shaft, inserting it into the tractor PTO.

Connect the Cardan shaft protection retainer chain snap hook in the relevant seat on the shredder PTO protection hood, indicated in the figure. Carry out the same operation on the tractor PTO.



5.3 CHECK THE STABILITY OF THE TRACTOR-SHREDDER COMPLEX



Shredder weight changes the stability of the tractor shredder complex, influencing steering and braking capability. Therefore proceed at a moderate speed. In particular, remember that the front axis must always be encumbered

by a weight equal to at least 20% of the total weight of the tractorshredder complex.

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

$$M \times (S1+S2) \leq 0.2 T \times i + Z \times (d+i)$$

$$M \leq 0.3T$$



WARNING DANGER OF TILTING

i = wheel base

d = distance from the front axis from the ballasts

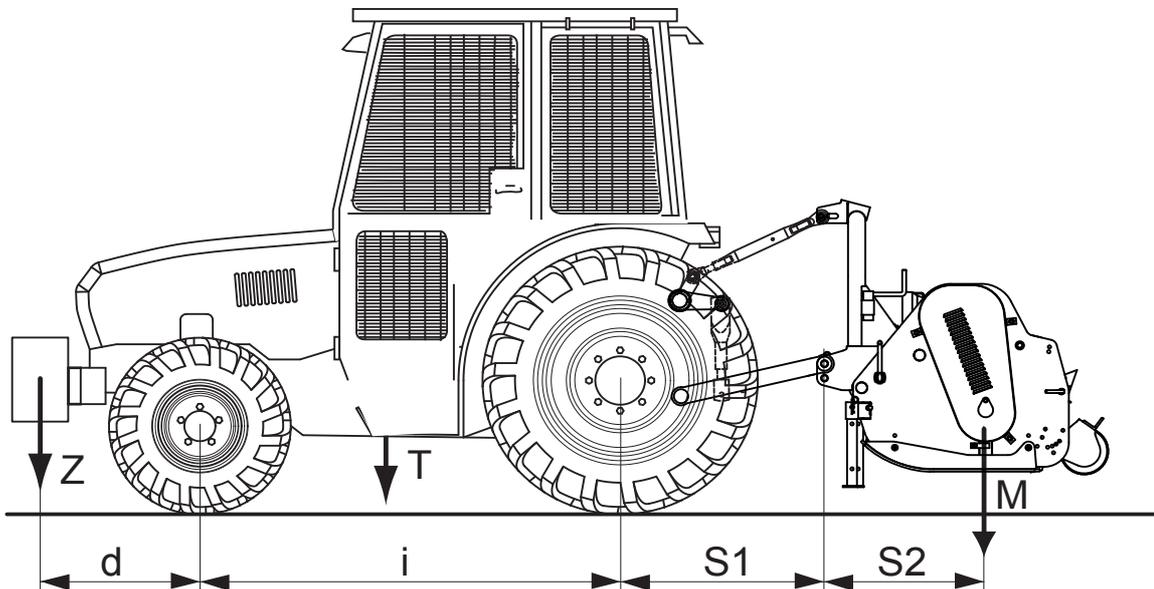
S1 = distance between centre of the rear axle and centre of the lower hitch points

S2 = distance between the centre of the lower hitch points and bar-centre of the shredder

T = weight of the tractor + 75Kg (operator)

Z = weight of the ballast

M = weight of the machine



5.4 ROAD TRANSPORT

Before transporting on public roads, it is indispensable to consult the Highway Code, in particular art. 61 and art. 104. For other countries, refer to the Highway Code in force.

5.5 MACHINING

Once all controls and regulations have been performed, with the tractor connected to the shredder (via 3 point hitch, but with Cardan shaft disconnected), switch the tractor on and go to the work area, remembering to keep the shredder lifted so that the tools do not touch the ground (at least 20 cm).

To activate the shredder, the operator must refer to the tractor manual, because the controls are located inside the tractor cab.

WARNING

Before starting work, make sure that no people 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 there are no restrictions that prevent movements. If there are restrictions, release the equipment from any fastening device.

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 conditions and not rusted
- check the state of wear of the tools
- grease all mobile parts precisely
- check that there is no oil leakage coming from the transmission unit
- check that all safety guards are properly positioned
- visually check the machine before all use. Tighten any loose bolts according to the coupling torque tables given in par. 13.1
- check the oil level in the speed increasing gearbox and, if need be, top up the oil until the correct level is restored (see Chap. 8 "Routine Maintenance").
- grease the rotor supports and of the rear roll (see par. 8.2)

Use the following lubricants for greasing:

- oil : **AGIP-ENI BLASIA 150**
- grease : **AGIP GREASE MU EP 2**



NOTE

Before working with the equipment, read the entire sequence in a way to be prepared for every inconvenience in time.

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.

On arrival at the work place, the operator must:

- engage the hand brake
- switch the engine off
- remove the ignition key and keep it
- get off the tractor
- check that there are no persons, animals and objects in the exposed area
- connect the Cardan shaft to the tractor PTO as described in par. 5.2.

Once connected to the Cardan shaft, the operator must:

- turn the tractor engine on
- release the hand brake
- work at a maximum speed of 6 km/h reducing it to about 2 km/h in the presence of woody material that is difficult to work (hard, large, etc.).





Warning Danger of Cutting and shearing of the hands and feet



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

Run a short way with the shredder working and check the quality of the work carried out. If it does not satisfy you, repeat and review the machine adjustment operations.

Do not approach the tool-holder rotor with the hands or feet when it is rotating.



Warning Danger of flying objects

During functioning, the machine can project material from the rear part: make sure that animals and persons are at least 50 metres from the machine.

In the operations involving change of direction, turning and going in reverse, disengage the power take-off and lift the shredder slightly from the ground, in order to avoid structure damage.

When the job has been finished, the operator must:

- engage the hand brake
- switch the engine off
- remove the ignition key and keep it
- get off the tractor
- disconnect the Cardan shaft from the tractor PTO and place it in the relevant support hook
- climb onto the tractor and release the hand brake
- switch the tractor on
- paying attention during movement that there are no exposed persons, animals or objects, take the shredder into the deposit.

Once having reached the deposit, the operator must:

- engage the hand brake
- switch the engine off
- remove the ignition key and keep it
- clean the shredder (see chap.10 "CLEANING")
- check that there are no oil leaks, stop any leaks present (ground pollution hazard)
- check and if necessary, replace any worn parts (see chap. 8 "Routin maintenance").



NOTE

If the equipment stops during working, consult par.13.2 "Troubleshooting".



Warning Danger of
Cutting and shearing of the
hands

6. STOPS

ATTENTION GENERAL HAZARD

Only qualified operators and which have read and understood the safety prescriptions (Chap. 2) can carry out the operations described below. Moreover, they must check that there are no persons, animals and objects exposed in the dangerous area.

The equipment must be stopped in the following ways::

- Temporary stop
- Stop at the end of the day
- Stop for long periods
- Emergency stop

Below find the description of how to behave in each case.

TEMPORARY STOP

To stop the shredder temporarily, just deactivate the rotation of the tractor PTO by activating the relevant control in the tractor control panel.

If the operator must get off the tractor, he must:

- engage the hand brake
- switch the engine off
- remove the ignition key and keep it
- get off the tractor

STOP AT THE END OF THE DAY

- engage the hand brake
- switch the engine off
- remove the ignition key and keep it
- get off the tractor
- disconnect the Cardan shaft from the PTO tractor.
- clean the shredder (see chap.9 "Cleaning")
- check that there are no oil leaks, stop any leaks present (Ground pollution hazard)
- check and if necessary, replace any worn parts (see chap. 8 "Routine maintenance").



STOP FOR LONG PERIODS

When the machine is parked for long periods of time:

- activate the tractor parking brake
- lower the machine resting feet
- place the shredder on the ground
- turn the tractor engine off
- remove the ignition key from the control panel and keep it
- descend from the driver position
- detach the Cardan shaft
- rest the Cardan shaft on the relevant support
- pull out the split pin and the gudgeon and detach the tie rod (upper third point)
- fix the tie-rod to the appropriate support on the tractor
- pull out the slip pins and the connecting pins and then the tractor's rear hydraulic lift arms from the shredder hitch points
- get back onto the tractor
- start the tractor and move away carefully
- clean the shredder (see chap.9 "Cleaning")
- lubricate all of the non-painted shredder parts with an anti-rust product.

The shredder must be parked on flat land and within a protected area, so as to prevent unauthorised staff from approaching.



EMERGENCY STOP



Warning Danger of cutting and shearing of the hands

To stop the shredder in emergency conditions, just deactivate the rotation of the tractor PTO by activating the relevant control in the tractor control panel. At this point, engage the hand brake, switch the engine off, remove the key and keep it.

Identify the cause of the emergency stop and, if necessary, consult par. 13.2 "Troubleshooting".

Decide:

- if necessary, take the equipment to the zero energy state
- if after-sales assistance must be requested
- if it is possible to repair the equipment

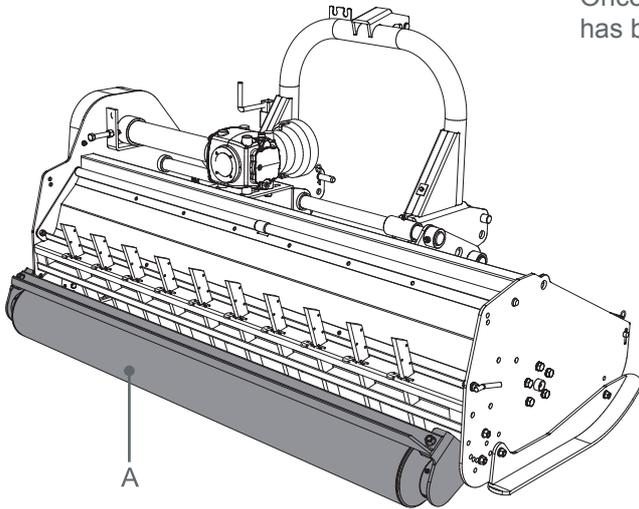
Once the cause of the emergency stop has been eliminated, the equipment has been re-started.

7. ADJUSTMENTS

7.1 WORKING HEIGHT ADJUSTMENT

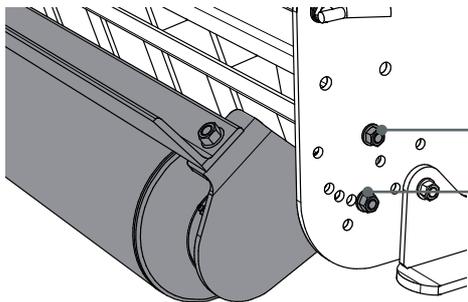
The machine working height is determined by the vertical position of the rear roll A or the wheels (optional).

By lifting the roll/wheels, the tools move closer to the ground and, vice versa, lowering them the tools move away from the ground. Make sure that the tools do not touch the ground after a working height adjustment: direct contact would cause rapid wear.

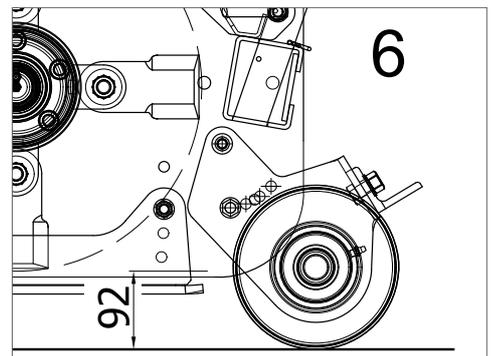
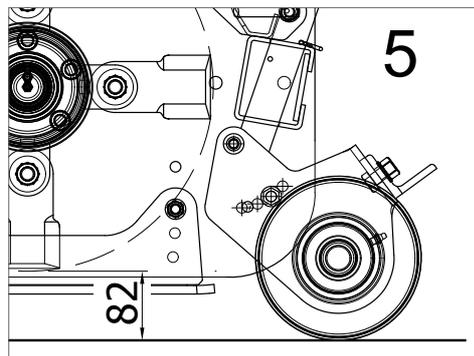
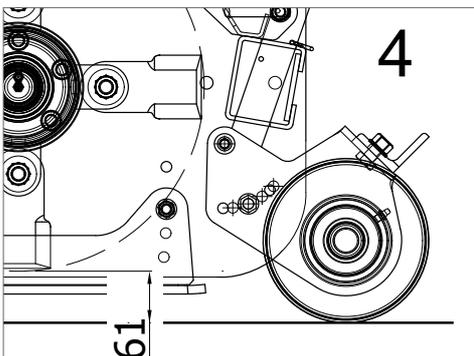
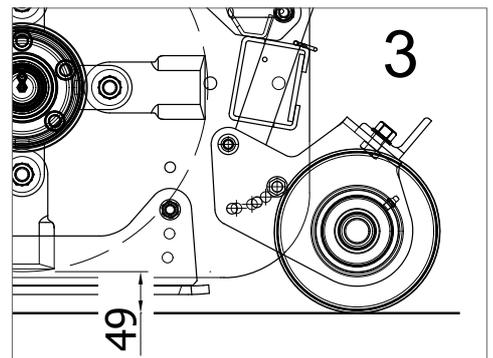
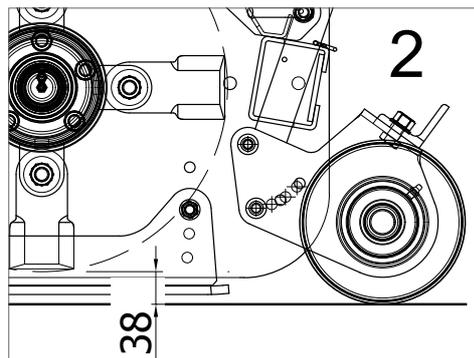
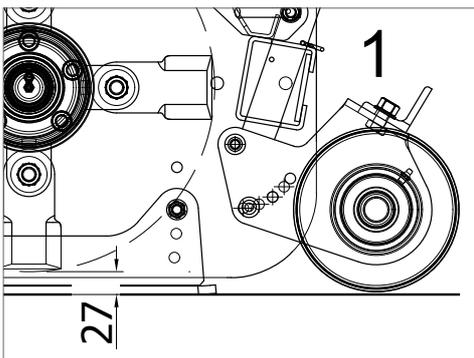


To adjust the height of the roll:

- loosen and extract the bolts "C" on both sides using a wrench
- lower the roll "B" until it can freely rotate around the bolt
- position the roll according to the layout given below
- re-insert and tighten bolts "C" on both sides
- tighten bolts "B" on both sides



C The skids prevent direct contact between the large side plates and the ground, facilitating shredder running.



7.2 ADJUSTING CRAMPES

The cramps allow you to obtain a finer cut-up by holding it longer in the shredding chamber. This is why they must be fine-tuned after adjusting the cutting height of the shredder except of specific needs.

Proceed as follows:

- Slide out the cotter of one of the lateral cramps
- push down the cramps on the ground
- pull out the cramps until the first cotter hole is open
- insert the cotter into the open hole
- check the hole used for the cotter by counting it from above
- adjuste all the cramps by inserting the cotters in the same hole of the crampe initially adjusted

7.3 ADJUSTING LATERAL DISPLACEMENT

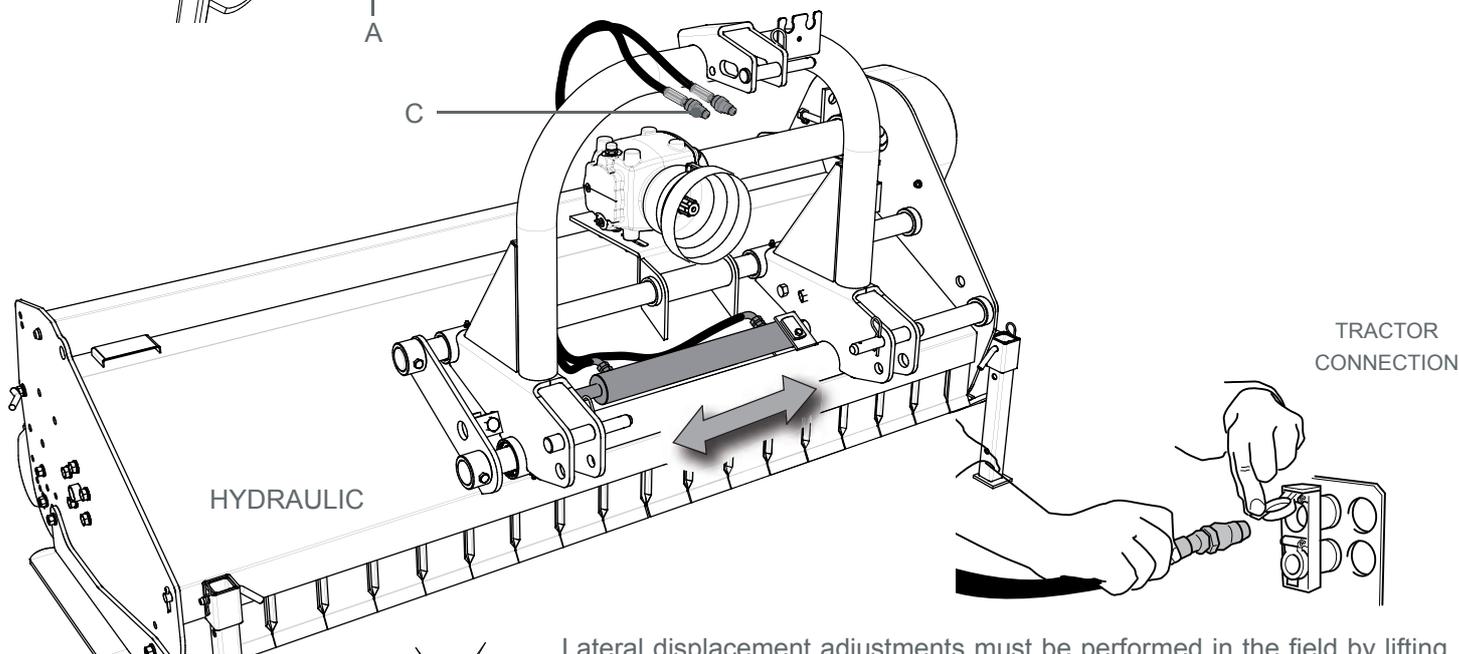
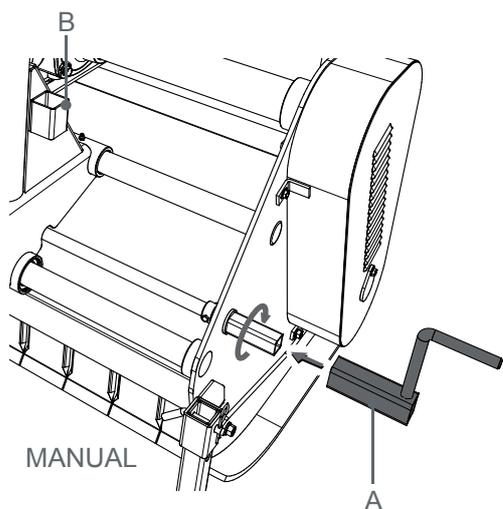
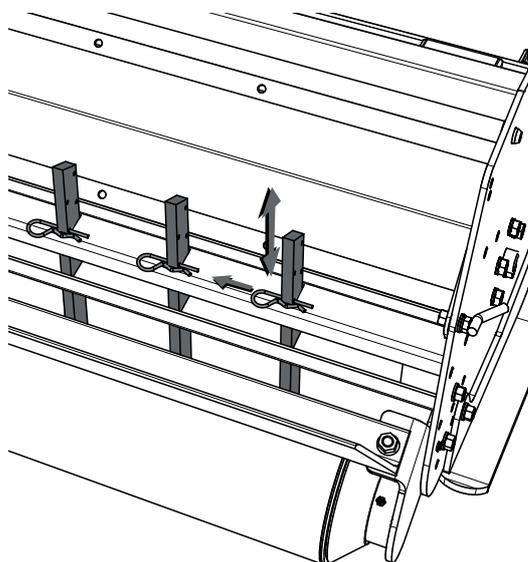
The TRX shredder can be configured in the movable version by using manual or hydraulic displacement.

To adjust the lateral position of the machine by screw jack proceed as follows:

with PTO disconnected, lift the schredder

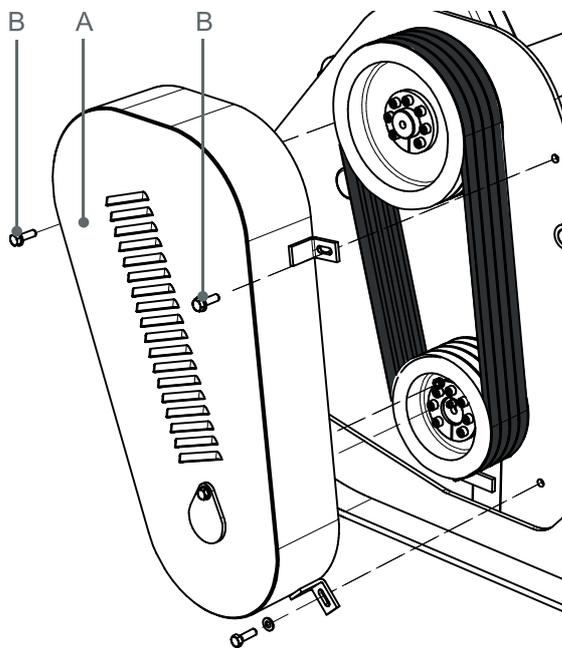
- insert the handle "A" into the tube protruding from the plate on the transmission side
- rotate the handle in one direction or another to move the machine to one side or other
- after reaching the optimal position, store the handle in its place B at the base of the mobile arc

If the arc is equipped with hydraulic cylinder, its position can be modified as desired, after connecting the rapid coupling C, by using the tractor controls.



Lateral displacement adjustments must be performed in the field by lifting the machine from the ground. Disconnect power take-off and engage hand brake, by ensuring the safety of themselves and others.

7.4 ADJUSTING BELT TENSION

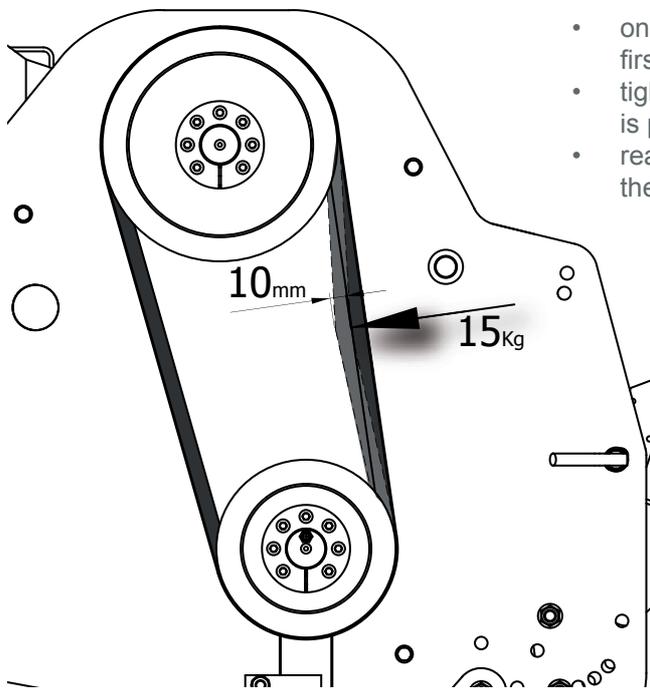


The tool-holder rotor is dragged in rotation by a drive belt the manually adjustable fixed tensioner.

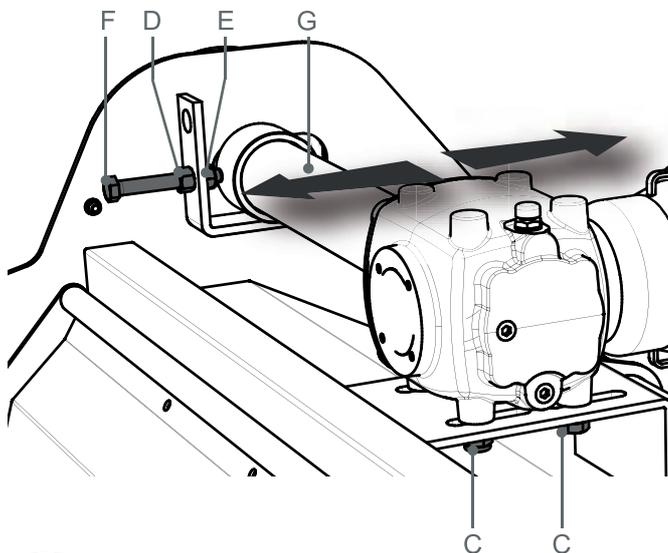
Proceed as follows to adjust belt tension:

- remove the belt protection guard "A" of the belts by loosening the three screws "B" which fix it, by holding the nuts on the opposite side of the slab;
- loosen the bolts "C" fixing the transmission group;
- loosen the counter-nut "D" by holding the nut "E";
- tighten the tension screw "F" if the belts are too slack; loosen if they are too taut.
- When replacing belt set, loosen the belts tension by removing the tension screw "F" and drawing back the transmission group.

The belts are correctly taut if, when applying a force of about 15 kg on the centre of the belts set, these bend by about 10 mm.



- once properly adjusted the belts tension, block the tension screw "F", first tighten the nut "E" and then the counter-nut "D";
- tighten the locking bolts "C" by making sure that the extension tube "G" is perpendicular to the transmission slab with the help of a square;
- reassemble the protection guards "A" by repositioning and tightening the bolts "B".





**WARNING GENERIC
DANGER**



**WARNING DANGER OF
TILTING, CRUSHING**



**WARNING GENERIC
DANGER**



**WARNING DANGER OF
POLLUTION OF THE LAND
AND WATER TABLE**

8. ROUTINE MAINTENANCE

ATTENTION

Only qualified operators and which have read and understood the safety prescriptions (Chap. 2) can carry out the operations described below. Moreover, they must check that there are no persons, animals and objects exposed in the dangerous 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 Standards and maintenance times jeopardises the good functioning of the machine and its duration and as a consequence the validity of the warranty.

For any other maintenance, consult par. 13.2 "Troubleshooting" or contact the Manufacturer or his after-sales centres. Considering the complexity of the equipment, repairs, modifications, extraordinary maintenance different to those mentioned below **MUST NOT** be performed without having consulted the Manufacturer or its after-sales centres. Depending on the case, these will give authorisation to proceed along with all instructions necessary or they will recommend the intervention of one of its own technicians.

These precautions are due to the fact that, incorrect or unsuitable operations can lead to abnormal functioning conditions, causing damage to the equipment and risks to staff.

ATTENTION

Before performing maintenance, read all of this part in a way to be prepared for every inconvenience in time.

ATTENTION

Ensure the effective stability of the equipment (tractor and shredder) before performing any maintenance intervention (the maximum gradient limit of the ground must be 3°).

Before carrying out any maintenance operation, the operator must take the shredder to the zero energy state (See par. 2.1)

The maintenance technician and any aids must have PPD available and wear them where necessary.

Do not perform repairs of which you have no knowledge. Always follow the instructions. If they are missing, contact the supplier or expert personnel.

Do not use lifting points different from those prescribed.

Make sure that the chosen lifting device is suitable to carry out operations in compliance with safety Standards.

Do not leave the tractor engine running in closed places if they do not have a ventilation system suitable to remove toxic gas exhaust concentrated in the air.

Avoid prolonged and repeated skin contact with lubricants as they could harm skin and cause other syndromes.

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

Do not weld in closed places or in those which are not appropriately ventilated.

Do not weld on painted surfaces, to prevent the formation of toxic vapours. Remove paint with suitable products and then wash the surfaces and let them dry.



SICMA INFORMS THAT ANY MODIFICATION OR TAMPERING OF THE SHREDDER OR ANY OPERATION PERFORMED IN DISAGREEMENT WITH WHAT WRITTEN IN THIS MANUAL, ESPECIALLY FAILURE TO COMPLY WITH THE SAFETY PROVISIONS, AS WELL AS MAKING THE WARRANTY NULL AND VOID, RELIEVES SICMA FROM ANY LIABILITY FOR DAMAGE TO OBJECTS AND INJURY TO PERSONS.

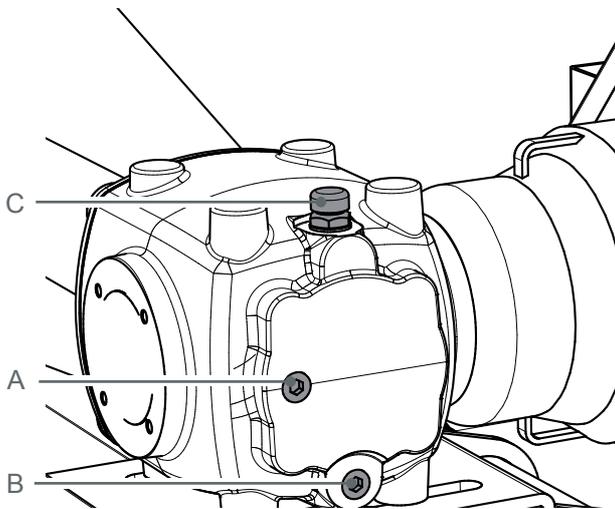


WARNING DANGER OF BURNS

8.1 CONTROL AND REPLACEMENT OF THE OIL IN THE SPEED INCREASING GEAR UNIT

ATTENTION

Wait for the gear transmission box to have cooled down before touching it.



ATTENTION

The operator must pay attention to oil leaks and perform relative maintenance immediately. Moreover, oil must not be poured onto the ground when topping-up or replacing the oil.

The oil level of the gear transmission box must be checked visually by loosening cap A using 8 mm Allen wrench.

If top-up is necessary, proceed as follows:

- use a wrench to loosen the oil load cap "C"
- top up with oil type AGIP-ENI BLASIA 150, with the aid of a funnel until the oil level is clearly visible through the hole of cap A
- re-insert the load cap C and the level cap A, tightening them well.



The oil on the gearbox unit must be replaced as follows:

- the first time after the first 50 hours of work
- every 500 hours of work.

To change the oil:

- position a container under the oil drain with cap B
- loosen the oil drain cap B (lower part of the sump) and allow the oil to flow out completely
- dispose of the drained oil in appropriate containers for waste oils
- screw the previously unscrewed oil drain cap B
- loosen the oil load cap C and the level cap A
- use a small funnel to top-up with AGIP-ENI BLASIA 150 oil until the level is reached
- top-up and tighten the caps A and C.

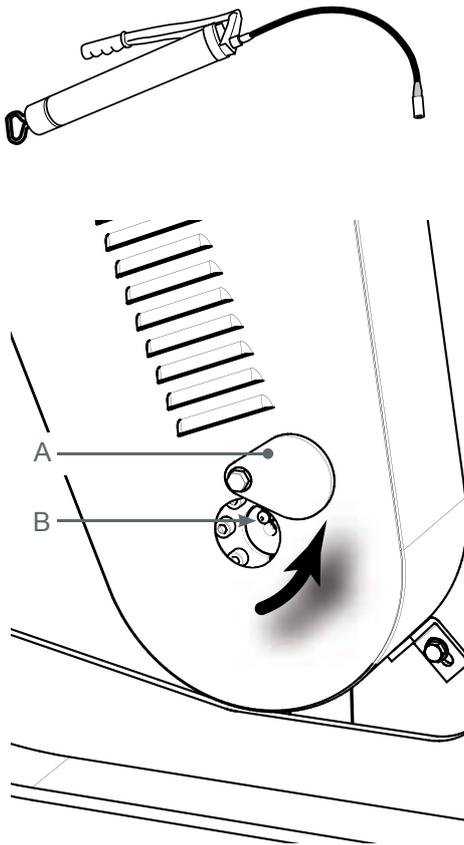


WARNING DANGER OF POLLUTION OF THE LAND AND WATER TABLE

Recover any waste oils and dispose of them in the relevant collection centres because, according to the Laws in force, they must not be disposed of in the environment as they are classed as dangerous waste. It is therefore necessary to contact the "Mandatory Consortium for Used Oils" (www.couu.it; free phone 800-863048). For the other countries, refer to the relative anti-pollution regulations in force.

8.2 GREASING

Greasing is performed using a manual greasing pump (as example in the figure) using AGIP GREASE MU EP 2 after having cleaned the greasing nipples thoroughly.

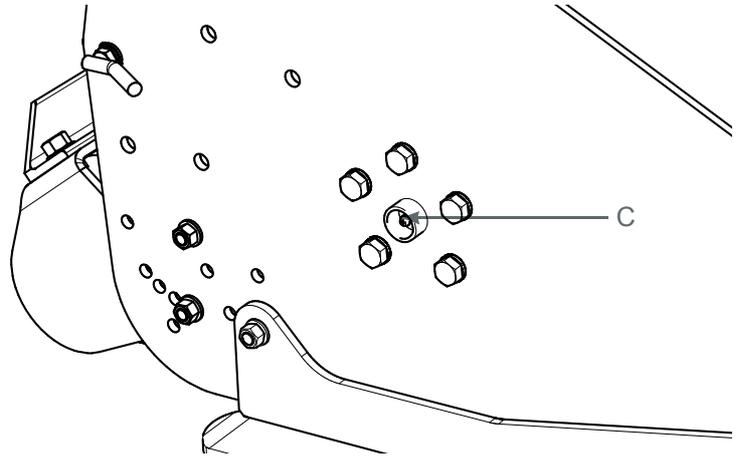


GREASING DRIVE SHAFT SUPPORTS

(every 8 hours of work)

To grease the supports, proceed as follows:

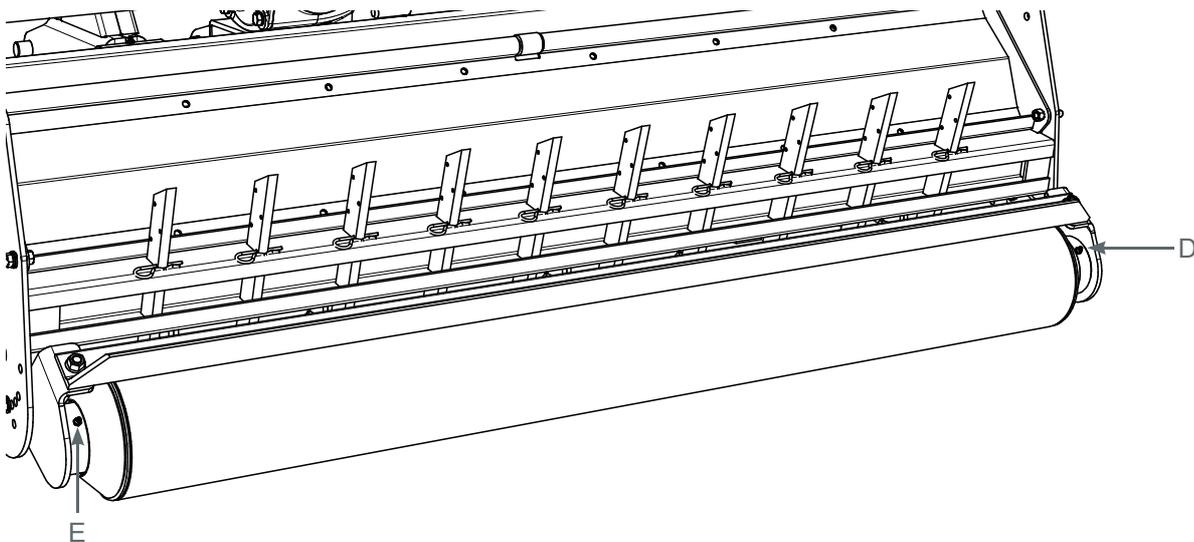
- turn the drip cap A and inject specific grease into the greasing nipple B;
- inject grease into the greaser C, situated on the opposite side of the shredder.



GREASING REAR ROLLER SUPPORTS

(every 8 hours of work)

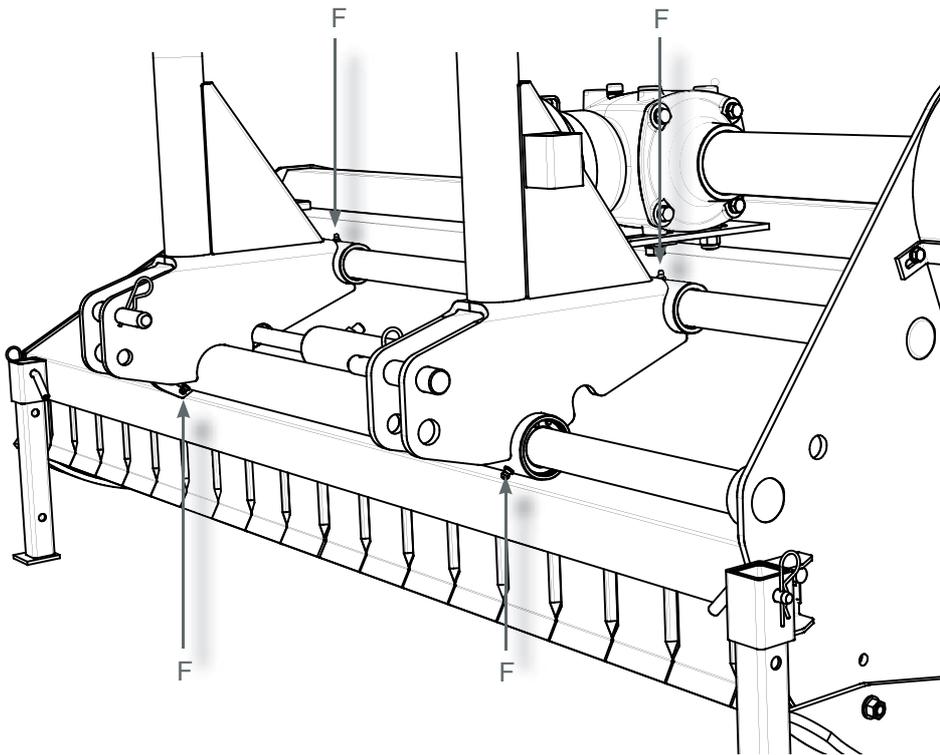
inject the grease into the greasers D and E situated on the upper outer part of the rear roll supports



GREASING SLIDING GUIDES OF THE HITCH

(every 20 hours of work)

inject the grease into the greasers "F" situated on the upper and lower part of the displacement guide supports of the mobile hitch.

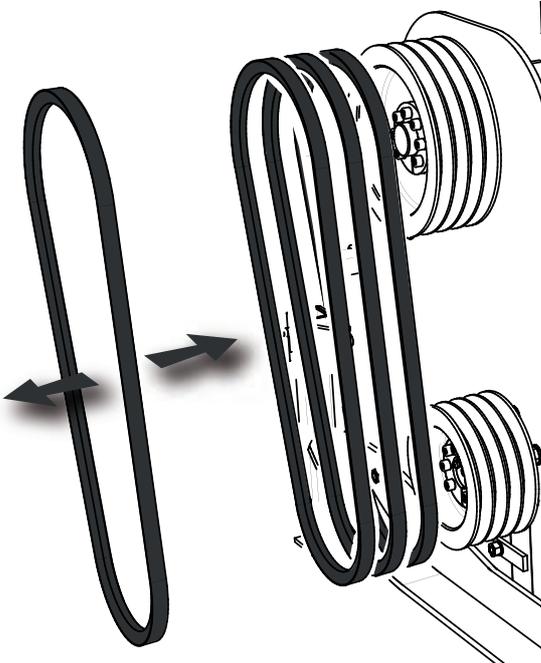


9. REPLACING THE DRIVE BELTS

Frequently check the state of wear of the belts and replace the entire set if one or more result deteriorated.

Proceed as follows to replace the drive belts:

- remove the cardan drive protection guard by loosening the set and following the procedure described in par. 7.4 "Adjusting belt tension"
- after loosening belts, slide the most external one out first followed by the others in succession
- replace all belts with a new set following the assembly in reverse order with respect to the previous point
- perform tensioning and described in par. 7.4 "Adjusting belt tension"



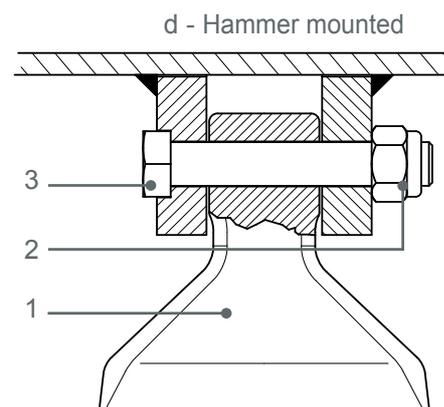
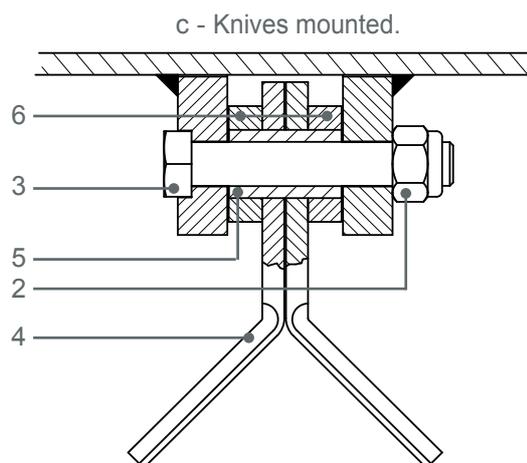
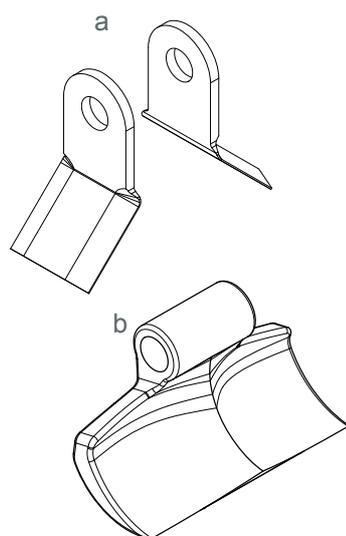
9.1 REPLACING KNIVES/HAMMERS

The TR can be equipped with knives and hammers depending on the job to be performed:

- (a) Universal knives: for grass, straw (assembly in fi g. c);
- (b) Smooth hammer: for grass, maize, cereals (assembly in fi g. d).



ATTENTION DANGER OF CUTTING



TOOLS LIST

Rif	Descr.	Cod.	Qt			
			TRX140	TRX160	TRX185	TRX220
1	Smooth hammer	5716648	14	16	20	24
2	Nut M16 UNI 7473	3464101016	14	16	20	24
3	Screw M16x95 UNI 5737	5716502	14	16	20	24
4	Knife	5816274	28	32	40	48
5	Knives spacer	5536541	14	16	20	24
6	Knife-holder bush	5596542	28	32	40	48



**When tools are worn, the entire set must be replaced.
Replacing only some tools, causes the drive shaft to be unbalanced.**

To replace the knives or hammers, contact the nearest SICMA after-sales centre or have this operation performed by skilled staff following the assembly layouts 5 and 6. Remember to assemble the tools with the sharp part facing in the direction of rotor rotation. Moreover, it is recommended to re-assemble the knives with relative spacer in the same way for all knife units, in order to prevent any assembly errors.



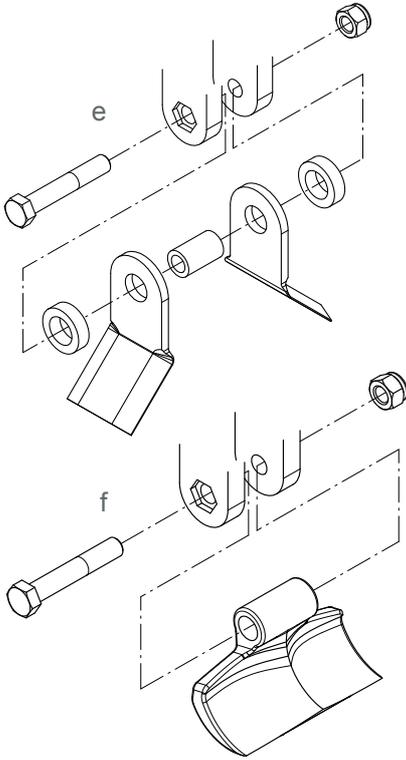
Use of non-original tools can cause anomalous vibrations for the machine.

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

Sicma does not recommend modification of the type of tools originally mounted on the drive shaft, e.g. replacing smooth hammers with notched hammers or knives and vice versa: whenever the user wants to perform this operation, the drive shaft must be re-balanced by a SICMA authorised centre (after having assembled the new tools) in order to prevent vibrations.

Sicma declines all liability for any damage deriving from this action.

If the balancing must be performed again, we recommend that you remove the added weights for the original balancing.



10. CARDAN SHAFT

For lubrication and for maintenance interventions, behave as described in the use and maintenance manual by the manufacturer of the Cardan shaft installed.

11. CLEANING

ATTENTION GENERAL HAZARD

Only qualified operators and which have read and understood the safety prescriptions (Chap. 2) can carry out the operations described below. Moreover, these must check that there are no persons, animals and objects exposed in the dangerous area.



**ATTENTION
CUTTING HA-
ZARD**

ATTENTION

During cleaning use the cut-proof gloves and accident-prevention shoes. The operator must clean the shredder on solid, flat ground and must take the shredder to the zero energy state. If compressed air is used to clean the machine, appropriate glasses are needed. It is good practice to wash the equipment externally with a jet of water after every job.

Clean the shredder with a jet of water (high-pressure water jet machine), especially the following parts:

- frame surface
- hammer/knives
- 3-point hitch
- rotor
- rotor compartment

When washing has been completed, protect the metal parts that are not painted with lubricant oil

12. STORAGE AND WINTERING

If the machine is immobilised for long periods, it must be stored in a place sheltered from atmospheric conditions and be protected to avoid damage. Before setting it aside, clean the whole machine and lubricate all mechanical parts to protect them from rust.

Before setting the machine aside for long periods, operate as follows:

- free the rotor and the tools from shredder residues;
- clean the machine thoroughly;
- run 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, recover the machine in a covered place, on flat and consistent ground.



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, before scrapping, separate the plastic or rubber parts from the metal ones. The parts made only in plastic, aluminium, steel, can be re-cycled, if collected by appropriate centres.

Recover any waste oils and dispose of them at relevant collection centres. Exhaust oil must be appropriately recovered and not littered in the environment because, according to the applicable provisions of law, it is classified as toxic waste and must as such be assigned to specific collection centres. For the collection of waste oils, it is mandatory to connect the "Consorzio Obbligatorio Oli Usati" (Mandatory Consortium for Used Oils) (www.coou.it; free phone 800-863048). For the other countries, refer to the relative anti-pollution regulations in force.

COUPLING TORQUE

bolt class

Threading	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

14. QUICK CONSULTATION TABLES

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

14.1 COUPLING TORQUE TABLE

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

14.2 TROUBLESHOOTING TABLE



NOTE

Before applying the solutions suggested, check that the anomaly persists via a further attempt. In this case, start from the most elementary solutions. If the anomaly should persist in spite of the solutions applied, contact the technical after-sales centres.

ANOMALY	CAUSE	REMEDY
Oil leak from the gear transmission box.	<ul style="list-style-type: none"> Too much oil in the box Vent cap with faulty valve Load/drain/level caps loose Damaged gaskets 	<ul style="list-style-type: none"> Restore the correct oil level Replace the vent cap Tighten the load/drain/level caps Replace the gaskets
Shredder not uniform	<ul style="list-style-type: none"> Worn or damaged tools Roll/wheels not adjusted correctly Machine clogged 	<ul style="list-style-type: none"> Replace the tools Carry out adjustments Decrease tractor advancement speed Clean shredding chamber
Bevel gear unit overheating	<ul style="list-style-type: none"> Insufficient oil No oil Material difficult to shred 	<ul style="list-style-type: none"> Top-up the oil Restore the oil level Reduce advancement speed
Premature tool wear	<ul style="list-style-type: none"> Stony ground Tools cutting height too low 	<ul style="list-style-type: none"> Patrol the ground previously Adjust the cutting height
Machine noise or vibrations	<ul style="list-style-type: none"> Unbalanced rotor Worn bearings Damaged, worn or missing tools 	<ul style="list-style-type: none"> Perform balancing in specialised workshop Replace bearings Replace the tools



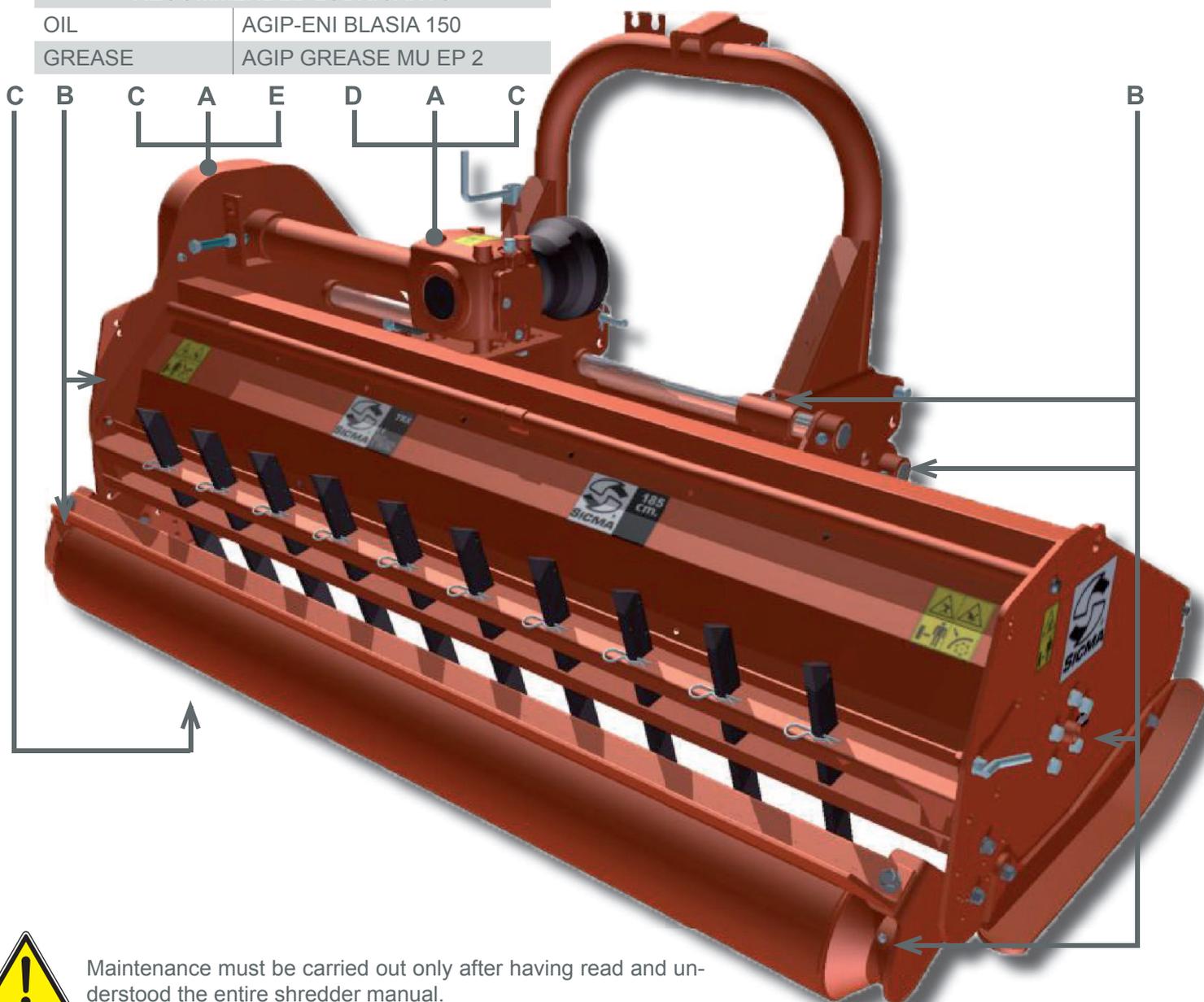
14.3 MAINTENANCE TABLE

	INTERVAL IN HOURS	DESCRIPTION OF THE INTERVENTION
A	AFTER THE FIRST 50 HOURS OF WORK	<ul style="list-style-type: none"> • check the correct tension of the drive belts • check the correct tightness of the nuts and bolts • replace the oil in the gear unit box
B	EVERY 20 HOURS OF WORK	<ul style="list-style-type: none"> • grease the rear roll supports • grease the drive shaft supports • grease the mobile arc guides supports
C	EVERY 50 HOURS OF WORK	<ul style="list-style-type: none"> • check the correct tension of the drive belts • check the correct tightness of the nuts and bolts • check the state of wear of the knives/hammers • check the oil level in the gear box unit and top-up to the correct level if necessary
D	EVERY 500 HOURS OF WORK	<ul style="list-style-type: none"> • check the correct tightness of the nuts and bolts • replace the oil in the gear unit box
E	EVERY 1000 HOURS OF WORK	<ul style="list-style-type: none"> • replace the drive belts

RECOMMENDED LUBRICANTS

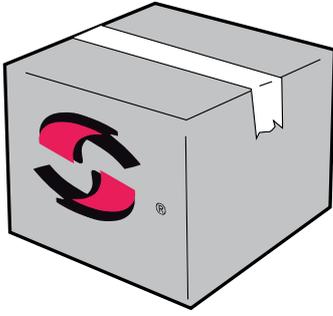
OIL AGIP-ENI BLASIA 150

GREASE AGIP GREASE MU EP 2



Maintenance must be carried out only after having read and understood the entire shredder manual.





15. SPARE PARTS

Repairs and replacements must be performed using original spare parts, which must be requested from the Dealer. Remember that the request for spare parts must be correct and accompanied by the following indications:

- machine type;
- serial number;
- code and description of the spare part requested can be obtained from the Spare Parts Exploded Diagram;
- quantity requested.

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

16. 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 of use envisioned by the Manufacturer;
- do not make modifications or variations to the machine without the written approval of the Manufacturer;
- always perform all maintenance interventions prescribed;
- always use original spare parts;
- make sure that the staff assigned to using the vehicle has the necessary skill requisites and training.

The contractual warranty is not applied if the conditions stated above are not respected, even also partially. The use of spare parts not approved by the Manufacturer invalidates any warranty and relieves the Manufacturer or Dealer from any liability due to malfunctioning 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.



NOTES





SICMA S.p.A.
Contrada Cerreto, 39
66010 MIGLIANICO (CH) - ITALIA
Tel. +39 087195841 - fax +39 0871950295