

Eng

English Language



Società Industriale Costruzione Macchine Agricole

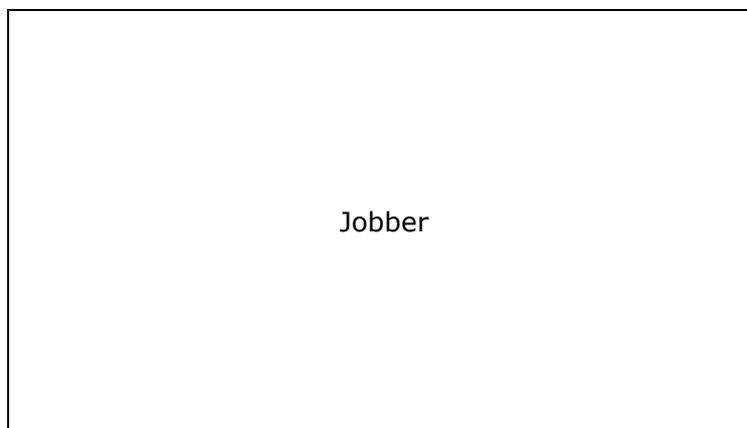
Instruction Manual
SHREDDERS

ATTENTION

Read carefully this manual
before using the equipment

TSL-L . TA . SL . TMX . TE . TS . TS-P . TRX . TR . TUF . TSD . TLX-R . FB

SICMA S.p.A.
c.da Cerreto, 19 - 66010 Miglianico (CH)
Telefono +39 (0)871 95841 -Telefax +39 (0)871 950295
web: www.sicma.it - e-mail: sicma@sicma.it



© SICMA joint-stock company

All rights reserved
Printed in Italy

Industrial Manufacture Company of Agricultural Machines

No part of this manual shall be reproduced, copied or disseminated by any means without SICMA joint-stock company prior authorization in writing.

SICMA joint-stock company reserves the right to make any necessary changes without giving prior notice in order to optimize the quality and safety of its products and without committing itself to update this manual every time a change takes place.

This booklet provides an accurate description of the operating instructions and maintenance activities to be carried out on the shredder you bought. We congratulate you on your choice and remind you that reading and following scrupulously all prescriptions here contained will assure the regular working of your machine and especially a high degree of safety.

The manufacturer therefore declines all responsibility as for the onset of problems caused by a lack of compliance with the instructions and/or negligence of the operator.

This manual is divided into chapters and paragraphs and its pages are progressively numbered in order to present information in a clear and concise way. Information, thus, can be found through the keywords used as chapters' title and especially consulting the index (page 4).

INDEX

General information

Symbols	Page 6
Tightening table	Page 6
Safety labels	Page 7
Technical data	Page 8/9
Main parts	Page 9
Identification plates	Page 10
Allowed/improper use	Page 10

Safety

Safety in the workplace	Page 11
Job clothing	Page 11
General safety rules	Page 12/13

Set up

Connection to the tractor	Page 14
Connection through Cardan joint	Page 15
Working height adjustment	Page 16
Side shift regulation	Page 17/18
Back cover regulation	Page 19
Strewing devices regulation	Page 20
Side skids regulation	Page 20
Wood cutting	Page 17
Spring-loaded arm and feeler arm regulation	Page 21/22
Cutters	Page 22
Starting up	Page 23
Working speed	Page 23
Road transport	Page 23
Set aside	Page 23

Maintenance

Maintenance program	Page 25/26
Spring-loaded/feeler arm maintenance program	Page 27
Cutters/hammers check	Page 28
Spare parts ordering	Page 29

GENERAL INFORMATION

SYMBOLS

This booklet contains three "safety graphic symbols" to highlight as many danger levels or important information:



It draws the operator's attention to situations which can jeopardize people's safety.



It draws the attention to situations which jeopardize the machine efficiency but not people's safety.



It highlights general information which does not endanger people's safety or the efficiency of the parts.

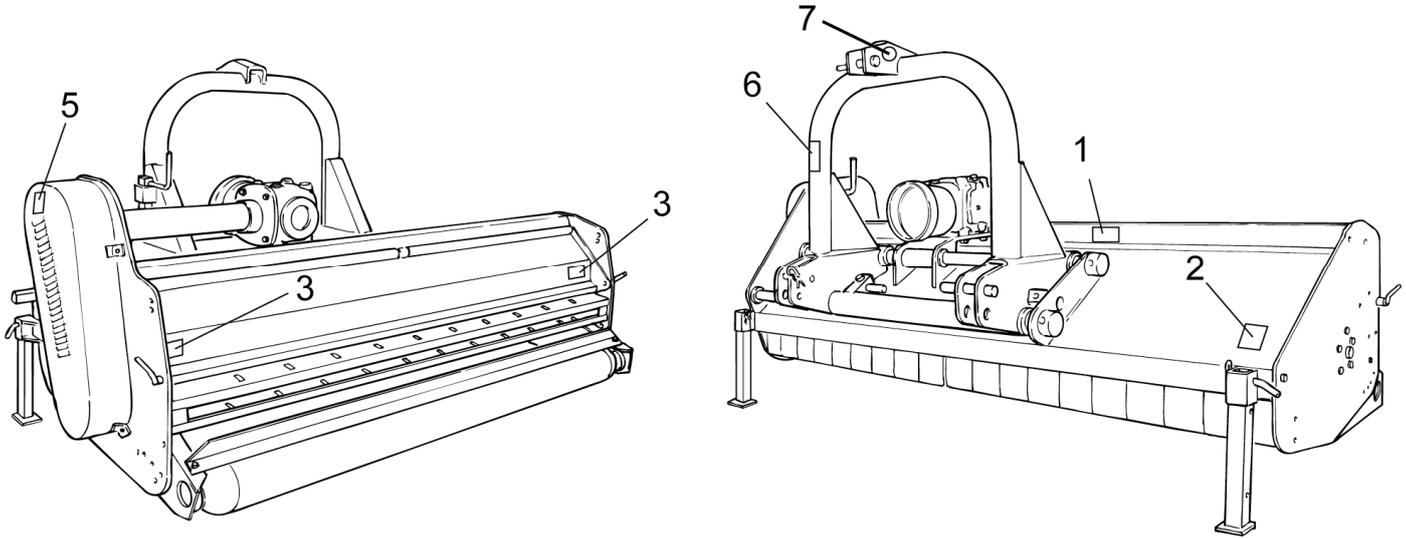
BOLTS AND NUTS TIGHTENING TABLE

In order to tighten correctly all bolts and nuts of your shredder, we advice you to use a special dynamometrical spanner and to refer to the following table:

THREADED BOLTS				
Bolt class				
thread	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

SAFETY LABELS

The safety labels and the information on the machine, listed in the following table, must be necessarily carried out; failure to carry out these warnings can cause death or severe injuries. Make sure that the labels are always present and legible, should this not be the case contact your nearest SICMA dealer to replace the missing or illegible ones.



<p>1</p>	<p>Attention: read carefully all instruction and safety rules before using the machine. Stop engine and remove key before starting maintenance or repairs.</p>	<p>4</p>	<p>Use a 540 rpm power takeoff.</p>
<p>2</p>	<p>Danger of feet injuries: rotating tools, keep away from the machine.</p>	<p>7</p>	<p>Hooking point for the machine's lifting.</p>
<p>3</p>	<p>Thrown objects: keep a safety distance from the machine. Danger of hands injuries: do not open or remove safety guards while the machine is operating.</p>	<p>5</p>	<p>Danger of feet injuries: keep a safety distance from the machine.</p>
<p>6</p>	<p>Danger of hands injuries: keep safety guards in position while operating.</p>	<p>6</p>	<p>Danger of hands injuries: keep safety guards in position while operating.</p>

Technical features

	model	Working width (m)	weight (kg)	Tractor horse - power (HP)
TSL-L	TSL-L 50	0,50	62	10-14
	TSL-L 60	0,60	65	10-14
	TSL-L 70	0,70	70	10-14
	TSL-L 80	0,80	77	10-14
	TSL-L 90	0,90	90	10-14
	TSL-L 100	1,00	100	10-14
TA	TA 95	0,95	108	15-35
	TA 110	1,10	118	15-35
	TA 125	1,25	128	15-35
	TA 140	1,40	138	15-35
SL fixed	SL 095	0,95	223	25-45
	SL 110	1,10	245	25-45
	SL 125	1,25	267	25-45
	SL 140	1,40	289	25-45
SL shifting	SL 095	0,95	226	25-45
	SL 110	1,10	249	25-45
	SL 125	1,25	270	25-45
	SL 140	1,40	292	25-45
TMX fixed	TMX 110	1,10	275	25-45
	TMX 125	1,25	297	25-45
	TMX 140	1,40	319	25-45
	TMX 155	1,55	341	25-45
	TMX 185	1,85	364	25-45
TMX shifting	TMX 110	1,10	279	25-45
	TMX 125	1,25	300	25-45
	TMX 140	1,40	322	25-45
	TMX 155	1,55	345	25-45
	TMX 185	1,85	367	25-45
TE fixed	TE 160	1,60	274	30-60
	TE 180	1,80	300	30-60
	TE 200	2,00	350	30-60
	TE 220	2,20	375	30-60
TE shifting	TE 160	1,60	294	30-60
	TE 180	1,80	320	30-60
	TE 200	2,00	370	30-60
	TE 220	2,20	395	30-60
TS	TS 125	1,25	356	35-70
	TS 140	1,40	382	35-70
	TS 155	1,55	408	35-70
	TS 185	1,85	450	35-70
TS-P	TS-P 140	1,40	430	35-70
	TS-P 155	1,55	454	35-70
	TS-P 185	1,85	466	35-70
TRX	TRX 140	1,40	380	35-70
	TRX 160	1,60	410	35-70
	TRX 185	1,85	530	35-70
	TRX 220	2,20	600	35-70
TR	TR 200	2,00	688	60-90
	TR 225	2,25	760	60-90
	TR 255	2,55	832	60-90
	TR 280	2,80	904	60-90
TUF	TUF 155	1,55	555	60-90
	TUF 180	1,80	605	60-90
	TUF 220	2,20	676	60-90
	TUF 250	2,50	750	60-90

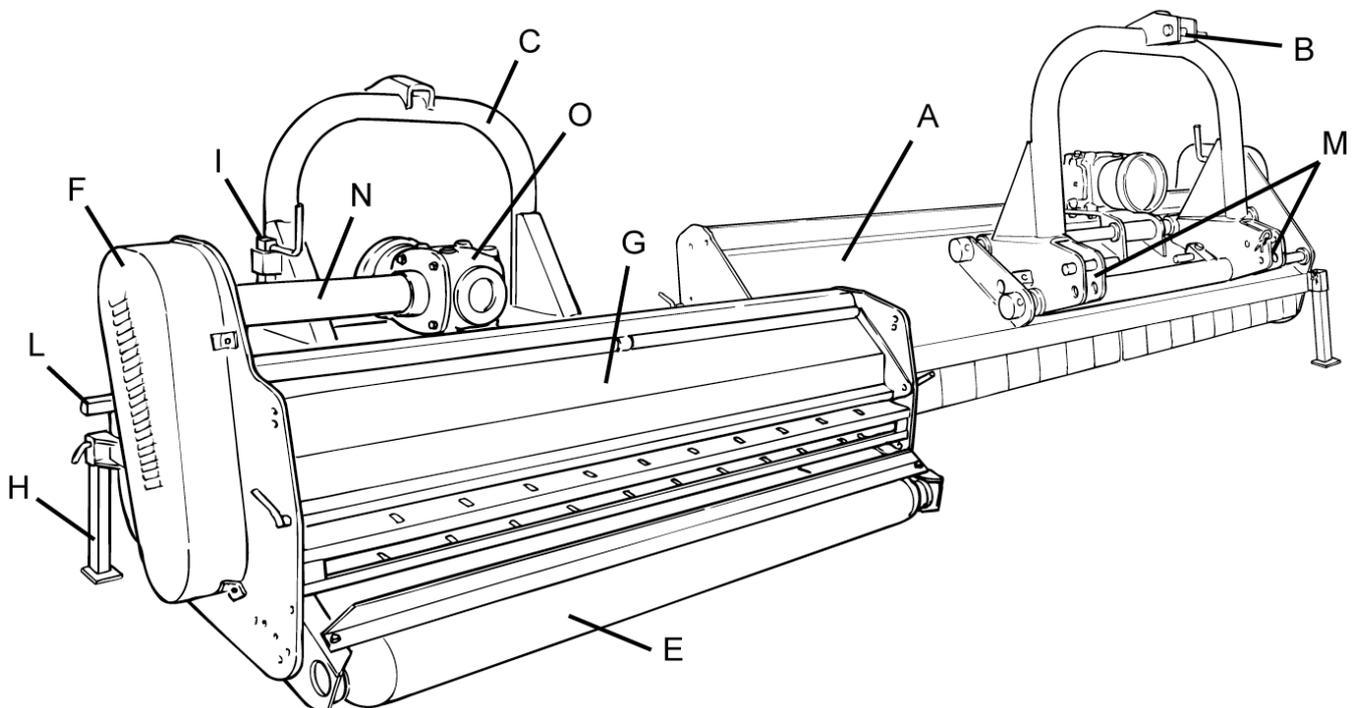
TSD	TSD 95	0,90	530	40-80
	TSD 115	1,15	580	40-80
	TSD 125	1,25	610	40-80
	TSD 140	1,40	650	40-80
	TSD 155	1,55	690	40-80
TLX-R	TLX-R 125	1,25	300	25-50
	TLX-R 140	1,40	321	25-50
	TLX-R 155	1,55	346	25-50
	TLX-R 185	1,85	386	25-50
FB	FB 180	1,80	636	35-80
	FB 220	2,20	724	35-80
	FB 250	2,50	790	35-80
	FB 280	2,80	856	35-80

Manufacturer:
Sicma S.p.A.

Via Cerreto,19 | 66010 MIGLIANICO (CH) Tel. +39 0871 95841 | fax +39 0871 950295 P.Iva 00227220696

Internet: www.sicma.it e-mail: sicma@sicma.it

MAIN PARTS TERMINOLOGY



- | | |
|----------------------------|-----------------------------|
| A) Frame | H) Foot |
| B) Lower three-point hitch | I) Adjusting crank |
| C) Third point mast | L) Traverse adjusting screw |
| D) Cardan guard | M) Elevator arms hitch |
| E) Stabilizing roller | N) Drive |
| F) Transmission case | O) Gearing-up unit |
| G) Cover | |

IDENTIFICATION PLATES

Identification plates are placed on every shredder and are structured as follows:

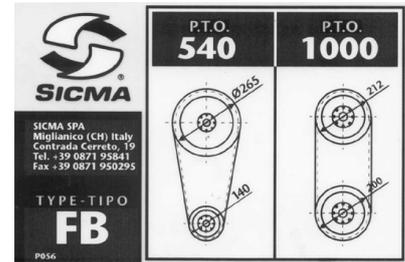
**model of shredder
(example)**



**dimension
(example)**



**P.T.O. information
(example)**



When asking for information or technical service, always specify the machine type and width.

ALLOWED USE

SICMA shredders, as described in this instruction and maintenance booklet, have been specifically designed to mince grass, shrubs and wood up to 6 – 7 cm diameter
Any other use jeopardizes the operator's safety and the machine integrity.

IMPROPER USE

When using SICMA shredders it is particularly forbidden:

- The attachment to vehicles of unsuitable power or weight.
 - To assemble the machine without securing the rebound tie rods of the three-point hitch of the tractor's elevator.
 - To work in excessively stony grounds
 - To use the machine without inserting the check-pins when supplied.
 - To work in excessive slopes.
 - To lift the machine when the power takeoff is engaged.
 - To approach the machine when wearing inappropriate work clothing.
- To get on the machine while it is being used or transported

SAFETY

SAFETY IN THE WORKPLACE

Most of the accidents which take place while the operator is using the machine or the equipment or during their maintenance or repair are caused by a lack of compliance with the basic safety precautions.

It is necessary, therefore, to become more and more conscious of the potential risks of one's action by constantly paying attention to its effects.

If potentially dangerous situations are known, accidents can be prevented!

OPERATOR'S REQUIREMENTS

All operators using the equipment must be competent and meet necessarily the following features:

Physical: good eyesight, coordination and capability of carrying out all functions required for the machine's use.

Mental: capability of understanding and applying the established rules and safety precautions. Users must pay attention and be sensible for their own and other people's safety.

Training: users must have read and studied this manual, its eventual enclosed graphs and schemes and its identification and danger plates. They must be skilled and trained on any use or maintenance activities.

WORK CLOTHING

When working and especially when executing repair or maintenance activities, it is necessary to wear the following clothing and safety accessories:

- Overalls or other comfortable clothing, not too loose to prevent the possibility that parts of them might be caught in the moving parts.
- Protective gloves for hands.
- Protective glasses or faceplate to protect eyes and face.
- Protective helmet for the head.
- Safety shoes



Wear only personal safety accessories in good condition and complying with the rules in force.

GENERAL SAFETY RULES

Always consider the features of the area where work is taking place:

- When the equipment is running, it is forbidden to stand within the field of action of the shredder or of the other accessories of which it is provided with.

Prepare the work:

- Before and when working do not drink alcohol, take drugs or any other substances which may alter your capability of working with machine tools.
- Be sure to have sufficient fuel, to prevent a forced stopping of the machine, maybe during a critical movement.
- Do not use the equipment under unsafe conditions. For instance, it is forbidden to execute makeshift repair activities just to start working; it is forbidden to work at night with an insufficiently illuminated working area.

When working or during the maintenance activities it is necessary to remember:

- The labels and stickers providing instructions and pointing out the dangers, must not be removed, hidden or made illegible.
- Do not remove, except in case of maintenance, the safety devices, protective covers or sumps. When it is necessary to remove them, stop engine, handle with care and reassemble them properly before restarting the engine and using the equipment.
- It is forbidden to lubricate, clean and adjust the moving parts while they are running.
- During maintenance or adjustment activities on the equipment it is forbidden to use hands for executing operations for which there are specific tools.
- Do not use tools in bad condition or inappropriately, for instance pliers rather than monkey spanners, etc.
- Before executing interventions on hydraulic lines under pressure, disconnect their components and make sure that the line is no longer under pressure and that it does not contain any hot fluid.

- Check out all pipe fittings and make sure that they are well connected before raising steam to the hydraulic lines.
- When maintenance or repairs are completed check out that no tools, wiping rags or other materials are left inside spaces or guides with moving parts.
- While using the equipment it is forbidden to make more than one person give directions and make signals. The eventual directions and signals relating to the load handling must be given by a person only.
- Do not unexpectedly call an operator while he is working if not necessary; it is forbidden as well to frighten who is working and throw objects, even if just for fun.
- Watch out those present, especially the children!

- Make always sure that no people stand within the equipment's ray of action.
- Do not make people get on the machine.
- When the equipment is not needed, stop the vehicle's engine, park it on a flat ground with first speed and parking brake on, with the machine rested on the ground and power takeoff disengaged.
- Do not make any cleanings, lubrications, repairs or adjustments with running engine and lifted machine.
- Never use the machine in steep slopes which may jeopardize the equipment's stability.
-

SICMA declines all responsibility for a lack of compliance with these instructions.

STARTING UP

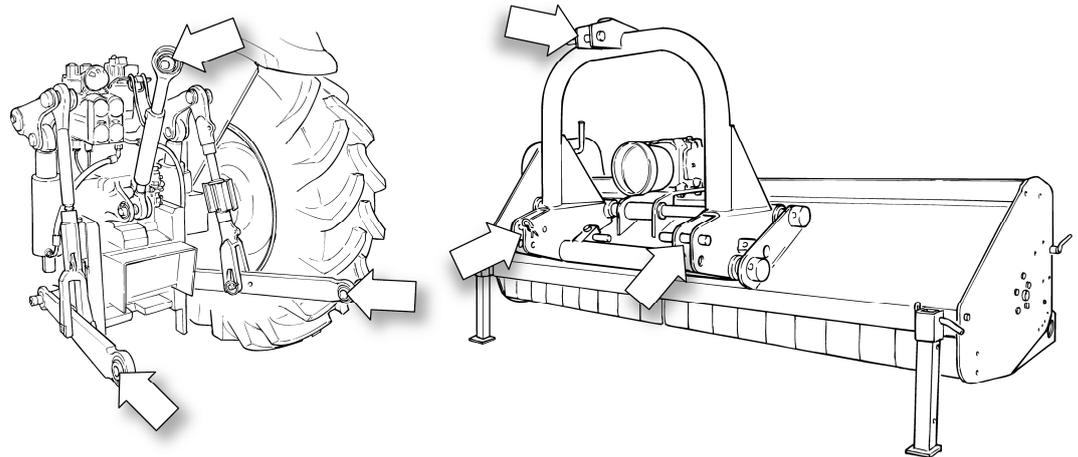
ATTACHMENT TO THE TRACTOR

It is necessary to read up this instruction manual and the manuals of the tractor and cardan shaft manufacturer.

All SICMA shredders have been manufactured to be attached to any tractor provided with hydraulic elevator and universal three-point hitch.

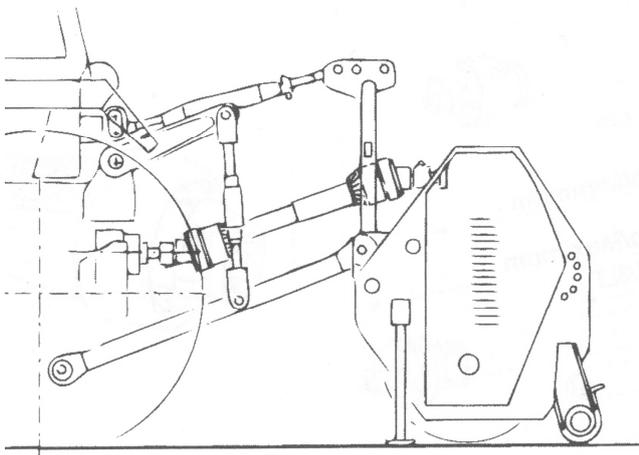
Before attaching the equipment to the tractor, set both on a flat and smooth ground and make sure that nobody is standing between them.

Move slowly the tractor towards the shredder by aligning the tractor elevator's arms to the two shredder hitches' lateral gudgeons; stop engine and pull parking brake.



Connect first the lower arms by removing the release pins of the gudgeons placed on the plates , inserting the elevator bars into the arms centre and fastening them with the relevant release pins, which had been removed in precedence

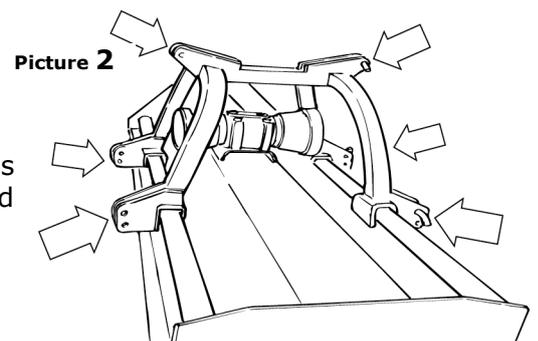
Connect, afterwards, the tractor tie rod to the third upper point by removing the pin located between the plates, inserting the tie rod itself and locking it with the pin.



Adjust the third point so that the upper part of the frame is parallel to the ground.
Lock all connection parts with the special sway chains or tie rods.

It is always good to make sure that the central group axis (sump/bevel gear pair) is parallel to the ground thus reducing the stresses on the power takeoff and extending the working life of the equipment.

TLX-R and **FB** shredders (picture 2) are reversing; it is thus possible to attach them to the front part of all tractors provided with a three-point hitch front elevator.



! Danger

Pay attention to the tractor's front wheels grip when the equipment is set up and lifted; if the wheels appear to be too lightened, ballast the tractor front part.

! Caution

After executing the above-mentioned activities it is always good to check that all bolts and nuts of your shredder are tightened strongly (refer to the bolts and nuts tightening table described in this booklet).

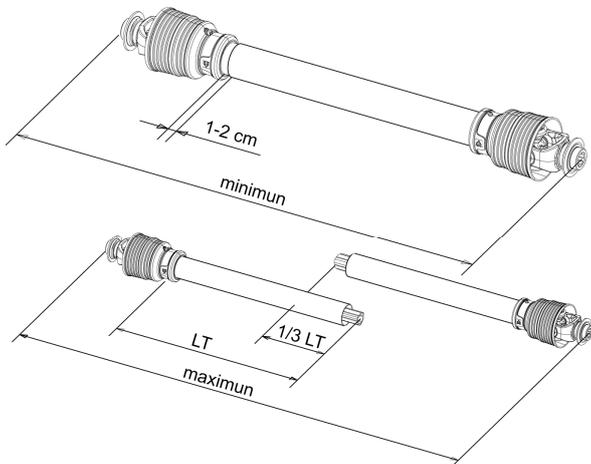
ATTACHMENT TO THE CARDAN SHAFT

Before assembling the cardan shaft, it is very important to check out that its number of revolutions and direction of rotation match those of the tractor. Moreover, read carefully the instruction manuals of the cardan shaft and the tractor manufacturers.

Before starting work, check the presence of the safety guards on the power takeoffs of the machine, of the cardan shaft and of the tractor. Check in particular that the safety guards cover the cardan shaft throughout its extension.

! Caution

When at their maximum extension, the safety guards' plastic hoses shall overlap of at least 1/3 of their length (LT). When in their maximum closing position, the minimum clearance allowed shall be of 1-2 cm.



Check out that the cardan shaft minimum and maximum length are the ones required by the machine-tractor coupling.

Should problems arise, contact a skilled repair shop or the cardan retailer. After installation, secure safety guards both to the tractor and the machine using the special chains and make sure that they pivot freely. If the cardan shaft is equipped with other safety devices, such as a pair limiter or freewheels, be sure to install them on the machine side. As for the cardan use and maintenance refer to the relevant booklet.

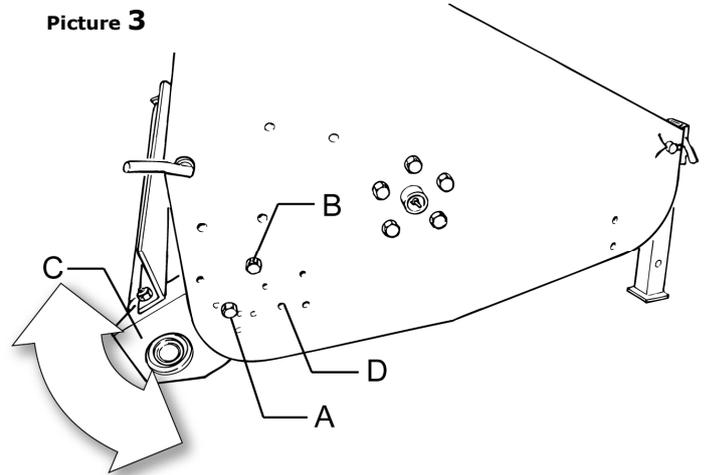
WORKING HEIGHT ADJUSTMENT

The machine's working height is determined by the position of the rear roller and, in some models, by the rear wheels.

Lifting the roller or wheels the cutters get close to the soil, whereas lowering them the cutters get far from it. After a modification of the working height be sure that the cutters skim the ground: a direct contact with it would cause their wear.

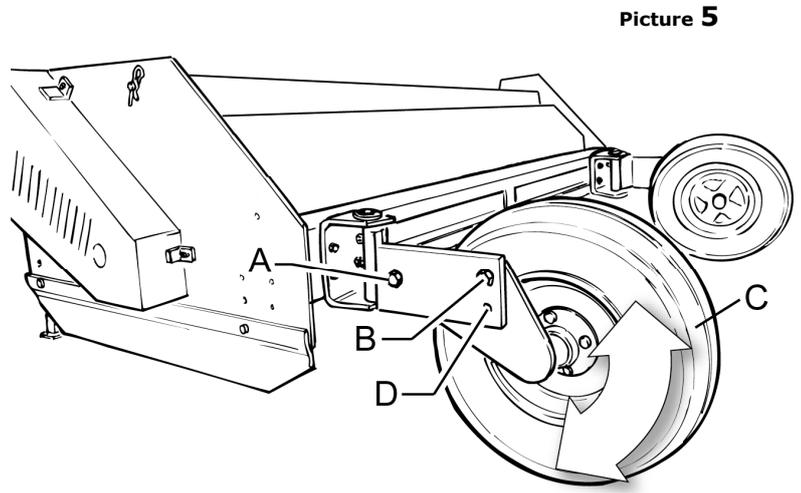
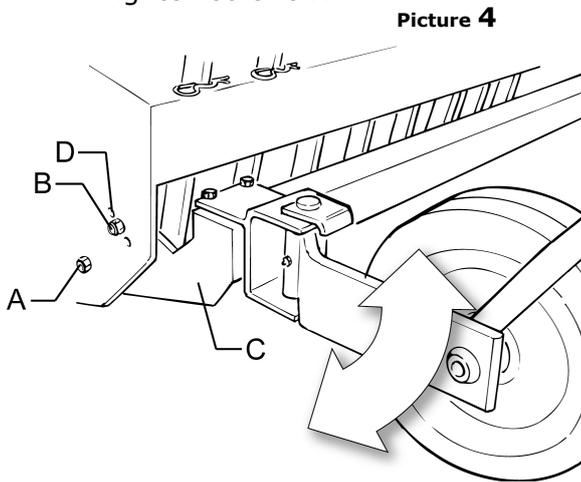
To adjust the roller height (picture 3):

- Screw out and remove screws **A** which fasten the roller on both sides.
- Loosen screw **B**.
- Lift or lower roller **C** through holes **D**.
- Insert back and tighten screws **A**.
- Tighten screw **B**.



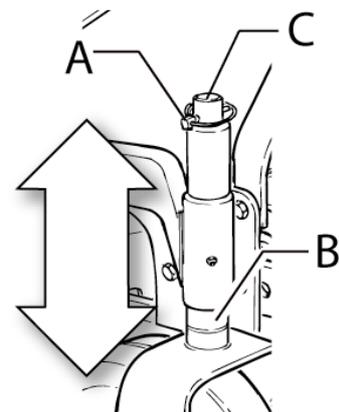
To adjust the wheels height on **TRX, TS, TS-P** models (picture 4) and on **TR, TUF, TSD** models (picture 5):

- Loosen screws **A** on both sides;
- Screw out and remove screws **B** on both sides.
- Lift or lower wheels **C** through holes **D** equally on the left and right sides.
- Insert back and tighten screws **B**.
- Tighten screws **A**



To adjust the wheels height on **TMX, SL, TE** models (picture 6):

- extract split pin **A**;
- extract gudgeon **C** and adjust height alternating the position of bushings **B**;
- after regulation insert back gudgeon **C** and split pin **A**.



Picture 6

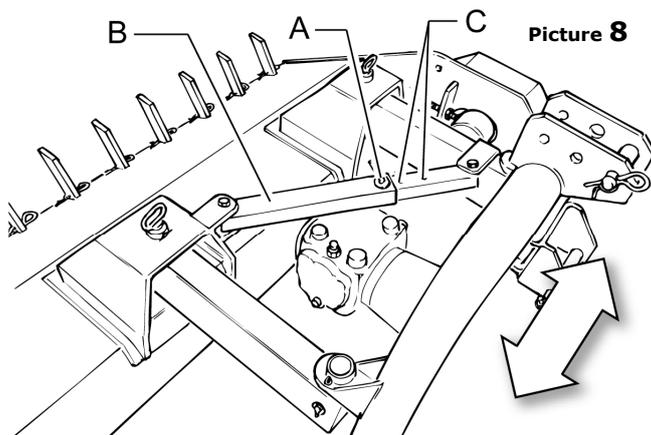
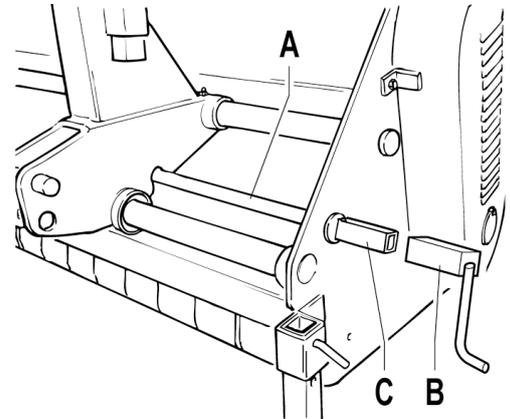
SIDE SHIFT ADJUSTMENT

TS-P, SL¹, TMX¹, TE¹, TLX-R, TRX, TR, TUF, FB shredders are provided with side shift, both manual (through worm screw or adjustable rod) and hydraulic.

To adjust side shift on the machines provided with **worm screw shift** (picture 7):

- Take off crank **B** from its housing and insert it in trailing tang **C**.
- Swing the crank clockwise or counterclockwise up to needed shift
- After regulation, leave crank **B** from trailing tang **C** and replace it into its housing.

Picture 7



Picture 8

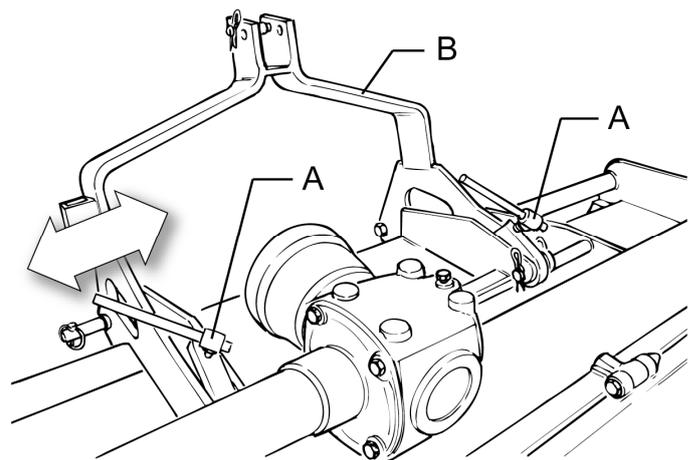
To adjust side shift on models equipped with rod shift (picture 8):

- extract gudgeon **A** and adjust the length of rod **B** through holes **C**: the length of rod **B** determines the machine side shift.
- After adjustment, insert back gudgeon **A** into needed hole.

To adjust **TUF** shredder side shift (picture 9) act as follows:

- loosen screws **A**;
- if side shift is made through worm screw, go on as above; if it is a hydraulic side shift, use the control levers for traversing the jack;
- after regulation tighten strongly screws **A** (refer to the bolts and nuts tightening table described in this booklet)

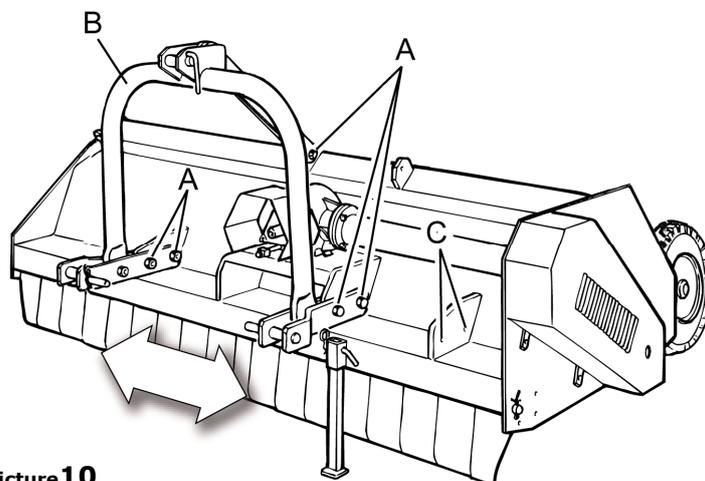
Picture 9



TMX², SL² and TE² shredders are provided with only two side shift positions. To adjust their side shift (picture 10):

- Screw out and extract screws **A**.
- Disassemble frame **B** connecting the elevator and place it on the shredder frame through holes **C**.
- After adjustment insert screws **A** back and tighten strongly.

- ¹ **traversing model**
- ² **fixed model**



Picture 10

 **Danger**

Work height and side shift adjustments shall be made only on working ground and only after having stopped the engine, disengaged the power takeoff and pulled the parking brake. If necessary, lift the machine from the ground but, in order to avoid risks for people, place it on rests thus preventing any injuries that might be caused by its sudden fall.

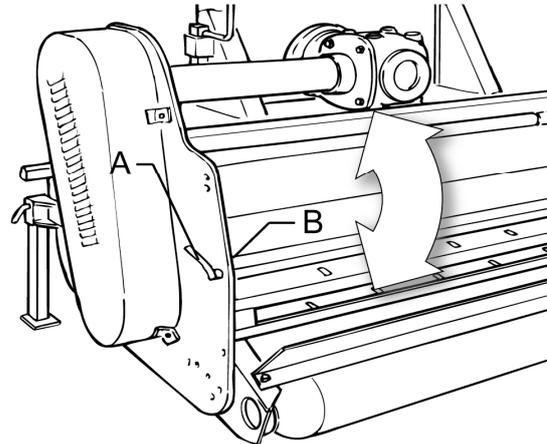
BACK COVER OPENING

In some shredder models the back cover may be opened in order to allow the operations of maintenance and cleaning of the rotor.

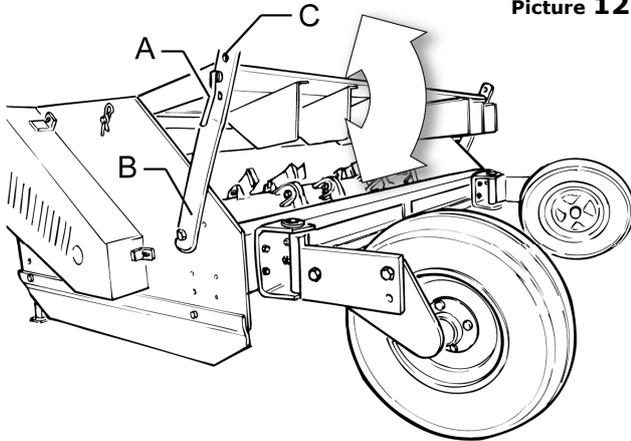
To open **TMX**, **TRX** and **TUF** shredders back covers (picture 11):

- Unscrew and extract gudgeons **A** which lock the cover on both sides.
- Lift the cover through holes **B** placed on it up to needed opening.
- Insert back and tighten gudgeon **A**.

Picture 11



Picture 12



To open **TR** and **TRP** models back covers (picture 12):

- Unscrew and extract gudgeons **A** on both sides of the cover;
- Place rods **B** supplied together with the machine;
- Adjust back cover opening through holes **C**;
- Insert back and tighten gudgeons **A** strongly.

ATTENTION: The back cover can only be opened to carry out the operations of maintenance and cleaning of the rotor: when the shredder is working the back cover must be closed.

SICMA Spa declines all responsibility for the onset of problems caused by a lack of compliance with the instructions.

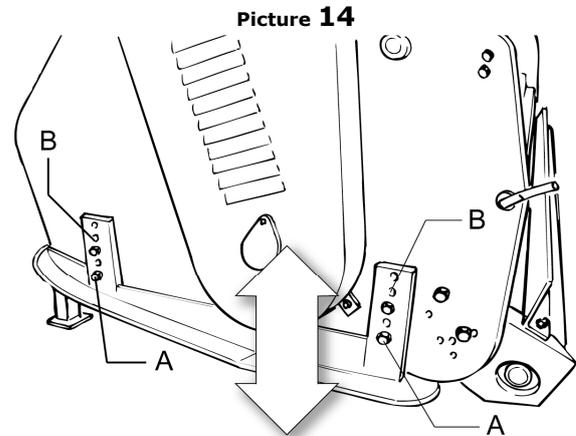
SIDE SKIDS ADJUSTMENT

The side skids whom some shredder models (**TLX-R, TS, TS-P, TRX, TR, TUF, TRP, FB, SL, TMX, TE**) are provided with, avoid an excessive sinking of the machine on the ground during working.

To adjust the skids height (picture 14):

- Unscrew and extract screws **A**.
- Adjust the skids height through holes **B** up to needed height.
- After regulation insert back and tighten screws **A** strongly (refer to the bolt and nuts tightening table described on this booklet).

Do the same thing on the opposite side of the machine.



Danger

These operations shall be made only on working ground and only after having stopped the engine, disengaged the power takeoff and pulled the parking brake. If necessary, lift the machine from the ground but, in order to avoid risks for people, place it on rests thus preventing any injuries that might be caused by its sudden fall.

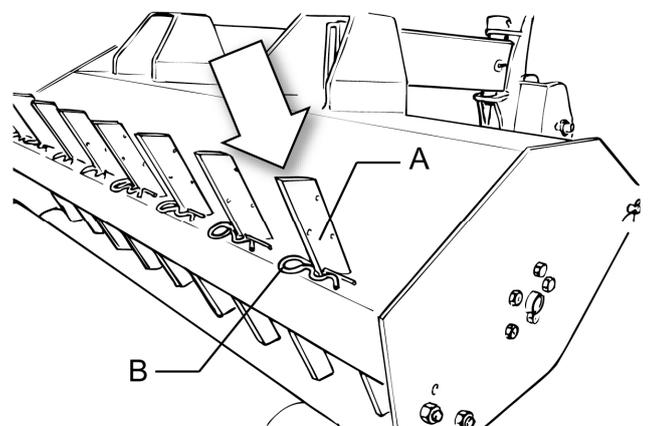
WOOD CUTTING

Some shredders models (**TMX, SL, TS, TS-P, TRX, TR, TUF, and TE**), provided with hammers (see "cutters" section) and with back blades, are able to mince also bigger shrubs.

Picture 15

To place the back blades (picture 15):

- Insert the back blades **A** into their special housing;
- Push them up to make them skimming the soil;
- Insert split pin **B** into the special drilling up to needed height.



FEELER ARM AND SPRING-LOADED ARM

Some shredder models (**TS, TS-P, TRX, and TUF**) can be equipped with a side arm which allows making the mincing of material even in uncomfortable areas during work, such as inter-lines grounds.

Side arms can be of two types:

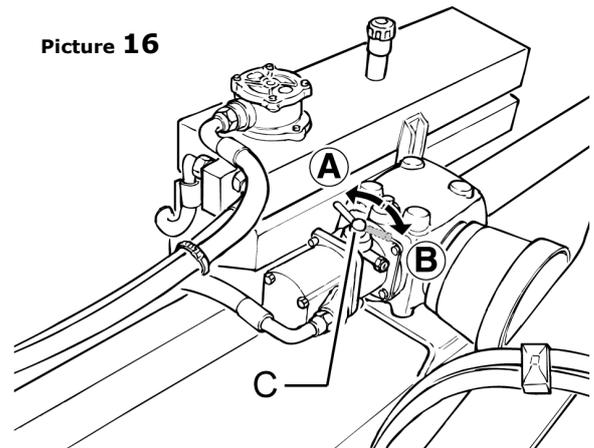
- **feeler arm**, equipped with a side rod which makes the arm return (through hydraulic movement) even after the crash with obstacles not too big (i.e. shrubs, shoots, etc);
- **spring-loaded arm**, without the side rod, but equipped with a simple return spring which makes the arm return (through mechanical movement) only after the crash with bigger object (i.e. stakes, stocks, etc);

Arm activation and deactivation

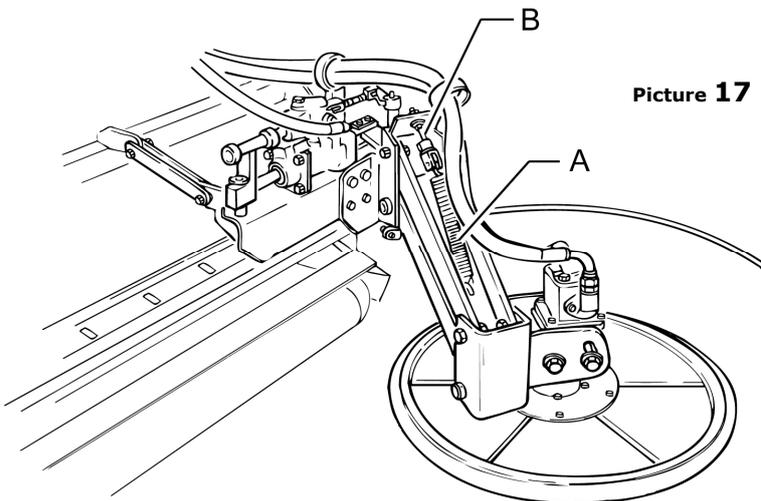
To set in action both feeler and spring-loaded arms use lever **C** (picture 16):

- Place it in position **A** to set the arm hydraulic system in action;
- Place it in position **B** to deactivate the arm hydraulic system.

Picture 16



Picture 17



Adjustment of the arm's sensibility to the ground (feeler and spring-loaded arm)

The arm's sensibility to the ground can be adjusted through spring **A** (picture 17) which acts on tie rod **B**:

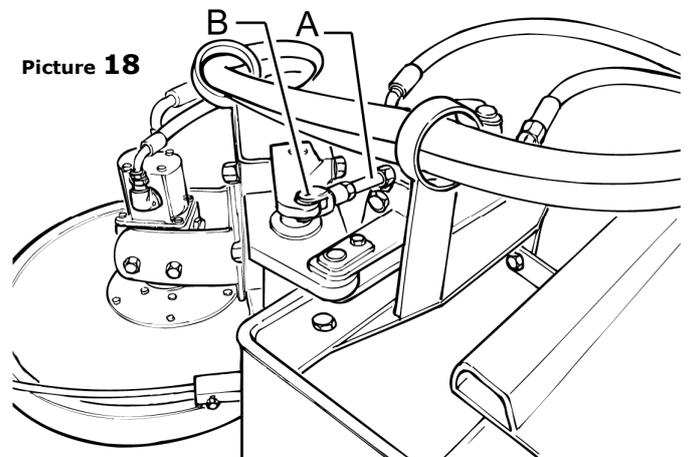
- tightening tie rod **B** the arm's sensibility to the ground grows up;
- loosening tie rod **B** the arm's sensibility to the ground decreases;

Adjustment of the feeler arm working amplitude

To adjust the **feeler arm** working amplitude radius (picture 18):

- Extract support **B**;
- Adjust the length of screw **A** considering that the shorter the screw's length the greater the rod's radius amplitude (thus increasing the working amplitude);
- After adjustment, insert support **B** back.

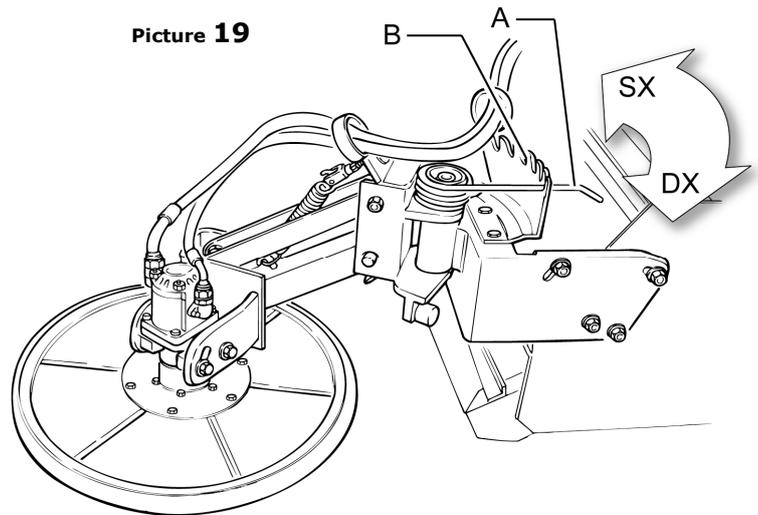
Picture 18



Adjustment of spring-loaded arm resistance to obstacles

To adjust the **spring-loaded arm** resistance to obstacles use return spring **A** (picture 19) moving it rightwards on hooking support **B** to decrease the arm resistance to obstacles, vice versa leftwards to increase resistance to obstacles.

Picture 19



These operations shall be made only on working ground and only after having stopped the engine, disengaged the power takeoff and pulled the parking brake. If necessary, lift the machine from the ground but, in order to avoid risks for people, place it on rests thus preventing any injuries that might be caused by its sudden fall.

CUTTERS

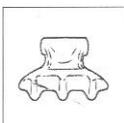
Shredders can be equipped with different types of cutters or hammers according to the work to be done:



All-purpose cutters: for grass, straw, and maize.



Straight cutters with counter cutters: for straw, wheat, extra fine mincing.



Hammers: for wood and shrubs.

STARTING UP

Now that all setting up operations are completed, your machine is ready to be used; after reaching the work place we advice to engage power takeoff only after having lifted the shredder of a few centimetres with the tractor elevator. After this, it is possible to start engine, engage power takeoff, drop the machine down to work position and start using it.

WORKING SPEED

The working speed depends on the quality, the diameter and the height of the material to be cut; anyway, it must be between 3 and 10 km/h. The power takeoff speed must be 540 rpm maximum (max 1000 rpm **FB** shredder)

ROAD TRANSPORT

While transporting the machine it is very important to follow the road traffic code of the country where you circulate.

SET ASIDE

If your shredder will not be used for a long period of time, we advice to:

- 1 Wash the machine accurately and dry it.
- 2 Check out all equipment and replace eventual damaged or worn parts.
- 3 Tighten strongly all bolts and nuts (ref. bolts and nuts tightening table).

Make an accurate greasing and finally protect the whole machine with a tarpaulin and put it in a dry place.

MAINTENANCE

Maintenance is a fundamental operation to extend life and performances of any agricultural vehicle; taking care of the machine grants you not only a good work execution, but also a longer life of the whole equipment and a greater safety on the workplace.

The operating times indicated on this manual have just an informative character and are referred to normal conditions of use; they can thus undergo variations according to the type of service, to the more or less dusty environment, to seasonal factors, etc



-
- **Before injecting lubricating grease into the nipples, clean them accurately to prevent mud, dust or other foreign matters from mixing up with grease, thus diminishing the lubrication effect**
 - **When making oil feed or change it is better to use the same oil type, in order to avoid mixing oils with different features.**
 - **When executing maintenance activities, keep the machine rested on the ground in horizontal position.**
 - **After the first working hours check that all bolts and nuts are tightened strongly; remember also to check often all the machine safety guards.**
-

MAINTENANCE OF THE MACHINES

FIRST CHECK

- Check the correct tension of the driving belt *
- Check that all bolts and nuts are tightened strongly *
- After the first 50 hours of work change oil in the overgear unit *

EVERY 8 HOURS OF WORK

- Grease the shaft support (driveline side) through the lubricating nipple A (picture 20)
- Grease the shaft support (external side) through the lubricating nipple A (picture 21)
- Grease the shaft support (driveline) (**TA, TMX, TLX-R, TSD, TE, SL**) through the lubricating nipple A (picture 22)
- Grease the stabilizing roller through the lubricating nipple A (picture 23)
- Grease the side shift rods through the lubricating nipple A (picture 24 - **TMX, TR, TRX, TE** - and picture 25 - **TSP** -)
- Grease the cardan shaft spiders on gearbox (**TR, FB, TSD**); do as follows (picture 26):
 - screw out wing nuts A and remove safety guard B;
 - grease the spiders through lubricating nipple (see the cardan shaft manual);
 - after greasing replace safety guard B and tighten wing nuts A strongly.

EVERY 50 HOURS OF WORK

- Check the correct tension of the collection rotor gearing chain (only TSD) and lubricate *
- Check the correct tension of the driving belt *
- Check that all bolts and nuts are tightened strongly *
- Check the cutters/hammers wear state
- Check the overgear unit oil level through plug A (picture 27)

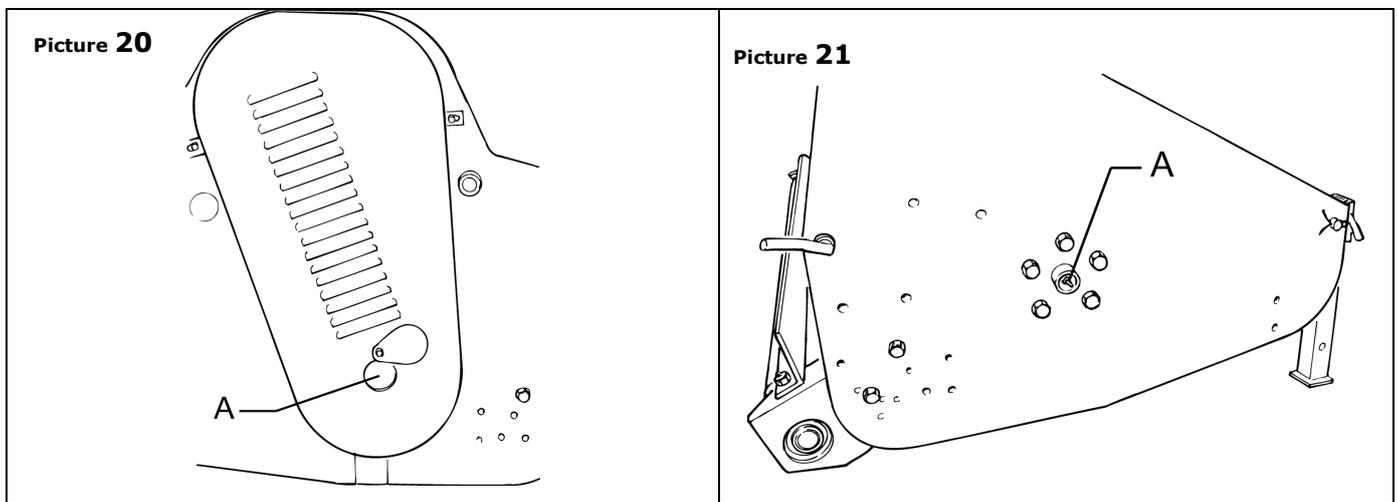
EVERY 500 HOURS OF WORK

- Check that all bolts and nuts are tightened strongly *
- Change oil in the overgear unit *

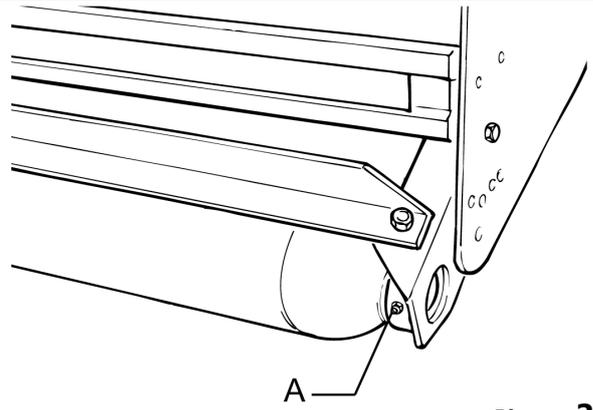
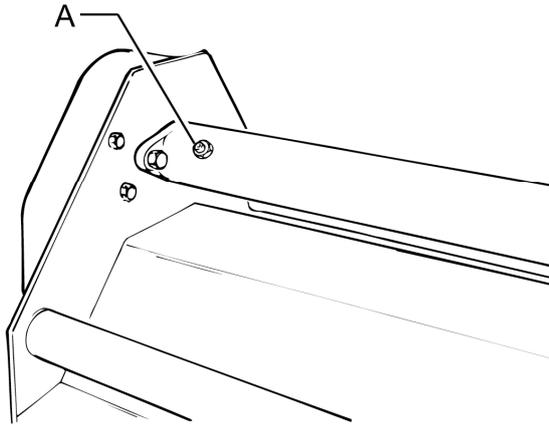
EVERY 1000 HOURS OF WORK

Replace the driving belt*

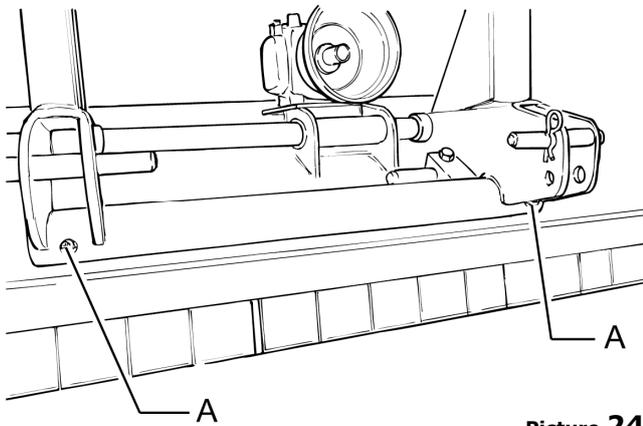
* **ATTENTION:** this maintenance activity is to be made only at SICMA authorized repair shops.



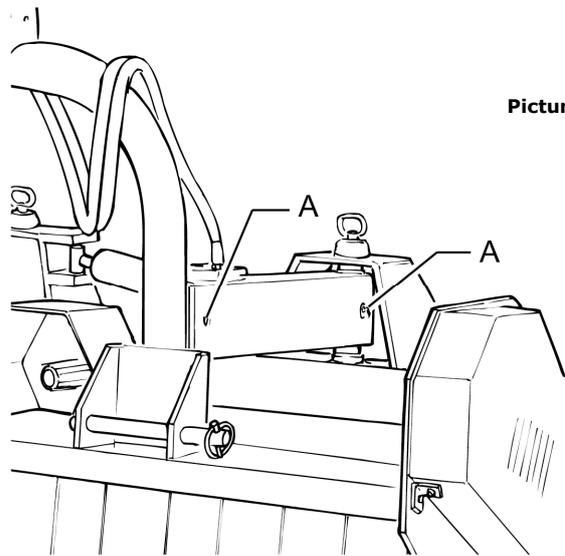
Picture 22



Picture 23

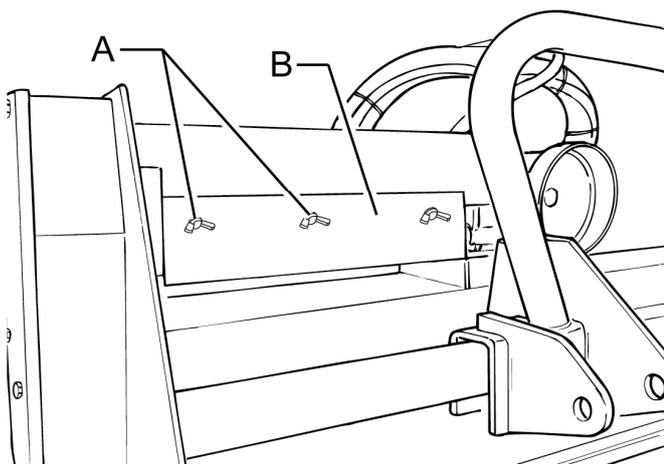


Picture 24

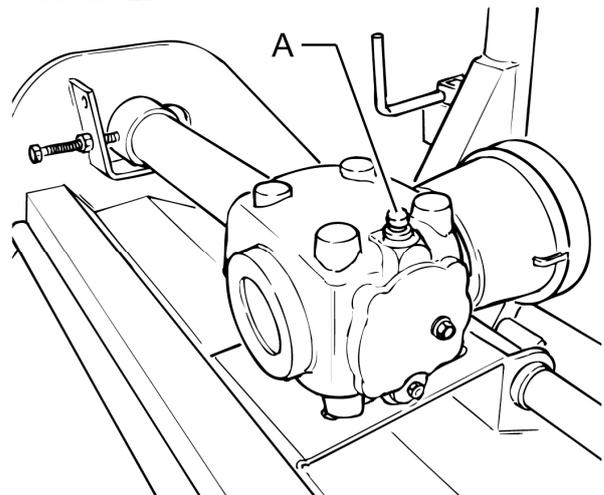


Picture 25

Picture 26



Picture 27



FEELER AND SPRING-LOADED ARMS MAINTENANCE

FIRST CHECK

- After the first 50 hours of work change oil in oil tank A (picture 28)*

EVERY 8 HOURS OF WORK

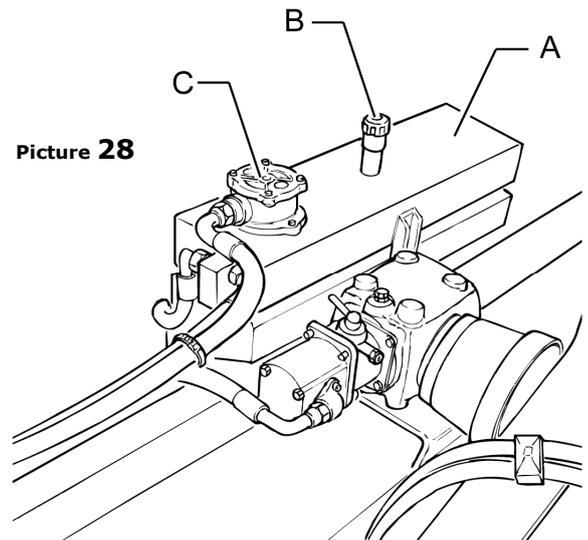
- Grease all components of the arm through lubricating nipples A (pictures 29 and 30)

EVERY 50 HOURS OF WORK

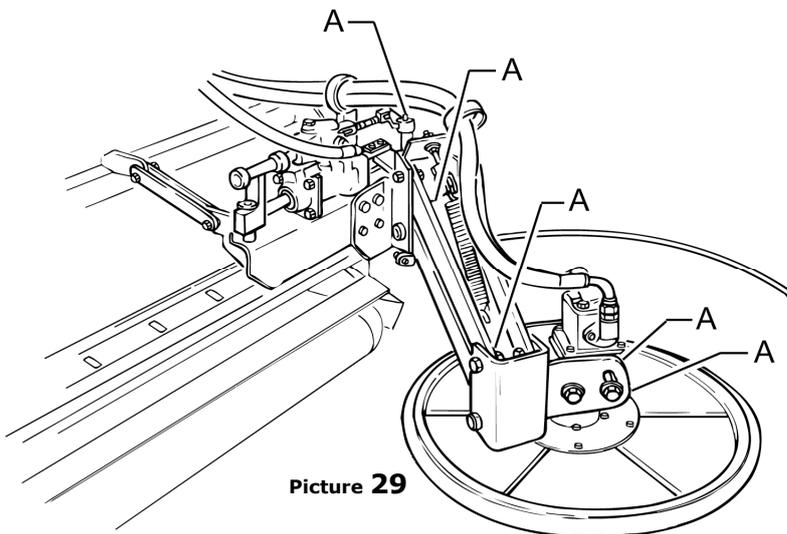
- Check oil level in tank A (picture 28) through plug B.

EVERY 500 HOURS OF WORK

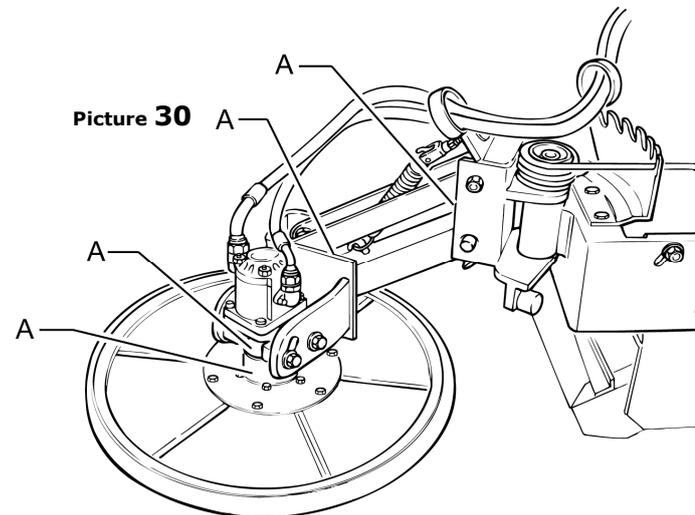
- Replace oil filter C (picture 28) *
- Change oil in oil tank *



Picture 28



Picture 29



Picture 30

ATTENTION: this maintenance activity is to be made only at SICMA authorized repair shops.

 **Caution**

Get rid of exhaust oil in compliance with the relevant rules of the country where you operate. It is thus forbidden to pour it on the ground.

 **Danger**

Before executing maintenance activities on the machine, stop engine, disengage power takeoff, pull parking brake and place the equipment on the ground.

CUTTERS/HAMMERS CHECK

To assure a perfect functioning of the machine, check often (at least every 50 hours of work) that the shredder's hammers are in good condition and perfectly fixed by the locking bolts; in case they are broken replace them with new spare parts.

For any cutter or hammer replacements please contact the nearest SICMA authorized repair shop.



Before starting the inspection of cutters and hammers, stop engine, pull parking brake and disengage power takeoff; lift then the shredder with the tractor elevator and place it on rests to avoid an accidental fall.

SPARE PARTS ORDERING

To order spare parts, please consult the catalogue.

Request of spare parts must be made to the retailer or to the nearest service centre and must always be completed with the following information:

- Type and width of the equipment.
- Code number of the needed spare part. Lack of this number, you can replace it with the number of the table where the part is represented and the correspondent reference.
- Denomination of the needed part and desired quantity.
- Chosen transportation. When this item is not specified, the retailer or service centre, even devoting many cares to this service, do not answer for eventual shipping delays due to acts of God. Transport charges must always be paid by the addressee.

