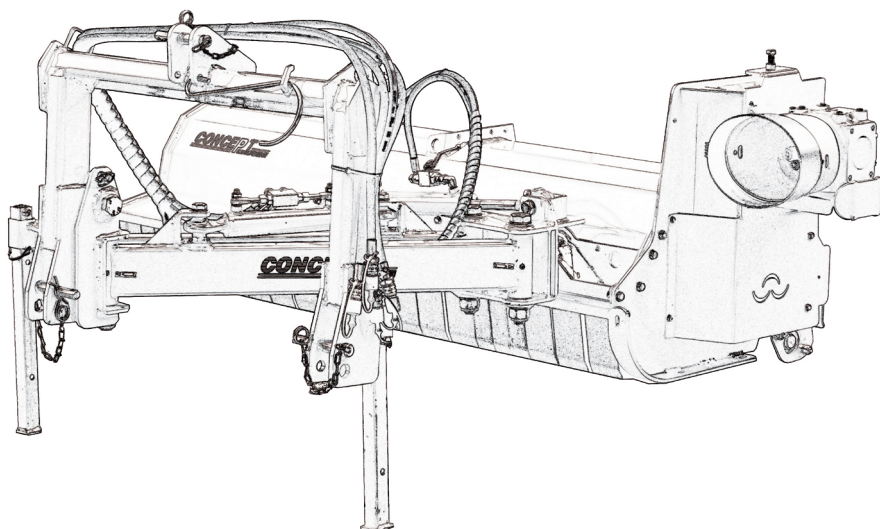


CONCEPT **PERUGINI**

VERGE FLAIL MOWERS



INSTRUCTION BOOK

Manufactured by
CONCEPT PERUGINI S.R.L.

Via Dell'Artigianato, 11-15
47014 Meldola (FC)
Italia

TEL.: +39 0543494602

FAX: +39 0543 494727

www.conceptagri.com

info@conceptagri.com

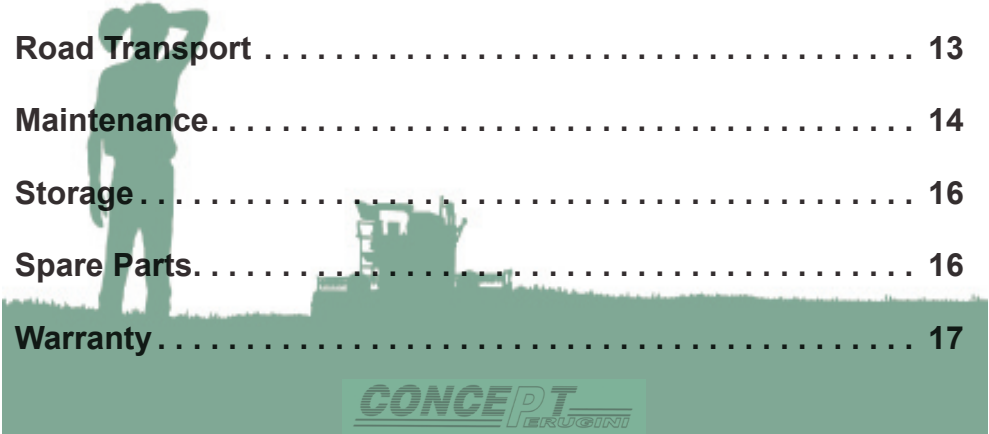


CONCEPT PERUGINI

CONCEPT PERUGINI S.R.L. RESERVES THE RIGHT TO MODIFY THEIR
PRODUCTS WITHOUT PRIOR NOTICE AND THE COMMITMENT TO UPDATE
THIS MANUAL

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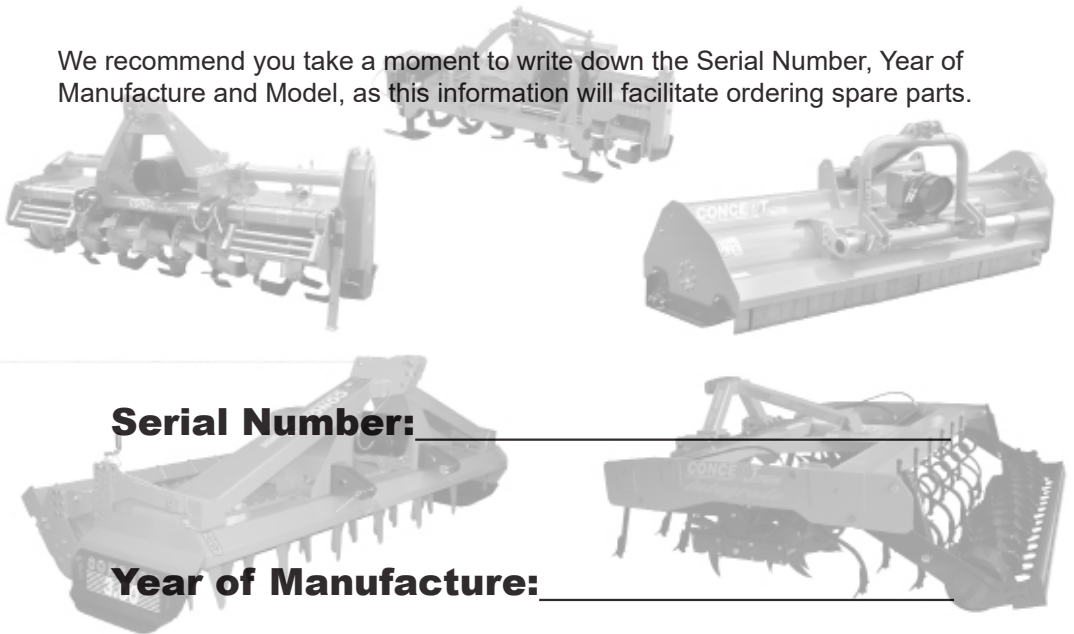
Introduction

Concept Perugini S.R.L would like to thank you for purchasing this Flail mower and offer their support and assistance throughout its productive life.

We strongly recommend that this booklet is read and understood before using your new machine, and that regular maintenance is carried out as described further in the booklet. If any doubts arise then don't hesitate to contact your local dealer or the company via the options provided on the front page or via Facebook @ Concept Perugini.



We recommend you take a moment to write down the Serial Number, Year of Manufacture and Model, as this information will facilitate ordering spare parts.



Serial Number: _____

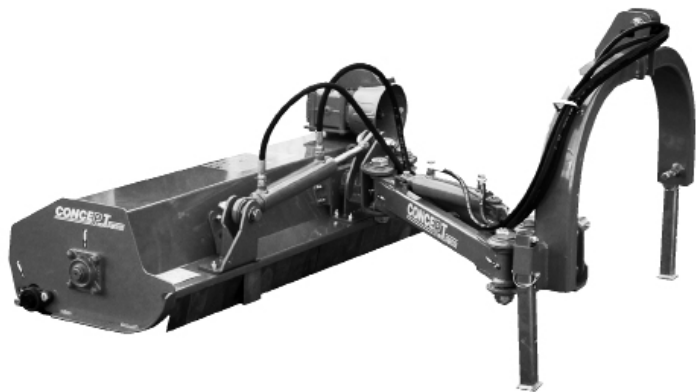
Year of Manufacture: _____

Model: _____

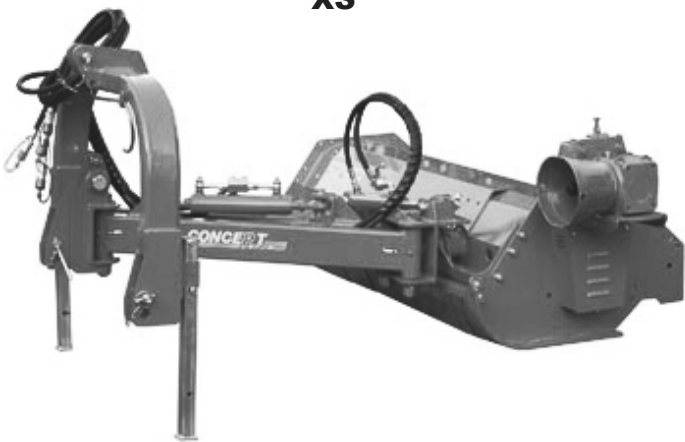
Instruction Manual

The aim of this manual is to help you (the user) understand how to use and how to maintain the machinery. This booklet covers the following models : **CS XS ES DS SS MS**

CS



XS



ES



Identification

The identification plate, attached to the machine shows the following information:

CONCEPT ERUGINI 47014 MELDOLA - (FO) - ITALIA		CE	
① ANNO DI FABBRICAZIONE	② MANUFACTURE YEAR		
③ ANNÉE DE FABRICATION	④ ANNEE		
⑤ N° DI MATRICOLA	⑥ SERIAL NUMBER		
⑦ NUMERO DE MATRICULE	⑧ NUMERO SÉRIEL		
⑨ MODELLO	⑩ TYPE		
KW	HP		
		min ⁻¹	
		S+G	
		1000	

- Manufacturer's Name
- CE mark
- Year of production
- Serial number
- Recommended tractor horsepower
- Overall weight
- P.T.O. speed and direction of rotation

These data are very important in order to check the compatibility between the machine and the tractor and when ordering spare parts

Before operation

At the factory each machine is carefully inspected to guarantee proper functioning. In addition, the dealer, before delivering the machine should have carried out a pre delivery inspection. However as a precaution measure check:

- Oil level in the gearbox
- Grease all those components provided with grease nipples
- Air pressure in the tractor's tyres, length of lift arms
- Tractor PTO speed to match the machine transmission speed

Safety

Symbols

In this booklet three different symbols are used to highlight danger levels or important information



DANGER

To draw the operator's attention to situations which could endanger his or other people safety.



CAUTION

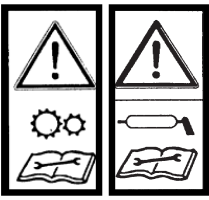
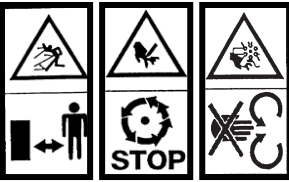



To draw the operator's attention to situations which could affect the machine performances but not his or other people safety.



IMPORTANT

To draw the operator's attention to situations which do not affect the machine performances and his or other people safety.

It is important to comply with the instructions given by the safety stickers, which must always be on the machine. If new ones are required, contact your dealer.

	SYMBOL	DESCRIPTION
1		Before operation, adjusting or servicing the machine, it is important that each operator carefully reads the following instructions. Servicing lubrication etc. should be carried out with the engine stopped, the brakes applied and locked and the starter key removed.
2		Anybody who is near the machine when working, must keep at a safe distance. During operation keep away from rotating parts and PTO shaft. Do not remove safety guards whilst the machine is working or with engine running.
3		Danger of injury to lower body parts. Anybody who is near the machine when working must keep a safe distance at all times.
4		Danger of injury to limbs. Anybody who is near moving parts must be aware of where his body is in relation to the machine and keep at a safe distance. Do not remove safety guards.
5		Any servicing should be carried out with the tractor off and the correct parking procedures should be followed out as advised by the manufacturer. Should the machine need to be raised it should be supported securely.



When lifting the machine always use the appropriate lifting gear and always use the lifting points indicated by the yellow and black stickers as shown in picture.

General Safety Instruction

- During operation keep away from rotating parts and PTO shaft, do not remove safety guards during operation or with the engine running.
- Servicing should be carried out with the engine stopped, the brakes applied and locked and the started key removed. Once the machine is raised do not work underneath unless supported securely.
- When travelling on the public road disconnect the PTO shaft and carefully follow the traffic regulations of your country.
- Always lift the machine from the lifting points.
- The operator should be experienced and in good health in order to avoid injury to his person and others.
- The operator must wear the correct safety garments.
- Do not work when dark unless suitable lighting is available

Operator's Prerequisites

To avoid danger to himself and others, the operator must be:

- **Physically sound**
- **Mentally sound**
- **Trained**

We advise that the operator read and understand this booklet before using the machinery. If there are any doubts then contact your dealer or **CONCEPT PERUGINI S.R.L**

Work Clothing

The operator must wear the following:

- Working gloves
- Overalls of appropriate size
- Working boots
- Protective glasses
- Protective helmet

**ALWAYS MAKE SURE THE TRACTOR IS TURNED OFF, P.T.O
IS DISENGAGED AND MACHINE IS MADE SAFE**

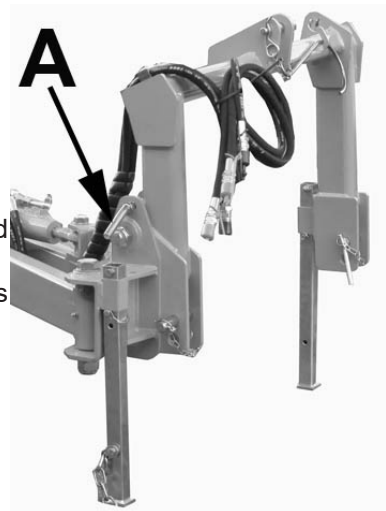
Attaching the machine to the Tractor

Concept Perugini Flail toppers can be linked up to any tractor with a category 1 or 2 three point linkage.

Read the tractor's instruction manual before attempting to attach the machine to the tractor.

- Adjust the width of the tractor arms to match the lower brackets on the machine
- On a flat surface reverse the tractor up to the machine
- Firstly attach the lower links and do the necessary adjustments to limit sideways movement
- Lengthen and attach the top link in order to have the machine parallel to the ground once attached
- **Remember** to fit all the locking pins and that the machine is safely secured to the tractor

On the **XS ES** there is a hitch pin **A** on the headstock that must be removed once attached to the tractor. This pin keeps the headstock locked in a vertical position when the machine is parked and not linked to a tractor.



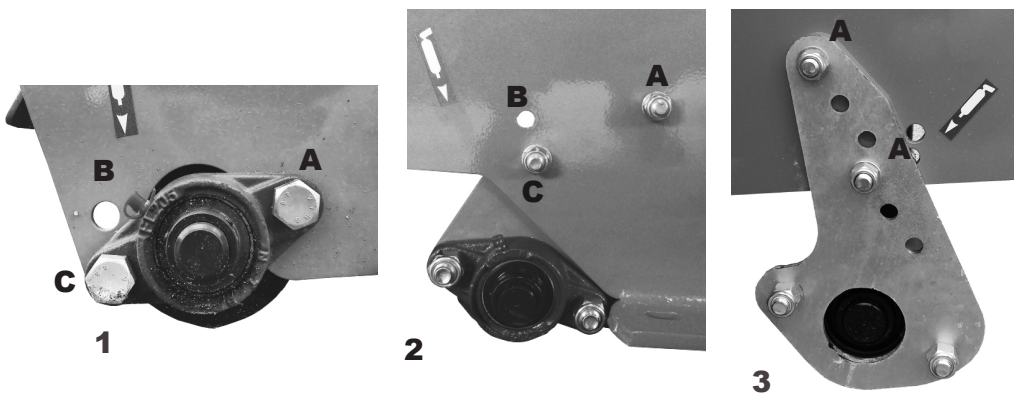
PTO Shaft

If necessary, cut the PTO shaft to the right length following the shaft manufacturer instructions.

When attaching the PTO shaft to the machine and tractor make certain that if the PTO shaft is fitted with an overrun clutch this must be installed on the implement. When connecting to the tractor verify that the locking pin is correctly located and secure in place. Before use make sure all the chains and guards are correctly fitted.

Working Depth

The height of the machine from the ground is controlled by the rear roller, skids and top link. Before using the flail mower make sure that the flails do not hit the ground, this will result in extreme wear and will damage the rotor.



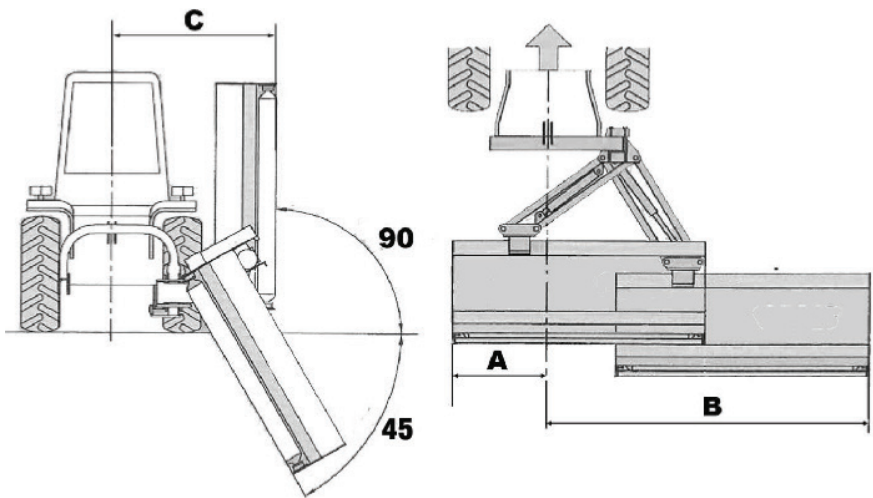
CS have the supports pictured in fig.1 to alter the height of the roller simply slacken bolt **A**, remove **C** and reposition the support in **B**. Tighten all bolts.

XS model has the supports pictured in fig.2. Slacken **A** remove **C**, reposition the support in the desired height (**B** or **C**).

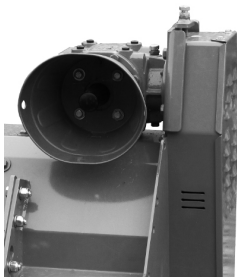
ES has the roller brackets shown in fig.3. Undo bolts **A** move the plate to the desired height and tighten bolts **A**. Depending on the width of the machine the plates may be either on the inside of the chassis or the outside.

Hydraulics

The **CS XS ES DS SS MS** are hydraulic verge mowers following is the table with all the movement information.



INTERNAL GEARBOX -D



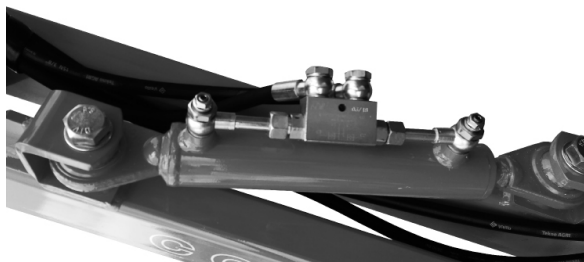
EXTERNAL GEARBOX -F



INTERNAL GEARBOX -D			
MODEL	A	B	C
CS 110	425	1550	1080
CS 135	425	1810	1080
XS-D 125	600	1890	1330
XS-D 140	600	2090	1330
XS-D 155	600	2220	1330
XS-D 165	600	2340	1330
ES-D 140	620	2100	1350
ES-D 160	620	2230	1350
ES-D 180	620	2490	1350
ES-D 200	620	2620	1350

EXTERNAL GEARBOX -F			
MODEL	A	B	C
XS-F 125	340	2150	1590
XS-F 140	340	2350	1590
XS-F 155	340	2480	1590
XS-F 165	340	2600	1590
ES-F 140	340	2380	1630
ES-F 160	340	2510	1630
ES-F 180	340	2770	1630
ES-F 200	340	2900	1630

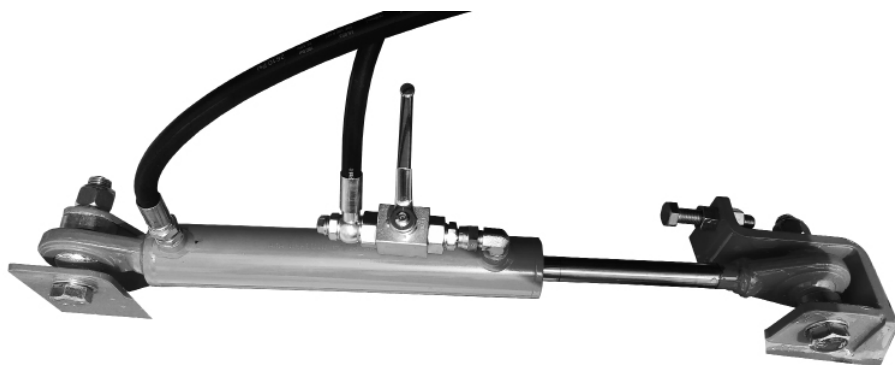
To use your verge mower firstly connect the hydraulic hoses to the tractors double acting spool valve.



Ram Adjustment

When the machine is connected for the first time to the tractor the oil flow must be regulated to get the desired movement speed. The machine should not move too quickly but must move steadily to avoid hitting obstacles and damages.

To adjust the oil flow undo the counter nut with a 13mm spanner and adjust the centre screw with an allen key, tightening the centre screw will reduce oil flow and loosening it will increase oil flow.



The tap on the machine ram must be opened during use and closed during transport. This acts as a safety block, restricting oil flow and therefore locking the implement in its position. During transportation the mower should never be in the upright position.

N.B The flow restrictors should never be adjusted with the oil under pressure. This will lead to personal injury and damage the machinery. Always lift the machine off the ground before using the hydraulic movements.

In the Field

Once the machine has been attached to the tractor, adjusted and inspected then it can be operated in the field.

- Lower the machine to approximately 10 cm from the ground.
- Engage the tractor PTO and slowly increase the speed to 540 rpm.
- Lower the machine to the ground, engage a forward moving gear and commence forward motion.

Always drive in a straight line, when turning lift the machine off the ground to avoid straining the parts in contact with the ground.

**NEVER START THE MACHINE WHEN AT 90°
ALWAYS ENGAGE PTO WHEN ROTOR IS PARALLEL TO THE
GROUND**

**IF THE MACHINE IS PROVIDED WITH AN OPENING
TAILGATE, THIS CAN BE OPENED ONLY WITH THE
MACHINE STOPPED. FOR NO REASON CAN THE MACHINE
BE USED IN THE FIELD WITH THE TAILGATE OPEN.**

Road Transport

When transporting the implement attached to a tractor on public roads ensure that you comply with the relevant regulations.

- Class of roads permitted for travel may be restricted.
- Transport may be restricted to daylight or off peak traffic hours.
- Signs indicating width may be required.
- Lights indicating vehicle width may be required for the hours of darkness.
- Disengage PTO when transporting.
- Ensure all hitch pins are correctly fitted with retaining pins.

Maintenance

The maintenance for the Concept Perugini flail mowers is very straight forward.

Lubrication

Every 10 working hours:

- Grease side shift sliding parts with **Agip 33/FD** or equivalent

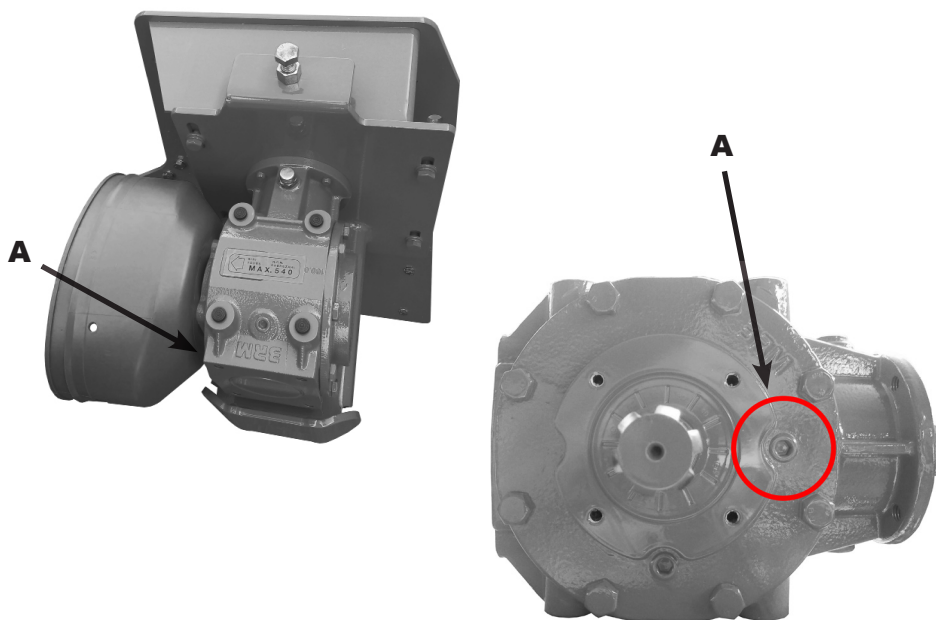
Every 50 working hours:

- Check the gear box and side shaft oil level. If necessary top up with gear oil **EP90**

Every 250 working hours or once a year:

- Change the oil in the gear box and the side shaft
- Grease the rear roller bearings. **DO NOT OVER-GREASE** the bearings, this will lead to the seal braking causing dirt to enter the bearing and eventually ceasing it.

To control the oil level in the gearbox use tap **A** located behind the plastic guard. The guard must be removed in order to access tap **A**.



Rotor



Maintenance on the rotor is very important.

Before and After each use check to see if the rotor and flails are damaged. If the rotor is damaged it will cause it to become unbalanced creating unwanted vibrations which will lead to the supports breaking. If the rotor is damaged then contact your local dealer.

Check the bolts for tightness and the flails for wear and breakages. Replace all broken, bent or worn blades.

To replace the blades machine must be lifted and the blades replaced from underneath, make sure the machine is properly supported and made safe.

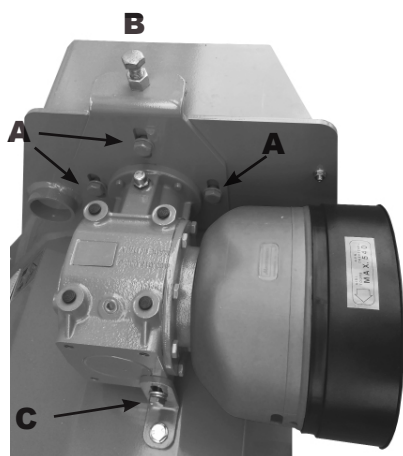
Belt tension observation slot



Transmission

The transmission on all Concept Perugini flail mowers is belt driven. After the first 2/3 hours of use check the tension in the belts via the slot on the belt guard, there should be 5 mm play when 10kgf are applied.

Should the belts need tensioning or replacing, the procedure is very simple.

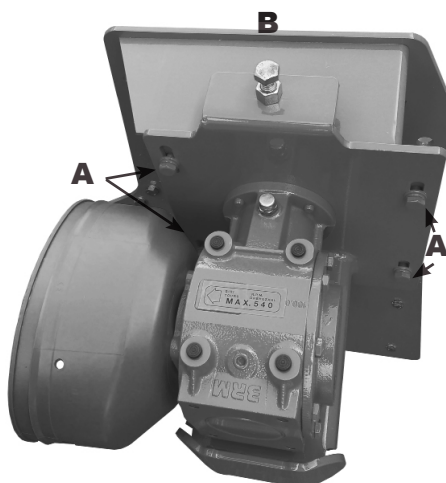


INTERNAL GEARBOX

- Slacken the bolt **C**
- Slacken the bolts indicated **A**
- Adjust the tension by either tightening or slackening bolt **B**, **NB**. Loosen the counter nuts on **B** before tightening or slackening
- When the belts are taught tighten the counter nuts on **B** and tighten **A** and **C**

EXTERNAL GEARBOX

- Slacken the 4 bolts indicated **A**
- Tighten or loosen bolt **B** to reach the optimum tension. **NB** loosen counter nut on **B** before either tightening or slackening
- Once the tension has been made tighten all bolts **B** and **A**



Stone Guards

The front stone guards are very important for the protection of the tractor driver. Under no circumstances should the machine be used without the front stone guards. If the guards are bent, worn or broken they should be immediately replaced, failure to do so can result in severe injury and in certain cases can cause death.

The picture shows the comparison between a used worn and bent stone guard (top) and a new guard (bottom).

If the machine is properly set up, set at the correct height and the top tractor link is adjusted accordingly then the stone guards should be able to hang freely and not dig into the ground.

ALL MAINTENANCE MUST BE CARRIED OUT WITH THE TRACTOR ENGINE OFF, P.T.O DISENGAGED AND THE MACHINE PROPERLY SUPPORTED. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY

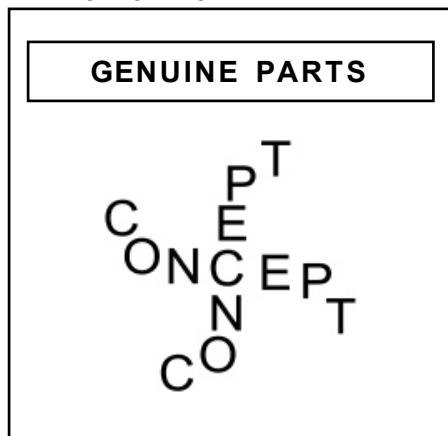
Storage

Before storing the flail mower after it's seasonal use it is recommended that a thorough check and clean is carried out. Remove all dirt and address any severely worn parts or broken parts. Treat any areas of the machine where the paint has worn off with a rust inhibitor and store in a dry place out of the elements to insure a longer life span. Grease the P.T.O shaft following the manufacturers recommendations.

Spare Parts

For the correct spare parts contact your local dealer and ensure that you have the all of the identification data and correct codes of the parts required.

Always use **genuine Concept spare parts**



**THE USE OF NON GENUINE PARTS WILL NULLIFY THE
WARRANTY**

Warranty

During the warranty period the appropriate maintenance should be carried failure to do so will breach any cover necessary,

Concept Perugini S.R.L covers warranty with the exemption of wearing parts, providing that the fault is due to defects in workmanship or material and is in any way or to any extent not attributable to misuse, lack of reasonable care and general wear or to the fitting of spares, replacements or extra components which are not supplied or approved by Concept Perugini S.R.L. failure to comply will void warranty and should any problems arise Concept Perugini S.R.L is not held responsible and is not required to answer to any warranty claims.

CONCEPT MADE IN ITALY
FARM MACHINERY PERUGINI