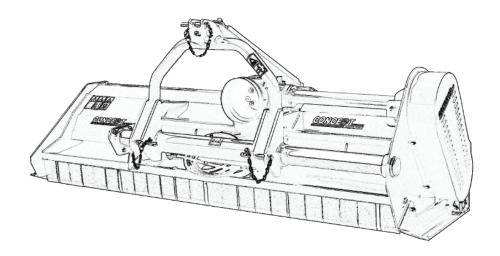


FLAIL MOWERS



INSTRUCTION BOOK

Manufactured by **CONCEPT PERUGINI S.R.L.**

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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:

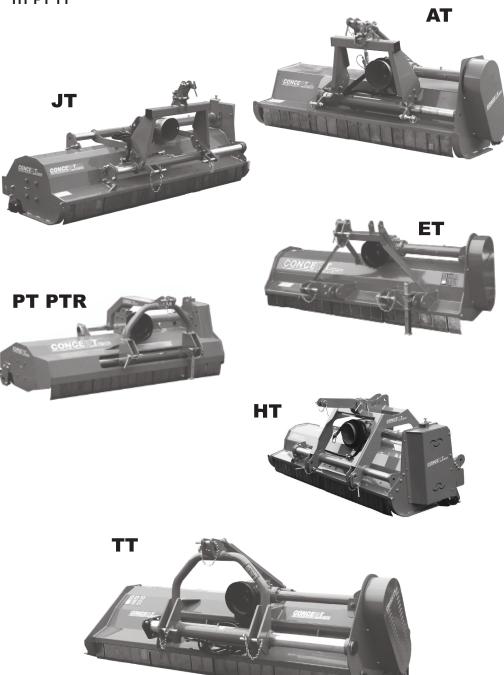
Model:





Instruction Manual

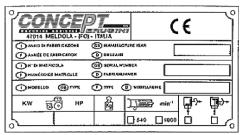
The aim of this manual is to help you (the user) understand how to use and how to maintain the machinery. This booklet covers the following models : **AT ET JT HT PT TT**





Identification

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



- 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	A A A A STOP STOP	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	₩ S	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.

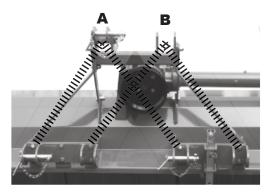
Read the tractor's instruction manual before attaching attempting to attach the machine to the tractor.

- 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

NB On the **PT** the top link bracket is provided with a hole and a slot to attach the tractor's top link. It is important that during transport the top link is secured via the hole and during work the slot is used. Failing to follow these instructions could result in serious damage to the headstock sliding mechanism and to injury.

ET Headstock

The **ET** comes with a fixed headstock but has 2 options as to where to attach the 3 point tractor linkage, this is to offer a fixed offset option. To attach the machine to the tractor proceed as previously described but choose the desired brackets, either to have the machine directly behind the tractor or offset.



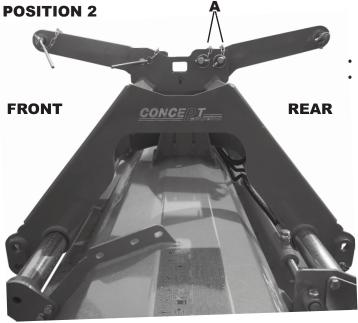
If the **ET** is attached with in position **A** then the machine sits behind the tractor as a normal fixed flail mower.

If the machine is linked in position **B** then the **ET** will be offset by 30 cm.



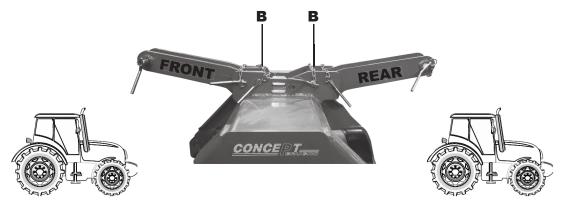
HT Front or Rear

The **HT** is a versatile small flail mower, for tractors from 40 to 70 HP, it can be mounted either on the rear as a standard flail mower or on the front as a front mounted flail mower. When changing from rear mounted to front mounted you need to remove the top link on the machine and place on rear side of the headstock.



- Remove pins A
- Place machine top link in position 2 and re-insert pins into holes

When transporting the **HT** it must be mounted on the tractor with both pins in the top link. Whilst when in use pin **B** must be taken out, this allows the machine to follow the course of the land.





PTO Shaft

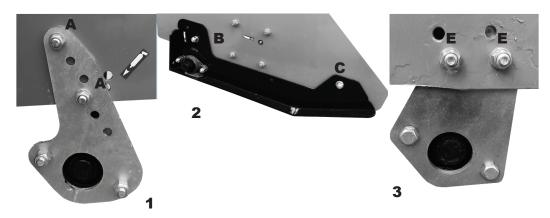
If necessary, cut the PTO shaft to the right length following the shaft manufacturer instructions.

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 will damage the rotor.

Always adjust the top link to keep the machine parallel to the ground when adjusting the height of the rear roller.

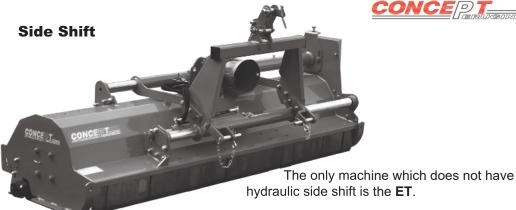


AT ET JT have the supports pictured in fig.1 to alter the height of the roller simply remove bolts **A**, position the plate so the holes align with either the higher or lower holes on the plate and replace bolts **A**. On some of these models the plates may be positioned on the inside of chassis. By moving the supports into a horizontal position the roller can be moved further away from the flail rotor allowing more space for rotor to discharge the cuttings.

TT model has the skids pictured in fig.2 to alter simply remove bolt **B** and loosen **C**, reposition the skid in the desired height and tighten **B** and **C**.

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





The hydraulic side shift is very simple and requires very little maintenance, simply connect the hoses to the tractors double acting spool valve. Make sure there are no oil leeks and that the side shift tube is well lubricated. Grease the grease nipple provided every 10 working hours to reduce wear.

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.

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 on the road make sure to disconnect the PTO, if the machine is fitted with wheels then fold them in by relocating the pin. Carefully follow the traffic regulations of your country.



Maintenance

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

Lubrication

Every 10 working hours:

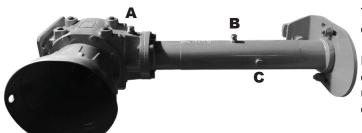
Grease the side shift sliding parts with Agip 33/FD or equivalent

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:

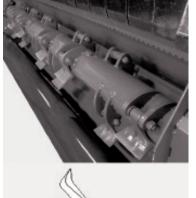
Change the oil in the gear box and the side shaft



To control the gear box oil use cap **A**.

For the side shaft, check oil level via cap **B** and use plug **C** to empty the oil for the oil change.

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 for either a replacement or arrange for it to be repaired.

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

To replace the blades on the **AT ET JT HT PT** the machine must be lifted and the blades replaced from underneath, make sure the machine is properly supported and made safe.

On the TT open the rear tailgate.



THE TAILGATE MUST BE CLOSED DURING USE, IT CAN BE OPENED ONLY WHEN THE MACHINE IS STOPPED AND P.T.O IS DISENGAGED

Belt tension observation slot





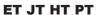
Transmission

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.

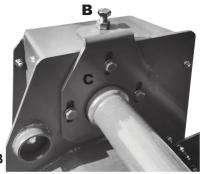
Should the belts need tensioning or replacing, the procedure is very simple.

AT

- Slacken the 2 nuts C
- Slacken the 4 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 nuts **C**
- Move the gearbox either forwards or backwards slightly to make the side shaft square with the side of the flail mower, this is very important as it will reduce the wear of the belts and lengthen their life



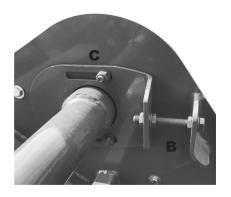
- Slacken the 3 bolts indicated C
- Slacken the 4 bolts indicated A
- Tighten or loosen bolt B to reach the optimum tension. NB loosen counter nut on B before either tightening or slackening
- Once the tension has been made tighten all bolts B and C
- Move the gearbox either upwards or downwards to make the side shaft square with the side of the flail mower. This is very important in order to lengthen the life of belts and to reduce upeven wear











TT

- Slacken nuts indicated C
- Slacken the 4 bolts indicated A which are situated under the gearbox
- · Slacken the counter nuts on B and either tighten or slacken bolt B
- Once the desired tension has been made tighten all the nuts on B and tighten nuts C
- Move the gearbox either forwards or backwards in order to make the side shaft square with the side of the flail mower. This is very important as it lengthens the life span of the belts and reduces uneven wear. Once this has been achieved tighten bolts 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 OFF, P.T.O DISENGAGED AND THE MACHINE PROPERLY SUPPORTED. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY



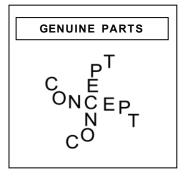
Storage

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 SPARE 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 a rise Concept Perugini S.R.L is not held responsible and is not required to answer to any warranty claims.

