EZEEMOW FX

OPERATOR'S MANUAL.

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THANK YOU FOR CHOOSING TRIMAX MOWING SYSTEMS!

This operator manual contains safety guidelines, setup and fitting instructions, maintenance requirements, service instructions and schedules, and spare parts lists for your Trimax mower. For your safety, **please read the entire manual** before operating your mower.

All operators should have access to the operator manual and should be familiar with the machine before operating. Extra copies of this operator manual can be downloaded for free or ordered online through the Trimax Resource Centre.

As a Trimax customer, you are entitled to register for a free Trimax Resource Centre account. The Trimax Resource Centre includes the Trimax Customer Centre (which contains operator manuals, part manuals, service checklists and videos, and more) and the Trimax Web Shop (where you can order Genuine Trimax Spare Parts).

Visit **resources.trimaxmowers.com/register** to register for your free Trimax Resource Centre account. You will need to provide the model and serial number of your mower as well as a valid email address and phone number.

The Trimax Sales Representative or Elite Dealer who delivers your mower should familiarise you with the machine and ensure that both you and the installer were satisfied with the product at the time of delivery and that you have been instructed on correct setup, maintenance, and operation of your Trimax mower.

Completing the Mower Registration process also certifies the beginning of your mower's one-year warranty period. **IMPORTANT:** You must register your mower with Trimax Mowing Systems to extend the warranty period of your mower to three years. Your Mower Registration can also be completed online at **trimaxmowers.com/register-a-trimax-mower.**

At Trimax Mowing Systems, we believe that equipment should never be a barrier to success. That's why we welcome and strongly encourage your feedback on our products, our commissioning and delivery processes, and our general customer service. Your valuable input helps us develop our products and systems so that they address your challenges and meet your needs. Feedback can be submitted through the Trimax website at **trimaxmowers.com/contact-us.**

Once again, thank you for choosing Trimax Mowing Systems to power your performance.

Best regards,
THE MANAGEMENT AND STAFF OF TRIMAX MOWING SYSTEMS

SERIAL NUMBER:

TABLE OF CONTENTS

1. NOTES ABOUT THIS MANUAL

LANGUAGE

- This manual was originally written in New Zealand English, which is very similar to British English. Translations into other languages are derived from the New Zealand version.
- Names for parts and machine components have been kept as international as possible, but some terms may be foreign to users in some markets. We apologise for any confusion.

IMAGES

- The images used in this manual show machines that are typical examples of the mower concerned. Some components may appear different from those on the mower being used but the images should still assist the operator to carry out the necessary operations.
- In some cases, guarding has been removed for clarity. Guarding or other parts shown may be optional in some markets and some items not shown may be standard in other countries.
- Where a tractor is shown it is used only to enhance the clarity of the instructions. Tractors differ significantly, and operators should be familiar with the tractor controls and their operation before attempting to attach or use the mower.

INSTRUCTIONS

- The instructions given are applicable in most instances. Wherever possible, alternative instructions are given if differences between models or options significantly affect the procedures.

CONVENTIONS

- The directions left, right, front and rear, are as seen from the driver's seat of the tractor facing in the normal direction of travel.
- On multi-spindled rotary mowers (including the **Striker, ProCut, Stealth, Snake, Pegasus, Vulcan, X-WAM,** and **Topper** ranges), Trimax convention is to identify the blade spindles as A, B, C, etc., starting from the left hand side. On machines with separate mowing decks, the left spindle on each deck starts with A.
- On Trimax flail mowers (including the **Force, Ezeemow** and **FlailDek** ranges); the cutting head is driven from one end of the mower. The end where the pulleys are enclosed within the belt guard is called the “drive end”.

TRACTOR BRAND IMPARTIALITY

- Trimax Mowing Systems is a privately-owned group of companies and has always been so. Trimax operates completely independently from all tractor manufacturers and does not favour any brand or model over any other. Front mounted mower decks in particular may be tractor specific, but this is because those tractors are especially suited to a given application or because there has been customer demand for mowers to fit them.
- Where tractor brands or models are listed, no favouritism should be assumed based on the order in which they appear. In many cases the manual pages were written as and when tractors became available and suitable fitting kits were developed. Similarly, where particular tractor brands or models do not appear, this may simply mean the mower is not suitable for some engineering reason or that a mounting kit has yet to be developed.

ACCURACY

- Every effort has been made to ensure the information given in this manual is as accurate as possible at the time of publication. Trimax Mowing Systems will not be held liable for the consequences arising from any errors.

2. SAFETY

SAFETY ALERT SYMBOL

This appears throughout this operator's manual wherever the operation being described requires special care or safety awareness. Read and obey all safety messages and follow instructions carefully.

DEFINITIONS

- The words below, where used in this manual, mean the following:
  - DANGER: indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.
  - WARNING: Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.
  - CAUTION: Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.
  - IMPORTANT: Indicates an action which, if not adhered to, may cause damage to the machine.
  - NOTE: Indicates an advisory message which could enhance the operator's understanding of the machine or ways to avoid situations that could cause premature wear.

RESPONSIBILITIES

- YOU are responsible for the SAFE operations and maintenance of your Trimax machine. You must ensure that you and anyone else who is going to operate, maintain or work around the machine is familiar with the operating and maintenance procedures and related safety information contained in this operator's manual. This manual will take you step by step through your working day and alert you to all good safety practices that should be adhered to when operating the machine.
- Remember, YOU are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety programme. Be certain that everyone operating this equipment is familiar with the operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.
- Owners of mowing machinery must give operating instructions to operators or employees before allowing them to operate Trimax machinery and at least annually thereafter or as required by local occupational safety and health regulations.
- The most important safety device on Trimax equipment is a safe operator. It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow these. All accidents can be avoided.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. Train all new personnel and review instructions frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes themselves and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorised modification may impair the function and/or safety, could affect the life of the equipment and will compromise the warranty.
- Use only genuine replacement parts when repairing or reconfiguring the equipment. The genuine parts have been tested and approved on the machine in the type of conditions it will be used in. Non-standard parts may render the machine unsafe.

HAZARD IDENTIFICATION

HAZARD	DESCRIPTION	REMEDY
Rotating blade hazard	The blades rotate at high speed. Hands and feet are well protected when the machine is on the ground, but must be kept clear when the mower decks are off the ground.	Do not approach or attempt to work on the machine while it is running.
Thrown object hazard	Blades on rotary and flail mowers must move at high speed to generate their cutting action. Foreign objects that enter the cutting chamber may turn into high speed projectiles. Such objects are contained within the cutting chamber when the mower is on the ground but may escape when it is lifted.	Do not operate the mower if bystanders are within thirty (50) metres (165 feet).
		Be aware that lifting the mower while operating may allow projectiles to escape.
	Flails or fling-tip blades attach to blade carriers with special bolts that allow the blades to rotate freely. Loose or improperly fitted bolts may allow blades to break free.	Ensure flail and blade bolts are fitted correctly and tightened to the specified torque.
Cut hazard	Mowers are fitted with sharp blades which can cut hands when being fitted or handled.	Wear heavy gloves when working on the machine.
	Sheetmetal covers are made from thin metal that could cut hands.	
Wrap hazard	Any exposed rotating machine component is a potential wrap point. Unguarded PTO or drive shafts are examples. Long hair or loose clothing can be caught & wrapped around these parts, dragging the wearer into the machinery.	Ensure all guarding is in place.
		Do not wear loose clothing or clothes with draw strings, etc.
		Contain long hair.
Crush hazard	Tractor operated mowers are heavy. Many can be raised or lower on the tractor linkage. Others have sections that can move independently from each other. Raised structures can drop and crush anything underneath.	Always place suitable stands under mower bodies, ensure transport locks have engaged correctly & safety devices have been fitted before inspecting or working under a raised mower or raised sections of a mower.
		Wear steel capped safety boots.
Bystander hazard	People, particularly children, are unpredictable and may run into the operating area unexpectedly.	Be aware of bystanders in the area, particularly children. Stop the mower if people approach within thirty (50) metres (165 feet).
Fire hazard	Grass clippings blow about and can be trapped in machinery. Hot tractor engines and exhausts can ignite the clippings and extensively damage the tractor and other property nearby.	Inspect inside tractor engine covers and remove clippings frequently, especially when operating in dry conditions.
		Carry a fire extinguisher on the tractor.
	Clippings trapped under the transmission covers can ignite in hot dry conditions.	Lift mower covers and clean out clippings regularly.
Noise hazard	Mowers are designed to operate outdoors. The operating position is seated in the driving seat of the tractor. Noise generated by the tractor and mower will vary considerably depending upon the tractor being used, the terrain and conditions.	Always use ear protection when operating the mower.
Dust hazard	Blades rotating at high speed stir up dust, particularly in hot dry weather.	Wear a dust mask when operating the machine in dry conditions.
		Wear eye protection
		Show consideration to others. Shut doors and windows in buildings nearby.

HAZARD	DESCRIPTION	REMEDY
Transport hazard	A tractor towing a mower is considerably heavier than the tractor on its own and is harder to stop.	Be aware. Drive defensively.
	Mowers attached to light tractors may cause the tractor wheels to lift off the ground when braking or traversing bumps	Use a suitable tractor.
		Fit approved ballast weights if necessary.
	Tractors often travel slower than other traffic.	Fit all signs, flags or beacons as required by local laws. Turn on headlights, taillights, and hazard flashers. Comply with local driving regulations. Pull over where safely possible to allow faster traffic to pass.
Pinch hazard	Pinch points occur where two items come together to a degree that can trap fingers or limbs. Belt drives create pinch points where the belt is moving onto the pulley.	Ensure all guards are fitted correctly before operating the machine.
Shear hazard	Shear hazards occur when the edges of two (2) surfaces move against each. Tractor linkages and mounted mowers move in relation to each other. Mowers with multiple decks have many sections that move independently from each other as the decks are lifted and lowered and when the machine is following ground contours. Fingers or limbs could be severed or seriously injured if trapped between moving parts.	Keep clear of machinery when it is moving.
		Ensure all guards are fitted.
Hydraulic hazard	Hydraulic systems such as hydraulic drives or lift rams and the tractor's auxiliary hydraulic system are operated by fluid under enormous pressure. Leaks can result in fine high-pressure jets that can penetrate soft tissue with ease. Hydraulic oil is also toxic to the body and must be surgically removed to prevent gangrene.	Never use hands or fingers to inspect hydraulic hoses. Hold a piece of paper, cardboard or wood as a target when inspecting for hydraulic leaks.
Free-wheeling parts hazard	Heavy revolving parts continue to rotate after the power is shut off. Flail and rotary mower blades, pulleys and driveshafts may keep turning for several seconds after the drive is disconnected. Injury can occur when operators attempt to work on the machine before all moving parts have stopped.	Wait for all moving parts to stop before approaching the machine.
Slips, trips & falls hazard	Slips and falls can result from slippery surfaces or cluttered work areas. Mowers parked after operating can leak large puddles of water onto the ground. Care is required when moving around them.	Take care when moving around the mower.
		Practice good housekeeping. Keep floors clean and dry.
		Put away anything not required for the job.
		Wear shoes with slip-resistant soles.

SAFETY LABELS

- General
  - Keep safety labels and signs clean and legible at all times.
  - Replace safety labels and signs that are missing or have become illegible.
  - Parts fitted to replace others which displayed safety signs should also display the current sign.
  - Safety labels are available from your dealer parts department or from Trimax Mowing Systems. They come in a single sheet which contains all the labels used on the machine.
- How to Install Safety Labels
  - Use scissors to cut out the label required. Leave some material outside the cut line around the label.
  - Be sure the installation area is clean and dry.
  - Decide on the exact location before removing backing paper.
  - Peel back the backing paper and fold it back to expose a small area of the sticky backing.
  - Position the label as required and press the area with the exposed sticky backing onto the required surface.
  - Slowly peel the backing paper from the rear while evenly pressing the label onto the surface.

TO THE NEW OWNER OR OPERATOR

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the work site. Untrained operators are not qualified to operate any Trimax machine.

SAFETY SIGN-OFF

- General
  - Anyone who will be operating and/or maintaining Trimax mowing, shredding and mulching equipment must read and clearly understand ALL safety, operating and maintenance Information presented in this manual.
  - Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.
  - Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment.
  - The sign-off form below is provided for your record keeping showing that all personnel who will be working with the equipment have read and understood the information in the operator's manual and have been instructed in the operation of the equipment. Ensure the sign-off sheet is kept up to date.

SAFETY SIGN-OFF FORM

The following personnel have read and understood the information in this operator's manual and have been instructed in the operation of this Trimax equipment.

DATE	EMPLOYEE'S SIGNATURE	EMPLOYER'S SIGNATURE

3. // CERTIFICATE OF CONFORMITY

EC DECLARATION OF CONFORMITY

Head office of the Manufacturer:
Trimax Mowing Systems (NZ) Ltd.
70 Maleme Street
Tauranga 3112
New Zealand

Authorised Representative
Authorised Representative Service
77 Lower Camden Street
St Kevin's
Dublin 2
Ireland
D 02 XE 80

Model Numbers:
751-135-3xx, 751-155-3xx, 751-185-3xx

Machine Name:
Ezeemow FX

Designation:
Rear or Front Mounted Flail Mower
Tractor three-point linkage mounted

Serial Numbers:
0000001 to 9999999

Cutting width:
135cm, 155cm, 185cm

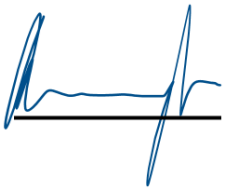
Conforms to Directive:
2006/42/EC (Machinery Directive)

Harmonised standards used:
ISO 17101-2:2012
ISO 12100:2010
ISO 11684:1995
ISO 3600:2015

Person who is authorised to compile the technical file and who is established in the Community:
Authorised Representative Service
77 Lower Camden Street
St Kevin's
Dublin 2
Ireland
D 02 XE 80

The place and date of the declaration:
Trimax Mowing Systems (NZ) Ltd
70 Maleme Street
Tauranga 3112
New Zealand 22/08/2023

Signed by:
Michael Sievwright, Chief Executive Officer
Trimax Mowing Systems (NZ) Ltd
New Zealand



4. LABEL IDENTIFICATION

SAFETY LABELS

- Types of labels and locations on the equipment are shown in the following illustrations. Familiarise yourself with the various pictorial safety signs, the type of warning, and the area or function related to that area that requires your safety awareness.

- If safety labels have been damaged, removed, become illegible, or if replacement parts have been fitted without labels, new ones must be applied. New labels are available from your authorised dealer or direct from Trimax Mowing Systems.

Label 1 – P/N 424-200-051

Label 1 (*left*) – Thrown Object Hazard
Fast moving blades may throw objects that could cause death or severe injury. Keep well clear of the machine when it is operating.

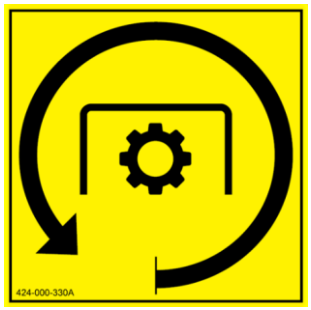
Label 1 (*right*) – Cut Hazard
Rotating blades could sever toes or fingers. Keep well clear of the machine when the blades are turning.

Label 2 – P/N 424-000-285

Label 2 *(left)* – Live Machinery Hazard
Stop the tractor engine and remove the key before carrying out any maintenance.

Label 2 *(mid)* – Follow Instructions
Read or refer to the operator's manual for instructions.

Label 4 *(right)* – Pinch Point
Belts moving around rotating pulleys may shear fingers or limbs. Keep hands and limbs clear of drive belts and pulleys.



Label 3 – P/N 424-000-330

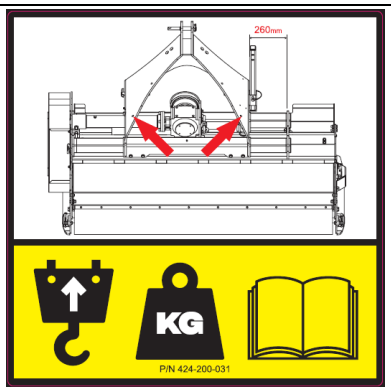
Label 3 – PTO Rotation Direction
Some tractor PTOs rotate in the wrong direction. Ensure the PTO runs in the direction shown by the arrow.

Label 4 – P/N 424-100-900

Label 4 – Overspeed Danger
Parts could fly off if blades are turning too fast. Ensure the PTO never runs faster than 540rpm.

Label 5 – P/N 424-101-170

Label 5 – CE mark
Indicates that this product achieves conformity with all relevant European Directives.

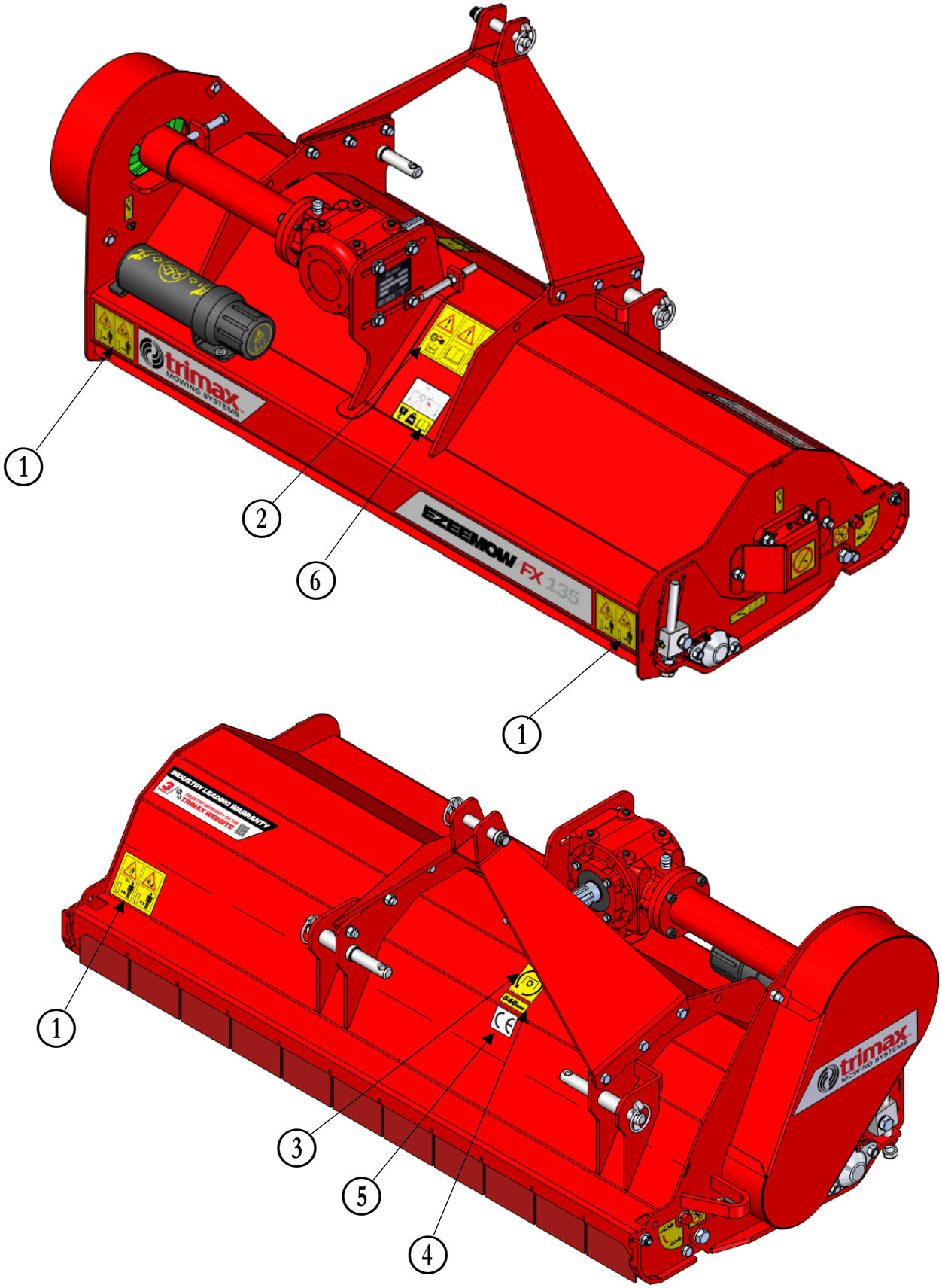


Label 6 – P/N 424-200-025 to 027

Label 6 – Lifting points
Shows the location of the lifting points used to lift the machine. See section 20 for more detail on how to lift safely.

Label positions are shown on the next page.

LABEL POSITIONS



5. // PRODUCT DESCRIPTION

Machines in the Trimax EzeemowFX range of flail mowers are designed specifically to suit tractors in the 16-45 horsepower bracket. With compact dimension they fit closely to the tractor and allow manoeuvring into tight corners. They are very versatile machines that can mow anything from fine turf to rough roadsides and can even shred small prunings and organic debris.

The mower body consists of an inverted trough-shaped body with a heavy tubular rotor supported horizontally on bearings between the left and right endplates. Drive is delivered from the tractor's power take-off via a driveshaft to a gearbox mounted on the mower body. The gearbox has a horizontal extension shaft that transfers drive to the left side of the body where pulleys and vee belts transmit power to spin the rotor shaft at high speed. The rotor is fitted with rows of swinging blades or "flails" which cut grass and other vegetation and discharge the clippings directly behind the mower body.

A full width rear roller governs the height of the rear of the machine, while the desired cutting height is fine-tuned by adjusting the tractor's top link. The front of the body aperture is very open and is fitted with a row of hinged flaps. These fold back to allow standing vegetation easy entry to the cutting chamber then close to contain any thrown objects. In this configuration the EzeemowFX can transform tall grass, dry stalky weeds and light brush into tidy mown lawn after a single pass.

The EzeemowFX can also be fitted with an optional hinged plate known as a Converter™. With the Converter™ in the raised position the front is as open as the standard machine. In the lowered position the front aperture is closed off to optimises performance for grass cutting. Airflow is forced upwards to lift the grass immediately in front of the flails and produce an exceptionally good finish on lawns and fine turf areas.

6. SPECIFICATIONS

MODEL	FX135	FX155	FX185
Cutting Width	1360mm (54")	1520mm (60")	1830mm (72")
Overall Width	1560mm (61.5")	1720mm (68")	2045mm (80.5")
Overall Length	583mm (23")		
Height Over Pan	370mm (14.5")		
Height Over Headstock	800mm (31.5")		
Cutting height range	10 - 100 ($^{3}/_{8}$" - 4")		
Approximate Weight	180kg (396 lb)	200kg (440 lb)	225kg 495 lb)
Recommended Minimum PTO Power	13kW (17hp)	15kW (20hp)	18kW (24hp)
Maximum PTO power	34kW (45hp)		
PTO Speed	540rpm		
Driveshaft	European A4 series		
Gearbox Type	TL-310		
Gearbox Ratio	1:3		
Gearbox Extension Shaft	Trimax, rigidly attached to gearbox		
Gearbox Oil	800ml (1.25 UK pint) EP90		
Rotor Tube Diameter	113mm (4.5")		
Cutting Blades	Trimax Forged Steel Flail		
Number of Flails	28	32	40
Rotor Pulley Diameter	157mm (6.2") OD		
Drive Pulley Diameter	243mm (9.5") OD		
Drive Belt Type	2 x B47		
Belt Tensioning	Moveable gearbox		
Flail Tip Speed (at 540rpm PTO speed)	42m/sec (8270 ft/min)		
Rotor Bearings	32mm (1.25") self-aligning ball bearings with tapered sleeve locking system		
Transport System	Full width rear roller		
Roller Diameter	114mm (4.5")		
Roller Bearing Type	Self-aligning ball bearings, housing protection package		
Cutting Height Adjustment	Infinitely adjustable roller, fine-tuned with tractor top link		
Grease Points	Rotor x2, roller x2, height adjuster x2		
Three-Point Linkage	Dual category linkage pins Category 1 & 2		
Body Construction	Fully welded monocoque construction		
No. of front flaps	11	12	14
Optional Converter™	Hinged gate tunes performance to suit huge range of conditions		
Declared single-number noise emission values in accordance with ISO 4871, using standards ISO 11201 and 11202	94 (dB)		

7. // MACHINE IDENTIFICATION

MODEL DESIGNATION

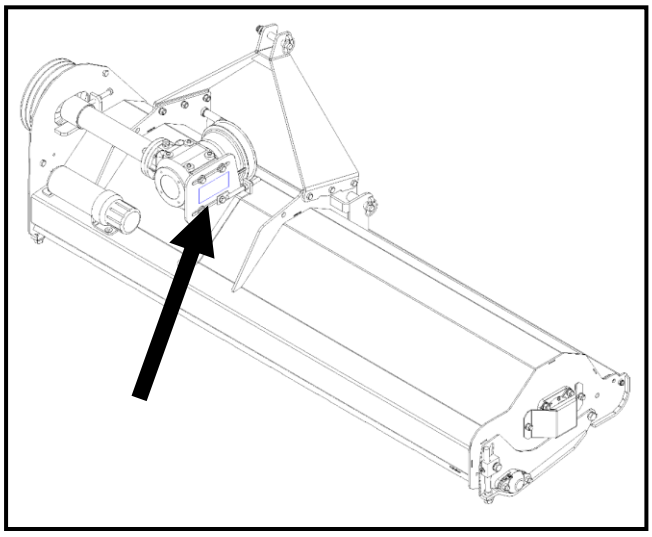
- This operator's manual covers Trimax Ezeemow FX mowers with model numbers 751-135-3xx, 751-155-3xx, 751-185-3xx,

SERIAL NUMBERS

- The serial number ranges covered by this operator's manual occur in a 7-digit format, and may be prefixed with the model number as shown by the example below:
- 751-135-300-*0000001*

LOCATE THE SERIAL PLATE

- Serial number plate is located on the gearbox mounting plate.
- Avoid errors – always quote the serial number when ordering parts.



8. EQUIPMENT MATCHING

To ensure the safe and reliable operation of the **EzeemowFX** it is necessary to use a tractor with the correct specifications.

POWER

- The following table is intended as a guide in selecting the tractor power appropriate for your model of machine. The exact minimum power requirement will vary considerably depending upon the type of job the mower is used for.
- **Maximum tractor power should not exceed 34kW (45hp)** for all the models shown.

Model	Cutting Width	Minimum Power Required
FX 135	1.36m (54")	13kW (18hp)
FX 155	1.5m (59")	15kW (20hp)
FX 185	1.83m (72")	18kW (24hp)

FRONT WEIGHTS

- In some cases the tractor sizes indicated above will have sufficient power to drive the mower but may require front weights to ensure full control during transportation or use. Fit sufficient front weights so that the front tractor wheels never lift off the ground under any circumstances.

TYRE CONFIGURATION

- The wheels on most tractors can be set to widen or narrow the track. It is recommended that wheels be set so the mower always covers the tyre tracks. In this way, the machine will always cut where the tractor is driven.

THREE-POINT LINKAGE

- All rear mounted Trimax mowing machines can be fitted to tractors with either Category I or Category II three point hitches. Lift arm stabilisers or sway chains are required.

LOAD SENSING HYDRAULICS

- Many tractors are equipped with "Load Sensing" hydraulics. It is the responsibility of the operator to set the tractor hydraulic system to provide "float" on the 3-point hitch. Refer to the tractor manual for details. The float feature will allow the machine to follow the ground contours during operation.

PTO (POWER TAKE-OFF) CONFIGURATION

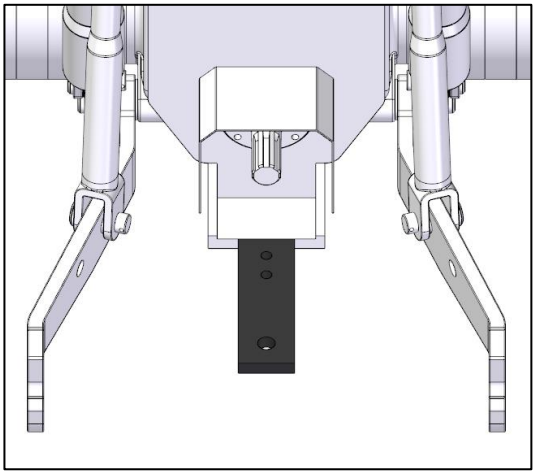
- The tractor must have a 1-3/8", 6 spline, 540rpm PTO outlet to fit the driveshaft supplied with the machine. Do not use shaft adapters or operate at any other speed. It is not recommended that tractors with multiple speed PTO's be used with **Trimax** mowers. Operating speeds faster than 540rpm will overload the cutting components and lead to early failures.

9. GETTING STARTED

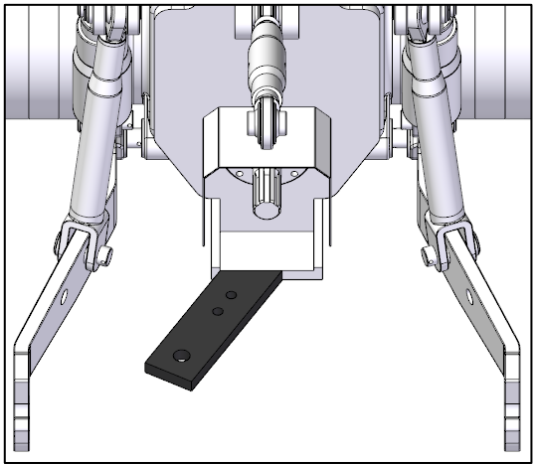
SAFETY! Before attempting to make any adjustments or carry out maintenance on the mower, review the hazard identification table take all necessary precautions.

CHECKING THE TRACTOR DRAWBAR POSITION

- The tractor may be fitted with a drawbar. If the drawbar is positioned in line with the PTO output shaft the mower driveshaft may contact it during operation.



- The drawbar should be moved sideways as shown. If the drawbar cannot be moved out of the way, it may need to be removed altogether. See your tractor operator's manual for details.

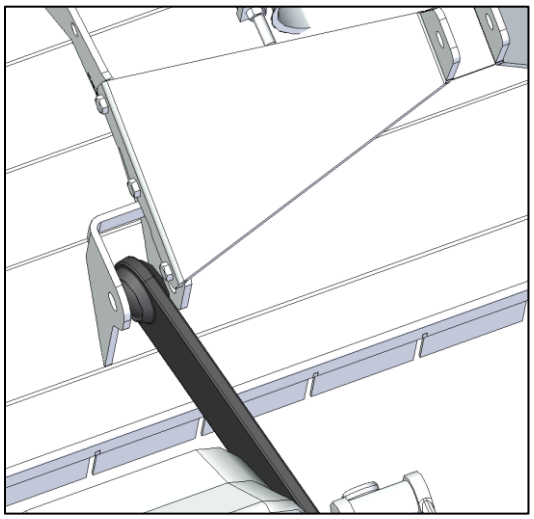


ATTACHING THE MOWER TO THE THREE POINT LINKAGE

EzeemowFX mowers are fitted with standard three-point linkages.

SAFETY! When attaching a heavy implement to a tractor, it may be necessary to leave the tractor engine running in order to operate the 3-point linkage hydraulics and to "inch" the tractor forwards or backwards to align the linkages and their mounting points. Exercise EXTREME CARE when others are working between the tractor and the implement when connecting the linkage pins and driveshaft.

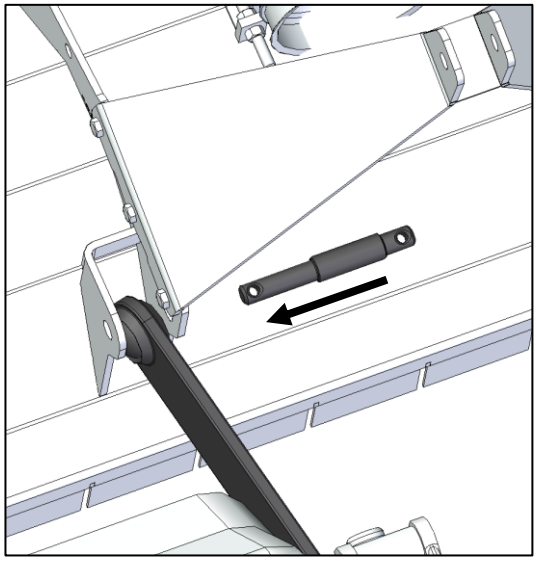
a. Back the tractor up to the mower. While backing up, align the linkage arm balls with the lower linkage plates on the mower. The linkage arms must fit between the linkage mounting plates.



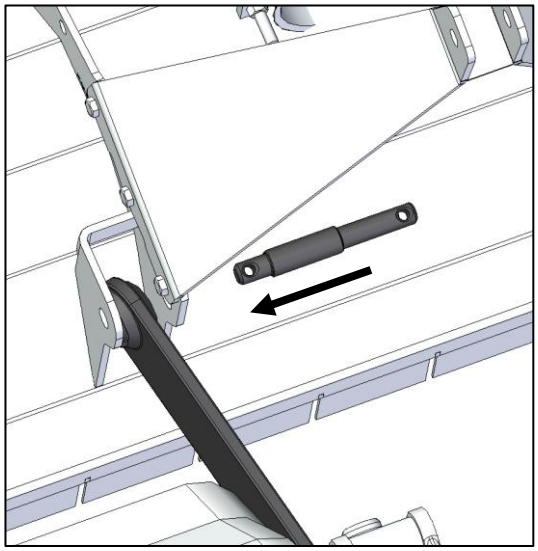
b. Stop the tractor, select neutral on the transmission, apply the parking brake and ensure the PTO is in neutral.

c. Align one of the lower link arms with the holes in the appropriate clevis.

d. Fit the linkage pin. The bottom linkage pins are of the dual-category type that allows fitting to tractors with standard Category 1 or 2 linkages. The method of fitting depends upon the linkage arms on the tractor being used. Always fit the pin from the inside of the clevis. For tractors with Category 1 linkages, insert the thin end of the pin first.



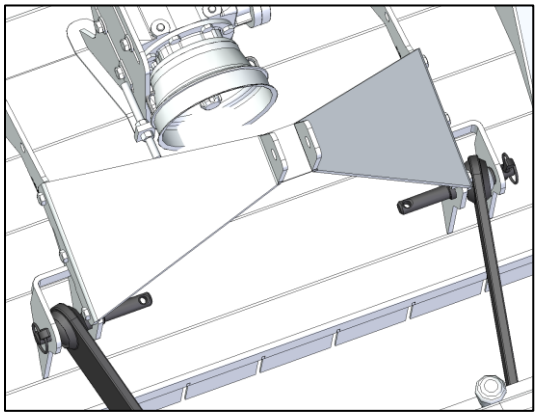
For Category 2 linkages, insert the thick end first.



NOTE: Never use the thin (Category 1) end of the pins on a Category 2 linkage as this will allow movement that will cause premature wear and may also significantly affect the performance of the mower.

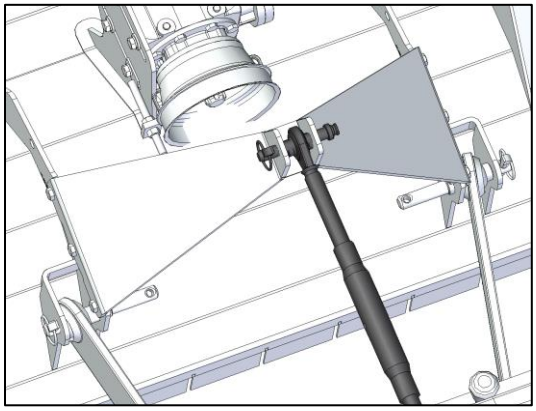
e. Fit the lynch pin to the hole in the end of the linkage pin.

f. Align the other lower linkage arm ball with the holes in the other mounting clevis. If necessary use the turnbuckle or box on the tractor's linkage to raise or lower the arm to suit. Fit the linkage pin and lynch pin as above.

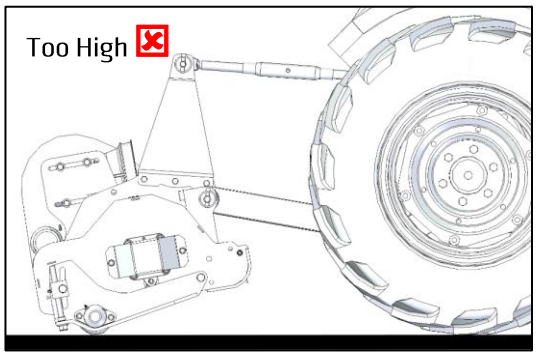


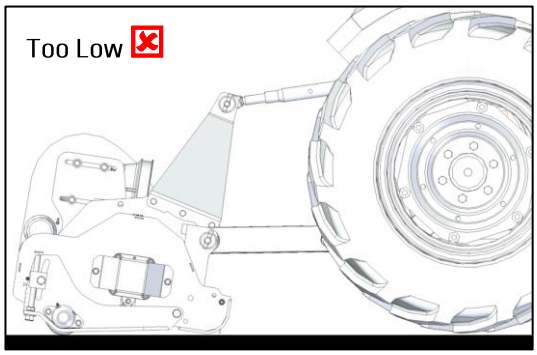
g. Extend or retract the tractor top link arm to align the ball joint in the top link with the hole in the headstock and fit the pin.

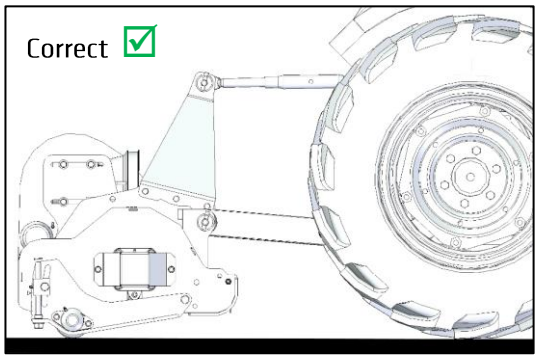
h. Secure the linkage pin with the lynch pin.



i. Adjust the length of the top link until the top of the mower body is horizontal. The pictures below show the mower too high at the front, too low at the front and correctly set up with the top of the body horizontal.

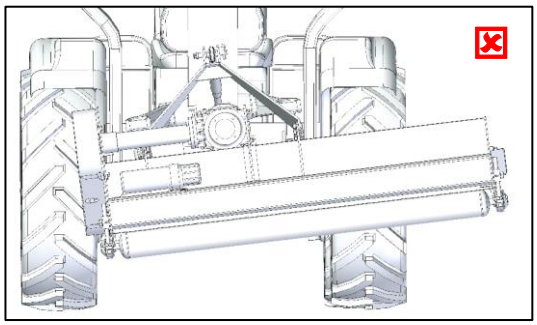


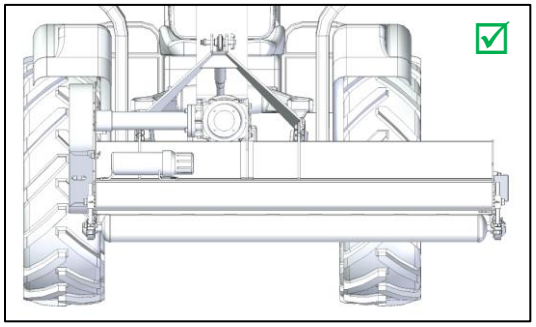




j. Use the tractor hydraulics to raise the mower till it is just clear of the ground.

k. Check the mower is lifting evenly. If not, level using the turnbuckle or levelling box on the tractor lift arm linkage.





l. Raise the mower slightly again and adjust the three-point linkage to limit lateral movement.

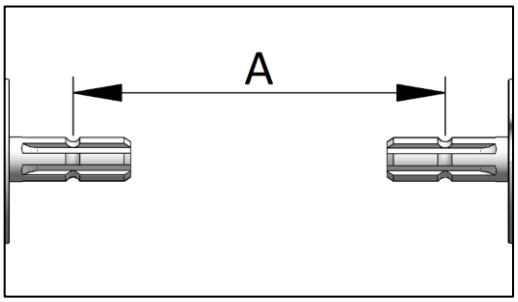
DRIVESHAFT LENGTH ADJUSTMENT

- If the tractor and mower have never been used together before or a new driveshaft is being fitted the driveshaft may need to be cut. Proceed as follows.

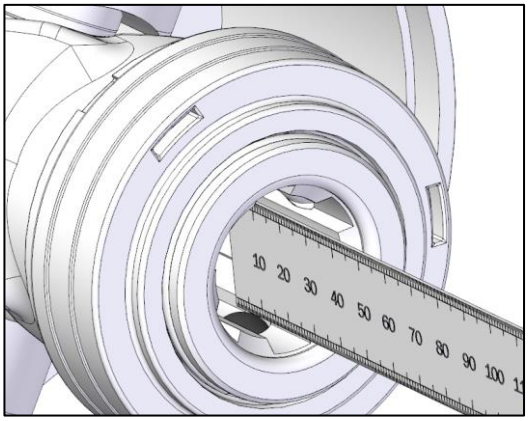
  a. Mount the mower on the tractor as described above.

  b. Start the tractor engine and raise the mower on the three-point linkage until the gearbox input shaft is level with the tractor PTO shaft.

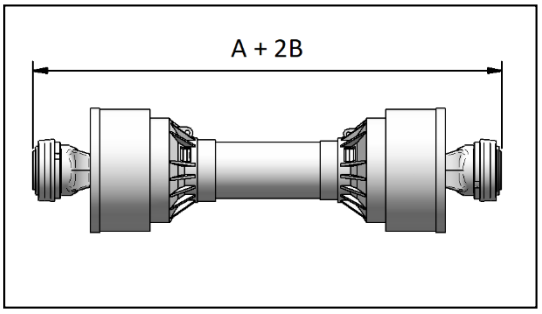
  c. Measure the dimension between the locking groove in the tractor PTO shaft and the locking groove in the mower gearbox input shaft as shown in (**Error! Reference source not found.**). This is **Dimension "A"**.



  d. Measure the distance from the end of the shaft to one of the internal locking balls (**Error! Reference source not found.**). This is **Dimension "B"**.

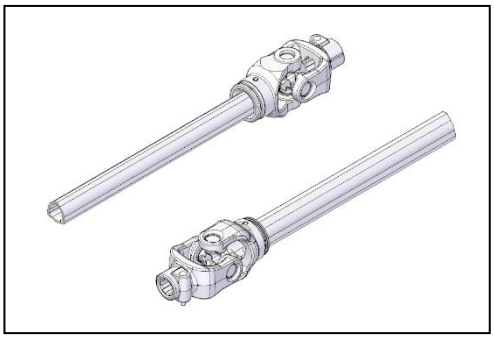


e. Fully compress the driveshaft and measure the distance between the locking pins as shown. The driveshaft must be 75mm (3") shorter than **Dimension "A" + 2 x Dimension "B"**. If the driveshaft is longer than this, it will have to be cut.

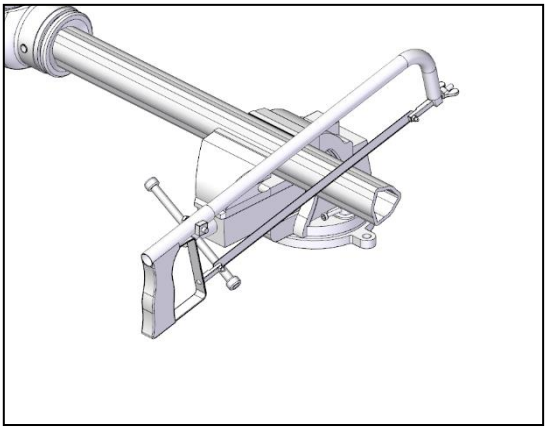


NOTE: If the driveshaft does not need to be cut but the two halves do not overlap by **AT LEAST 150mm (6")** a longer driveshaft will be needed.

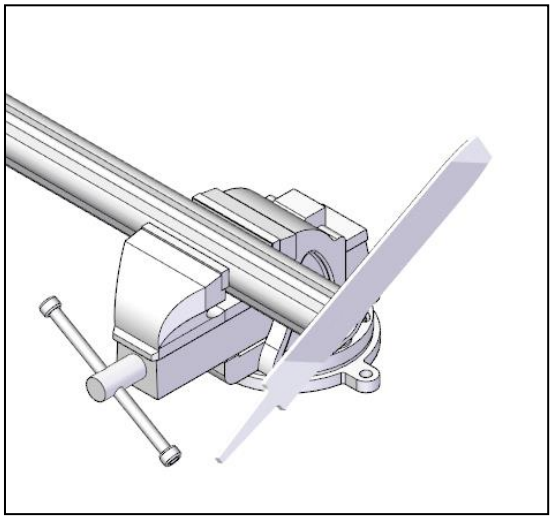
f. Separate the two halves of the driveshaft and remove the guards (see the driveshaft manufacturer's instructions)



g. Shorten both the inner and outer steel profile tubes by the required length (2 cuts)



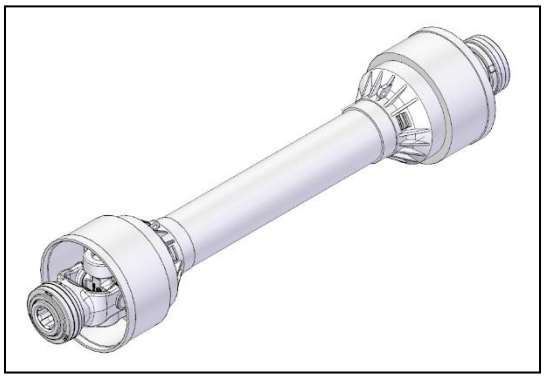
h. De-burr and thoroughly clean the cut areas, including the inside of the larger tube.



i. Cut the same amount off the plain ends of both the inner and outer plastic tubes and remove any burrs.

j. Apply a liberal amount of multi-purpose grease to the contacting steel parts.

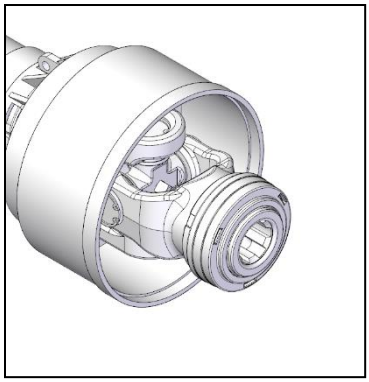
k. Re-assemble the driveshaft and check the length.



l. Fit the driveshaft to the mower and tractor.

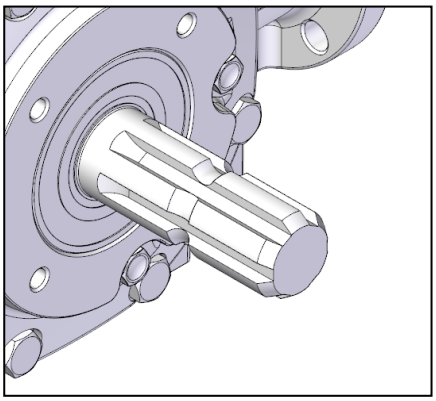
FITTING THE DRIVE SHAFT TO THE MOWER

The driveshaft supplied has quick release couplings at both ends. No tools are required when attaching them to the tractor's power take-off (PTO) shaft or mower gearbox.



IMPORTANT! If only one end of the driveshaft has a sliding collar, that end must be attached to the tractor.

The gearbox and tractor PTO shafts have six splines with a groove near the outer end. The driveshaft coupling has matching internal splines. The spring-loaded pin or ball bearings in the driveshaft coupling fit into the groove and prevent the coupling from sliding off the shaft.



a. Press and hold the end of the locking pin while offering the driveshaft to the gearbox input shaft and aligning the splines.

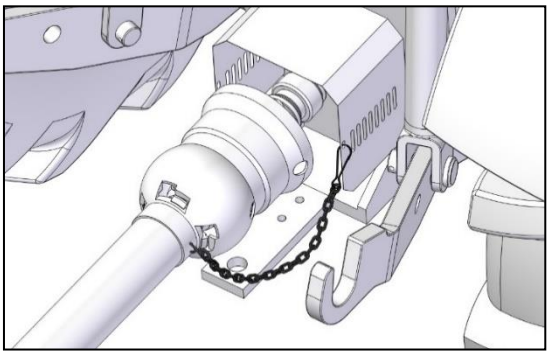
b. As the yoke slides onto the shaft, release the locking pin or collar. The pin or collar will pop out when properly aligned with the groove in the shaft.

c. Check the driveshaft is properly retained by trying to move it in and out.

d. Attach the free end of the driveshaft to the tractor PTO output shaft. Once again, ensure that the locking mechanism engages properly with the groove in the tractor PTO shaft.

DANGER! Never operate the machine unless the locking pin or collar has secured the driveshaft correctly. If the driveshaft were to come loose while rotating, severe injury or damage could result.

e. Attach the driveshaft safety chains to the mower gearbox shield cone or some suitable part of the tractor to prevent the covers from rotating. Leave plenty of slack in the chains so that they will not be stretched when the mower is raised on the three point linkage.



f. Raise the three-point linkage slowly through its full lifting range to check that:

- the driveshaft does not foul any part of the tractor or mower
- driveshaft angles never exceed 35 degrees
- the mower gearbox input shaft remains approximately parallel with the tractor PTO output shaft (within 10 degrees is satisfactory)
- the driveshaft does not bottom out
- the driveshaft halves do not separate
- the driveshaft safety cover retaining chains are not stretched.
- the mower does not foul the tractor tyres

If any of these are not correct it may be necessary to limit the maximum lift of the three-point linkage at the tractor's position control lever and/or relocate the top link arm. See the tractor operator's manual for details.

TO UNCOUPLE THE MOWER FROM THE TRACTOR

a. Position the machine where it will be parked, ensure all controls are in neutral and apply the parking brake.

b. Lower the machine to the ground.

c. Disconnect the driveshaft safety chain and uncouple the driveshaft from the tractor.

d. Disconnect the top link arm.

e. Disconnect the lower link arms then lower the arms clear of the mower.

10. // OPERATION & ADJUSTMENTS

SAFETY! Before attempting to operate or make any adjustments to the mower, review the hazard identification table and take all necessary precautions.

EzeemowFX mowers are designed to operate well in many kinds of grass or terrain conditions. However, it is the responsibility of the operator to be familiar with and follow all operating and safety procedures.

CUTTING HEIGHT

EzeemowFX machines are fitted with full width rear rollers. Cutting height adjustment is carried out in two ways, by adjusting the position of the rear roller and by extending or retracting the tractor's top link. Adjusting the top link has the effect of raising or lowering the front of the mower.

The front of the EzeemowFX body is designed to minimise throw-forward but the mower deck must be set up correctly to achieve this. When the mower is lowered to the ground in the operating position, the top surface of the mower body must NEVER be tilted rearwards.

SAFETY! It is important that the front of the mower should never be set up higher than the rear. Flail mowers can throw stones or debris forward when cutting. "Throw-forward" is more likely to occur when mowing very short grass where stones or debris may be present, such as alongside a gravel driveway.

DANGER! Never operate the mower with the front higher than the rear.

While it is important to keep the front of the mower lower than the rear, it is also important to keep the top surface of the mower body horizontal when adjusting the cutting height. This ensures the gearbox input shaft remains approximately parallel with the tractor's power take off shaft when the mower is in the operating position. If the mower is operated for long periods with the shafts not approximately parallel, the driveshaft will be subjected to excessive forces and may wear out rapidly.

Ideally both the front and rear of the mower should be raised by the same amount to keep the mower as level as possible. If only small variations of cutting height are required, it is acceptable to leave the rear roller in one position and fine tune the cutting height by adjusting the top link only.

- Rear Roller Adjustment

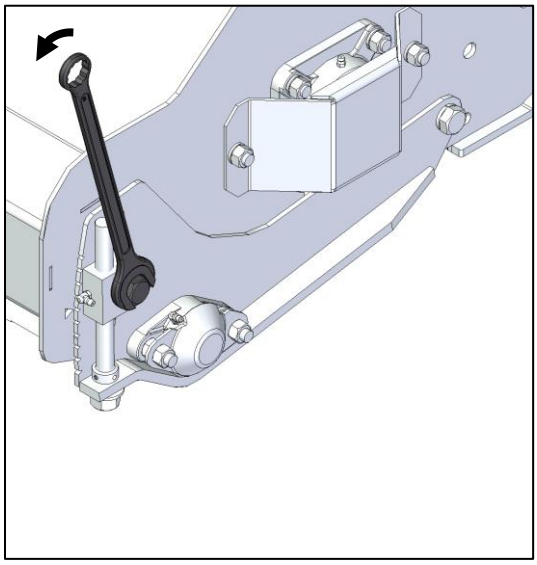
  a. The full width rear roller is attached to a trailing arm at either end of the mower body.

  b. Each trailing arm is mounted to the mower body with two bolts, one at the front and another at the rear. The front mounting bolt passes through a hole in the trailing arm, while the rear bolt passes through a slot. This enables the trailing arm to pivot about the front bolt so the roller can be set at different cutting heights.

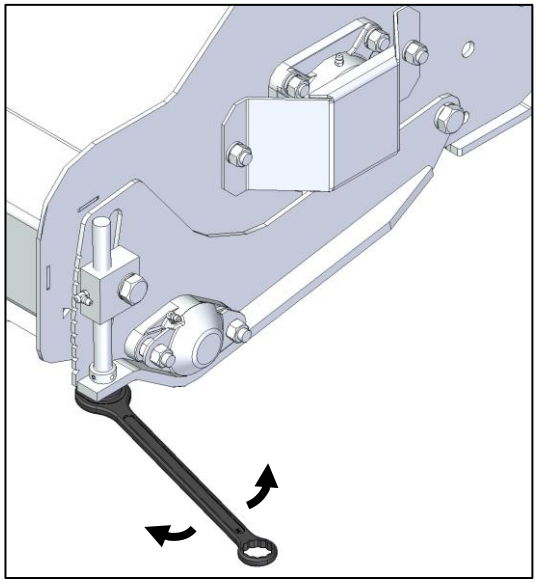
  c. The rear mounting bolt also secures a threaded height adjuster block. An adjuster screw passes through the height adjuster block and protrudes through the flange, which doubles as a skid along the bottom of the trailing arm. The cutting height is regulated by screwing the adjuster screw up or down.

- To Adjust the Rear Roller

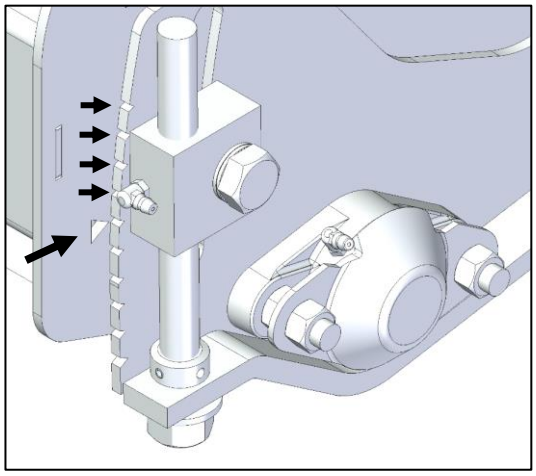
  a. Start with one side only. Loosen the two mounting bolts that secure the trailing arm to the mower body.



  b. The head of the adjuster screw is underneath the rear of the trailing arm skid. Turn the adjuster screw as required, clockwise to raise the cutting height or anti-clockwise to lower it. Each full turn equates to about 1.5mm (1/16") of adjustment.



c. There are notches cut into the rear of the trailing arm. These match up with a small triangular hole cut into the mower endplate. Moving the trailing arm from one notch to the next will alter the cutting height by 10mm (3/8").

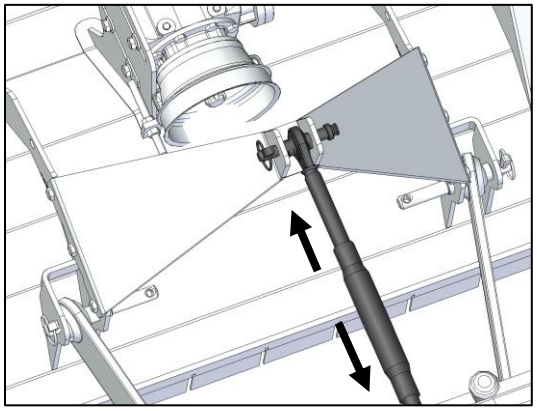


d. Adjust the other end of the roller, ensuring each trailing arm is set at the same notch so the cut height will be the same on both sides.

e. Tighten all the mounting bolts (two each side).

- To Adjust the Height of the Front of the Mower

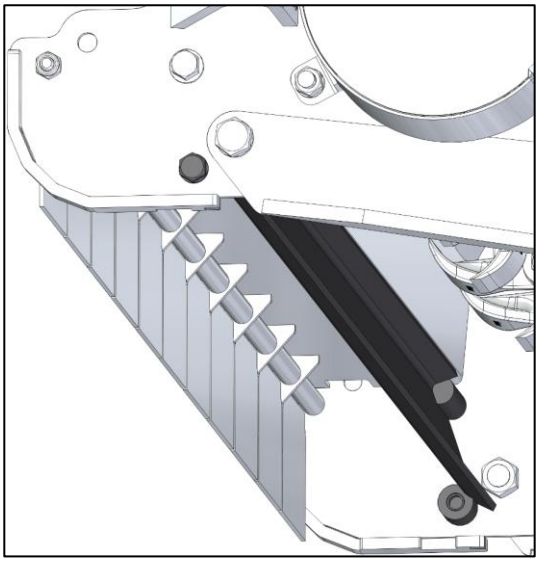
a. To raise the cutting height, extend the tractor's top link. To lower the cutting height, shorten the top link.



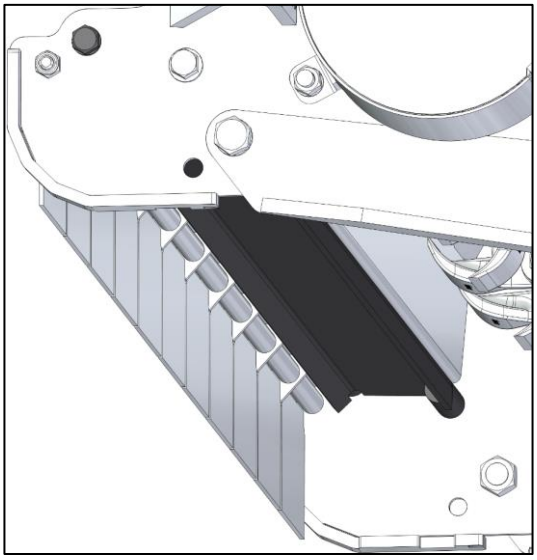
CONFIGURING THE OPTIONAL CONVERTER™

- The **Trimax EzeemowFX** is unique in that can be fitted with the optional **Converter™**. With this the configuration can be varied to ensure optimum performance in a very wide range of operating conditions.

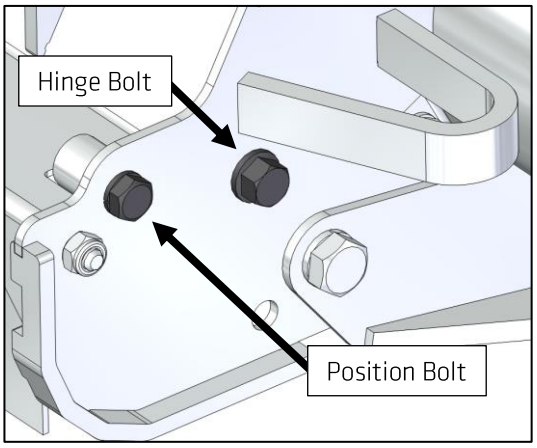
- The **Converter™** pivots about a hinge directly behind the hinge centreline of the front flaps. For fine grass it is lowered into a vertical position.



- For tall grass the **Converter™** is raised into the horizontal position where it allows open access for rank grasses and the flaps perform the role of preventing debris from being thrown forwards.



- The **Converter™** hinge bolts are fixed to the hinged plate and should never need to be touched. The position bolts at each end fit through holes in the endplate.



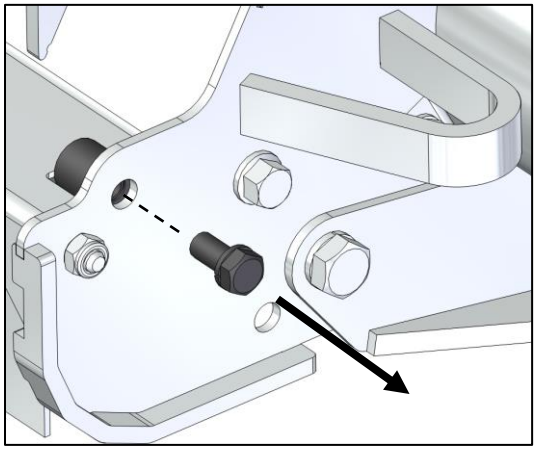
- To Adjust the **Converter™**

  a. Secure the mower deck in the raised position or place suitable stands or blocks to prevent it from lowering unexpectedly.

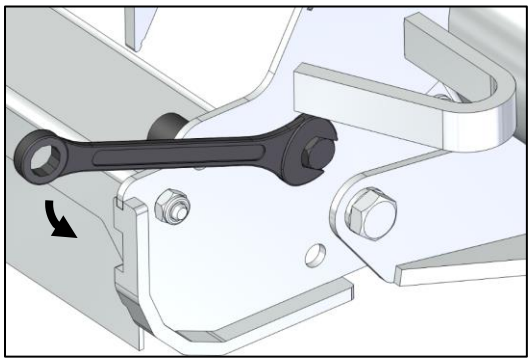
  b. Turn off the tractor engine, apply the parking brake, ensure all controls are in neutral, wait for all moving parts to stop and remove the ignition key.

  c. Clean any debris from the area behind the hinged front flaps and from the rear of the flaps themselves.

  d. Remove the position bolts and spring washers on both sides of the mower (**Converter™** shown in long grass position)



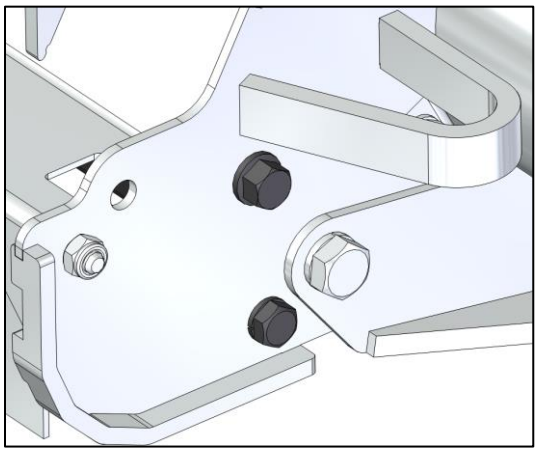
e. Move the **Converter™** to the desired position. A spanner can be fitted to either of the hinge bolts and used as a lever if necessary



When lowering the **Converter™** to the short grass position, fit the spanner to the pivot bolt on the right side of the mower.

When raising the **Converter™** for long grass, fit the spanner to the left side pivot bolt.

f. Replace and securely tighten the position bolts and spring washers (**Converter™** shown in short grass position)



- Running the EzeemowFX Permanently in Either Mode

    a. If the machine will ALWAYS be run with the Converter™ lowered for short grass the front flaps can be removed. If it will always be raised for long grass the Converter™ can be removed altogether. Instructions for both these operations are in the Service and Maintenance section of this manual.

TRANSPORT

SAFETY! Before travelling any distance with the mower, review the hazard identification list and take all necessary precautions.

a. Ensure the area is clear of bystanders, especially children.

b. Ensure the tractor's PTO is disengaged.

c. Start the engine and raise the mower on the three-point linkage.

d. Turn on headlights, warning lights and/or hazard flashers and comply with all local regulations.

STARTING & STOPPING THE MOWER

SAFETY! Before starting to mow, review the hazard identification list and take all necessary precautions.

- To Start the Mower

    a. Make sure the area to be mown is free of stones or objects that could be thrown by the mower blades.

    b. Ensure the area is clear of bystanders, especially children.

    c. Start the engine and raise the mower on the three-point linkage.

    d. Align the tractor with the working area.

    e. Lower the mower until it is just off the ground.

    f. Run the engine at low speed.

    g. Engage the tractor's PTO control to start the mower.

    h. Lower the mower to the ground.

    i. Bring the engine up to its operating speed (usually full throttle).

    j. Proceed down the working area.

- To Stop the Mower

    a. Reduce the engine speed to idle.

    b. Disengage the PTO.

    c. Stop the tractor engine, ensure all controls are in neutral, engage the parking brake, remove the ignition key and wait for all moving parts to stop before dismounting.

OPERATING THE MOWER

- PTO speed

    NEVER EXCEED a PTO SPEED of 540rpm, but try to maintain engine the PTO revs as close to 540rpm as possible.

    The cutting action of the blades is generated by the speed of the blade tip. When the PTO speed is allowed to drop too low the blades start to tear rather than cut, resulting in a ragged finish.

    Vary the speed of travel by changing gears or operating the tractor's hydrostatic transmission pedals rather than by changing the throttle setting.

WARNING! Allowing the engine to "bog down" and lose revs when cutting in heavy conditions causes the flails to bang back against the rotor. This can cause considerable damage to the machine if allowed to happen repeatedly. ALWAYS RUN THE PTO AT THE RATED SPEED. If the tractor has insufficient power to operate the machine without bogging down it may be necessary to use a smaller model of EzeemowFX, a more powerful tractor or a different type of machine altogether.

- Missing Flails

    Inspect the machine regularly to check flail condition.

    NEVER operate the mower with missing flails!

    This causes dynamic imbalance in the drive system.

    This imbalance can cause rapid and costly structural and driveline failure.

    If vibration is detected, stop the mower IMMEDIATELY.

    Inspect the flails, replace as required before continuing to mow. To maintain optimal rotor balance always replace opposing pairs of flails.

- Mowing Conditions

  Like all Trimax Mowers, EzeemowFX works well in wet conditions, however best results are achieved when conditions are dry.

  Terrain, grass length, grass species, moisture content and tractor power all affect the final appearance of cut.

  Clumping will occur if too much material is cut in one pass. Mowing once at a higher cut height, then lowering the cut height and mowing again in the opposite direction can help. Mowing more frequently may help avoid this.

- Ground Speed

  Travel speed can vary from very slow up to as fast as the tractor can go depending upon the material being cut and terrain conditions.

  It is the responsibility of the operator to note the condition of the job being done and to set the ground speed to obtain a quality cutting job and to maintain control of the machine.

  Reduce ground speed in heavy cutting conditions, around obstructions, and when crossing rough terrain.

- Hidden Obstacles

  Always inspect the area for hidden obstacles before mowing.

  If an obstacle is struck, stop the mower IMMEDIATELY.

  Inspect for damage, repair/replace as required before continuing.

- Cutting Height

  Never cut grass or cover crop shorter than recommended for your weather conditions. Vegetation cut short is less able to withstand hot and dry conditions.

  It is better to cut more often at a greater cutting height than to cut too short.

- Safety Awareness

  Trimax EzeemowFX flails rotate at high speeds.

  The EzeemowFX mower is designed to minimise the risk of ejected objects and meets all relevant safety standards, however it is still possible that stones or objects hit by the flails may be ejected from under the mower at high speed.

  Operators must be aware that ejected objects may cause property damage, injury or death.

DANGER! If people approach within 50m (165 feet) of the machine, stop immediately. Do not restart until the working area is cleared.

11. LIFTING AND TRANSPORTING

DANGER! Only trained personnel should use lifting equipment and secure the mower for transport.

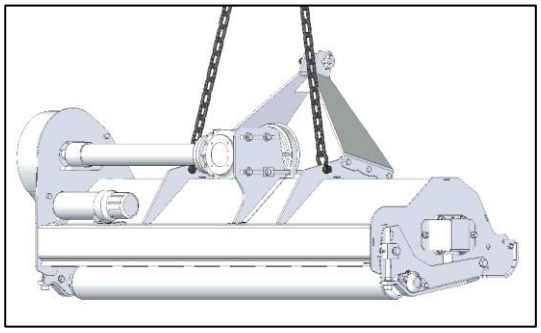
DANGER! Before lifting or transporting the mower, review the hazard identification table (page Error! Bookmark not defined.) and take all necessary precautions.

GENERAL

- If it is ever necessary to transport the EzeemowFX mower on a truck or trailer, it is recommended to either drive it on with a tractor and unhitch it, or use a forklift or crane to lift it on.
- Always comply with local transportation regulations.

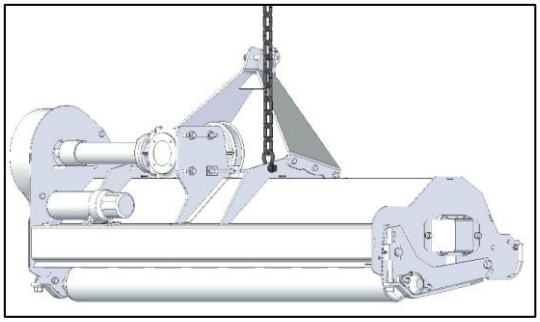
TO LIFT THE MOWER

- Use only the indicated lifting point shown on the mower decal. The lifting decal indicates lifting points which will give the safest, most stable lift. Always use equipment rated appropriate for lifting the weight of the EzeemowFX mower.
- To lift centre mount mowers, attach shackles to both lifting points on the headstock.



Centre mount mower

- Offset mount mowers should be lifted using only a single shackle attached to the centre lift point.



Offset mount mower

DANGER! DO NOT stand under suspended loads.

SECURING THE MOWER ONTO A TRUCK OR TRAILER

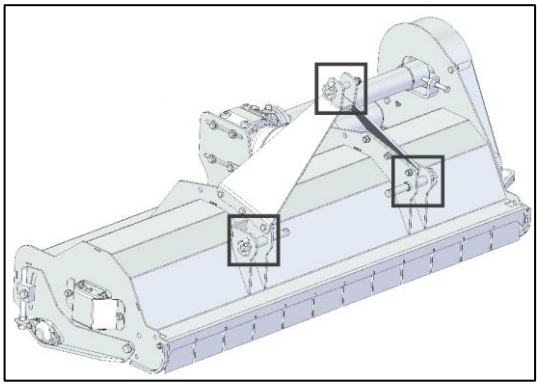
a. Use appropriately load rated chains or ratchet straps.

b. Avoid securing over mower body, otherwise use suitable padding to protect painted surfaces and sharp corners.

c. Straps or chains should be attached at deck level or below, well forward of the mower at the front and well behind the mower at the rear.

d. Use only the designated tiedown points to secure the mower during transport. These points are the upper and lower link pins only.

e. Secure lower link pins forwards of the mower, and use the upper pin to secure rewards



12. // SERVICE & MAINTENANCE

SAFETY! Before attempting to make any adjustments or carry out maintenance, review the hazard identification table (section 3), take all necessary precautions.

GENERAL

- Maintenance requirements for your EzeemowFX mower have been kept to the minimum without sacrificing long life and reliability.
- Operations described in this section should be carried out as necessary or at the intervals stated in the Service Schedule, section 15.
- Always purchase genuine Trimax parts when replacing worn or damaged parts. After-market parts may not achieve the same life or level of performance and will not be covered by warranty.

WORKSHOP FACILITIES & SKILL LEVELS

- Trimax mowers are designed with servicing in mind. Every effort is made to ensure parts can be removed and replaced as easily and quickly as possible.
- If you experience difficulties when undertaking repairs beyond the scope of this operator's manual, Trimax suggests using a qualified maintenance service provider.
- Do not attempt to maintain or repair your mower if you are not confident to perform the work, or if you do not have the correct tools.

DRIVE BELT GUARD

Drive from the mower gearbox is transmitted to the end of the mower and then down to the rotor shaft by means of pulleys and two vee belts. A ventilated guard encloses the pulleys and vee belts.

- To remove the drive belt guard:

  a. Disengage the PTO and stop the engine before removing the guard.

  b. Remove the three nuts and retrieve the spring washers fitted to each stud.

  c. Lift the guard clear.

  d. To re-fit the guard, reverse the procedure.

DRIVE BELTS

- General

  The EzeemowFX uses two vee belts as part of the drive train that spins the rotor. It is important to ensure that these belts remain at the correct tension to ensure optimum performance and belt life.

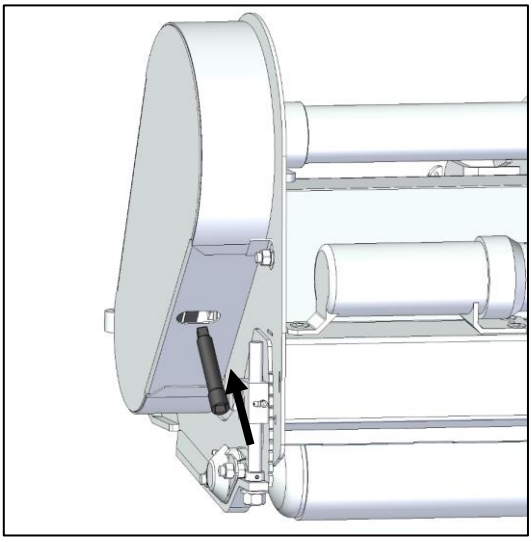
  As a general rule, if the mower is matched with an appropriately sized tractor and a drive belt slips during normal use then belt tension should be increased until slipping stops.

The tension of the drive belts must be checked regularly during their run-in period. If slippage is avoided while the belts settle in, very long life can be achieved. Check tension after the first half hour of operation and again during the first day.

- Checking Drive Belt Tension

  a. Disengage the PTO and stop the engine before checking belt tension.

  b. There is no need to remove the belt guard to check or adjust the belt tension as it can be checked through a small access hole in the underside of the guard using your finger or a blunt tool such as a socket extension bar.



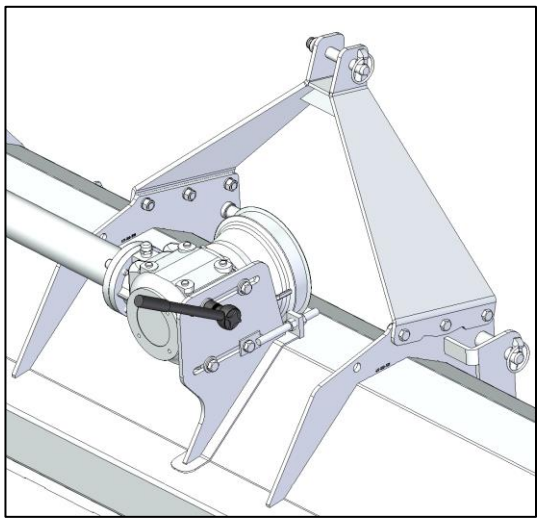
  c. When a single belt is pressed in this way the deflection should be approximately 10mm for a correctly tensioned belt.

  d. If manual tension checking is insufficient a dedicated belt tension measurement tool can be purchased from any reputable vee-belt supplier.

- To Adjust Drive Belt Tension

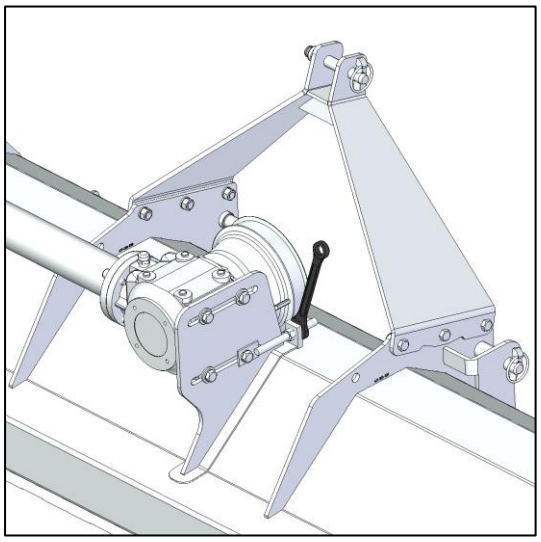
  a. The vee belts are tensioned by moving the gearbox forwards or backwards. The gearbox is secured to its mount in the centre of the mower by four bolts. A threaded adjuster is fitted to one of these bolts. Another adjuster bolt pushes against the end of the gearbox extension where it passes through the mower endplate.

  b. Loosen the four gearbox mounting bolts on top of the gearbox mounting plate in the centre of the mower.



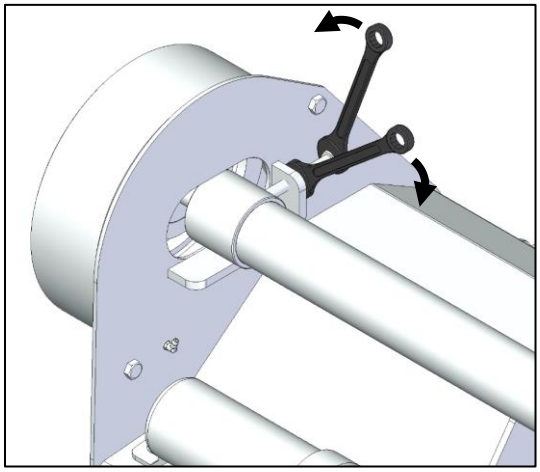
Gearbox mounting bolts

  c. Loosen the locknut on the gearbox extension adjuster bolt on the inside of the mower endplate.



Gearbox lock nut and adjuster bolt

  d. Turning the extension adjuster bolt and the nuts on the gearbox adjuster screw will move the gearbox and the drive pulley to tension or slacken the vee belts. Move the gearbox rearwards to tighten the belts, forwards to loosen them.



Extension lock nut and adjuster bolt

  e. It is important that the gearbox extension remains parallel with the mower body. If the extension is at an angle to the body adjust the gearbox adjuster screw nuts until it is parallel, then check the belt tension again.

  f. When the belt tension is correct tighten the four gearbox mounting bolts and the locknuts on the adjuster screws.

REPLACING THE DRIVE BELTS

IMPORTANT! Always fit genuine Trimax replacement parts. Never mix different types or brands of vee belts. If the drive belts are the wrong type or are not a matched pair, they will not transmit the required power properly.

Always replace both drive belts together. Replacing one belt only is false economy as it will quickly wear out.

- To Replace the Drive Belts:

  a. Remove the drive belt guard.

  b. Loosen the gearbox mounting bolts, gearbox and extension adjuster screw locknuts and move the gearbox forward as far as possible.

  c. Remove the drive belts and discard them.

  d. Fit the new drive belts to the pulleys. Do not use levers to force them over the pulley rim as this can cause irreparable damage to the tensile cords inside the belt. If the cords are damaged the belt will quickly fail even though no damage may be visible on the exterior.

  e. Turn the rotor a few turns to make sure all belts are evenly settled in the pulley grooves and then adjust the drive belt tension.

  f. Check and adjust the drive belt tension again during the first hour of operation.

CHANGING FLAILS

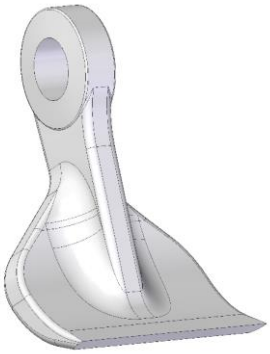
DANGER! In order for the flails to cut correctly they must rotate at high speed. ANY PARTS WHICH BREAK LOOSE MAY TRAVEL A CONSIDERABLE DISTANCE AND CAUSE SEVERE INJURY OR DEATH.

NEVER RUN THE MACHINE WITH FLAILS MISSING as the resulting imbalance may create a vibration sufficient to loosen other blades. Vibration may also lead to early structural failure of the mower and tractor.

Pay particular attention to the security and condition of flails, mounting lugs and blade mounting hardware.

- General

  a. The flails fitted to EzeemowFX mowers are forged from special steel for long life and combine weight with an aerodynamic shape. Weight provides sufficient impact to cut the required material while the shape minimises the amount of air movement but provides sufficient airflow to lift plant material and to cut and deposit the clippings behind the mower without wasting horsepower. The straight cutting edge gives a perfectly even cut across the full width of the mower.



  b. Flails are positioned on the rotor in four rows and placed so each flail overlaps another to eliminate uncut strips. Each flail is mounted between a pair of lugs welded to the rotor tube. The flail is secured to the lugs with a high tensile nut and bolt.

  c. The flails are held in the operating position by centrifugal force as the rotor spins at high speed. Should a flail strike a solid object while operating it can momentarily swing back out of the way to prevent damage.

WARNING! Rotors are dynamically balanced during manufacture. It is vital this balance be maintained. An out of balance rotor will cause vibration during operation. If the machine is operated in an unbalanced state structural failure of the mower body and other components WILL result.

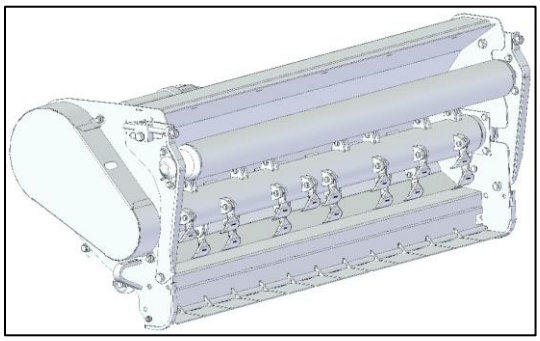
If one new flail is fitted when all other flails are badly worn rotor balance will be affected. It is better to replace two flails and to fit them as nearly opposite each other on the rotor as possible. Otherwise replace single flails with others that are worn to a similar degree.

- To Remove Flails:

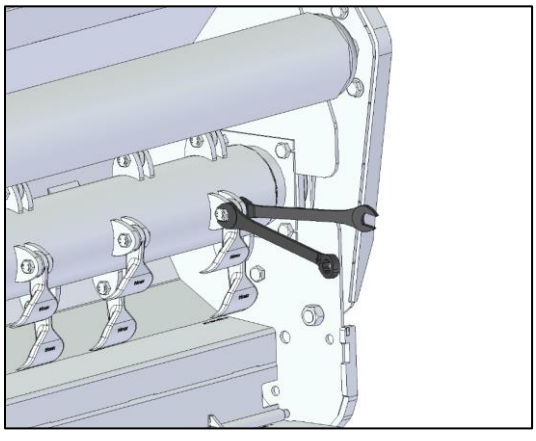
  a. Ensure that the area is clear of bystanders, especially small children.

  b. Remove the mower from the tractor.

  c. Tip the mower forwards onto its headstock so that the rotor and flails are exposed. Make sure that it cannot roll over again unexpectedly while it is being worked on. Enlist help and lift correctly to avoid back injury.



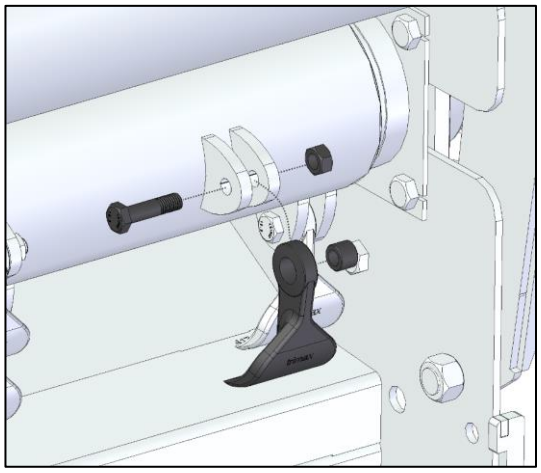
  d. Use two spanners to undo the flail mounting bolts. The bolts are secured with a low strength grade of Loctite locking compound and may be difficult to undo.



  e. Remove the bolt, flail and hardened bush. All bolts, nuts and bushes must be replaced as a matter of course whenever replacing flails.

- To Refit Flails:

  a. Take the replacement flail, fit a new hardened bush to the hole in its shank and align the mounting hole in the flail with the bolt holes in the flail lugs.



  b. Fit a new mounting bolt through the lugs and hardened flail bush.

IMPORTANT: The cutting edge MUST face forwards when the flail is hanging from the bottom of the rotor.

IMPORTANT: The bolts should be inserted from the left-hand end of the rotor. When fitted from the right bolts are more likely to loosen during use.

  c. Apply a drop of Loctite 262 locking compound (or equivalent) to the thread of the bolt and fit a new nut.

  d. Tighten the nut to a torque of 45Nm (35 lb-ft).

  e. When the job is complete turn the mower right way up. Once again, seek assistance to prevent back injury.

SHARPENING FLAILS

- Flail Life:

  The life of flails depends upon many factors including the cutting height, soil type, the type of material being cut, moisture and dust content. Although the flails are self-sharpening to a degree, they will eventually wear so the original straight and sharp cutting edge becomes scalloped in the centre and rounded. Provided they are not too worn, flails can be re-sharpened.

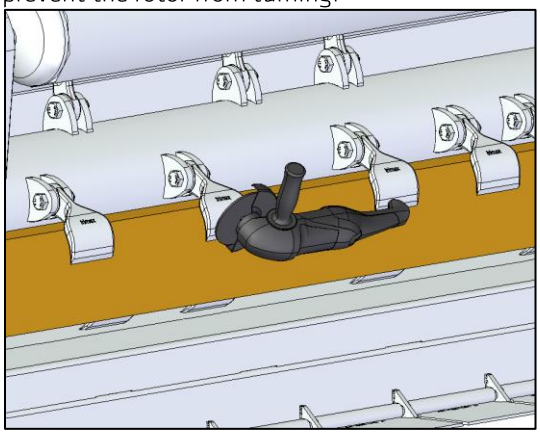
- To sharpen the flails:

  a. Ensure that the area is clear of bystanders.

  b. Remove the mower from the tractor.

  c. Turn the mower over so that the rotor and flails are exposed. Secure the mower to ensure it cannot roll over unexpectedly while it is being worked on.

  Turn the rotor so that one row of flails is about 90 degrees from the top. Place a suitable block of wood or similar between one of the flail lugs on the rotor and the mower body to prevent the rotor from turning.



  d. The whole row of flails can be supported on a suitable length of wood or steel so that they stick straight out from the rotor. Alternatively each individual flail can be locked in this position using a vise grip or similar self-locking pliers. The idea is to hold the flails rigidly in a position where the face to be worked on can be easily accessed.

  e. Gently sharpen the angled edges on the **back** of the flail using a small disc grinder. **Do not grind the front face of the flail.** Be sure to use the grinder gently so the flail does not get hot or the steel will lose its hardness. The angled edge should be flat and at an angle of approximately 45 degrees to the front face of the flail. Ensure all flails are sharpened equally to maintain the balance of the rotor.

  f. Repeat these steps until all flails have been sharpened.

  g. Turn the mower right way up. Once again, **seek assistance to prevent back injury**.

GREASING

IMPORTANT! Use only NLGI Grade No. 2 lithium-based grease manufactured by a reputable company (Such as Mobilux™ EP-2).

Greases formulated from bases other than lithium may react or completely break down when mixed, even in very small quantities. In particular, DO NOT USE GREASES CONTAINING GRAPHITE. The cause of the resulting mechanical failure can often be detected and may result in the rejection of any subsequent warranty claim.

DO NOT OVER-GREASE! Excessive greasing will dislodge seals from the bearing and allow water and dirt to enter, leading to early bearing failure.

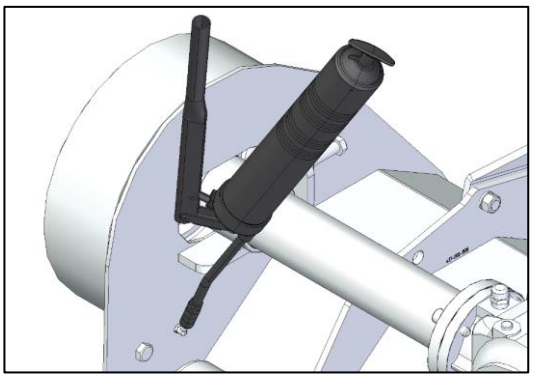
NOTE: The quantity of grease is described by the number of "pumps" or "shots". One pump is defined as the quantity of grease delivered by one pump of a lever-action grease gun, while one shot is that delivered in one cycle of an air-operated power grease system. One shot is typically equivalent to four pumps.

It is best to grease your Trimax mower after each use while the moving parts are still warm. When the bearings are warm fresh grease flows around them and expels used grease and dirt more readily.

There are six grease points on the mower itself, one for each rotor bearing (2), one for each roller bearing (2) and one on each height adjuster block (2). There are others on the driveshaft.

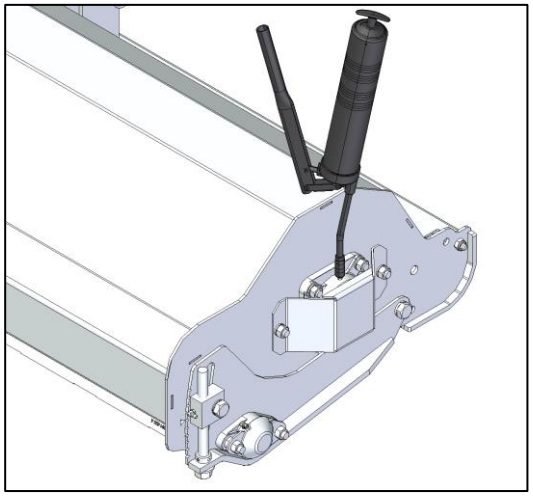
GREASING – DRIVE END ROTOR BEARING

- This bearing is fitted with a remote grease fitting which is located on the inner side of the drive endplate above the gearbox extension adjuster. Lubricate every 8hours or daily with 4 pumps or 1 shot of multi-purpose grease.



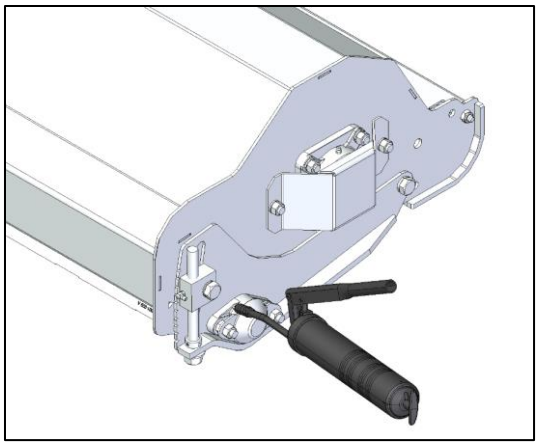
GREASING – NON-DRIVE END ROTOR BEARING

- A greaser is fitted directly to the bearing housing. Lubricate every 8 hours or daily with 4 pumps or 1 shot of multi-purpose grease.



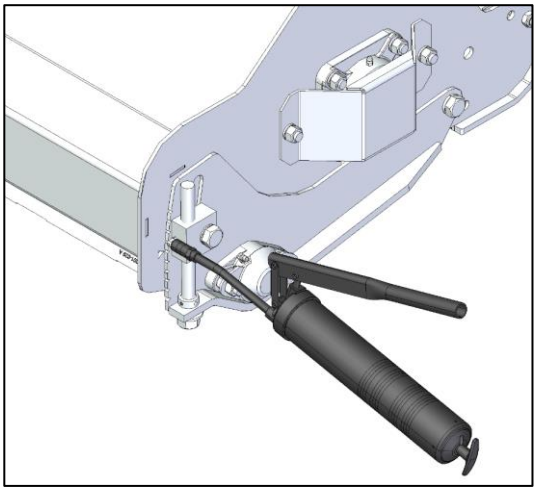
GREASING – ROLLER BEARINGS

- The roller is supported by bearings at either end. Greasers are fitted to each roller bearing housing. Lubricate every 8 hours or daily with 2 pumps of multi-purpose grease to each greaser.



GREASING – HEIGHT ADJUSTER BLOCKS

- Greasers are fitted directly to each height adjuster block to lubricate the threaded height adjuster rod. These should seldom require greasing, especially if the height adjustment is changed infrequently. Apply grease to each fitting as required.



DRIVESHAFT MAINTENANCE

The driveshaft that connects the tractor PTO output to the mower gearbox is a complex piece of equipment in its own right. **Regular maintenance is essential** if it is to continue to perform reliably.

The driveshaft **must be able to telescope freely at all times or serious damage to the tractor, mower and the driveshaft itself will result**.

Driveshafts for **Trimax** mowers are supplied by various manufacturers. Each shaft comes with its own maintenance instructions. These may be attached to the driveshaft or included with this operator's manual. Follow the manufacturer's guidelines.

GEARBOX OIL

Check the gearbox oil level **every 40 hours or weekly**.

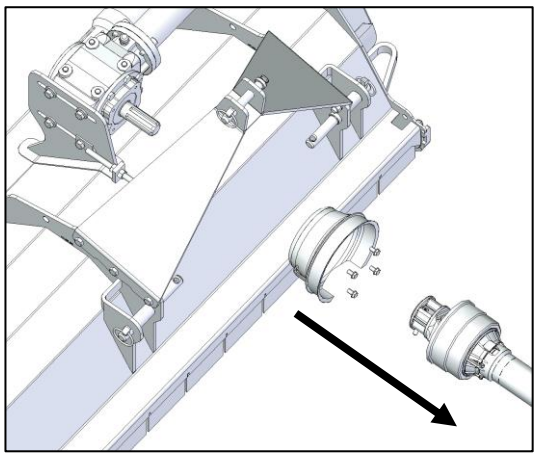
The main gearbox casing contains the gears and has the PTO input shaft attached. A tubular extension housing is bolted to the main casing and has the drive pulleys at its outer end. The gearbox has an oil reservoir, filler, drain and level plugs. There is a breather plug on the top of the gearbox casing which doubles as the filler plug.

- Checking Gearbox Oil Level and filling

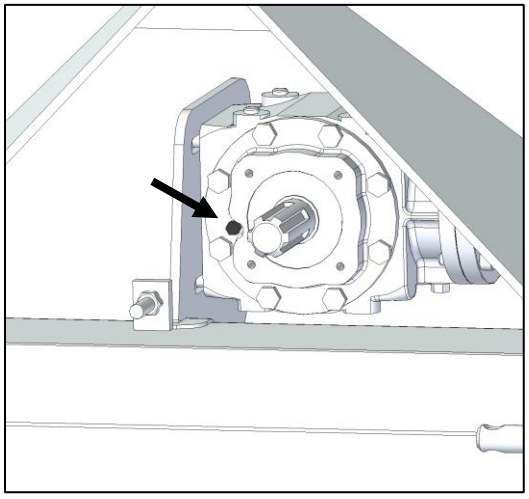
  a. Park the tractor and mower on level ground.

  b. Lower the mower to the ground, stop the engine, ensure that all controls are in neutral, apply the parking brake and remove the ignition key.

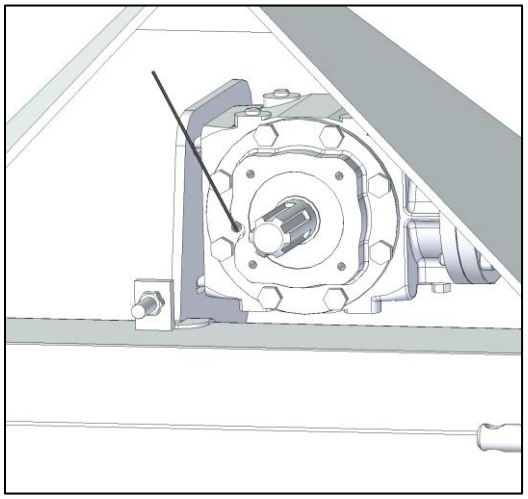
  c. Remove the PTO shaft and PTO cone.



  d. Remove the gearbox oil level plug. A small amount of oil may leak out as the plug is removed.

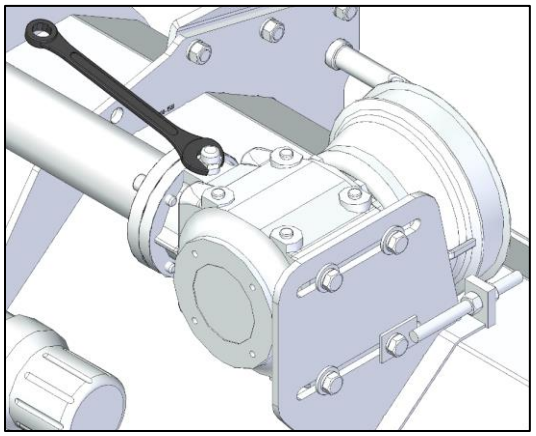


  e. Use a clean piece of wire as a dipstick to check the oil level. The oil level should be no less than 25mm (1") below the level plug.

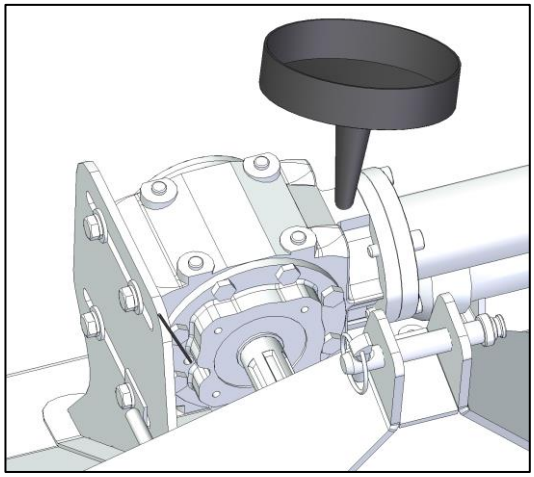


  f. If the oil level is too low, it will be necessary to add more EP90 oil through the fill hole.

  g. To add more oil first remove the breather plug from the top of the gearbox.



  h. Add oil through the top of the gearbox until the correct level is obtained at the level plug. It may be necessary to use a funnel to assist filling.



i. Once the correct level is obtained replace the breather and level plugs, tighten both securely.

j. Replace the PTO cone and PTO shaft

k. If the gearbox needs topping up frequently, check all plugs for tightness and inspect the seals on the input and output shafts for leaks. Consult your dealer if necessary

- Change the Gearbox Oil

a. The gearbox oil should be drained and replaced **annually**.

b. Draining is best carried out when the oil is still warm after use.

c. Although there is a drain plug in the gearbox casing it is not accessible when the gearbox is fitted to the mower. The best option is to use an oil suction gun to remove all the oil through the breather plug on the top of the casing. Suitable suction guns should be available from larger automotive supply companies.

d. Dispose of used oil according to local laws and regulations.

e. After draining, replace the oil with a high quality EP90 grade gear oil. Follow the gearbox oil level process. The gearbox holds approximately 800ml (1.4 UK pints, 1.7 US pints). Do not overfill the gearbox as this will cause overheating and premature failure of gearbox components.

f. Refit the breather and level plugs, tighten securely.

FRONT FLAPS

The hinged front flaps on the FlailDekFX models allow tall and stalky vegetation to enter the mower easily. As the material enters the cutting chamber the flaps drop down to hold it in the chamber and prevent debris from being expelled forwards.

These machines are often used for cutting areas with infrequent mowing cycles. This means the mower may contact hidden obstacles which the operator may be unable to see. The front flaps can be replaced if they become damaged.

When the Converter™ is set in the lowered position the front flaps are redundant. If the FlailDekFX will always be used for cutting short grass and will never be run with the Converter™ raised the front flaps can be permanently removed.

DANGER! The machine must NEVER be operated with the front flaps removed AND the Converter™ in the raised position. This will remove all protection from the front of the machine and allow debris to be thrown forward. Stones or other debris thrown by the machine could cause SERIOUS INJURY OR DEATH.

- To Remove the Front Flaps:

a. This operation will be much easier if there is another person to assist.

b. Park the tractor on level ground, disengage the PTO and apply the parking brake.

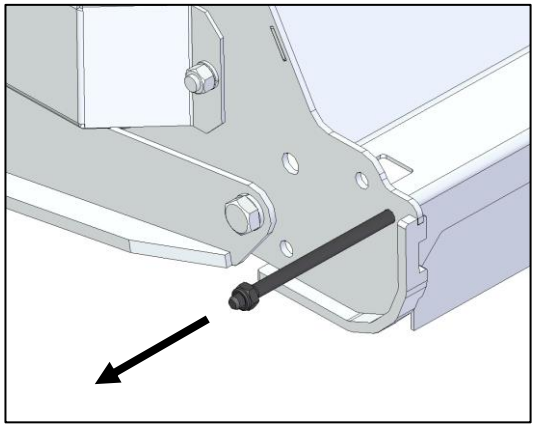
c. Fully raise the mower. Lock it in position or place suitable stands to prevent it from lowering accidentally.

d. Turn off the tractor engine and remove the ignition key.

e. Clean the flaps and the area under the front of the mower.

f. Remove the self-locking nut from one end of the flap hinge pin. If the pin turns with the nut it may be necessary to have an assistant hold the nut on the other end with another spanner.

g. Withdraw the hinge pin from the other side of the mower. If it cannot be moved, screw a standard M10 nut about three turns onto the thread from which the nut was removed and lightly hammer on it to push the pin through. **DO NOT HAMMER DIRECTLY ON THE UNPROTECTED HINGE PIN as this will damage the thread and the pin will need to be replaced.**



h. Withdraw the hinge pin to allow the damaged flap(s) to be released and remove them. As the hinge pin is removed, the flaps will be released one after the other.

- To Replace the Front Flaps:

  a. Clean any debris from the area where the hinge passes through.

  b. Hold each flap in position and push the hinge pin through one flap at a time.

  c. When all flaps are in position, refit the self-locking nut to the hinge pin.

REMOVING & REPLACING THE OPTIONAL CONVERTER™.

- General

  a. The Converter™ is generally quite robust but it can get damaged if it hooks onto an immovable object whilst reversing. Unless this damage is very severe it can often be repaired in place. If not, the Converter™ can be removed and the repair carried out in an engineering workshop, or the entire Converter™ can be replaced.

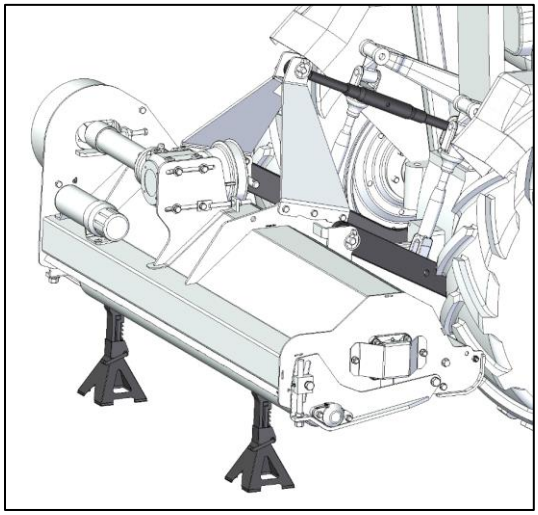
  b. If the machine will always be used for mowing tall grass in rough conditions the Converter™ can be removed altogether

- To Remove the Converter™:

  a. Park the tractor on level ground, disengage the PTO and apply the parking brake.

  b. Fully raise the mower.

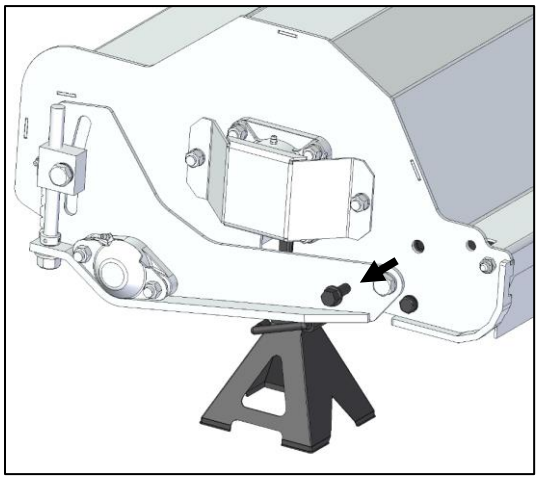
  c. Place suitably rated axel stands underneath the rear roller and lower the mower until its weight is taken on the stands. This will prevent the mower from lowering accidentally whilst being worked on.



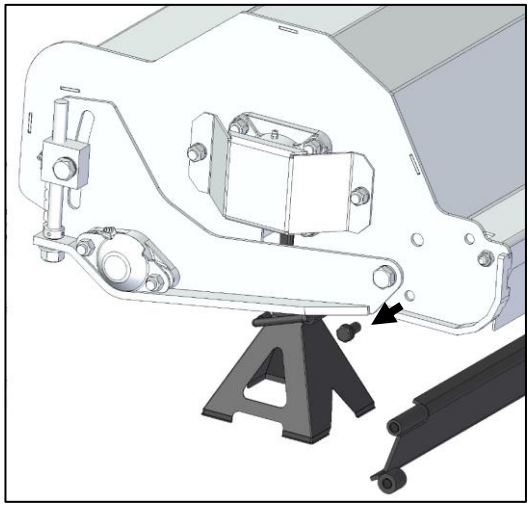
d. Turn off the engine and remove the ignition key.

e. Loosen the Converter™ position bolts on either side of the mower.

f. Remove the Converter™ pivot bolts. These are tightly secured and may require an impact gun or light heating (200°C - 400°F) to remove.



g. Support the Converter™, remove the position bolts completely and then remove the Converter™



- To Replace the ConverterTM:

  a. This is easier if there is someone else to help hold the **Converter™** in position.

  b. Fitting is more or less the reverse of the above. Smear the threads of the **pivot bolts** (not the position bolts!) with a few drops of Loctite 609 high strength threadlocker before fitting them to the sockets on the **Converter™**.

  c. Tighten the pivot bolts to a torque of 100Nm (75 lb-ft).

CLEANING THE MACHINE

- Always grease the EzeemowFX prior to cleaning. If greasing is done whilst components are hot, then pause and allow the mower to cool before cleaning begins. Sealed components can be damaged if washed whilst hot.

- Take care when using a pressure washer, steam cleaner or high-pressure hose to wash the mower. Avoid directing hoses at bearing housings or areas protected by seals.

- Cleaning should be carried out in a designated area where dirt and grass washed from the mower is trapped to prevent it being washed into drains or streams. Collected dirt and grass clippings should be disposed of according to local bylaws.

LONG TERM STORAGE (WINTERING)

It may be necessary to store the mower for an extended period. If this situation occurs, follow the instructions below.

a. Fully clean the mower – Wash down if temperatures are above freezing otherwise brush down all loose debris (if water from hose is likely to freeze).

b. Inspect the mower for damage to structural components, bearings, flails, flaps, **converter™** etc. Repair or replace any damaged items.

c. Inspect all bolts and check they are fully tightened. Add a paint stripe on the bolt head to mark it as completed.

d. Inspect the gearbox oil level and clarity – fill or replace if required.

e. Remove PTO's and their covers then fully grease inner tube & joints (see the driveshaft manufacturer's instructions).

f. Grease gearbox input shafts.

g. Assemble PTO covers and install on the mower.

h. Grease all grease points until grease begins to weep from seals or bushes.

i. Lower the machine onto suitable planks or dunnage to keep it clear of ground moisture.

j. Touch up all paint nicks and scratches to prevent rusting.

k. Store the mower indoors, if possible. otherwise, if storing outdoors ensure the mower is covered with a waterproof cover and tied securely.

l. Follow getting started setup procedure before beginning mowing.

SERVICE SCHEDULE

DANGER! Before attempting to make any adjustments or carry out maintenance, review the hazard identification table, take all necessary precautions.

IMPORTANT! If using EzeemowFX in arduous conditions (e.g. excessively dusty or wet etc.) moving parts and driveshaft may require greasing more frequently.

MAINTENANCE INTERVAL	MAINTENANCE PROCEDURE
EVERY 8 HOURS OR DAILY	• Check flail bolt tightness • Check flail condition • Check all safety devices • Grease rotor bearings • Grease roller bearing • Check gearbox for oil level, leaks and top up if necessary
EVERY 40 HOURS OR WEEKLY	• Grease driveshaft universal joints • Grease driveshaft telescoping tubes • Grease driveshaft cover bearings • Oil driveshaft quick release pins and collars • Check drive belt condition • Check drive belt tension, adjust if required • Check all fasteners • Check ConverterTM for damage
ANNUALLY OR AS REQUIRED	• Change gearbox oil • Grease height adjuster blocks • Remove driveshafts, remove covers, clean and inspect, replace worn parts, grease and assemble

13. TROUBLESHOOTING

FAULT	CAUSE	REMEDY
MOWER VIBRATES EXCESSIVELY	Excessive PTO speed	Run PTO at speed appropriate for gearbox
	Flails missing or badly damaged	Replace flails
	New & worn flails fitted to rotor	Fit new/worn flails in pairs opposite each other on rotor
	Balance weights missing from rotor	Remove rotor, return to Trimax for rebalancing
	Rotor bent	Remove rotor, return to Trimax for straightening and rebalancing
	Driveshaft worn	Repair or replace
	Excessive driveshaft angles	Three-point linkage lifting too high. Limit movement
	Rotor bearings damaged	Replace rotor bearings
DRIVE BELTS SLIPPING	Excessive ground speed	Vary transmission to travel more slowly
	Rotating parts not turning freely	Check for & remove any debris fouling flails or pulleys
		Check rotor bearings, replace if necessary
	Mower scalping excessively	Raise cutting height
	Drive belts loose	Check spring on auto belt tension system
	Drive belts worn out	Replace drive belts
	Non-standard belts fitted	Use only genuine Trimax parts
	Tractor too powerful	Use a less powerful tractor or travel more slowly
	Oil on drive belts	See below
OIL OR GREASE ON DRIVE BELTS	Too much oil in gearbox	Drain to correct level, replace belts
	Rotor bearings over-greased	Grease as per instructions
	Gearbox seals or extension seals leaking	Inspect gearbox for leaks, repair if necessary, replace belts
EXCESSIVE POWER REQUIRED TO DRIVE MOWER	Rotating parts not turning freely	Check for and remove debris fouling flails
		Check rotor bearings, replace if necessary
	Engine speed too low	Run PTO at speed appropriate for gearbox
	PTO speed too fast	Run PTO at speed appropriate for gearbox
	Excessive ground speed	Vary transmission to travel more slowly
	Cutting height too low	Raise cutting height
	Converter™ in wrong position	Raise Converter™
	Cutting too much at once	Cut more frequently
		Raise cutting height for first cut, lower cutting height and cut again in opposite direction

FAULT	CAUSE	REMEDY
EXCESSIVE WHEEL MARKS OR POOR CUTTING FINISH	PTO speed too slow	Run PTO at speed appropriate for gearbox
	PTO speed too fast	Run PTO at speed appropriate for gearbox
	Cutting height too high	Lower cutting height
	Excessive ground speed	Run PTO at speed appropriate for gearbox, adjust transmission to travel more slowly
	Flails missing, damaged or worn out	Replace flails
	Ground too wet	Wait for ground to dry out
	Cutting too much at once	Raise cutting height for first cut, lower cutting height and cut again in opposite direction
	Grass sticking to underside of mower	Try running PTO at speed appropriate for gearbox, use transmission to maintain ground speed
	Converter™ in wrong position	Raise Converter™
MOWER WILL NOT CUT ANYTHING PROPERLY	Flails fitted backwards	Fit flails with cutting edge facing forward
MOWER SCALPS EXCESSIVELY	Cutting too low	Raise cutting height
		Change mowing pattern to approach contours from different angle
ROLLER BEARINGS FAIL	Water in bearings	Do not direct hoses or pressure washers at bearings
	Bearings loose on roller axle	Replace roller or roller bearings
	Seals displaced	Do not over grease – two shots per greasing
CORRUGATIONS IN GROUND AFTER REPEATED MOWING	Wrong linkage pins	Fit correct pins for tractor. Use adapter for Category 1 pins in Category 2 top link
	Slack in tractor linkage	Check for wear. Adjust linkage correctly
	Mowing too fast	Travel more slowly
MOWER DOESN'T LIFT HIGH ENOUGH FOR TRANSPORT	Tractor Linkage does not have enough lift	Use lowest sets of upper and lower linkage holes to achieve more lift for transportation.
	Tractor is of the low, "orchardized" type	