# IM1925

# TRI-BLADE Tri-Blade 3000 Tri-Blade 4000

# PASTURE TOPPER

INSTRUCTION BOOK
AND
REPLACEMENT PARTS INFORMATION
ISSUE 3

#### **IMPORTANT**

NOTE HERE THE SERIAL NUMBER OF YOUR MACHINE AND ALWAYS QUOTE IT IN ANY COMMUNICATION WITH US OR YOUR DEALER. THIS IS PARTICULARLY IMPORTANT WHEN ORDERING SPARES. REMEMBER TO INCLUDE ALL NUMBERS AND LETTERS.

MACHINE SERIAL NUMBERS	

THE INFORMATION GIVEN THROUGHOUT THIS MANUAL IS CORRECT AT THE TIME OF PUBLICATION. HOWEVER, IN THE COURSE OF CONSTANT DEVELOPMENT OF BOMFORD TURNER MACHINES, CHANGES IN SPECIFICATION ARE INEVITABLE. SHOULD YOU FIND THE INFORMATION GIVEN IN THIS BOOK TO BE AT VARIANCE WITH THE MACHINE IN YOUR POSSESSION, YOU ARE ADVISED TO CONTACT THE BOMFORD TURNER SERVICE DEPARTMENT WHERE UP-TO-DATE INFORMATION WILL BE PROVIDED. THE MANUAL CAN CONTAIN STANDARD AND OPTIONAL FEATURES AND IS NOT TO BE USED AS A MACHINE SPECIFICATION.

THE MACHINE HAS BEEN TESTED AND IS CONSIDERED SAFE IF CAREFULLY USED. ENSURE YOUR OPERATOR IS PROPERLY TRAINED IN ITS USE AND MAINTENANCE.

#### **IMPORTANT**

NOTEZ ICI LES NUMEROS DE SERIE DE VOTRE MACHINE ET MENTIONNEZ LES DANS TOUTE COMMUNICATION AVEC NOS SERVICES OU VOTRE REVENDEUR. CECI EST IMPORTANT POUR LA COMMANDE DE PIECES DETACHEES. PENSEZ A NOTER TOUS LES NUMEROS ET TOUTES LES LETTERS.

NUMEROS DE SERIE DE LA MACHINE	
NUMERUS DE SERIE DE LA MACHINE	

LES INFORMATIONS DONNEES DANS CE MANUEL SONT CORRECTES CEPENDANT, DU FAIT DE DEVELOPPEMENT CONSTANT DES MACHINES BOMFORD TURNER.

CHANGEMENTS DANS LES CARACTERISTIQUES SONT INEVITABLES.

SI VOUS TROUVEZ QUE LES INFORMATIONS DONNEES NE CORRESPONDENT PAS A VOTRE MACHINE VEUILLEZ CONTACTER LE SERVICE DES REPARATIONS OU DES INFORMATIONS PLUS RECENTES VOUS SERONT DONNEES.

CE MANUEL PEUT MONTRER DES CARACTERISTIQUES OPTIONNELLES ET NE PEUT PAS ETRE CONSIDERE COMME SPECIFICATION DE LA MACHINE.

CETTE MACHINE A ETE TESTEE, ET ELLE EST CONSIDEREE COMME FIABLE A CONDITION D'UNE BONNE UTILISATION. ASSUREZ-VOUS QUE VOTRE OPERATEUR EST QUALIFIE EN CE QUI CONCERNE L'UTILISATION DE LA MACHINE AINSI QUE SON ENTRETIEN.

#### **WICHTIG**

TRAGEN SIE HIER DIE SERIENNUMMERN IHRER MASCHINE EIN UND GEBEN SIE DIESE IMMER AN, WENN SIE SICH AN UNS ODER IHREN HÄNDLER WENDEN. DAS IST BESONDERS BEI ERSATZTEILBESTELLUNGEN WICHTIG. VERGESSEN SIE NICHT, ALLE ZAHLEN UND BUCHSTABEN ZU NOTIEREN.

SERIENNUMMERN DER MASCHINE	
SEKTENNUMMEKN DEK MASCHINE	

DIE ANGABEN INDIESEM HANDBUCH SIND BEI VERÖFFENTLICHING KORREKT. AUFGRUND DER KONSTANTEN WEITERENTWICKLUNG VON BOMFORD TURNER MASCHINEN SIND JEDOCHÄNDERUGDEN IN DER SPEZIFIKATION UNVERMEIDLICH. WENN DIE INFORMATION IN DIESEM HANDBUCH NICHT MIT IHRER MASCHINE ÜBEREINSTIMMEN, NEHMEN SIE BITTE KONTAKT MIT DER BOMFORD TURNER KUNDENDIENSTABTEILUNG AUF, DIE IHNEN GERNE DIE AKTUELLEN INFORMATION ZUKOMMEN LÄSST.

DAS HANDBUCH KANN SOWOHL BESCHREIBUNGEN FÜR DIE STANDARD AUSFÜHRUNG ALS AUCH FÜR ZUBEHÖR ENTHALTEN UND IST NICHT ALS MASCHINENSPEZIFIKATION ZU VERWENDED.

DIE MASCHINE IST GETESTET UND BEI SACHGEMÄSSEM BETRIEB ALS SICHER BEFUNDEN WORDEN. SORGEN SIE DAFÜR, DASS IHR BEDIENPERSONAL IN ANWENDUNG UND WARTUNG RICHTIG GESCHULT WIRD.

This manual describes Tri-Blade range of pasture toppers available in 3 and 4 metre cutting widths. The machines are attached using the tractors 3-point linkage system. The machine features 3 pairs of rotating blades; each pair having its own gearbox which is driven by a slip clutch protected PTO shaft, from the tractor PTO output.

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#### **IMPORTANT**

This machine is designed for vegetation control and must not be used for any other purpose.

It is potentially hazardous to fit or use any parts other than genuine **Bomford Turner** parts.

The company disclaims all liability for the consequences of such use which, in addition, voids the machine warranty.

1925	2. TECHNICAL DATA	0505
TractorRequirements	Tri-Blade 3000	Tri-Blade 4000
BHP PTO Type PTO Speed PTO Size	90 Live 1000 rev/min 1-3/8" 6 spline	100 Live 1000 rev/min 1-3/8" 6 spline
Machine Weight	1130kg	1325kg
Cutting Blades	3 Sets	3 Sets
Cutting Width	2.7m	4.0m
Cutting Height	25 – 225 mm	25 – 225 mm
Castor Wheels	2	2
Tyre Size Type Pressure	15" O/D X 4" Solid N/A	206/60 14.5 x 10 ply Pneumatic - Duro-rib 30 psi
Transport Position	Normal	"End On" (Lengthways)

3.0m

N/A

1.6m

Yes

Transport Width

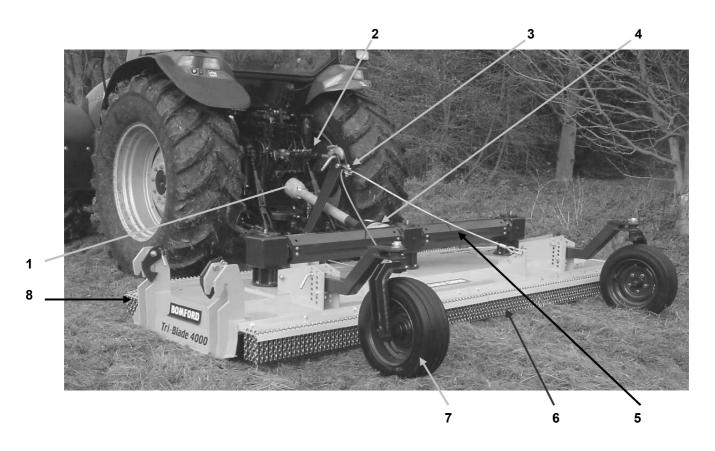
Transport Kit

# EC DECLARATION OF CONFORMITY conforming to EEC Directive 98/37/EC

We,
of BOMFORD TURNER LIMITED, Station Road, Salford Priors, Evesham, Worcestershire, WR11 5SW
declare that under our sole responsibility that the product (type)
TRI-BLADE ROTARY TOPPER
Product Code: TB30 – TB40
Serial No. & Date:
Manufactured by the above Company/*
(*insert business name and full address if not stated above)
complies with the required provisions of the Directive 98/37/EC and 89/336/EEC, AMD 92/31/EEC, AMD 93/68/EEC and conforms with European Norm. BS EN 292
Part 1: 1991 Safety of Machinery - Terminology, Methodology Part 2: 1991 Safety of Machinery - Technical Specifications
and other national standards associated with its design and construction as listed in the Technical

File.

Status Engineering Manager Date 12/01/2005



- 1, PTO Shaft
- 3. A Frame
- 5. Shaft Guard
- 7. Castor Wheel

- 2. Top Link
- 4. Slip Clutch
- 6. Rear Chain Guard
- 8. Front Chain Guard

(4 Metre Tri-Blade Illustrated)

#### **Noise**

The equivalent daily personal noise exposure from this machine, measured at the operator's ear, is within the range of 80-85dB when used in conditions where the load fluctuates between zero and maximum. This applies when the machine is attached to a tractor fitted with a quiet cab and used in accordance with the operating instructions in a generally open environment. At daily noise exposure levels of between 85 and 90dB, suitable ear protectors are recommended.

#### Safety

Read, Understand and Follow the Safety Messages. Serious injury or death may occur unless care is taken to follow the warnings and instructions given in the safety messages,

**CAUTION!** The lowest level of Safety Message; warns of possible injury.

**WARNING!** Serious injury or possible death.

**DANGER!** Imminent death/critical injury.

Never operate the tractor or machinery until you have read and completely understand this manual and the tractor operator's manual and each of the safety messages found in the manuals and those displayed on the tractor and implement.

#### DANGER!

DO NOT attempt any maintenance of or adjustment to the machine while it is running. Before carrying out any work on the machine follow the three safety instructions below:

- a LOWER THE MACHINE ON TO THE GROUND
- b PUT THE PTO OUT OF GEAR
- c STOP THE TRACTOR ENGINE

#### WARNING!

The operator and all support personnel must wear the appropriate safety clothing i.e. safety glasses and protective footwear at all times for protection from injury by objects thrown from the machine.

#### DANGER!

Never allow passengers especially children to ride on the tractor or implement. Falling off can kill.

#### DANGER!

At all times ensure that the PTO shaft guard is in position, securely fitted and in good condition and that the tractor PTO shaft shield is fitted.

#### **CAUTION!**

Replace the PTO shaft guard if any of the following are evident:- guard cracked or damaged any part of the PTO shaft exposed. Ensure the PTO shaft guard is free to rotate and the anti-rotation chains are securely fitted and effective.

#### **WARNING!**

Ensure that the correct guards are properly fitted to the machine and tractor at all times and check that they are in good condition. Ensure you have the correct guards fitted for the type of operation being performed. Missing or damaged guards must be replaced immediately.

#### WARNING!

While the tractor is running all personnel should keep well clear of the area around the machine as there are numerous crushing, shearing, impact dangers caused by the machine operation.

#### **DANGER!**

**AVOID WIRE**. It can be extremely dangerous if wire catches in the blades of the machine, and every care must be taken to ensure this will not happen. Inspect the working area before commencing. Remove all loose wire and obstructions and clearly mark those that are fixed so that you can avoid them. Any unusual noise from the cutting unit area indicates that the blades may have been fouled by an obstruction. A visual indication that wire has become entangled may be a sudden movement of the vegetation ahead of the machine. In any such event STOP the tractor engine INSTANTLY. On no account move the machine until blades have completely stopped. When the machine has stopped check it and remove any obstruction that may be present. If working under a raised machine ensure that it is safely supported. Before working on the machine always stop the tractor engine and remove the ignition key.

#### DANGER!

These machines are capable under adverse conditions of throwing objects great distances at high velocity. CHECK the blades for wear and the attachment bolts for tightness every day during work .A few moments whenever the machine is stopped, e.g. whenever removing obstructions, will help reduce blade wear or loss.

#### **DANGER!**

Keep your forward speed to a level appropriate to the operating conditions. High-speed manoeuvres are very dangerous, particularly on uneven ground where there is risk of overturning.

#### DANGER!

Keep a careful watch for passers by who may inadvertently get in the way of cut material being thrown from the machine. These machines are capable under adverse conditions of throwing objects great distances at high velocity. Stop the blades until all people are well clear.

#### **WARNING!**

Extreme care should be taken when operating near loose objects such as gravel, rocks, wire, and other debris. Inspect the area before mowing. Foreign objects should be removed from the site to prevent machine damage and/or bodily injury or even death. Any objects that cannot be removed must be clearly marked and carefully avoided by the operator. Stop mowing immediately if blades strike a foreign object. Repair all damage and make certain the blade and carrier are still balanced before resuming cutting operations.

#### **WARNING!**

Transport the machine only at safe speeds. Serious accidents and injuries can result from operating this equipment at unsafe speeds

#### **Emergency Stop**

To stop the blades in an emergency use the tractor stop control. The use of the tractor stop control must only be done in an emergency. Its use to stop the machine can cause damage. After an emergency stop of the machine; ensure that the PTO is disengaged before restarting the tractor.

#### **Safety Decals**

Safety decals are located on various points of the machine. They can be identified by the yellow upper panel depicting the hazard, and the lower white panel indicating means of avoidance or precautions to be taken. These decals have no text. It is essential that all operators and personnel associated with the machine fully understand their meanings, which are shown on the following pages.

Any safety decals which are found missing should be replaced.





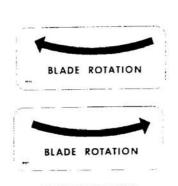


**PTO SPEED** 

STOP ENGINE AND REMOVE **IGNITION KEY BEFORE SERVICE** OR MAINTENANCE

DANGER OF **KEEP CLEAR** 

DANGER DO NOT ROTATING BLADES OPERATE MACHINE WHEN RAISED



**BLADE ROTATION DECALS** 



DANGER OF **ENTANGLEMENT KEEP CLEAR OF** MACHINE WHEN IN OPERATION



**KEEP ALL NUTS TIGHT** 



**READ INSTRUCTION** MANUAL BEFORE **OPERATING** 







DANGER OF CRUSHING STAY CLEAR **OF ZONES** 



DANGER FROM THROWN OBJECTS **KEEP CLEAR** 

#### **Fitting Machine To Tractor**

**WARNING** Avoid injury. Ensure there are no bystanders between tractor and machine when coupling machine to the tractor.

- a Reverse tractor slowly up to the machine until lift arms are level with mounting pins.
- b Fit left lift arm on to the mounting pin and secure with linch pin.
- c Adjust the height of the right lift arm if necessary.
- d Fit right arm on to the mounting pin and secure with linch pin.
- e Fit top bracket on the A frame to the top link on the tractor.
- f Adjust the length of the top link so that the machine is level.
- g Adjust the lift arm check chains if necessary to prevent the machine from swaying when raised.

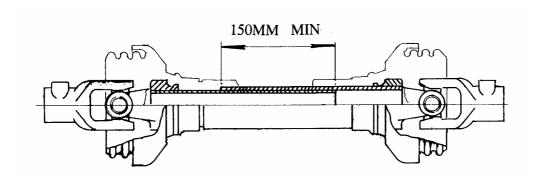
#### **Fitting PTO**

Due to many different makes and sizes of tractor to which mowers may be fitted, a nominal length PTO shaft is supplied with the machine. In some cases it may be found that this PTO shaft is too long and will have to be shortened.

IMPORTANT: MINIMUM ENGAGEMENT OF PTO IS 150MM IN THE WORKING POSITION. THIS MEASUREMENT MUST BE TAKEN INTO ACCOUNT WHEN SHORTENING THE PTO SHAFT.(See illustration below)

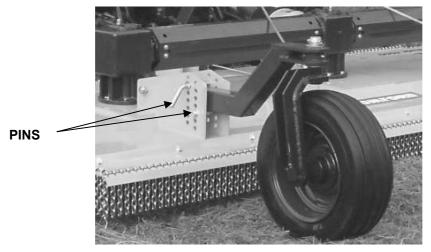
Before fitting PTO shaft to tractor, grease the sliding drive shafts and bearing units.

- a Fit PTO to tractor ensuring locking peg on the splined coupling is fully engaged.
- b Attach PTO guard check chains to tractor and machine.



#### **Height of Cut**

The height of the cut may be adjusted by repositioning the castor wheel arms in the multi-position clevises on the machine.



**WARNING** Avoid injury. Stop the tractor engine, remove ignition key and allow blades to stop rotating before making adjustments.

IMPORTANT Avoid very low cutting heights; striking the ground with the blades can cause damaging shock loads to the gearboxes and drive system and also cause premature blade wear.

To achieve maximum cutting efficiency and provide the most uniform cut the machine should be operated with the rear of the machine slightly higher  $(\frac{1}{2}^{n} - 1^{n})$  than the front.

#### To Set Cutting Height

- a. Place the tractor and machine on a level surface.
- b Raise the machine to the approximate height using the tractor hydraulics.
- c. Adjust the height of the castor wheel arms by repositioning the pins (see illustration above)
- d. Secure pins with linch pins
- e. Lower the machine on the tractor hydraulics until it is  $\frac{1}{2}$ " –1" higher at the rear than the front.
- f. Position the stop on the lift quadrant on the tractor lift control lever so that the machine can be returned to the same height.
- g. Adjust the length of the top link so that when lifting the machine the front will raise about  $2"-2\frac{1}{2}"$  before the castor wheels leave the ground. (This will allow the flexible hitch to pivot and allow the machine to follow the contours of the ground).
- h. Adjust the machine side to side movement with the lower link adjustment.

IMPORTANT: When raising machine to transport height ensure that there is clearance between the machine and PTO shaft. Damage will result if the driveshaft hits the machine deck.

#### **Pre Start Checks**

Before operating the machine it is advisable to carry out the following Checks.

- a Check that the blades are free of obstructions especially pieces of wire.
- b Check that the blades are in good condition and securely attached
- c Ensure all guards are in position and in a serviceable condition.
- d Examine the work area and remove or identify hidden obstructions, posts and wire etc.

#### Starting

With a new machine it is recommended that the machine is restricted to light work for the first day for "running in" purposes.

Do not start the machine while it is under load.

- a Start the tractor and engage the PTO at low engine speed
- b Increase engine speed to give full PTO speed
- c Increase or decrease forward speed to suit prevailing conditions.

**WARNING** Never increase or decrease PTO speed rapidly as this can lead to gearbox or drive line damage.

#### **To Stop The Machine**

- a Reduce engine speed to idle
- b Disengage PTO

**WARNING** Do not disengage PTO when engine is at full PTO speed.

#### **Storage**

It is preferable to store the machine in dry conditions under cover when not in use. Before removing the machine from the tractor a thorough check of the machine should be made as follows.

- a Thoroughly clean all moving parts, particularly the blades and blade pans.
- b Check that all the blades are in place and that they are in good condition
- c Smear all unpainted metal parts with grease and lubricate all grease nipples.
- d Make a note of any item that needs replacing so that parts can be ordered

#### **Parking and Removal**

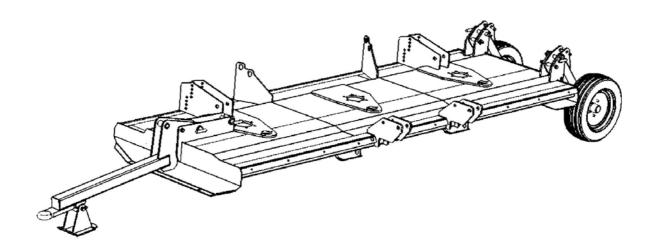
In the parked position the machine rests on the side skids.

- a With the machine supported on the tractor hydraulics remove the top pins from the castor wheel clevises.
- b Lower the machine on the tractor hydraulics until it rests on the side skids
- c Stop tractor engine and apply parking brake.
- d Slacken lower lift arm check chains
- e Remove top link
- f Remove linch pins securing lower lift arms to mounting pins
- g Remove lift arms from mounting pins
- h Replace linch pins in mounting pins
- i Release PTO shaft at tractor end and pull back along splines
- j Start tractor engine and drive carefully forward
- k Fully grease PTO shaft and store in a safe dry place.

#### **Transport**

There are certain regulations regarding the transport of machines over 2.5 metres wide on the public highway; if unsure contact your local authority or the local police abnormal loads officer.

The Tri-blade 3000 can be transported normally supported on the tractors 3 point linkage system; however the Tri-Blade 4000 needs to be transported "end on" (lengthways) on the public highway (see below) and a wheel frame and drawbar are provided for this purpose.



Tri-Blade 4000 in the transport position

#### To Place The Tri-Blade 4000 In The Transport Position

**WARNING** Avoid injury. Ensure there are no bystanders between tractor and machine when coupling machine to the tractor.

- a Fit wheel brackets at end of deck and secure with pins and linch pins.
- b Lower machine to the ground, stop engine and disconnect PTO and store in a safe place
- c Uncouple machine from tractor and carefully drive tractor forward.
- d Fit drawbar to the bracket provided at the opposite end of the deck and secure with pins and linch pins.
- e Couple tractor to drawbar.

#### **PTO Shaft**

The PTO shaft is of the normal agricultural type and fitted with a slip clutch at the gearbox end. Spares kits comprising the spider, needle bearings, circlips etc are available from your dealer.

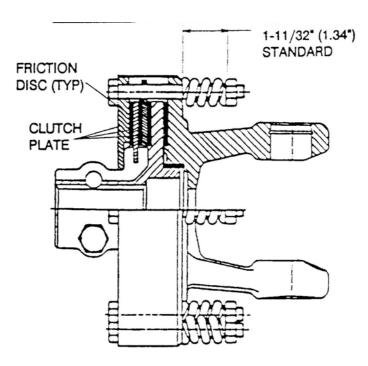
Some routine maintenance is needed to ensure a trouble free life for the shaft as detailed below:-

- a. Grease PTO shaft sliding tubes daily.
- b. Grease universal joints at both ends of shaft daily. Do not over grease as it could cause overheating and damage to the bearing seals.
- c. Check joint bearing journals for roughness or slackness.
- d. Check the PTO guard is in good condition and if not replace.
- e. Ensure the anti-rotation check chains are securely attached.

#### Slip Clutch

If the machine is to be stored outside for more than 30 days and exposed to rain or humid conditions it is recommended that the PTO shaft and slip clutch assembly are removed and stored in a dry place.

It is important that the clutch slips when an obstacle or load heavier than the clutch setting is encountered. Therefore, if the machine sits outside longer that 30 days and is exposed to rain and/or humid air, it is important to make sure that the clutch lining plates are not rusted/corroded together. Before using the machine.



To check that a clutch is not "frozen" use the following procedure to make sure the clutch will slip and give the overload protection required.

- a Mark across the clutch discs and plates plainly with chalk. (if the clutch slips it will misalign the marks).
- b With the machine off the ground, the PTO engaged and the engine a half throttle let the tractor clutch out rapidly to see if the clutches slip.
- c Stop the tractor engine and check if clutches have slipped. If everything is ok the machine is ready for use.

If the machine has been stored outside for 30 days or more carry out the following procedure,

- a Slacken the adjusting nuts until the nuts just touch the springs and then tighten the nuts one full turn uniformly.
- b Mark plates and discs with chalk as described previously.
- c With the machine off the ground, the PTO engaged and the engine a half throttle let the tractor clutch out rapidly to "pop" the slip clutches loose
- d If the clutches slip as necessary tighten nuts uniformly until springs are compressed to 1-11/32" (1.34") (34mm) long
- e If the clutch slips too easily stop the tractor and remove ignition key. Tighten each adjusting nut a further ½ turn at a time.

**WARNING** - Never tighten springs shorter than 1-9/32" (1.28") (32.5mm) even after disc wear.

NOTE:- Excessive slipping will burn up discs and slip clutch to the point where the clutch is not repairable. However excessive tightening will prevent the clutch from slipping and can lead to failures of the drive train components

#### **Gearboxes**

Three gearboxes are fitted:- a triple output shaft centre box and two right angle outer boxes. The gearboxes have been filled with lubricant to the test plug level prior to shipment. However, you should check the oil level at test plug before operating and frequently thereafter.

Recommended Lubricant NLGI 000 Grease

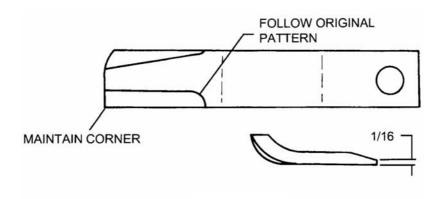
Capacity 0.54 Litres

#### **Blade Servicing**

Inspect blades before each use to determine that they are properly installed and in good condition. Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.

#### WARNING

Use only original equipment blades on this mower. They are made of special heat-treated alloy steel. Substitute blades may not meet specification and may be dangerous.

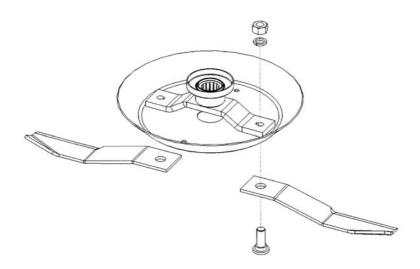


#### **Blade Sharpening**

Always sharpen both blades at same time to maintain balance. Follow original sharpening pattern as shown above. Always sharpen blades by grinding. DO NOT heat and pound out edge. Do not sharpen blade to a razor edge, but leave a 2mm (1/16") blunt edge. Do not sharpen back side of blade.

**IMPORTANT:** When sharpening blades, grind each blade the same amount to maintain balance. The difference in blade weights should not exceed 25g (1 ounce). Unbalanced blades will cause excessive vibration, which can damage gearbox bearings. Vibration may also cause structural cracks in mower housing.

**WARNING:-** Avoid personal injury. Always block and support the machine to prevent it from falling when the blades and carrier are being serviced.



#### **Blade Removal**

To remove blades for sharpening or replacement, remove the cover plate on deck of the machine near the gearbox. Remove the locknut from blade bolt. **NOTE:** Inspect the locknut after removal and replace if the threads are damaged. Always replace the nut when replacing a blade bolt. When installing blades check the blade bolt pivot diameter for wear. Replace the bolt if worn more than 6mm (1/4") at any point. Install the blade bolts with partially worn side of bolt either toward or away from centre. Tighten locknut to 250ft.lbs.(340 Nm)

#### WARNING

Avoid personal injury. Blade and/or blade carrier removal should be done only with the tractor engine stopped, the ignition key removed, parking brake on, PTO disengaged and the machine blocked in the raised position.

#### **Blade Carrier Removal**

Remove split pin and loosen slotted nut on gearbox shaft. Loosen but do not remove the nut until the blade carrier is loosened. Use a suitable two-jaw gear puller to pull carrier off tapered gearbox shaft. If a gear puller is not available use suitable long bar inserted through the blade bolt access hole with end against blade carrier bar. Strike opposite end of bar with sledgehammer. Rotate blade carrier 180 degrees and repeat process.

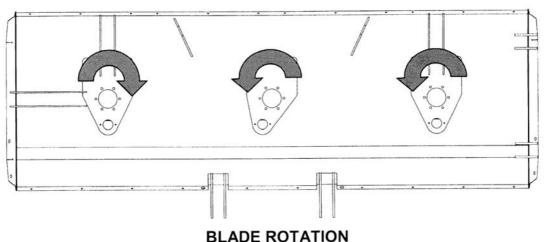
#### **Blade Carrier Installation**

Clean the splines on both the blade carrier and the output shaft. Position carrier on the gearbox output shaft and install flat washer and M30 hex nut. Tighten nut holding blade carrier to minimum 450ft. lbs, strike the carrier on the hub several times with a heavy hammer to seat the hub. Use a suitable spacer over the nut to prevent damage to the nuts and threads. Re-tighten the nut to 450 ft lbs (610Nm) Install and spread split pin.

**NOTE:** After a few hours of operation always re-check the blade carrier retaining nut torque.

#### WARNING

Avoid personal injury. Do not work under machine without support blocks to prevent the machine from falling.



(View on top of machine)

# Replacement Parts Section

# For best performance...

# USE ONLY GENUINE BOMFORD TURNER SERVICE PARTS

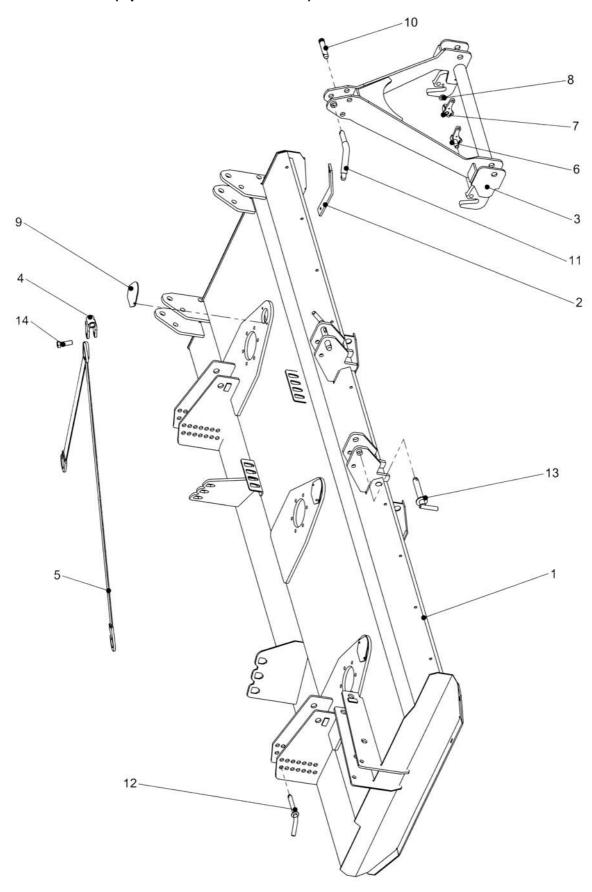
To be assured of the latest design improvements purchase your 'Genuine Replacements' from the Original Equipment Manufacturer through your local Dealer or Stockist.

#### Always quote:

- Machine Type
- Serial Number
- Part Number

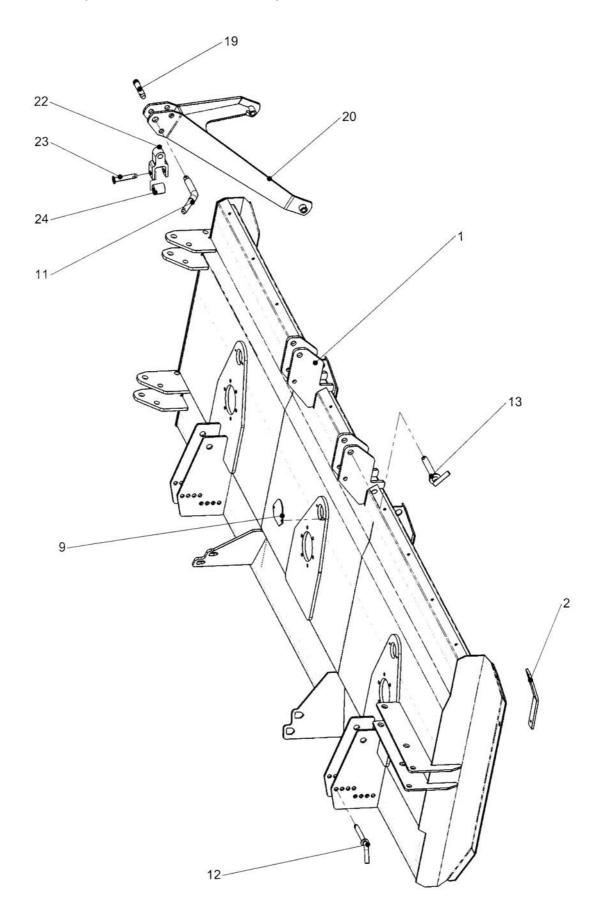
Design Improvements may have altered some of the parts listed in this manual – The latest part will always be supplied when it is interchangeable with an earlier one.

# MAINFRAME - 4M (Up to Serial No. 3339S/05)



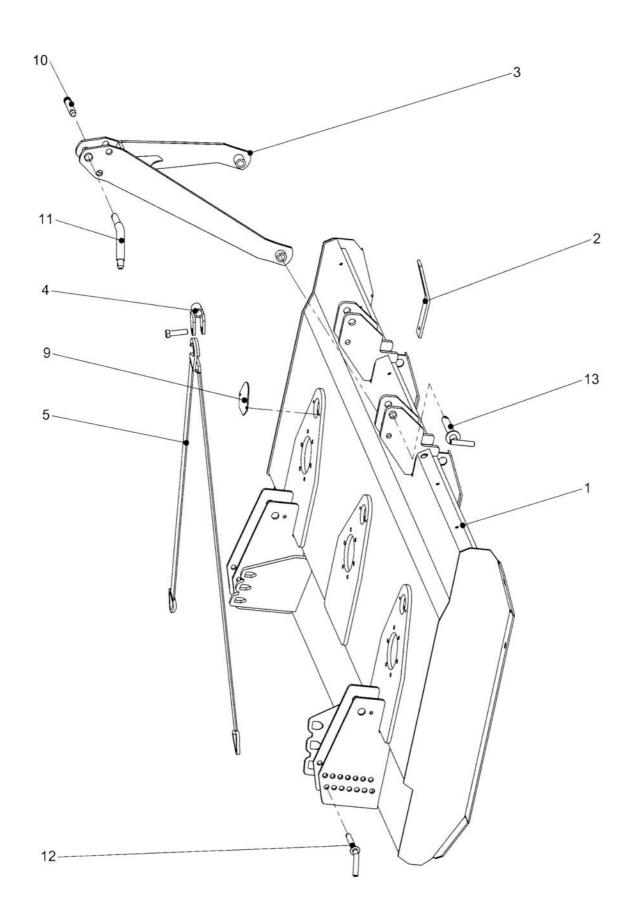
ITEM NO	PART NO	DESCRIPTION	QTY
77.330.01 4	IM MAINFRAME A	SSEMBLY (Up to Serial No.3339S/05)	
1*	46943.02	MAINFRAME 4.0M	1
1	05.774.07	SERIAL PLATE – BOMFORD TURNER	1
1	05.277.01	HAMMER DRIVE SCREW	4
1	05.291.37	BOLT M16 X 60MM	18
1	05.287.04	SELF LOCKING NUT M 16	18
2*	47074.01	SKID	2
2	30.072.96	BOLT M10 X 30 SQ SHLDR SCK	4
2	05.287.02	SELF LOCKING NUT M10	4
3	47117.01	QUICK HITCH FRAME	1
4	47045.01	BRACKET TOP LINK	1
5	47131.01	STRAP – WEBBING	2
6*	47136.01	CATCH ASSY LH	1
6	47143.01	STEEL BALL 10MM	1
6	47144.01	SPRING	1
6	41585.01	SPRING	1
6	05.625.31	BUTTON HD CAP SCREW M8 X 20	2
6	05.287.05	SELF LOCKING NUT M20	1
7*	47136.02	CATCH ASSY RH	1
7	47143.01	STEEL BALL 10MM	1
7	47144.01	SPRING	1
7	41585.01	SPRING	1
7	05.625.31	BUTTON HD CAP SCREW M8 X 20	2
7	05.287.05	SELF LOCKING NUT M20	1
8	47145.01	WASHER – SPECIAL	2
9*	47025.01	COVER PLATE	3
9	05.287.01	SELF LOCKING NUT M8	6
10*	46125.01	PIN – CAT 2 TOP LINK	1
10	00.372.01	LINCH PIN	1
11*	47031.01	TOP LINK PIN CAT 2 & 3	1
11	00.372.01	LINCH PIN	1
12*	47055.01	PIN 20 X 150	4
12	00.372.01	LINCH PIN	4
13*.	07.574.01	PIN 1 1/8" DIA X 172	2
13	00.372.01	LINCH PIN	2
14*	05.291.50	BOLT M20 X 75	1
14	05.287.05	SELF LOCKING NUT M20	1

# MAINFRAME – 4M (From Serial No. 3340S/05)



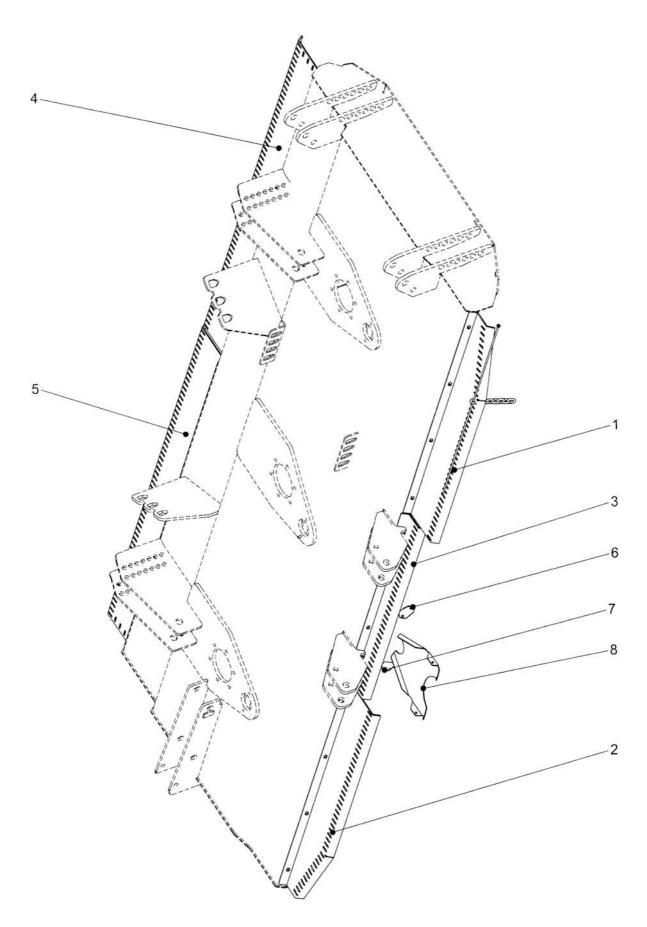
ITEM NO	PART NO	DESCRIPTION	QTY
77.330.02	4M MAINFRAME	(From Serial No. 3340S/05)	
01	46943.03	MAINFRAME 4M TOPPER	1
01	05.287.04	SELF-LOCKING NUT M16 PLATED	18
01	05.291.37	BOLT M16 X 60MM PLATED	18
02	47074.01	SKID 50 X 10 - 342	2
02	05.287.02	SELF-LOCKING NUT M10 PLATED	4
02	30.072.96	BOLT M10X30 SQ SHLDR SCK Z/P	2
09	47025.01	PLATE 4 - 190 X 160	3
09	05.287.01	SELF-LOCKING NUT M8 PLATED	6
11	47031.01	TOP LINK PIN CAT 2 AND CAT 3	1
11	00.372.01	LINCH PIN	1
12	47055.01	PIN 20 X 150	4
12	00.372.01	LINCH PIN	4
13	07.574.01	PIN 1.1/8"DIA X 172	2
13	00.372.01	LINCH PIN	2
17	47384.01	STRAP WEBBING - Not Illustrated	1
18	6777575	SHACKLE - Not Illustrated	2
19	00.372.01	LINCH PIN	1
19	46125.01	PIN CAT 2 TOP LINK	1
20	46985.03	A FRAME	1
20	05.287.05	SELF-LOCKING NUT M20 PLATED	2
20	05.292.48	BOLT M20 X 150MM PLATED	2
22	47386.01	BRACKET TOP LINK	1
23	03.652.08	PIN 20 DIA X 102	1
23	00.372.01	LINCH PIN	1
24	47388.01	ROLLER	1

## MAINFRAME - 3M



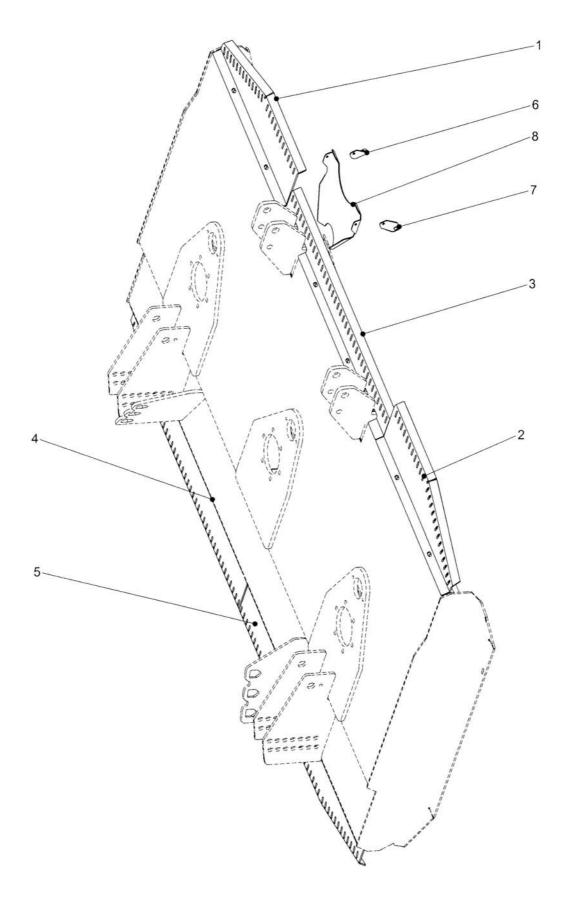
ITEM NO	PART NO	DESCRIPTION	QTY
77.363.01	BM MAINFRAME AS	SSEMBLY	
1*	46986.01	MAINFRAME 3.0M	1
1	05.774.07	SERIAL PLATE – BOMFORD TURNER	1
1	05.277.01	HAMMER DRIVE SCREW	4
1	05.291.37	BOLT M16 X 60MM	18
1	05.287.04	SELF LOCKING NUT M 16	18
2*	47074.01	SKID	2
2	30.072.96	BOLT M10 X 30 SQ SHLDR SCK	4
2	05.287.02	SELF LOCKING NUT M10	4
3*	46985.01	A FRAME	1
3	05.292.48	BOLT M20 X 150	2 2 1
3	05.287.05	SELF LOCKING NUT M20	2
4	47045.01	BRACKET TOP LINK	1
5	47131.01	STRAP – WEBBING	2 3 6
9*	47025.01	COVER PLATE	3
9	05.287.01	SELF LOCKING NUT M8	
10*	46125.01	PIN – CAT 2 TOP LINK	1
10	00.372.01	LINCH PIN	1
11*	47031.01	TOP LINK PIN CAT 2 & 3	1
11	00.372.01	LINCH PIN	1
12*	47055.01	PIN 20 X 150	4
12	00.372.01	LINCH PIN	4
13*.	07.574.01	PIN 1 1/8" DIA X 172	2
13	00.372.01	LINCH PIN	2 2
14*	05.291.50	BOLT M20 X 75	1
14	05.287.05	SELF LOCKING NUT M20	1

#### **CHAIN GUARDS - 4M**



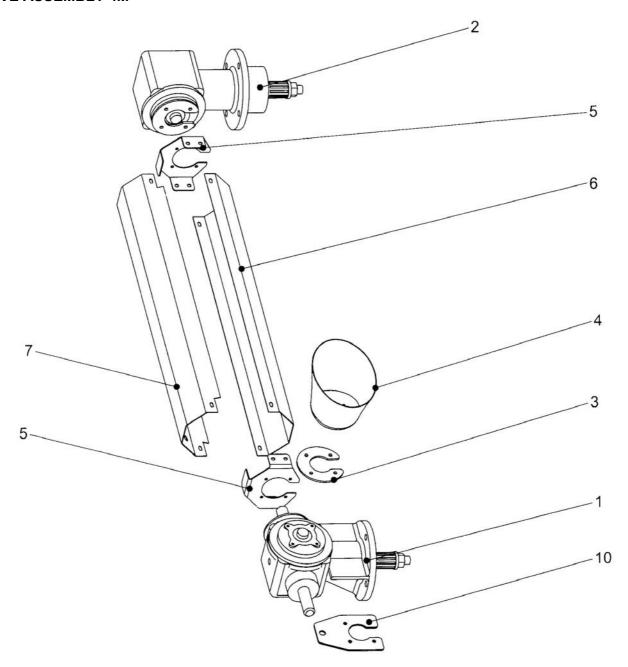
ITEM NO	PART NO	DESCRIPTION	QTY
77.334.01 CH	AIN GUARD ASSEMBI	_Y 4M (Up to Serial No.3339S/05)	
1*	46975.01	CHAIN CARRIER LH FRONT	1
1	05.264.22	SETSCREW M12 X 25MM	4
1	05.287.03	SELF LOCKING NUT M12	4
1	47029.05	CHAIN BAR 6MM DIA X 1410	1
1	46192.01	PUSH ON RETAINER 6MM	2
1	46943.21	PLATED CHAIN	37
2*	46975.02	CHAIN CARRIER RH FRONT	1
2	05.264.22	SETSCREW M12 X 25MM	4
2	05.287.03	SELF LOCKING NUT M12	4
2 2	47029.05 46192.01	CHAIN BAR 6MM DIA X 1410 PUSH ON RETAINER 6MM	1 2
2	46943.21	PLATED CHAIN	37
3*	47004.01	CHAIN CARRIER CENTRE FRONT	1
3	05.264.22	SETSCREW M12 X 25MM	6
3	05.287.03	SELF LOCKING NUT M12	6
3	47029.02	CHAIN BAR 6MM DIA X 1185	1
3	46192.01	PUSH ON RETAINER 6MM	2
3	46943.21	PLATED CHAIN	36
4*	46975.03	CHAIN CARRIER LH REAR	1
4	05.264.22	SETSCREW M12 X 25MM	4
4	05.287.03	SELF LOCKING NUT M12	4
4 4	47029.04	CHAIN BAR 6MM DIA X 2010 CHAIN BAR 6MM DIA X 100	1 1
4	47029.06 46192.01	PUSH ON RETAINER 6MM	4
4	46943.21	PLATED CHAIN	68
5*	46975.04	CHAIN CARRIER RH REAR	1
5	05.264.22	SETSCREW M12 X 25MM	4
5	05.287.03	SELF LOCKING NUT M12	4
5	47029.04	CHAIN BAR 6MM DIA X 2010	1
5	47029.06	CHAIN BAR 6MM DIA X 100	1
5	46192.01	PUSH ON RETAINER 6MM	4
5	46943.21	PLATED CHAIN	68
6	47091.01	BRACKET LH	1
7 8	47091.02 47092.01	BRACKET RH SUPPORT – PTO	1 1
		_Y 4M (From Serial No.3340S/05)	'
		,	,
1*	46975.01	CHAIN CARRIER LH FRONT	1
1 1	05.264.22 05.287.03	SETSCREW M12 X 25MM SELF LOCKING NUT M12	4
1	47029.05	CHAIN BAR 6MM DIA X 1410	1
1	46192.01	PUSH ON RETAINER 6MM	2
1	46943.21	PLATED CHAIN	37
2*	46975.04	CHAIN CARRIER RH FRONT	1
2	05.264.22	SETSCREW M12 X 25MM	4
2	05.287.03	SELF LOCKING NUT M12	4
2	47029.05	CHAIN BAR 6MM DIA X 1410	1
2	46192.01	PUSH ON RETAINER 6MM	2
2 3*	46943.21	PLATED CHAIN	37
3	47004.01 05.264.22	CHAIN CARRIER CENTRE FRONT SETSCREW M12 X 25MM	1 6
3	05.287.03	SELF LOCKING NUT M12	6
3	47029.02	CHAIN BAR 6MM DIA X 1185	1
3	46192.01	PUSH ON RETAINER 6MM	2
3	46943.21	PLATED CHAIN	36
4*	46975.05	CHAIN CARRIER REAR	1
4	05.264.22	SETSCREW M12 X 25MM	4
4	05.287.03	SELF LOCKING NUT M12	4
4	47029.04	CHAIN BAR 6MM DIA X 2010	1
4	47029.06	CHAIN BAR 6MM DIA X 100	1
4 4	46192.01 46043.21	PUSH ON RETAINER 6MM PLATED CHAIN	4 68
4 5*	46943.21 46975.05	CHAIN CARRIER REAR	1
5	05.264.22	SETSCREW M12 X 25MM	4
5	05.287.03	SELF LOCKING NUT M12	4
5	47029.04	CHAIN BAR 6MM DIA X 2010	1
5	47029.06	CHAIN BAR 6MM DIA X 100	1
5	46192.01	PUSH ON RETAINER 6MM	4
5	46943.21	PLATED CHAIN	68
8	21160.03	SUPPORT – PTO	1

#### **CHAIN GUARDS - 3M**



ITEM NO	PART NO	DESCRIPTION	QTY
77.367.01 C	CHAIN GUARD AS	SEMBLY 3M	
1*	47161.01	CHAIN CARRIER LH FRONT	1
1	05.264.22	SETSCREW M12 X 25MM	2
1	05.287.03	SELF LOCKING NUT M12	2
1	47029.07	CHAIN BAR 6MM DIA X 400	1
1	47029.08	CHAIN BAR 6MM DIA X 350	1
1	46192.01	PUSH ON RETAINER 6MM	4
1	46943.21	PLATED CHAIN	24
2*	47160.01	CHAIN CARRIER RH FRONT	1
2	05.264.22	SETSCREW M12 X 25MM	2
2	05.287.03	SELF LOCKING NUT M12	2
2	47029.07	CHAIN BAR 6MM DIA X 400	1
2	47029.08	CHAIN BAR 6MM DIA X 350	1
2	46192.01	PUSH ON RETAINER 6MM	4
2	46943.21	PLATED CHAIN	24
3*	47004.01	CHAIN CARRIER CENTRE FRONT	1
3	05.264.22	SETSCREW M12 X 25MM	6
3	05.287.03	SELF LOCKING NUT M12	6
3	47029.02	CHAIN BAR 6MM DIA X 1185	1
3	46192.01	PUSH ON RETAINER 6MM	2
3	46943.21	PLATED CHAIN	36
4*	46975.04	CHAIN CARRIER LH REAR	1
4	05.264.22	SETSCREW M12 X 25MM	4
4	05.287.03	SELF LOCKING NUT M12	4
4	47029.05	CHAIN BAR 6MM DIA X 1410	1
4	46192.01	PUSH ON RETAINER 6MM	2
4	46943.21	PLATED CHAIN	42
5*	46975.01	CHAIN CARRIER RH REAR	1
5	05.264.22	SETSCREW M12 X 25MM	4
5	05.287.03	SELF LOCKING NUT M12	4
5	47029.05	CHAIN BAR 6MM DIA X 1410	1
5	46192.01	PUSH ON RETAINER 6MM	2
5	46943.21	PLATED CHAIN	42
6	47091.01	BRACKET LH	1
7	47091.02	BRACKET RH	1
8	47092.01	SUPPORT – PTO	1

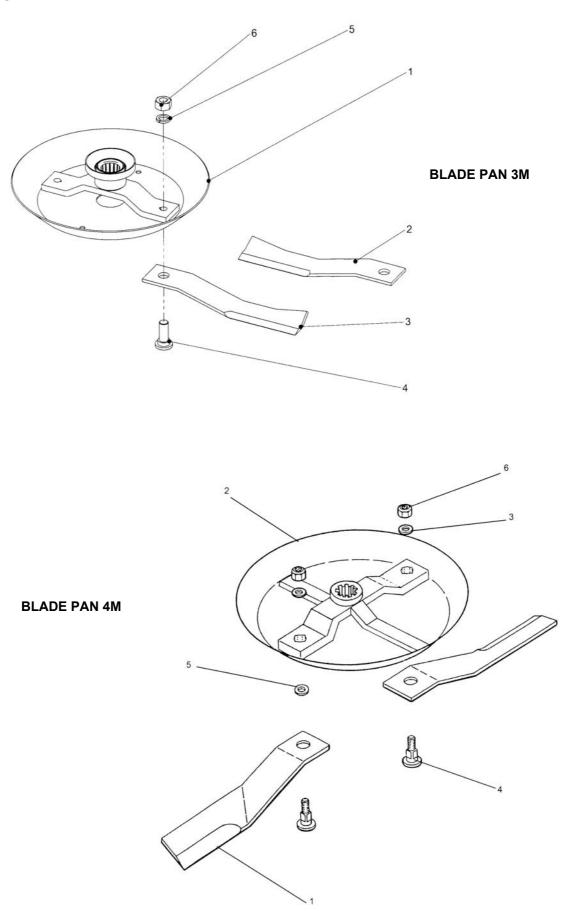
## **DRIVE ASSEMBLY 4M**



ITEM NO	PART NO	DESCRIPTION	QTY
	DRIVE ASSEMBLY 4M DRIVE ASSEMBLY 3M		
1	46979.01	T GEARBOX	1
2	46980.01	RIGHT ANGLE GEARBOX	2
3	47049.32	GUARD MOUNT - <i>Up to Serial No.3339S/05</i>	1
4*	47141.01	PTO GUARD – PLASTIC	1
4	30.057.38	BOLT 5/16" UNC X 1"	4
5*	47049.01	GUARD MOUNT	4
5	30.057.38	BOLT 5/16" UNC X 1"	16
5	30.216.54	RIVNUT M8 FLAT HEAD	16
5	05.264.01	SETSCREW M8 X 20	16
6	46973.01	GUARD LOWER 4M	2
6	47163.01	GUARD LOWER 3M	2
7	46974.01	GUARD UPPER 4M	2
7	47162.01	GUARD UPPER 3M	2
8	00761322CE	PTO SHAFT <b>N/I</b>	1
9*	46981.01	DOUBLE FLEX COUPLING SHAFT 4M N/I	2
9*	47164.01	DOUBLE FLEX COUPLING SHAFT 3M N/I	2
9	0366033	3/8" SOCKET GRUB SCREW	2
10	47221.01	GUARD MOUNT - From Serial No.3340/05	1

**N/I** = NOT ILLUSTRATED

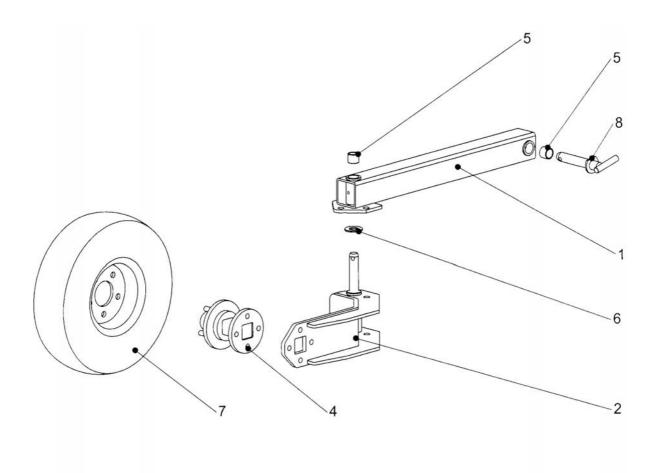
#### **BLADE ASSEMBLY**



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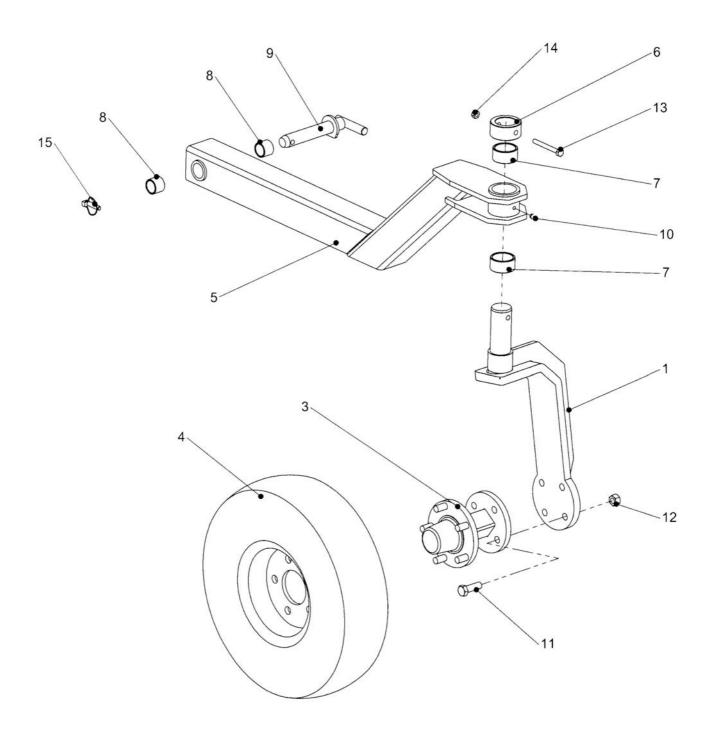
<u>1925</u>		REPLACEMENT PARTS	0306		
ITEM NO	PART NO	DESCRIPTION	QTY		
77.366.01 E	77.366.01 BLADE ASSEMBLY 3M				
1	47020.01	DISHPAN	3		
2	47154.01	BLADE C/W CUT	2		
3	47154.02	BLADE A/C CUT	4		
4	00761402	BOLT	6		
5	00761535	WASHER	6		
6	0141008	NUT 7/8" UNF CLEVELOCK	6		
77.333.02 E	BLADE ASSEMBLY	4M			
1	47050.01	BLADE A/C CUT	4		
1	47050.02	BLADE C/W CUT	2 3		
2	00771591P	DISHPAN	3		
3	0656150200	WASHER	6		
4	571044	SHOLDER BOLT	6		
5	571045	SHOLDER BOLT WASHER	6		
6	5GL16140	LOCK NUT	6		

# WHEEL ASSEMBLY 4M (Up to Serial No. 2204S/05)



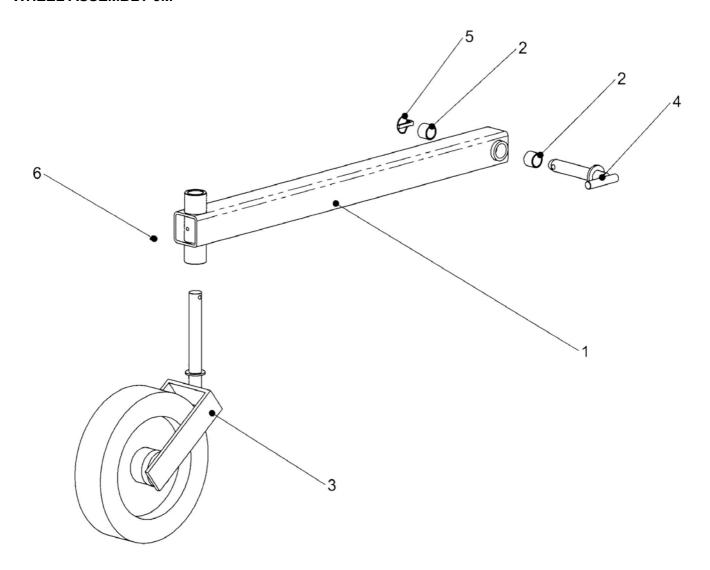
ITEM NO	PART NO	DESCRIPTION	QTY
77.331.01 V	WHEEL ASSEMBLY	<sup>7</sup> 4M (Up to Serial No. 2204S/05)	
1	46967.01	ARM ASSEMBLY	2
1	05.953.03	GREASE NIPPLE M10	4
2	46966.01	WHEEL ARM L.H.	1
2	00.372.01	LINCH PIN	1
3	46966.02	WHEEL ARM R.H.	1
3	00.372.01	LINCH PIN	1
4	47112.01	HUB ASSEMBLY	2
4	05.287.04	SELF LOCKING NUT M16	8
4	05.291.35	BOLT M16 X 50MM	8
5	08.297.04	BUSH PLASTIC	4
6	05.281.18	SPACER WASHER	2
7	1048038AP	WHEEL AND TYRE ASSY	2
8	47041.01	PIN 30 X 190	2
8	00.372.01	LINCH PIN	2

# WHEEL ASSEMBLY 4M (From Serial No. 2205S/05)



ITEM NO	PART NO	DESCRIPTION	QTY
77.331.03 V			
1	47062.01	WHEEL CASTOR ASSEMBLY LH	1
2	47062.02	WHEEL CASTOR ASSEMBLY RH	1
3	47112.01	HUB ASSEMBLY	2
4	1048038AP	WHEEL & TYRE	2
5	47068.01	WHEEL MOUNT	2
6	47289.01	COLLAR	2
7	08.297.13	BUSH 60 X 50 X 30	4
8	08.297.04	BUSH 37 X 30 X 30	4
9	47041.01	PIN 30 DIA	2
10	05.953.03	GREASE NIPPLE	2
11	05.291.35	BOLT M16 X 50	8
12	05.287.04	NUT M16	8
13	05.292.12	BOLT M10 X 90	2
14	05.287.02	NUT M10	2
15	00.372.01	LINCH PIN	2

## WHEEL ASSEMBLY 3M



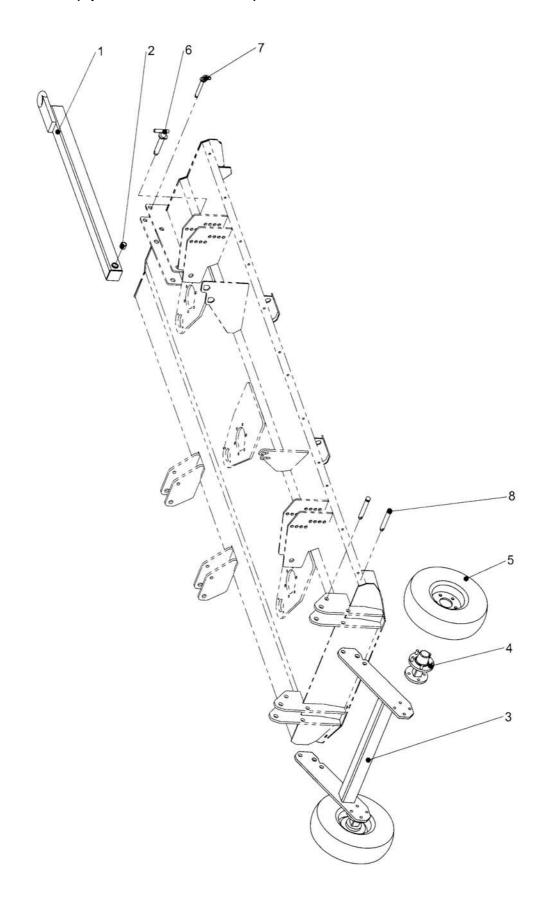
2

**GREASE NIPPLE** 

6

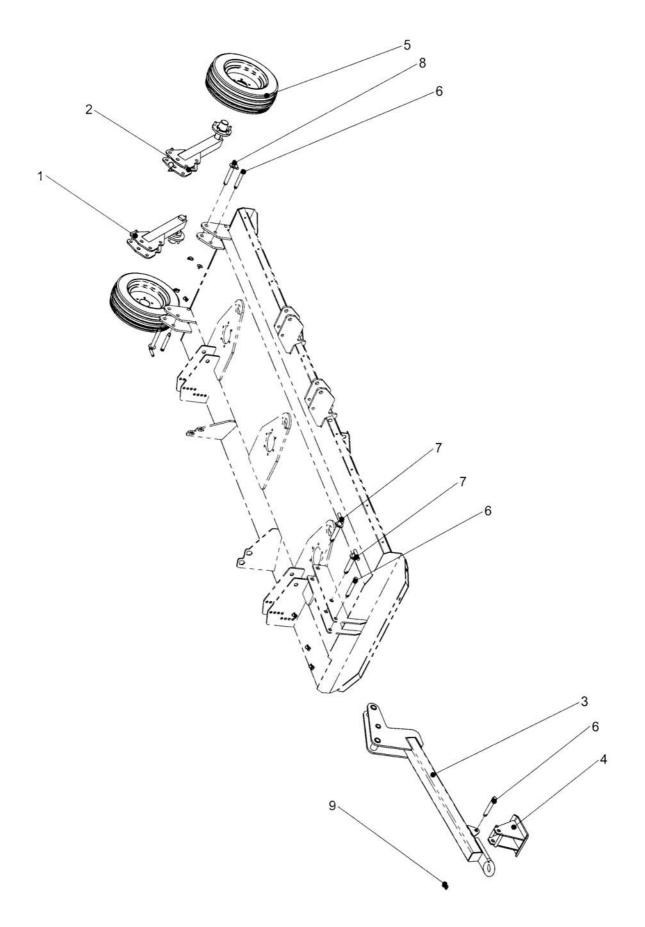
05.953.03

# TRANSPORT KIT 4M (Up to Serial No. 2204S/05)



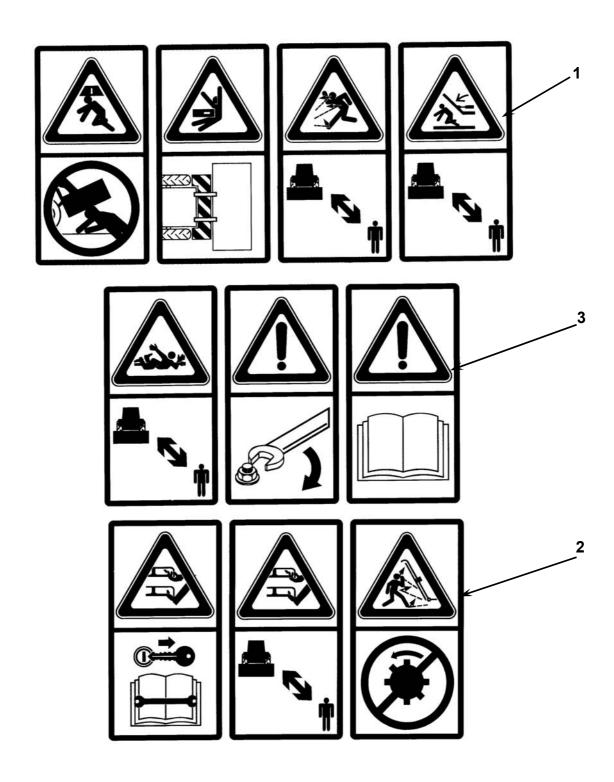
ITEM NO	PART NO	DESCRIPTION	QTY
77.371.01			
1	47274.01	DRAWBAR ASSEMBLY	1
1	05.593.03	GREASE NIPPLE	1
2	08.297.04	BUSH – PLASTIC	2
3	47167.01	WHEEL FRAME ASSEMBLY	1
4	47112.01	HUB ASSEMBLY	2
4	05.287.04	SELF LOCKING NUT M16	8
4	05.291.35	BOLT M16 X 50MM	8
5	1048038AP	WHEEL & TYRE	2
6	47041.01	PIN 30 DIA	1
6	00.372.01	LINCH PIN	1
7	47233.01	PIN 20 DIA	1
7	00.372.01	LINCH PIN	1
8	47233.01	PIN	4
8	00.372.01	LINCH PIN	4

# TRANSPORT KIT 4M (From Serial No. 2205S/05)



ITEM NO	PART NO	DESCRIPTION	QTY	
77.371.02 TRANSPORT KIT – 4M (From Serial No. 2205S/05)				
1	47350.01	BRACKET LH	1	
2	47350.02	BRACKET RH	1	
3	47363.02	BRACKET - DRAWBAR	1	
4	47366.01	SKID	1	
5	6770674	WHEEL AND TYRE	2	
5	6770578	WHEEL NUT	10	
6	47233.01	PIN - TOP LINK	4	
7	47041.01	PIN 30 DIA	2	
8	07.574.01	PIN	2	
9	00.372.01	LINCH PIN	8	

**DECALS** 



ITEM NO	PART NO	DESCRIPTION	QTY
	DECALS 4M DECALS 3M		
1	09.821.29	DECAL - EURO	1
2	09.821.30	DECAL - EURO	1
3	09.821.34	DECAL - EURO	1
4	09.811.05	DECAL - MAX PTO SPEED 1000 ACW	1
5	45645.01	DECAL - BOMFORD	2
6	47177.01	DECAL – TRIBLADE 4000	1
6	47178.01	DECAL – TRIBLADE 3000	1
7	D132	DECAL – BLADE TIMING	1
8	D137	DECAL – BLADE CCW ROTATION	2
9	D138	DECAL – BLADE CW ROTATION	1