



**1-5 metre  
Supercut/Multicut  
flailhead**

**Operation & Spares manual**



## **READ THE BOOK FIRST**

**It might save hours and pounds later**

**When ordering spare parts always  
quote the machine type and serial  
number as well as the part number**

**Factory re-built service exchange  
units of the major hydraulic components  
are available from you dealer.**

## **NOISE**

The equivalent daily personal noise exposure from this machine, measured at the operators' ear, is within the range 78 - 85 DB.

These figures apply to a normal distribution of use where noise fluctuates between zero and maximum. The figures assume that the machine is fitted to a tractor with a quiet cab with the windows closed in a generally open environment. We recommend that the windows are kept closed.

With the cab rear window open the equivalent daily personal noise exposure will increase to a figure within the range 82-88 DB.

At equivalent daily noise exposure levels of between 85 and 90 DB, ear protection is recommended, it should be used if any window is left open.

EC DECLARATION OF CONFORMITY  
conforming to EEC Directive 89/392/EEC

We,

McCONNEL LIMITED, Temeside Works, Ludlow,  
Shropshire, SY8 1JL

declare under our sole responsibility that

the product (type) **FLAIL HEAD** .....

Product Code **F 115** .....

Serial No. & Date

Type

Manufactured by the above Company/\* .....

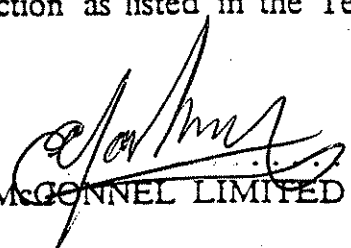
(\*insert business name and full address if not stated above)

complies with the required provisions of the Directive 89/392/EEC,  
and AMD 91/368/EEC, AMD 93/44/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.

Signed .....  
on behalf of McCONNEL LIMITED



Responsible Person

Status. **ENGINEERING MANAGER** Date **24 December 1998**

# GENERAL INFORMATION

Read this manual before fitting or operating the machine. Whenever any doubt exists contact your dealer or the McConnel Service Department for assistance.

Use only McConnel spare parts on McConnel equipment and machines.

## DEFINITIONS

The following definitions apply throughout this manual:

### WARNING

An operating procedure, technique etc., which can result in personal injury or loss of life if not observed carefully.

### CAUTION

An operating procedure, technique etc., which can result in the damage of either machine or equipment if not observed carefully.

### NOTE

An operating procedure, technique etc., which is considered essential to emphasise.

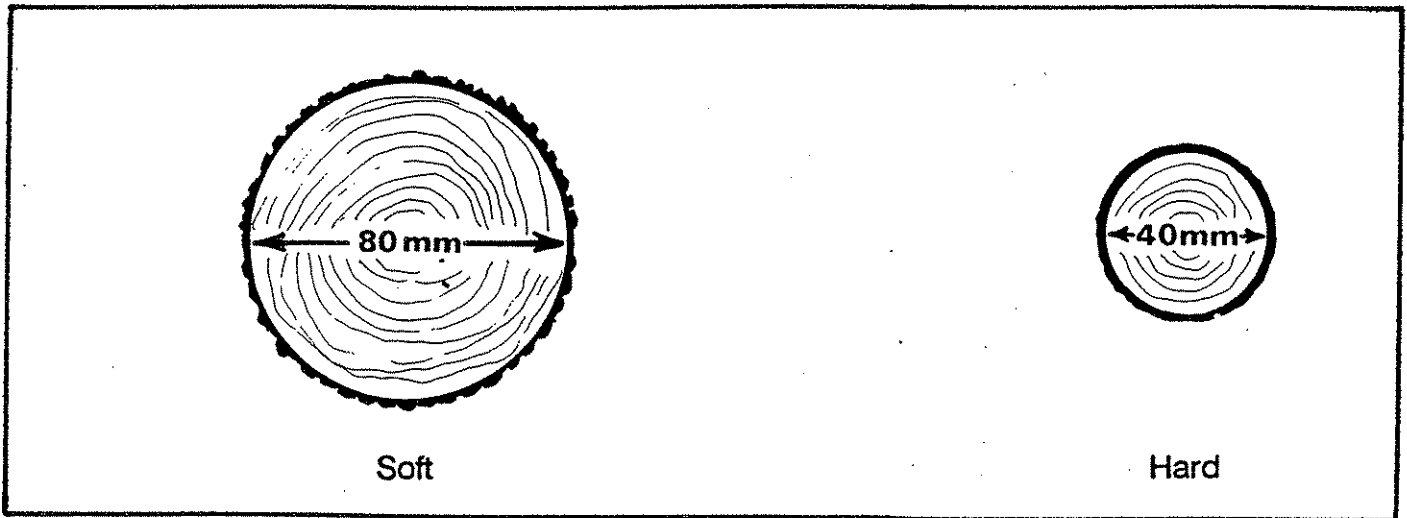
### Left and Right-Hand

This term is applicable to the machine when fitted to the tractor and viewed from the rear. This also applies to tractor references.

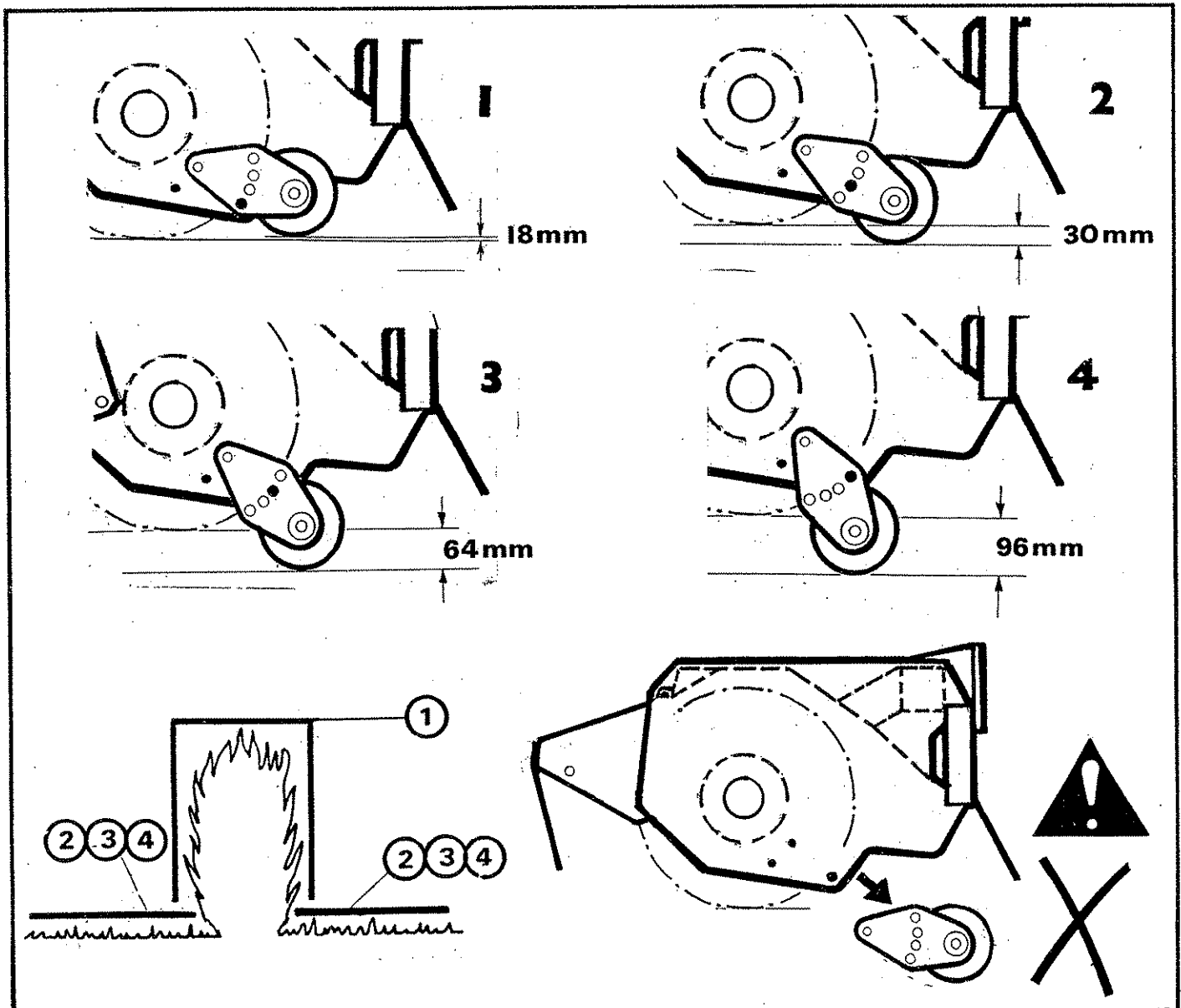
Record the serial number of your machine on this page and always quote this number when ordering spares. Whenever information concerning the machine is requested remember to also state the type of tractor to which it is fitted.	
MACHINE SERIAL NUMBER	INSTALLATION DATE
MODEL DETAILS	
DEALERS NAME	
DEALERS TELEPHONE NUMBER	

# OPERATION

## MATERIAL THICKNESS CUTTING LIMITATIONS

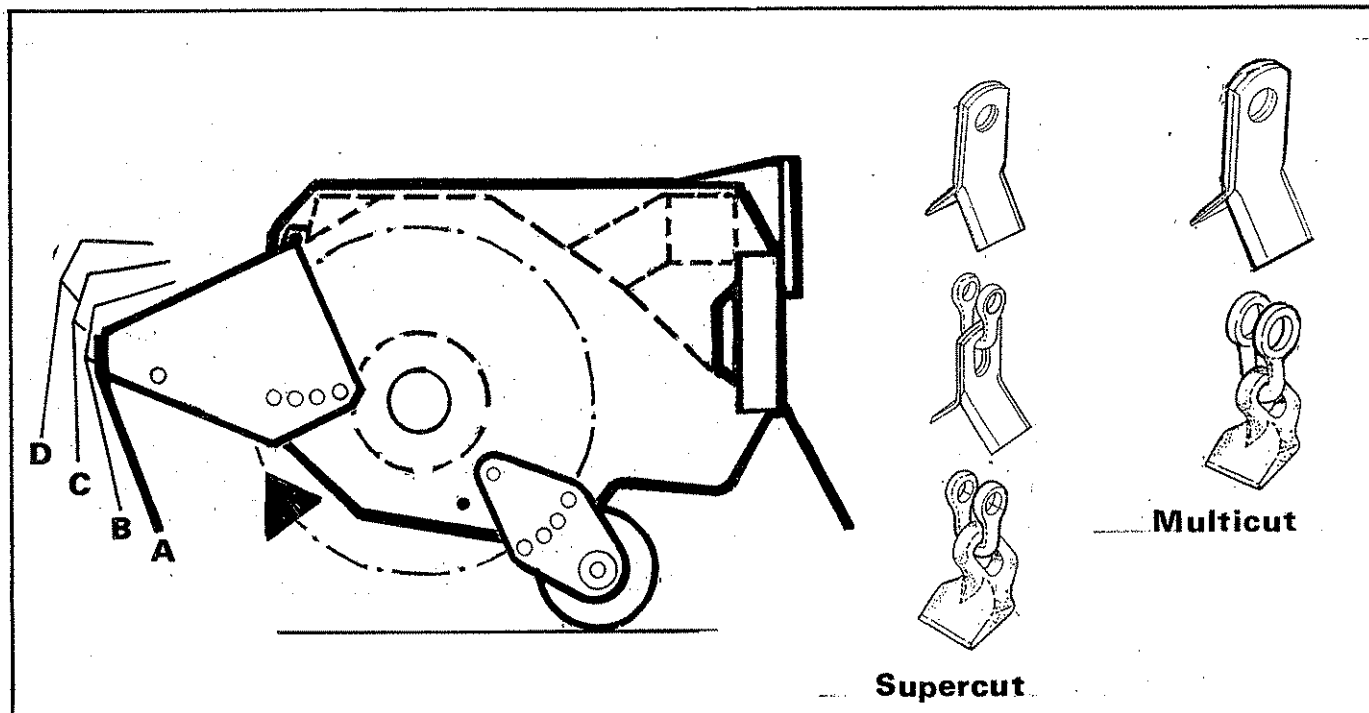


## ROLLER POSITION



# FLAILHEAD ARRANGEMENT

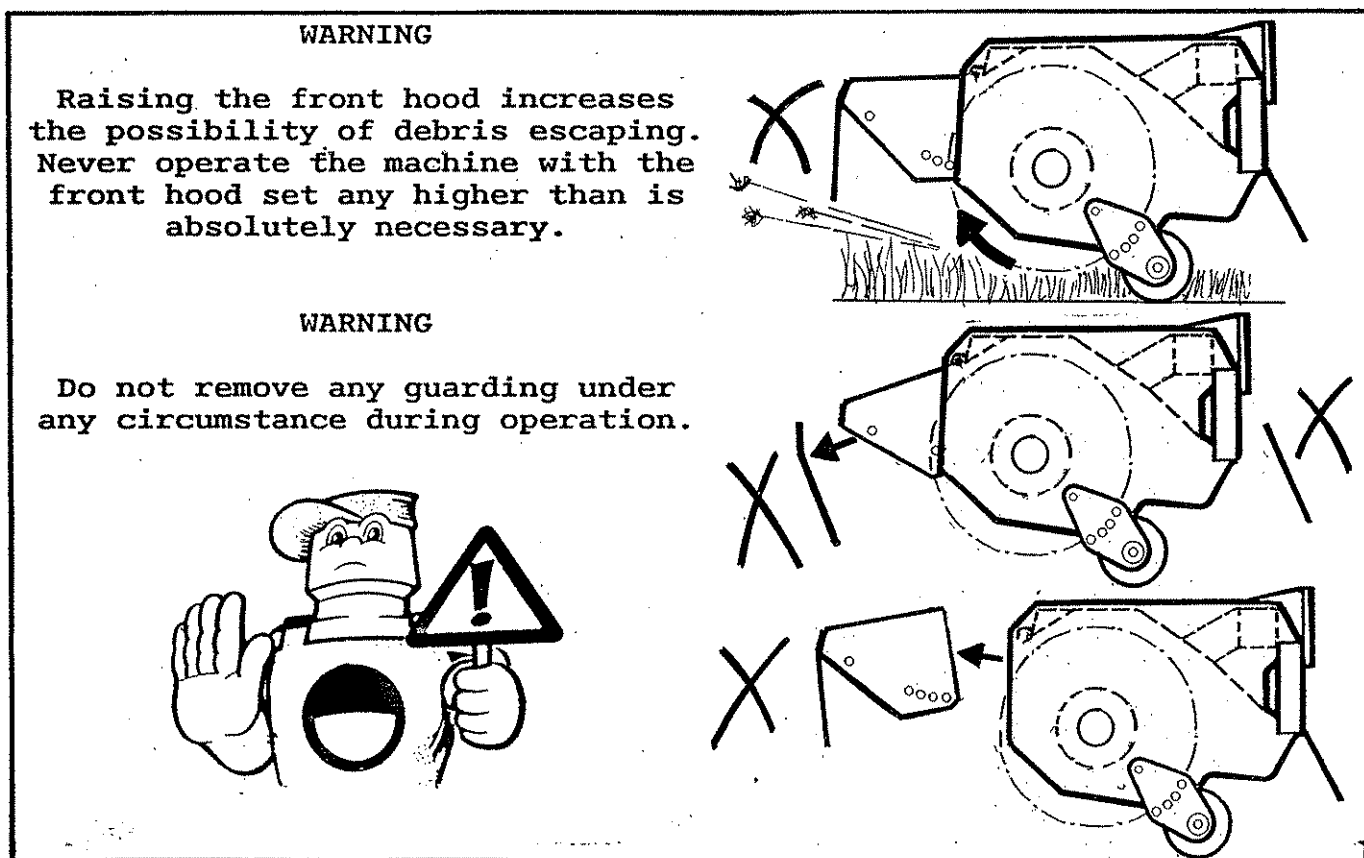
## MOWING

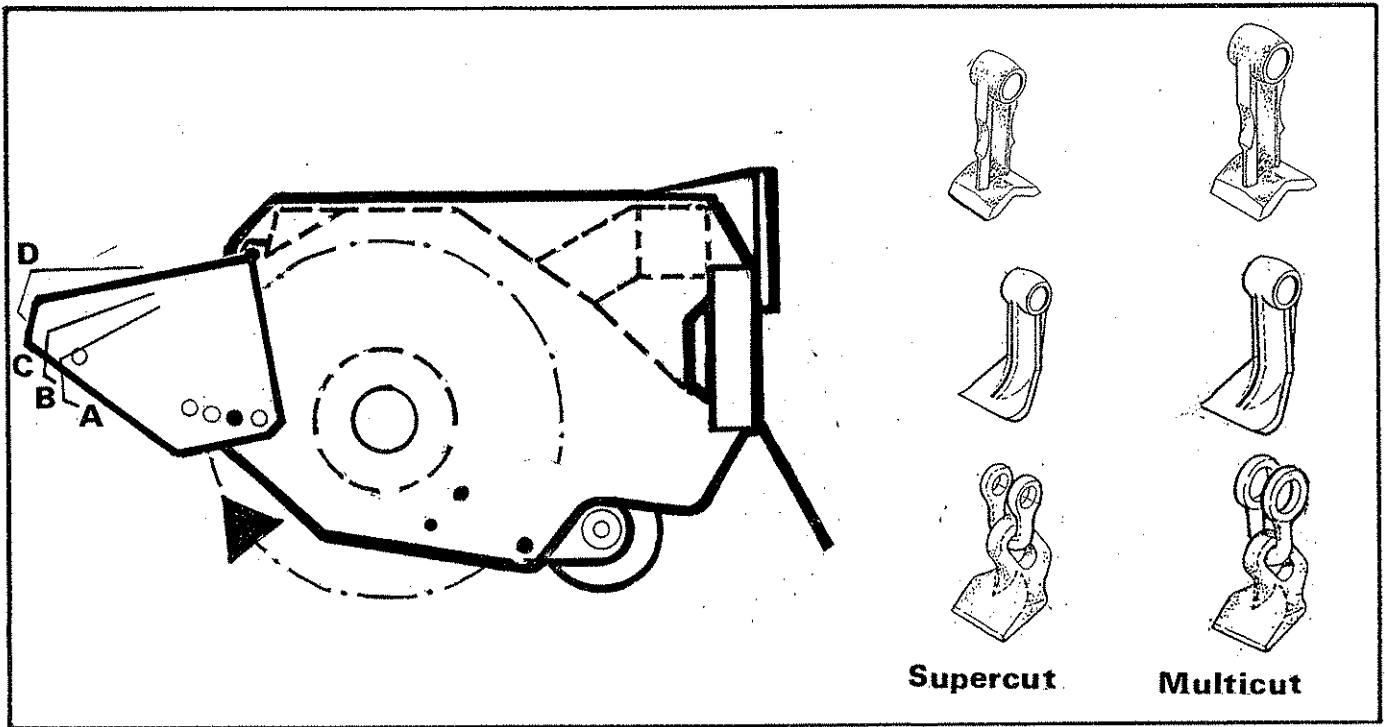


When mowing the rotor must always cut with an upwards rotation.

When mowing the roller must always be set below the level of the skid or the rotor if skids are not fitted i.e. in positions 2 - 4.

The front hood has four adjustment positions for height. The lowest possible position which allows the material to be cut to enter the head should always be used.





For the best finish the rotor should cut with an upwards rotation.

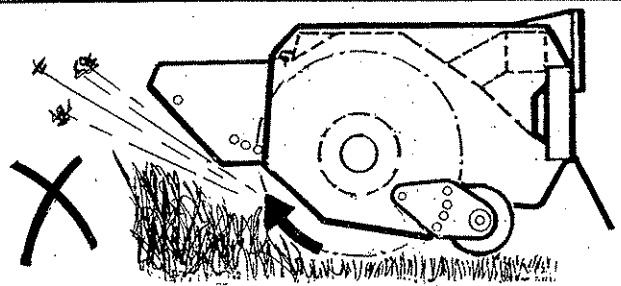
The roller should be set slightly above the rotor i.e. in position 1.

On universal heads the front rubber flaps and skids if fitted, may be removed to aid the entry of the material to be cut into the flail head.

The front hood has four adjustment positions for height. The lowest position which allows the material to be cut to enter the flail head should always be used.

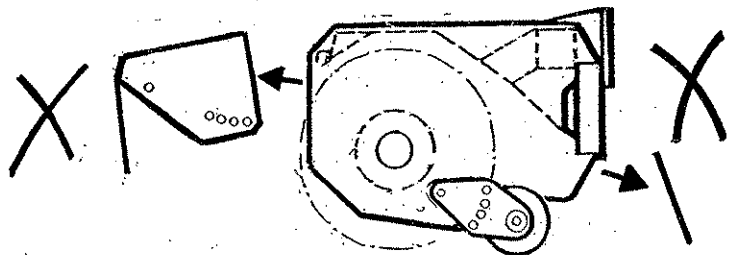
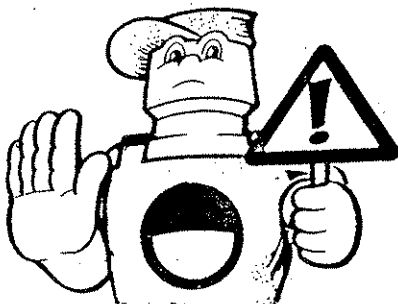
**WARNING**

Raising the front hood increases the possibility of debris escaping. Never operate the machine with the front hood set any higher than is absolutely necessary.



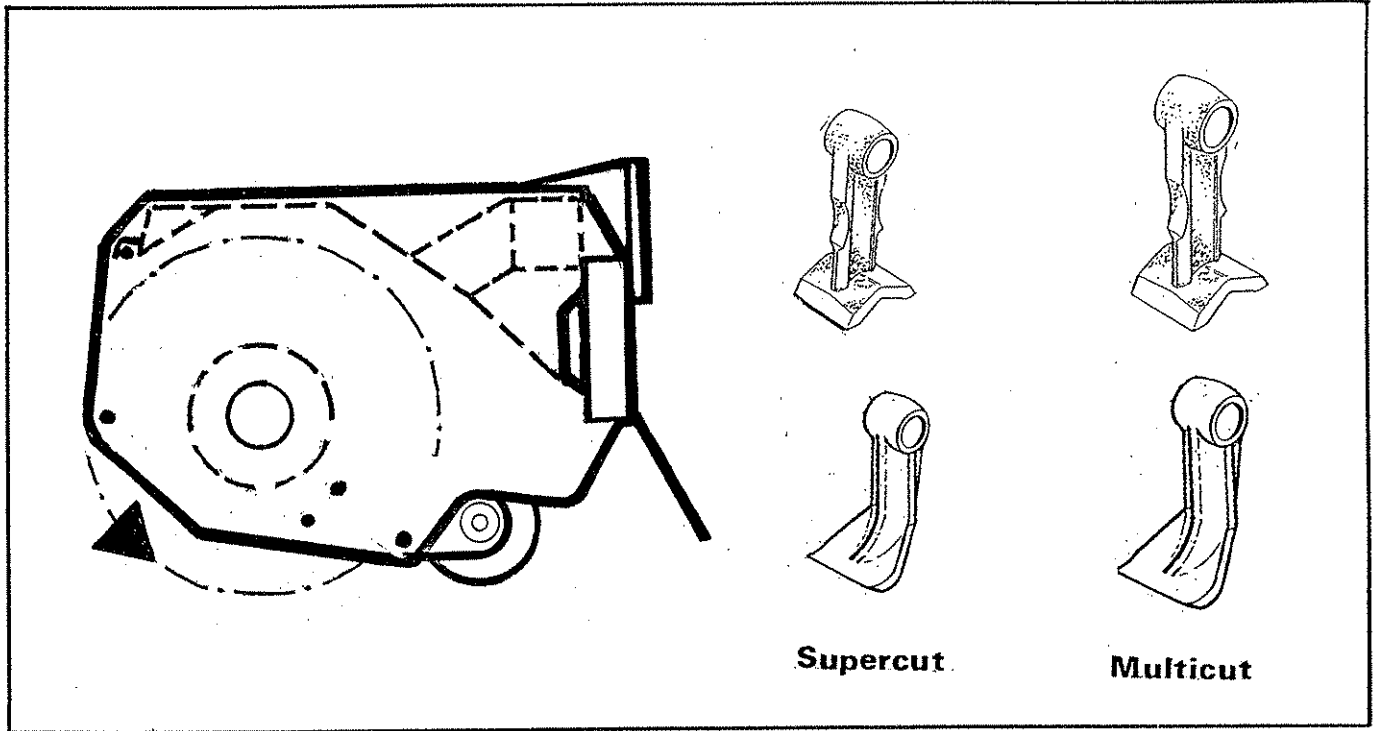
**WARNING**

Do not remove any guarding under any circumstance during operation.





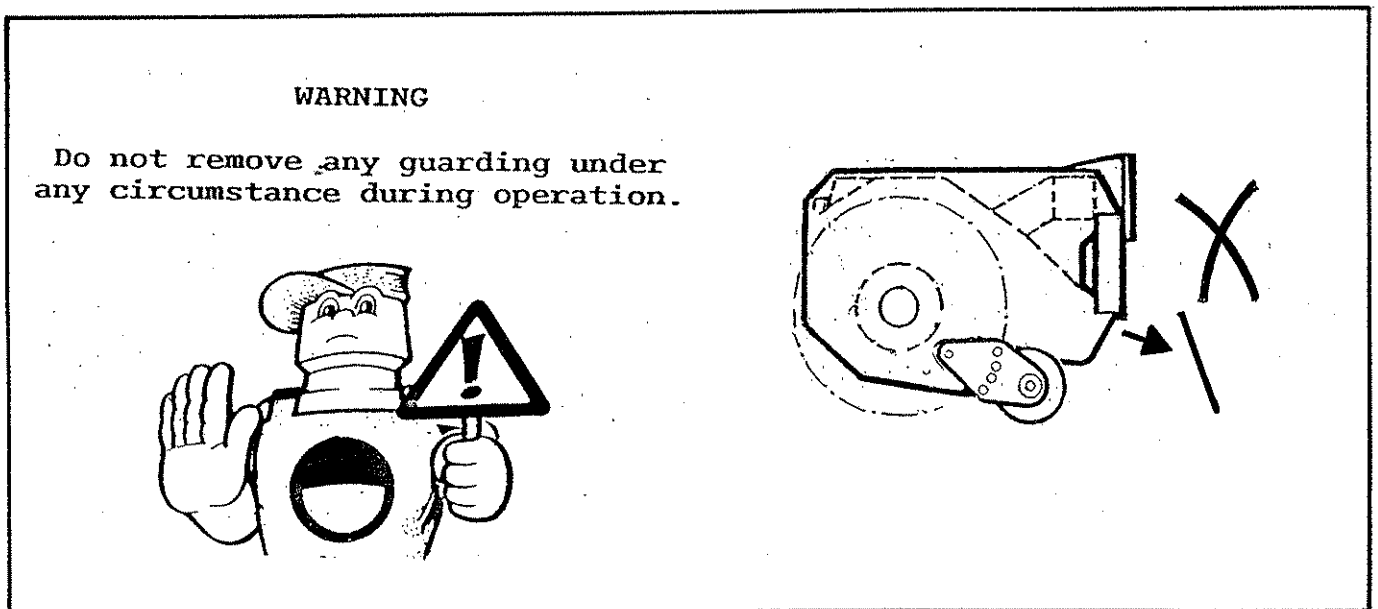
HEDGE CUTTING - Heavy duty working conditions



Where the size of the material to be cut makes it necessary for the front hood to be removed to allow the rotor to cut, the rotor must always cut with a downwards rotation.

This will result in a poorer finish and require more power than when cutting upwards.

The roller should be set slightly above the rotor i.e. in position 1



# MAINTENANCE

## FLAILHEAD

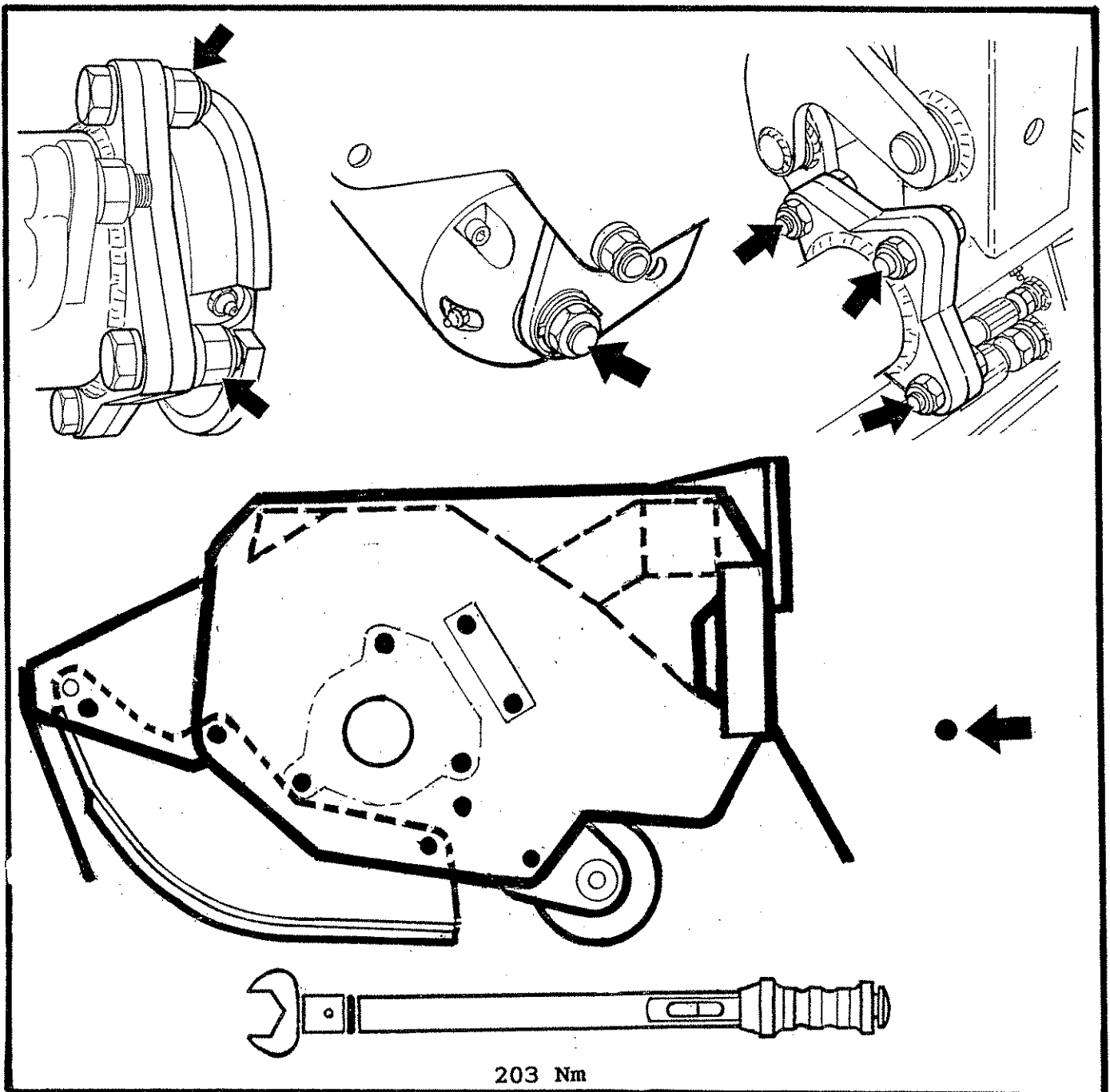
Frequently inspect the rotor assembly for damaged or missing flails.

Do not attempt to run the rotor with flails missing. Im-balance will cause severe vibration and can rapidly damage the rotor shaft bearings. As an emergency measure if a flail is broken off or lost, remove another on the opposite side of the rotor to retain balance. Always replace flails in opposite pairs and never match up a new flail with a re-sharpened one which will of course be lighter.

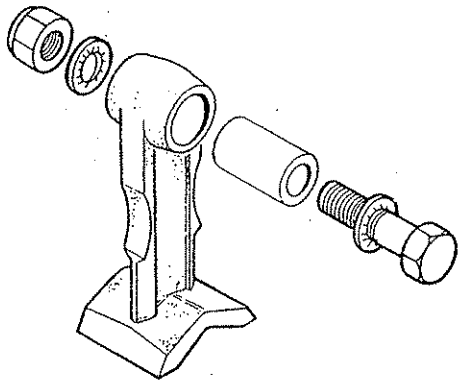
Blunt flails absorb a lot of power and leave an untidy finish to the work. They should be sharpened on a grindstone or with a portable grinder periodically.

Wear protective gear when sharpening flails.

**Check:-** All bolts are tight and that the torque figures are correct for the specific locations shown below.

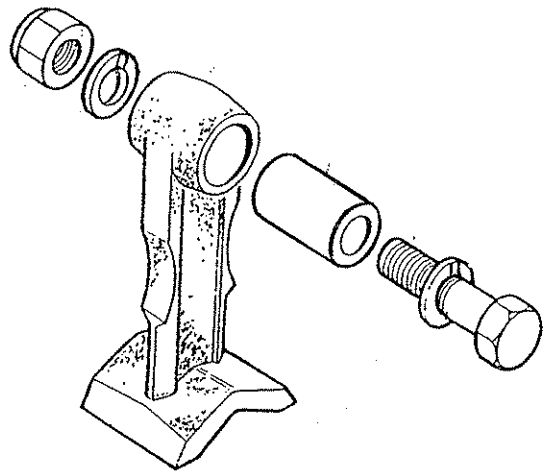


203 Nm



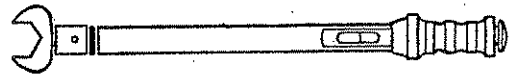
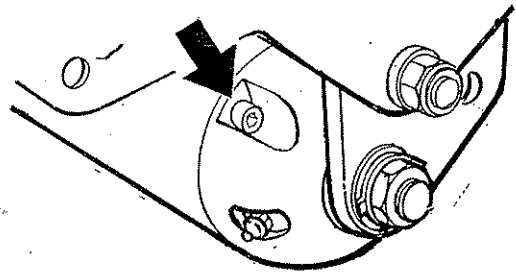
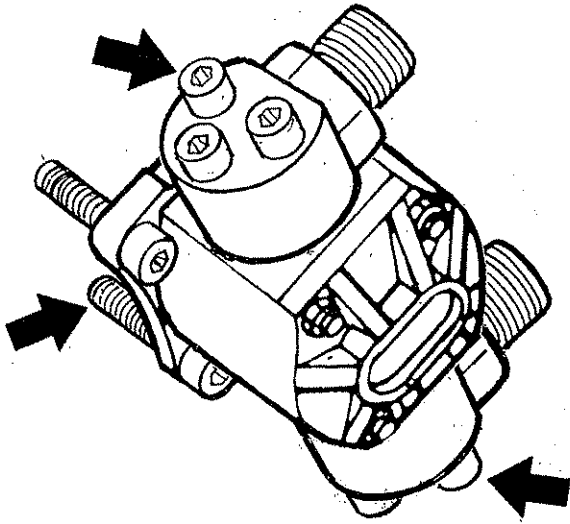
140 Nm

**Supercut**



203 Nm

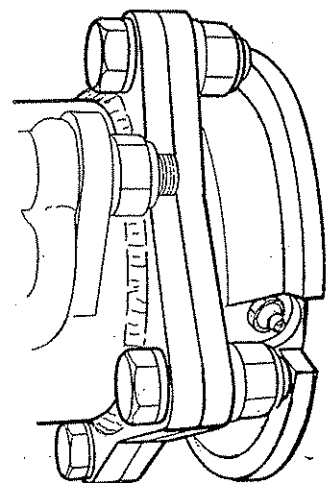
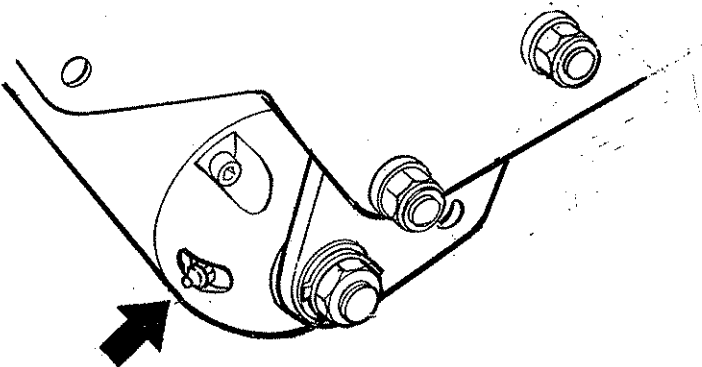
**Multicut**



52 Nm

## LUBRICATION

Grease daily all points shown.



**FOR NOTES**

# **SPARE PARTS MANUAL**

## **FOR BEST PERFORMANCE....**

### **USE ONLY McCONNEL SPARE PARTS**

To be assured of the latest design improvements purchase your genuine replacements from the original equipment manufacturer **McConnel Ltd.** through your local dealer or stockist.

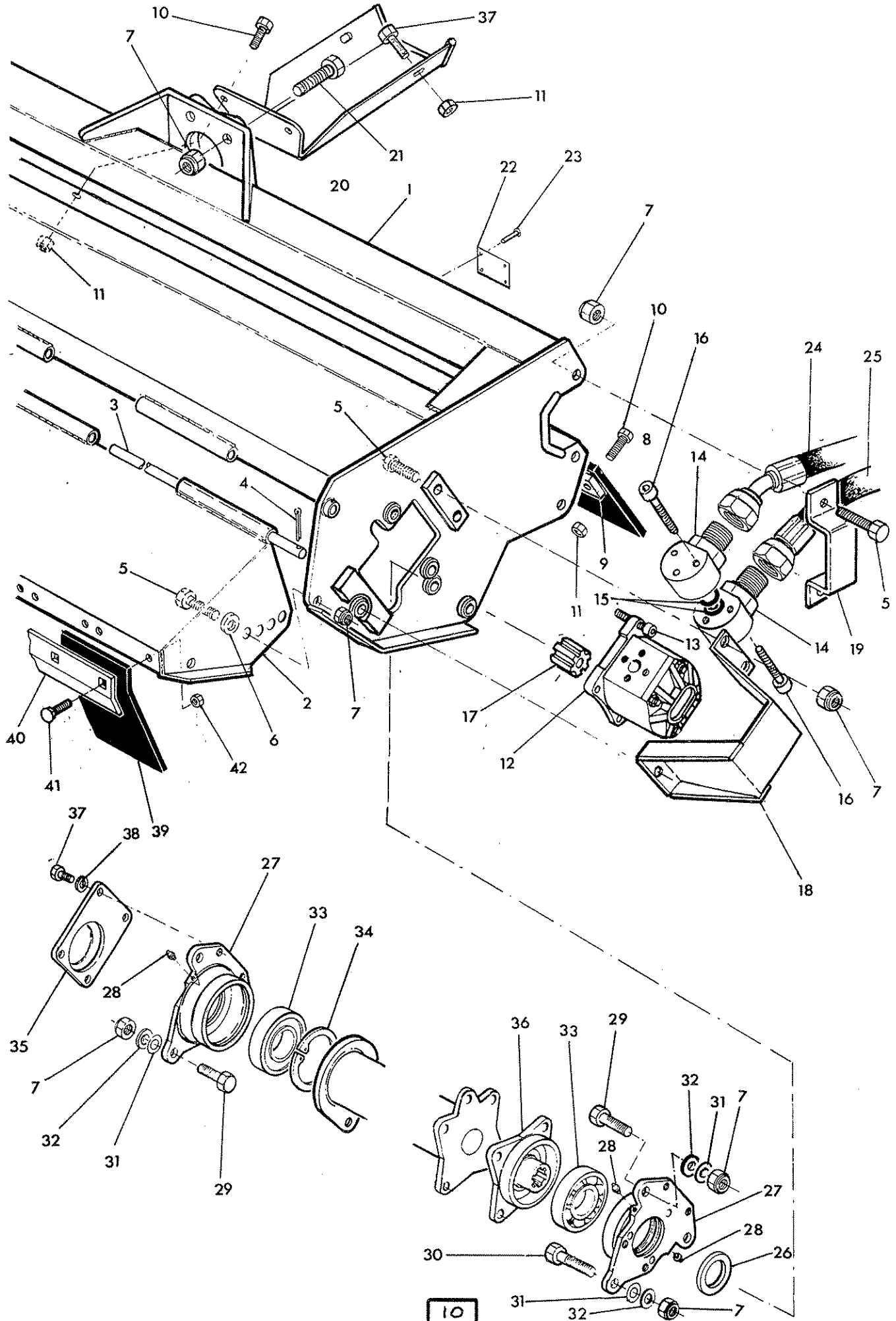
Always quote machine type and serial number as well as the part number.

Design improvement 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.

FLAIL CASING

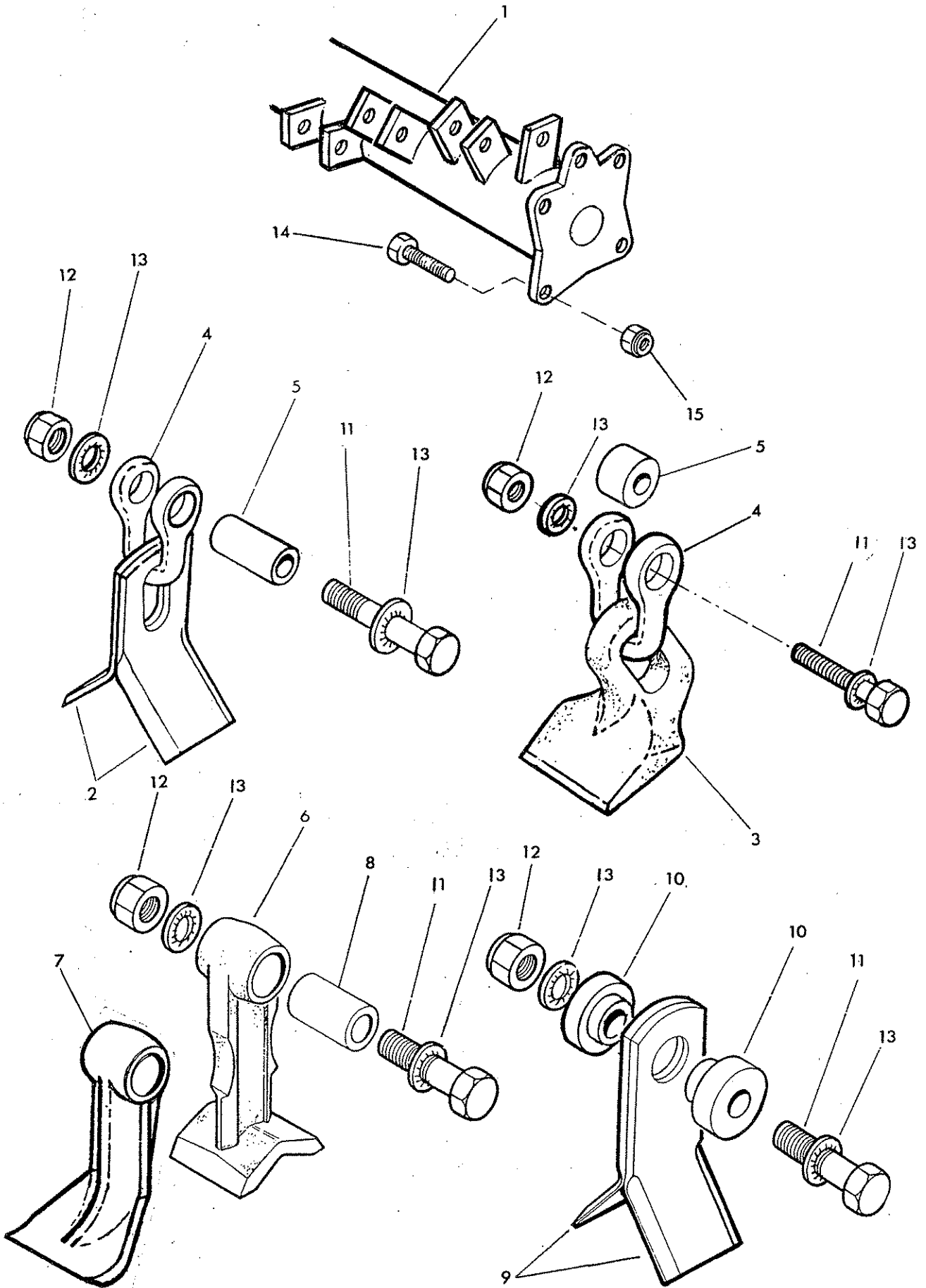


McCOMEL





Ref	Part No	Qty	Description
<b>FLAIL HEAD CASING</b>			
1	42427.01	1	Casing
2	42431.01	1	Front hood
3	41293.03	1	Pivot pin - hood
4	95 01 406	1	Split pin
5	03 11 126	6	Bolt
6	01 00 106	2	Plain washer
7	01 41 006	18	Self locking nut
8	42440.01	1	Rear flap
9	42439.01	1	Clamp strip
10	93 13 065	11	Setscrew
11	91 43 005	13	Self locking nut
12	83 01 282	1	Motor
	83 01 283	1	Motor
13	93 00 144	4	Capscrew
14	73 90 016	2	Motor connection
15	86 00 121	2	'O' ring
16	93 00 014	6	Capscrew
17	71 90 573	1	Drive coupling
18	71 91 281	1	Motor cover
19	41740.01	1	Hose guide
20	42438.01	1	Hose tray
21	02.11.246	4	Bolt
22	13 35 246	1	Serial No plate
23	71 03 230	4	Pop rivet
24	85 01 270	1	Hose-upper-outboard 1" BSP x 1400 long
	85 01 272	1	Hose-upper-inboard 1" BSP x 1600 long
25	85 01 269	1	Hose-lower-outboard 1" BSP x 1450 long
	85 01 271	1	Hose-lower-inboard 1" BSP x 1650 long
26	71 90 015	1	Motor locating washer
27	71 90 261	2	Bearing housing
28	09 01 121	4	Grease
29	02 11 166	5	Bolt
30	02 11 186	1	Bolt
31	81 21 043	as req	Shim
32	81 21 044	as req	Shim
33	06 00 018	2	Bearing
34	71 90 022	1	Internal circlip
35	71 90 292	1	Cover plate
36	71 90 571	1	Drive hub
37	93 13 292	6	Setscrew
38	91 00 205	4	Spring washer
	<b>71 98 315</b>		<b>FRONT FLAP KIT</b>
39	71 91 020	10	Flap
40	71 98 065	1	Clamp strip
41	92 93 054	20	Bolt - cup sq
42	91 43 004	20	Self locking nut
	<b>86 99 236</b>		<b>SEAL KIT - for hydraulic motors</b>



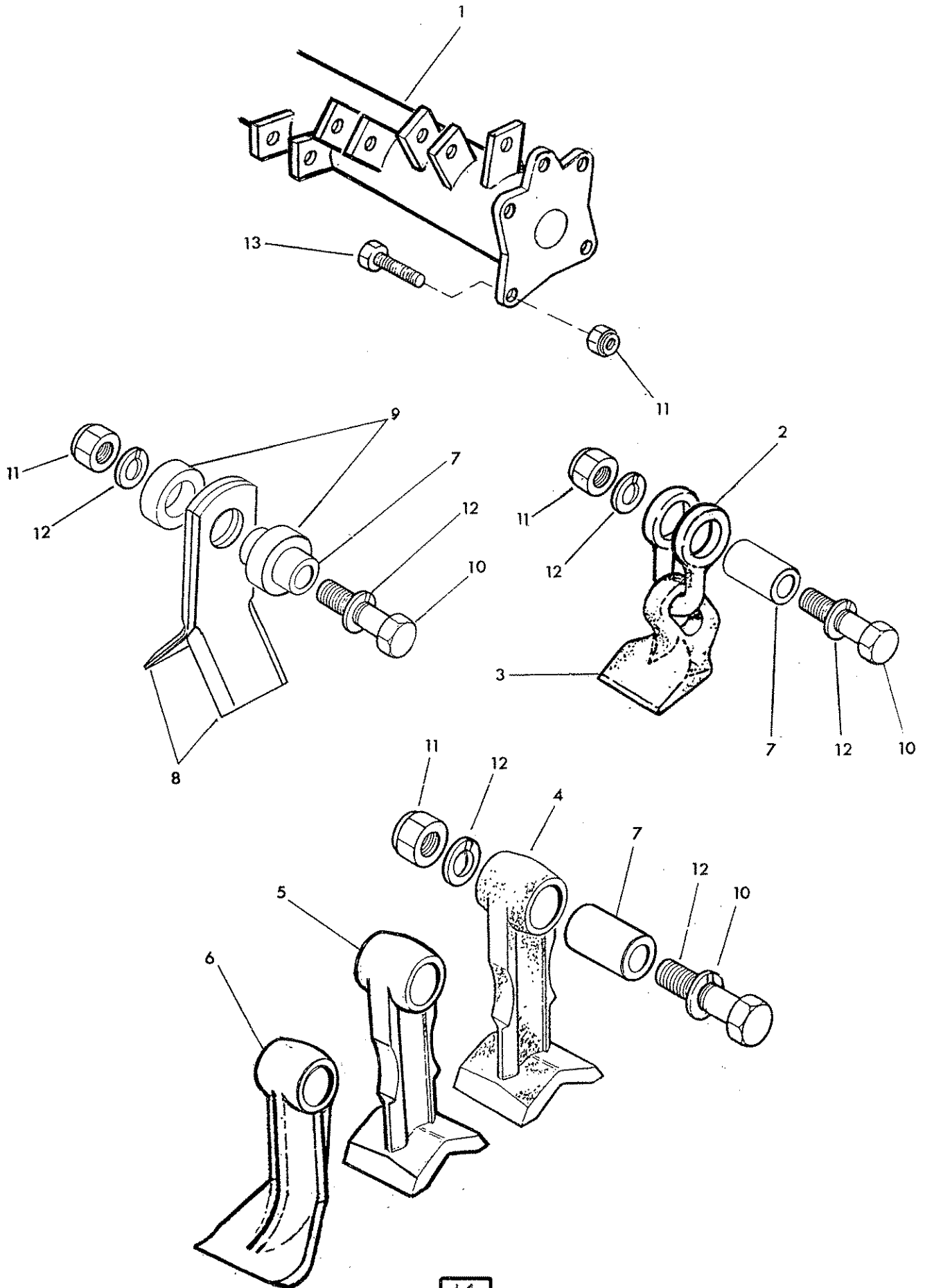
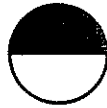


**SUPERCUT ONLY**

Ref	Part No	Qty	Description
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**ROTOR AND FLAILS OPTIONS**

1	42444.01	1	Rotor
2	71 90 166	64	Flail
3	71 90 462	32	Flail
4	71 91 138	32	Shackle
5	71 91 139	32	Spacer
6	71 91 320	32	Flail
7	71 98 390	32	Flail
8	71 91 054	32	Spacer
9	71 90 315	64	Flail
10	71 91 095	64	Bush
11	71 91 109	32	Bolt - special
12	01 41 005	32	Self locking nut
13	01 00 305	64	Internal shakeproof washer
14	03 11 146	4	Setscrew
15	01 41 006	4	Self locking nut





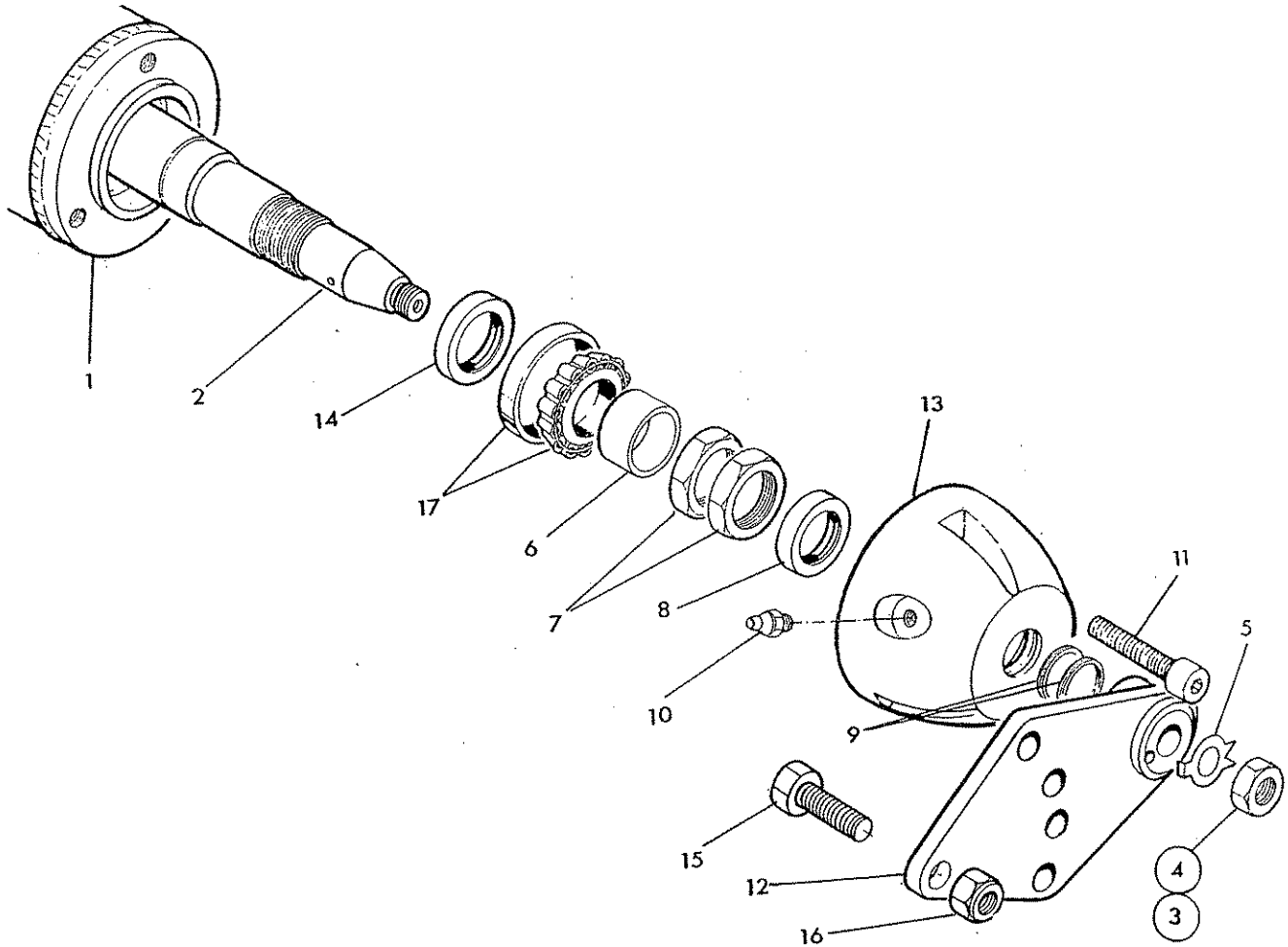
## MULTICUT ONLY

Ref	Part No	Qty	Description
<b>ROTOR AND FLAILS</b>			
1	42428.01	1	Rotor
2	71 90 106	28	Shackle
3	71 90 462	28	Flail
4	73 14 366	28	Flail F10H - cast
5	41391.01	28	Flail F10H - forged
6	73 90 276	28	Flail
7	73 14 223	28	Pivot bush
8	71 90 315	56	Flail
9	71 90 010	56	Flail spacer
10	73 14 201	28	Special bolt
11	01 41 006	32	Self locking nut
12	01 00 206	56	Spring washer
13	03 11 146	4	Bolt

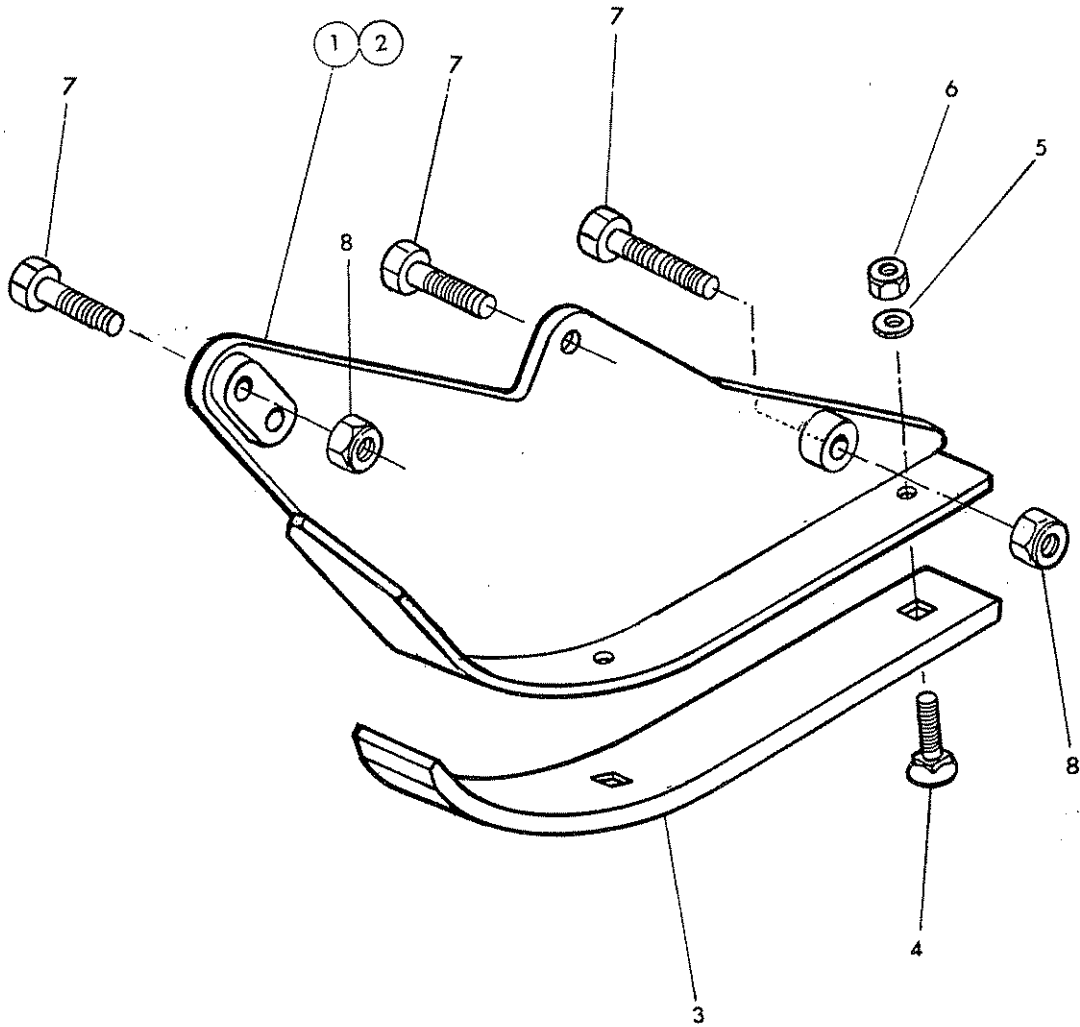
ROLLER



**McDONNELL**



Ref	Part No	Qty	Description
	<b>42241.28</b>		<b>ROLLER ASSEMBLY</b>
1	42241.03	1	Roller
2	42242.03	1	Axle
3	91 13 008	1	Plain nut R hand - not illus.
4	91 00 026	1	Plain nut L hand
5	71 90 023	2	Tab washer
6	42245.01	2	Spacer
7	42244.01	4	Locknut
8	86 29 125	2	Seal
9	04 12 120	4	Spirolox ring
10	09 01 121	2	Greaser
11	93 43 075	6	Capscrew
12	42246.02	1	Roller bracket
13	42243.01	2	End cap
14	86 29 213	2	Seal
15	02 11 186	4	Bolt
16	01 41 006	4	Self locking nut
17	06 00 105	2	Taper roller bearing



Ref	Part No	Qty	Description
	73 52 250		SKID KIT - Option
1	42436.01	1	Skid - L hand
2	42436.02	1	Skid - R hand - not illus.
3	72 90 391	2	Wear skid
4	60 12 034	6	Tine bolt
5	01 00 104	6	Plain washer
6	01 42 004	6	Self locking nut
7	03 11 126	6	Set screw
8	01 41 006		Self locking nut



**ATTENTION**



Recommended P.T.O.  
speed 500 r.p.m.  
Vitesse recommandee  
500 T/min a la  
prise de force.

**DANGER**  
Rotating cutters under here.  
**DANGER**  
Rotor ne pas approcher.

**KEEP BOLTS TIGHT**  
Check bolt tightness after 1 hour  
4 hours, 10 hours and thereafter daily  
**MAINTENEZ LES BOULONS SERRES**  
Et controlez serrage apres 1 heure  
4 heures, 10 heures puis chaque jour



**FLAIL PARTS INFORMATION**

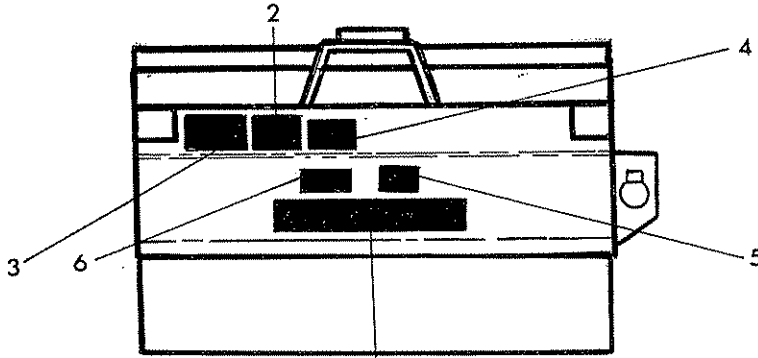
McCormel Flail Mowers use dynamically balanced and mated system components for Cutter Shafts (Rotors), Knives (Flails), Knife Hangers (Shackles), Bolts, Bushes, Rollers, Drivetrain Components, Bearings Belts and Belt Pulleys. McCormel parts are made and tested to meet close-tolerance specifications of balance, quality and consistency that assure long, trouble-free service. "Will-Fit" parts do not ordinarily meet McCormel Standards and could reduce Mower performance, void warranties, and present an increase in the safety hazard potential.

**DON'T GAMBLE!**  
USE GENUINE McCORMEL SERVICE PARTS  
See your McCormel dealer

**BEWARE OF FLYING DEBRIS. KEEP PEOPLE AWAY.**  
**ATTENTION AUX PROJECTIONS. SE TENIR A L'ECART.**

2

5



**McCORMEL**

**54 HP**  
OR  
**65 HP**

6



**DANGER**

CUTTING BLADES

THROWN OBJECTS



FLAIL

ROTARY

FLAIL

ROTARY

**KEEP AWAY - ROTATING BLADES**

SERIOUS INJURY OR DEATH CAN RESULT  
FROM THROWN OBJECTS OR BLADE CONTACT.

- \* STOP MOWING IF PERSONS ARE NOT CLEAR OF THROWN OBJECTS
- \* DO NOT STAND ON OR NEAR MACHINE WHEN IN OPERATION
- \* DO NOT OPERATE WITH DEFLECTORS OR GUARDS REMOVED

4

**GUARDING REQUIREMENTS**  
**EQUIPEMENTS DE SECURITE**

**GROUND CUTTING**  
**COUPE DE SOL**



Always cut upwards.  
Roller set below flails.  
Skids recommended.

Toujours couper en aspiration.  
Rouleau regle sous les fliaux.  
Patins recommandes.

**HEDGE CUTTING**  
**TAILLE DE HAIES**



With flails cutting upwards.  
Roller set above flails.

Les fliaux travaillant en  
aspiration.  
Rouleau regle au dessus des  
fliaux.

**HEDGE CUTTING**  
**TAILLE DE HAIES**



With flails cutting downwards.  
Roller set above flails.

Les fliaux travaillant en attaque.  
Rouleau regle au dessus des fliaux.

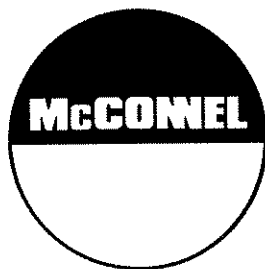
3

Ref Part No Qty Description

**STICKERS**

1	12 90 255	1	McCormel
2	12 90 377	1	Flail head instructions
3	12 90 341	1	Flail head guarding
4	0075 6485	1	Rotating blade warning
5	12 90 392	1	Use McCormel spares
6	12 90 508	1	54hp
	12 90 491	1	65hp





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