

**1.2 metre
Sliding Mount
Multicut Flailhead**

Operation & Spares Manual

EC DECLARATION OF CONFORMITY

*Conforming to EEC Machinery Directive 98/37/EC**

We,

McCONNEL LIMITED,

Temeside Works, Ludlow, Shropshire SY8 1JL.

Declare under our sole responsibility that:

The product (type) Hydraulic Arm Mounted Flailhead.....

.....

Product Code BD12, BD16, F110, F112, F115, F012, F016.....

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 Machinery Directive 98/37/EC, * previously Directive 89/392/EEC as amended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC.

The machinery directive is supported by;

- BS EN ISO 12100:2003 Safety of Machinery. This standard is made up of two parts; Part 1 Terminology, methodology, Part 2 Technical Specifications.
- BS EN 1050 Safety of machinery - Principles of risk assessment.
- and other national standards associated with its design and construction as listed in the Technical File.

The Machinery Directive is fully implemented into UK law by means of the Supply of Machinery (Safety) Regulations 1992 (SI 1992/3073) as amended by The Supply of Machinery (Safety) (Amendment) Regulations 1994 (SI 1994/2063).

Signed John Frank.....

on behalf of McCONNEL LIMITED

Responsible Person

Status: Chief Design Engineer

Date: May 2005

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

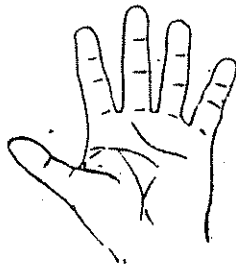
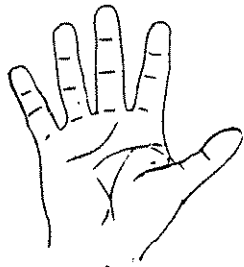
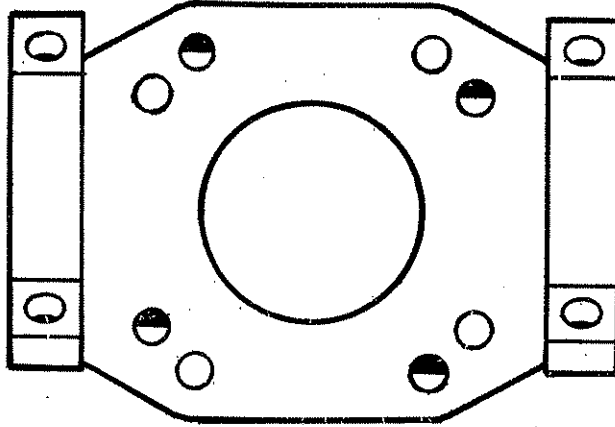
An operating procedure, technique etc., which is considered essential to emphasise.

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.

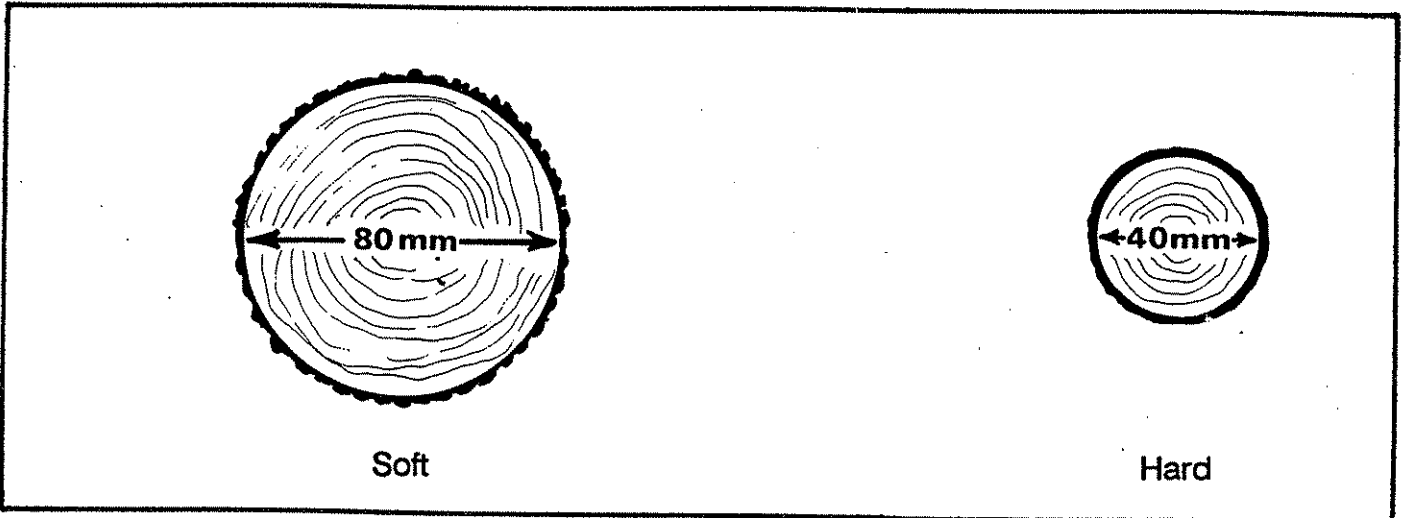
Record the serial number of your machine on this page and always quote this number when ordering spares. Whenever information concerning the machine is requested remember to also state the type of tractor to which it is fitted.	
MACHINE SERIAL NUMBER	INSTALLATION DATE
MODEL DETAILS	
DEALERS NAME	
DEALERS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

FLAILHEAD ATTACHMENT

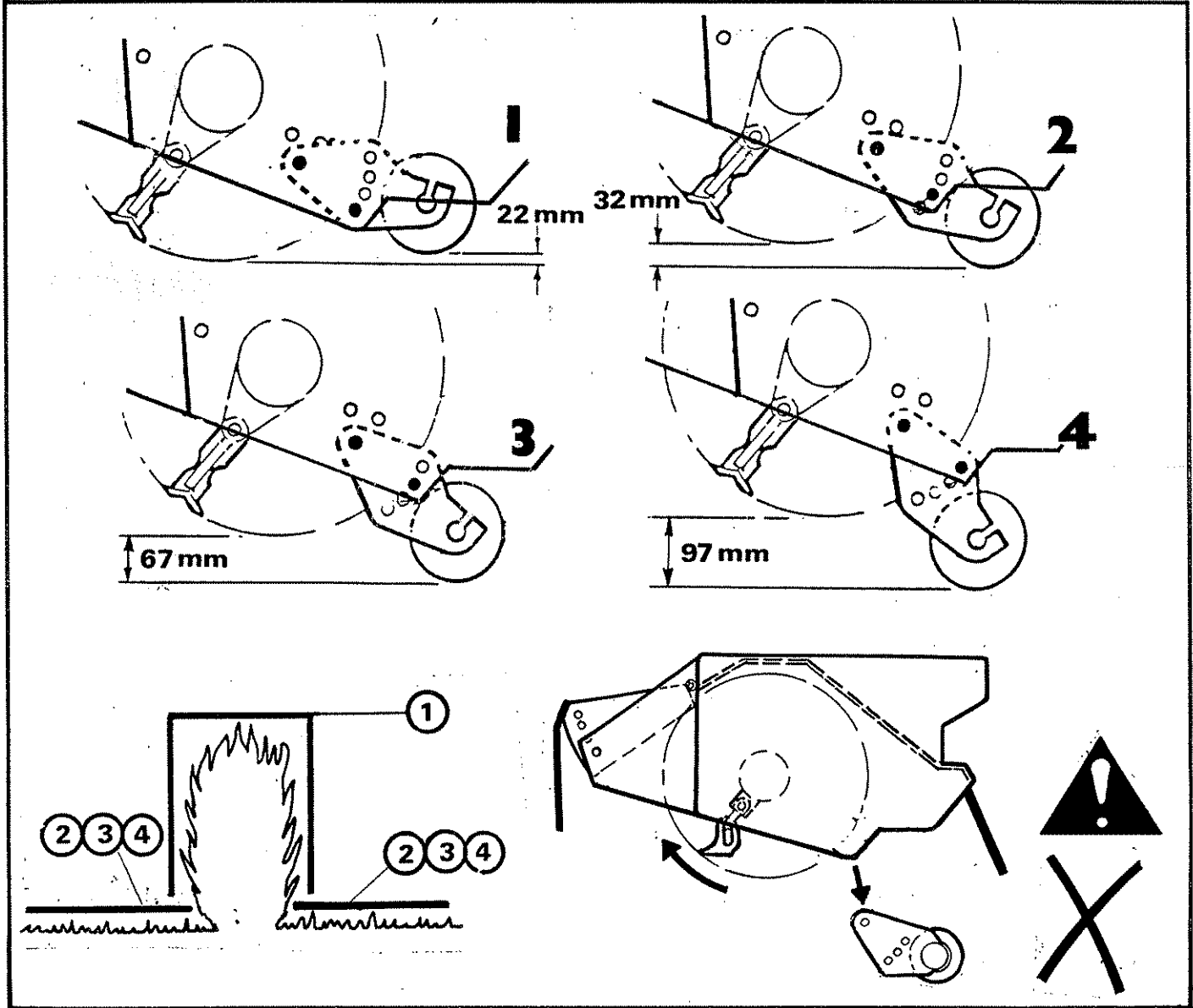


OPERATION

MATERIAL THICKNESS CUTTING LIMITATIONS



ROLLER POSITION

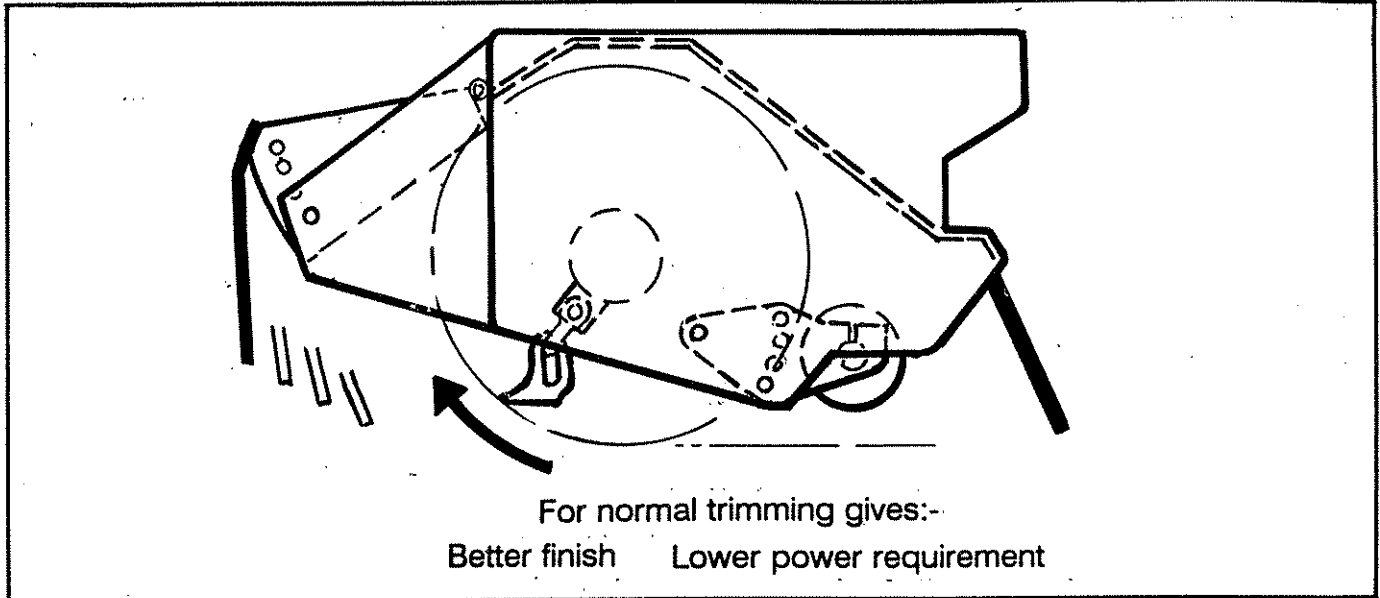


HEDGE CUTTING PROCEDURE

Preliminary Precautions

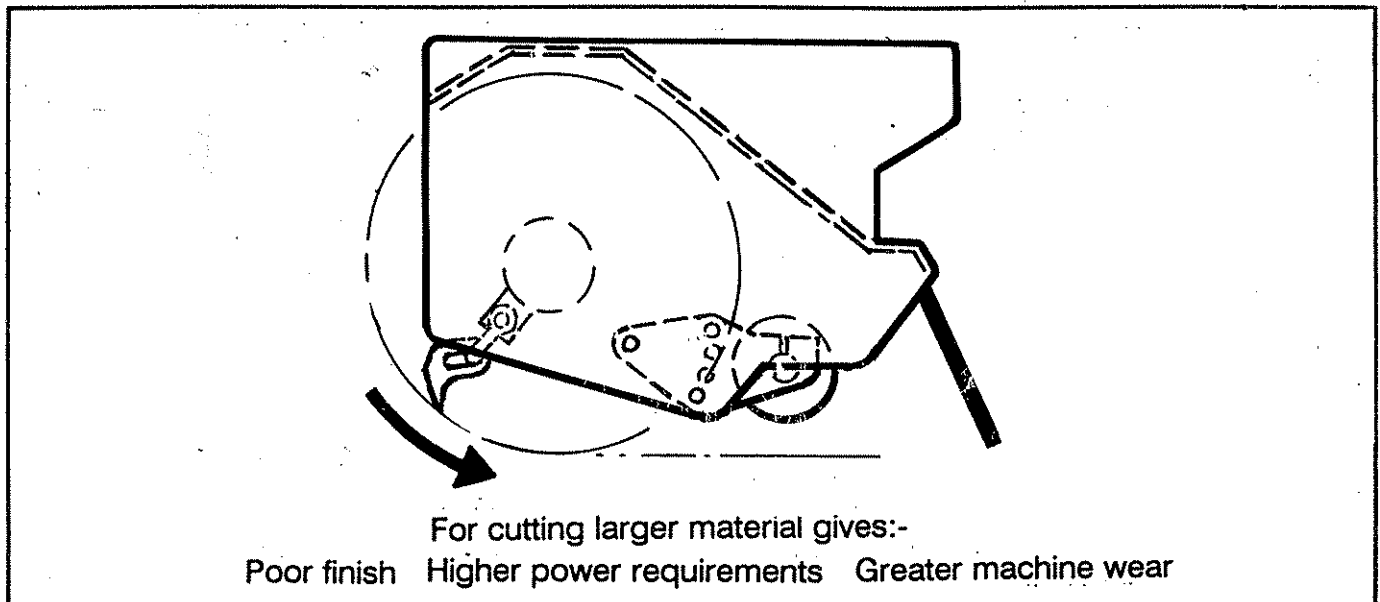
Inspect the work area, remove hazardous materials and note any immovable obstructions.

Upward cutting

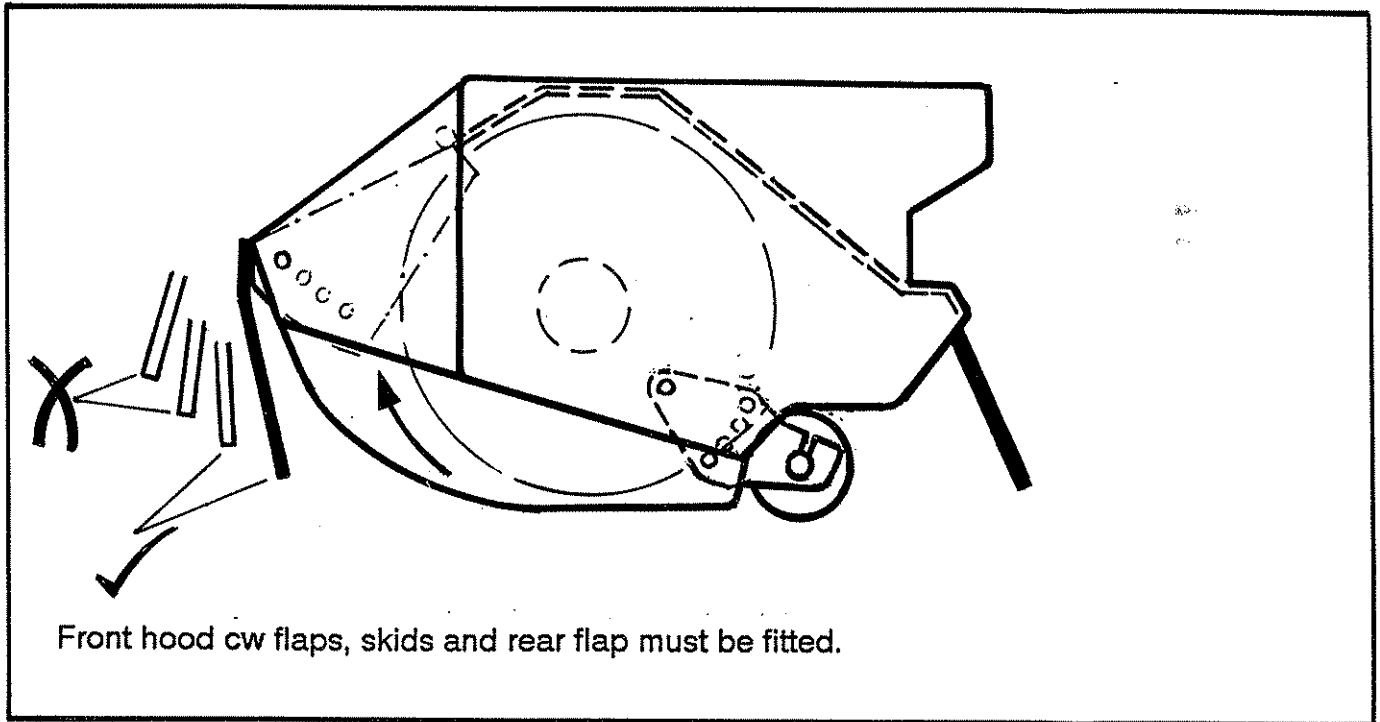


Front hood and rear flap must always be in position.

Downward cutting



GRASS CUTTING Flails must cut upwards



FLAILHEAD

Frequently inspect the rotor assembly for damaged or missing flails. Bolts and nuts securing the flails to the rotor should be regularly checked and kept tight. The correct torque setting for these locknuts is 135 Nm (100 lbf/ft.). Use only the correct flail bolt and locking nut. Check the flail pivot bushes for possible damage or wear. They do not require oil.

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.

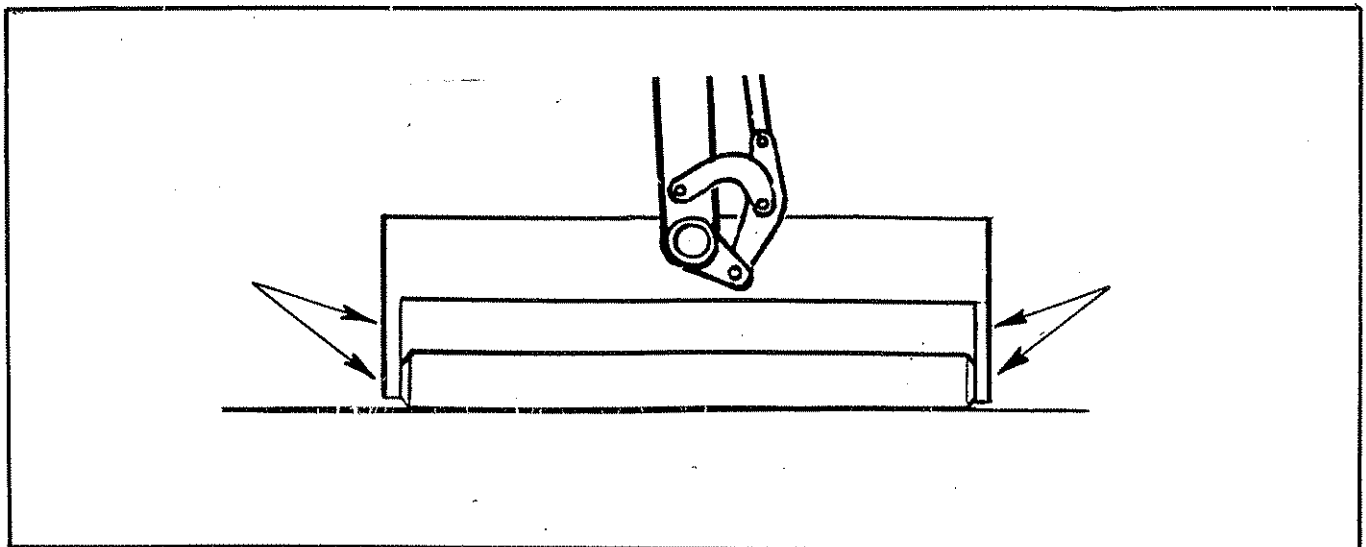
Wear protective gear when sharpening flails.

Ensure that the bearing housings and hydraulic mounting nuts and bolts are kept tight. They should be checked during servicing.

LUBRICATION

General

Grease daily all points shown.



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.

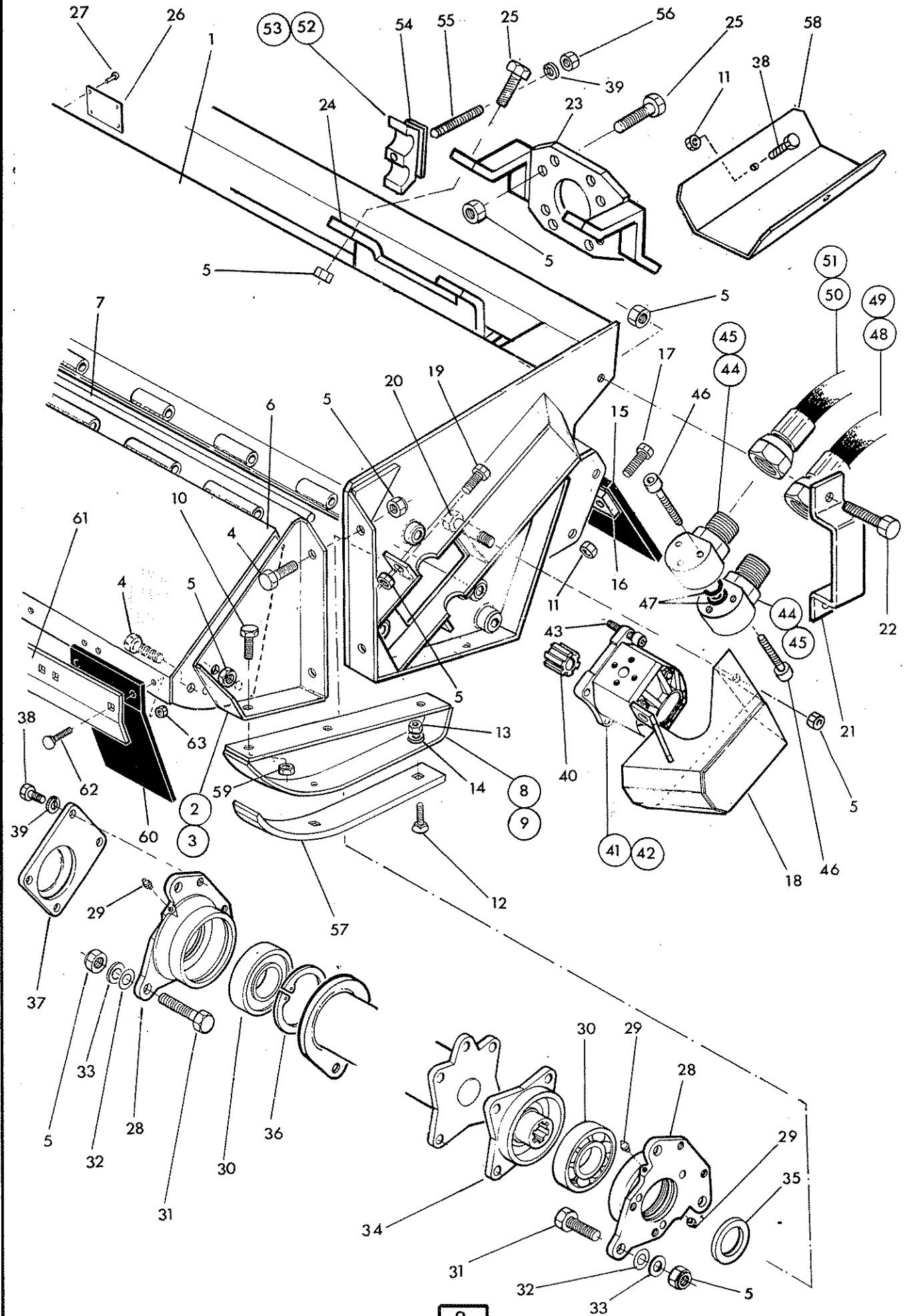
Always quote machine type and serial number as well as the part number.

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



McCORMICK

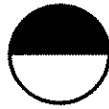




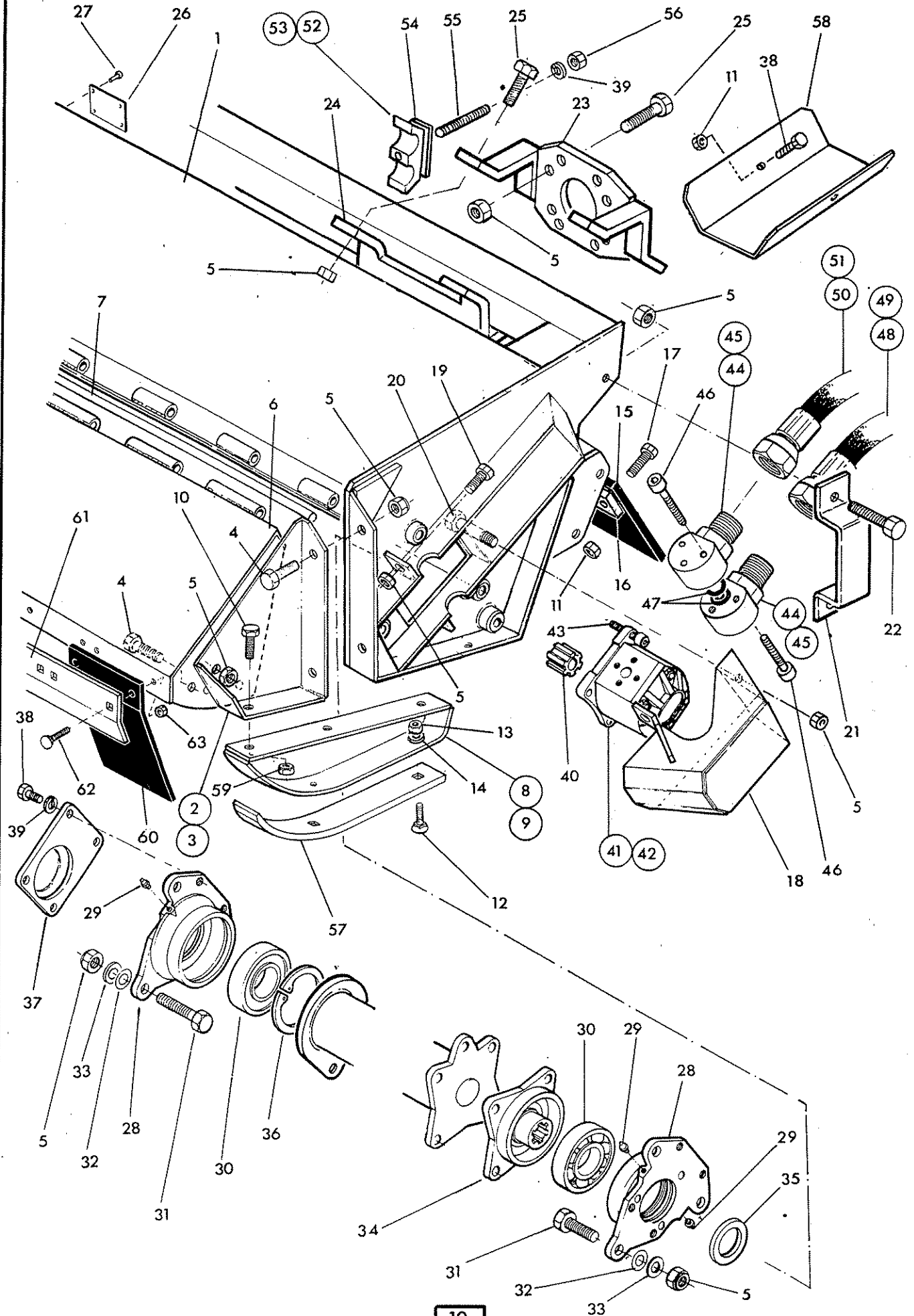
MCCORMICK

Ref	Part No	Qty	Description
			FLAIL HEAD CASING - 1.2M MULTICUT SLIDING MOUNT
1	41685.01	1	Casing
2	72 90 387	1	Hood bracket R.Hand - not illus.
3	72 90 388	1	Hood bracket L.Hand
4	03 11 106	6	Setscrew
5	01 41 006	25	Self locking nut
6	41695.01	1	Hood
7	41700.01	1	Hood pivot pin
8	72 90 389	1	Skid - R.Hand - not illus.
9	72 90 390	1	Skid - L.Hand
10	03 11 085	6	Setscrew
11	91 43 005	11	Self locking nut
12	60 12 034	6	Tine bolt
13	01 42 004	6	Self locking nut
14	01 00 104	6	Plain washer
15	71 90 314	1	Rear flap
16	71 90 313	1	Clamp strip
17	93 13 065	9	Setscrew
18	71 90 488	1	Motor cover
19	03 11 126	2	Setscrew
20	02 11 266	1	Bolt
21	41740.01	1	Hose guide
22	03 11 146	2	Setscrew
23	71 98 330	1	Clamp plate
24	41739.01	1	Clamp
25	02 11 186	8	Bolt
26	13 35 246	1	Serial No plate
27	71 03 230	4	Pop rivet
28	71 90 261	2	Bearing housing
29	09 01 121	4	Greaser
30	06 00 018	2	Bearing
31	02 11 166	6	Bolt
32	81 21 043	as req	Shim
33	81 21 044	as req	Shim
34	71 90 571	1	Rotor hub
35	71 90 015	1	Motor locating washer
36	71 90 022	1	Internal circlip
37	71 90 444	1	Cover plate
38	93 13 292	6	Setscrew
39	91 00 205	5	Spring washer

FLAIL CASING



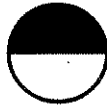
McCOMEL



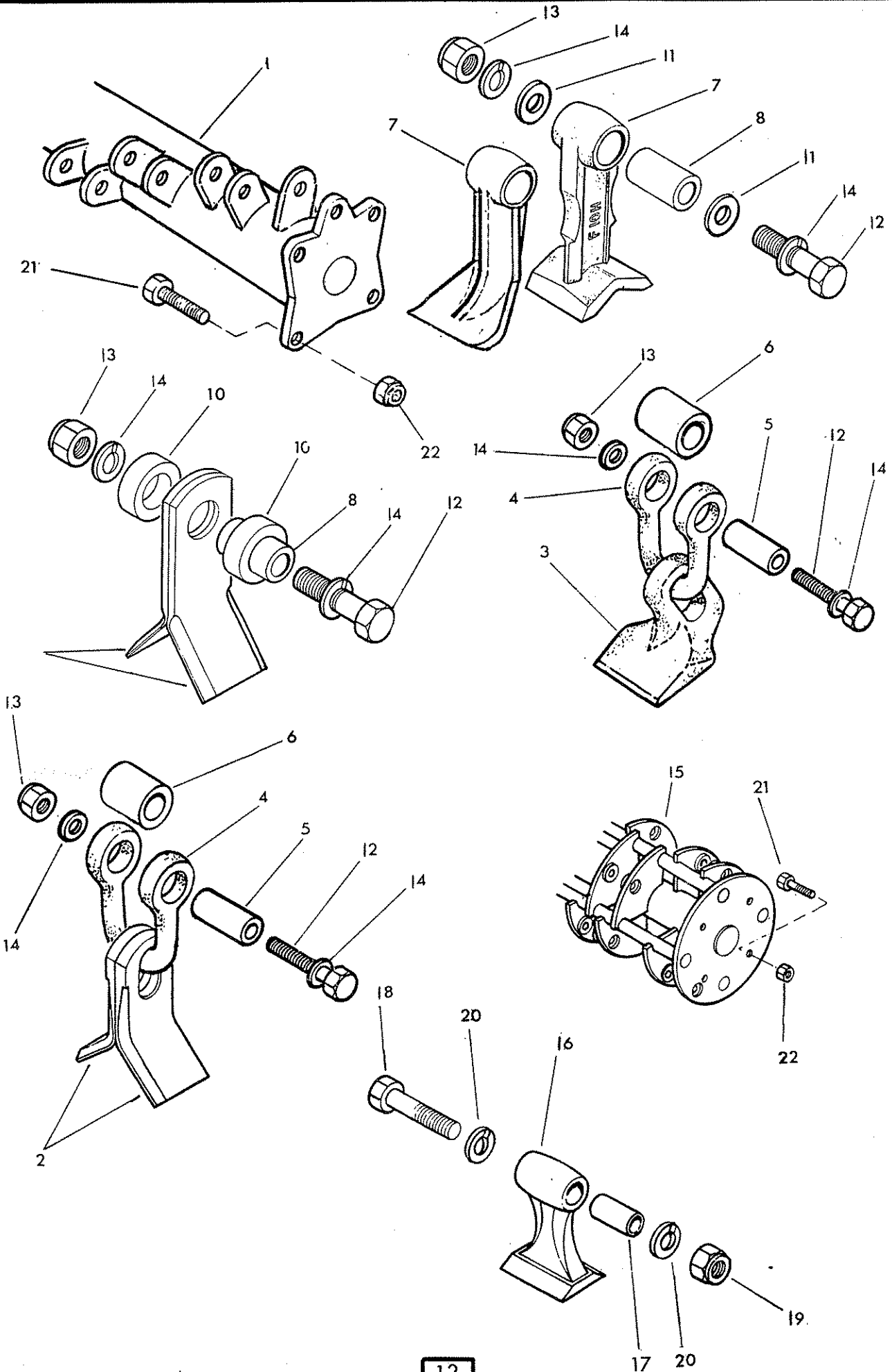


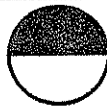
Ref	Part No	Qty	Description
FLAIL HEAD CASING - Continued			
40	71 90 573	1	Drive coupling
41	83 01 281	1	Motor - std. power
42	83 01 282	1	Motor - Hy power
	83 01 283	1	Motor - Hy power +
43	93 00 144	4	Capscrew - self locking
44	73 90 017	2	Motor connection
45	73 90 016	2	Motor connection
46	93 43 135	6	Capscrew
47	86 00 121	2	'O' ring
48	85 01 256	1	Hose 3/4 BSP x 75" long
49	85 01 254	1	Hose 1" BSP x 75" long
50	85 01 257	1	Hose 3/4 BSP x 79" long
51	85 01 255	1	Hose 1" BSP x 79" long
52	71 90 148	1	Hose clamp
53	71 93 063	1	Hose clamp
54	06.418.05	1	Clamp plate
55	04.282.09	1	Stud
56	91 13 005	1	Nut
57	72 90 391	2	Wear skid
58	71 98 333	1	Hose tray
59	01 41 005	6	Self lock nut
	72 90 375		FRONT FLAP KIT
60	72 90 053	8	Flap
61	71 90 304	1	Clamp strip
62	92 93 054	16	Bolt-cup square
63	91 43 004	16	Self locking nut
	86 99 236		SEAL KIT - for hydraulic motor

ROTOR & FLAIL OPTIONS



MCCORMICK





WAGGON

Ref Part No Qty Description

ROTORS AND FLAILS

1 73 90 270 1 Rotor

The following flails are suitable for use with 73 90 270

2	73 90 004	48	Flail
3	71 90 462	24	Flail
4	73 90 001	24	Shackle
5	73 90 003	24	Spacer
6	73 90 012	24	Spacer sleeve
7	73 14 366	24	Flail F10H- Cast
	41391 .01	24	Flail F10H- Forged
	73 90 276	24	Flail - alternative single edged
8	73 14 223	24	Pivot boss
9	71 90 315	48	Flail
10	71 90 010	48	Spacer
11	73 90 005	48	Spacer
12	73 90 006	24	Special bolt 5/8" UNF x 4" long
13	01 41 006	24	Self locking nut 5/8" UNF
14	01 00 206	48	Spring washer 5/8" dia

15 71 90 465 1 Rotor - Omega

The following are used with 71 90 465

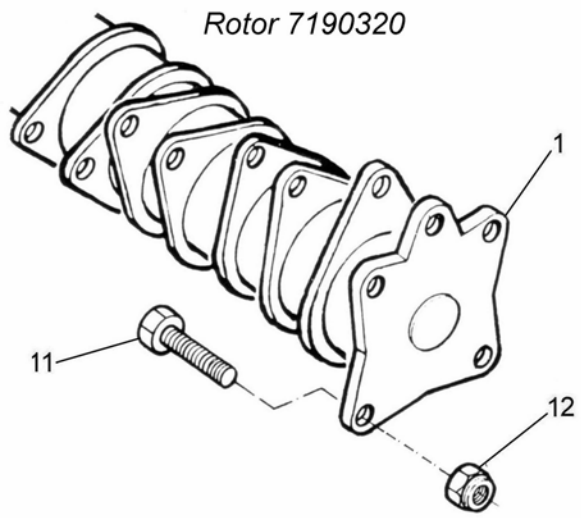
16	71 90 564	20	Flail
17	71 90 117	20	Bush
18	73 90 006	20	Special bolt 5/8" UNF x 4" long
19	01 41 006	20	Self locking nut 5/8" UNF
20	01 00 206	20	Spring washer 5/8" dia

The following are used with both rotors

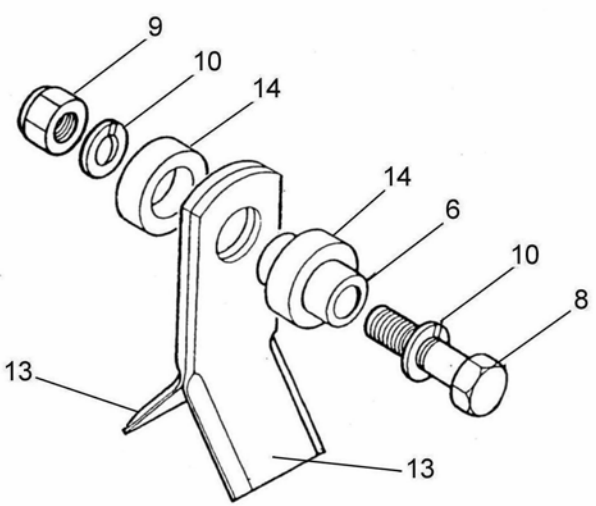
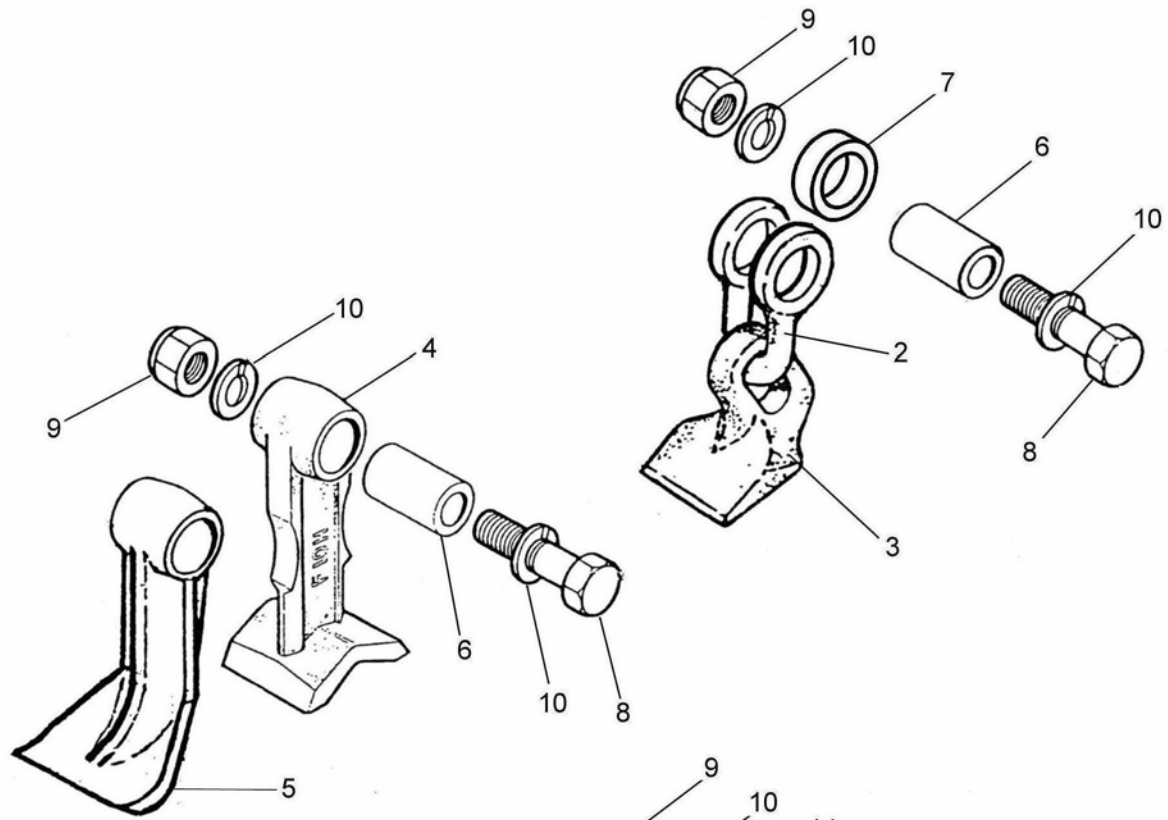
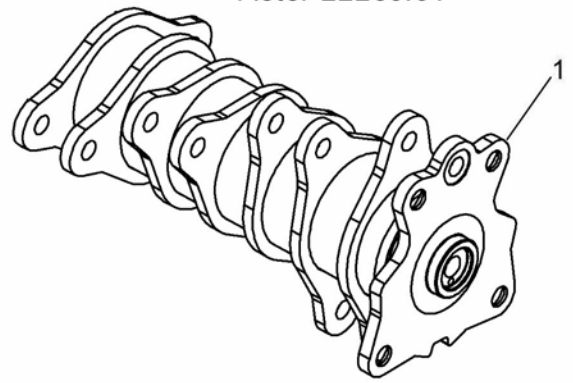
21	03 11 146	4	Setscrew 5/8" UNF x 1 3/4" long
22	01 41 006	4	Self locking nut 5/8" UNF

ROTOR & FLAIL OPTIONS

Rotor 7190320



Rotor 22269.01

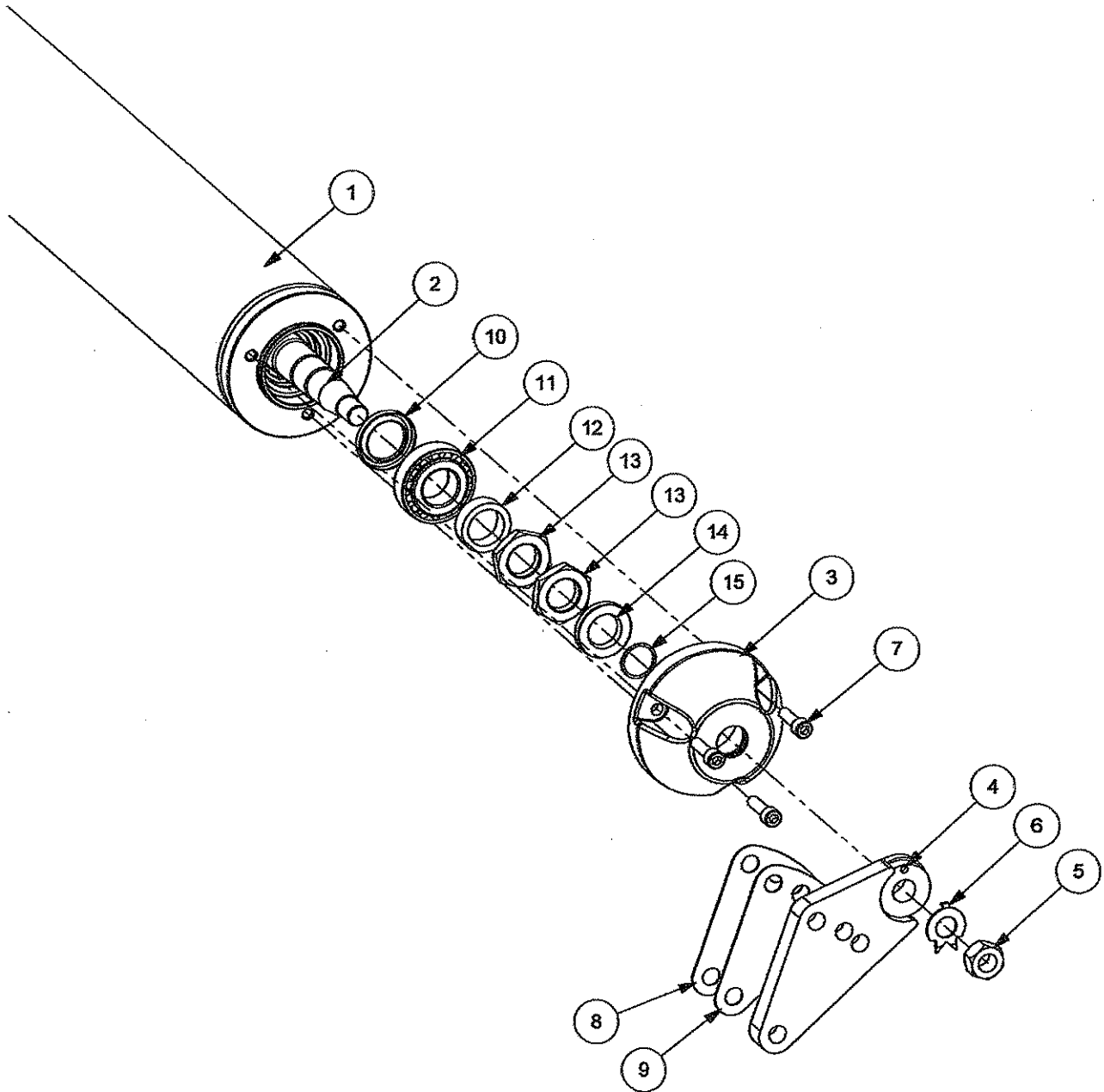


**ROTOR & FLAIL OPTIONS**

Ref.	Part No.	Qty.	Description
ROTOR & FLAILS (Wrap Around Lug)			
1	7190320	1	Rotor - 1.2m
	22269.01	1	Rotor - 1.2m
2	7190106	24	Shackle
3	7190462	24	Flail
4	7314366	24	Flail F10H - Cast
	41391.01	24	Flail F10H - Forged
5	7390276	24	Flail - Alternative single edged
6	7314223	24	Pivot Bush
7	7190172	24	Spacer
8	7390025	23	Special Bolt M16 x 1.5p x 83 long
9	9100028	24	Special Self-Locking Nut M16 x 1.5p
10	0100206	48	Spring Washer 5/8" dia.
11	0311146	4	Setscrew 5/8" UNF x 1-3/4" long
12	0141006	4	Self-Locking Nut 5/8" UNF
13	7190315	48	Flail
14	7190010	48	Spacer

1.2M ROLLER ASSEMBLY

Module:
42241.26





1.2M ROLLER ASSEMBLY

Ref.	Part No.	Qty.	Description
	42241.26		ROLLER ASSEMBLY
1	42241.01	1	Roller - 1.2m
2	42242.01	1	Roller Axle - 1.2m
3	42243.01	2	Roller End Cap
4	42246.01	1	Roller Bracket - L/H
	42246.02	1	Roller Bracket - R/H
5	9100026	1	Nut - L/H
	9113008	1	Nut - R/H
6	7190023	2	Tab Washer
7	9343075	6	Capscrew
8	42257.01	<i>as req'd</i>	Roller Shim - 1.2mm
9	42257.02	<i>as req'd</i>	Roller Shim - 2.0mm
10	8629213	2	Rotary Lip Seal
11	0600105	2	Taper Roller Bearing
12	42245.01	2	Spacer - Roller
13	42244.01	4	Locknut
14	8629125	2	Rotary Lip Seal
15	0412120	2	Spirolox Ring



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.



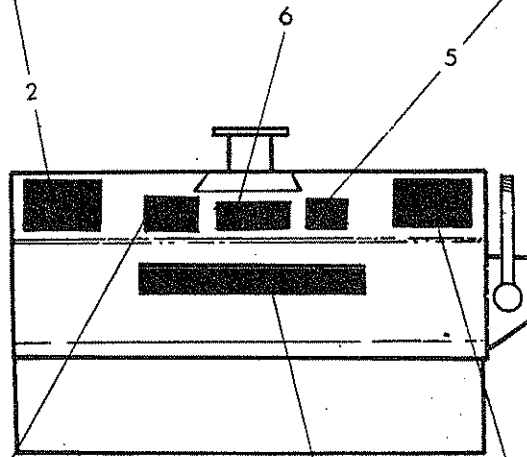
FLAIL PARTS INFORMATION

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.**



McCormel



DANGER

CUTTING BLADES

THROWN OBJECTS



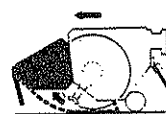
KEEP AWAY - ROTATING BLADES

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

**GUARDING REQUIREMENTS
EQUIPMENTS DE SECURITE**

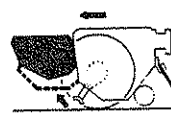
**GROUND CUTTING
COUPE DE SOL**



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

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

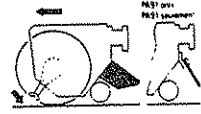
**HEDGE CUTTING
TAILLE DE HAIES**



With flails cutting upwards.
Roller set above flails.

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

**HEDGE CUTTING
TAILLE DE HAIES**

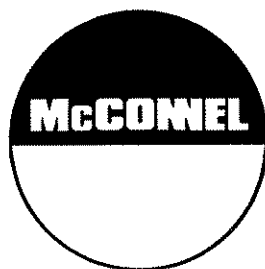


With flails cutting downwards.
Roller set above flails.

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



Ref	Part No.	Qty	Description
			STICKERS
1	12 90 255	1	McConnel
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 McConnel spares
6	12 90 491	1	65 hp - Hy power +



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