

Publication 201

June 1994

Serial No.

-----

Part No.

12-91-001



# **1-0 metre Supercut 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 Flail Head

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)*

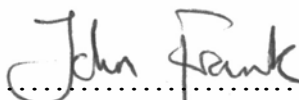
Complies with the required provisions of the Machinery Directive 98/37/EC, \* previously Directive 89/392/EEC as amended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC.

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



.....  
*on behalf of McCONNEL LIMITED*

*Responsible Person*

Status: Chief Design Engineer

Date: January 2008



1.0 SUPERCUT DIRECT DRIVE

A LIGHT TRIMMING FLAIL HEAD

May be fitted to:-

PA91

## **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.

## **I N F O R M A T I O N**

**All information contained herein supersedes  
any contradictory information relating to  
flail heads that may appear in  
the main instruction or parts manual.**

# GENERAL INFORMATION

Read this manual before fitting or operating the machine. If in doubt contact your dealer or the McConnel Service Department for assistance.

Use only McConnel spare parts on McConnel equipment and machines. Refer to the parts section before ordering spares.

## DEFINITION

The following definitions apply throughout this manual:

|  |
|--|
| <p style="text-align: center;"><b>WARNING</b><br/>An operating procedure, technique etc., which can result in personal injury or loss of life if not observed carefully.</p> |
|--|

### 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.

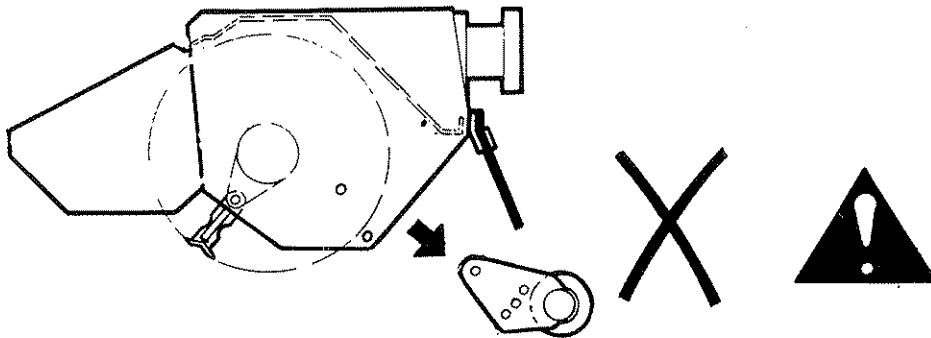
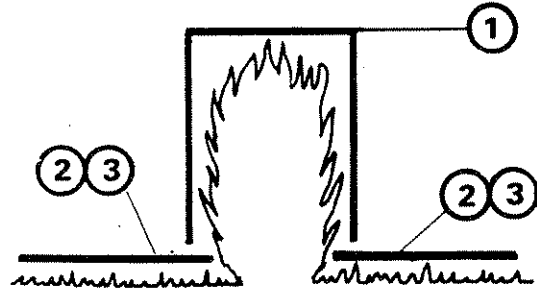
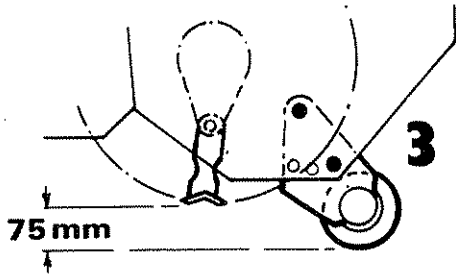
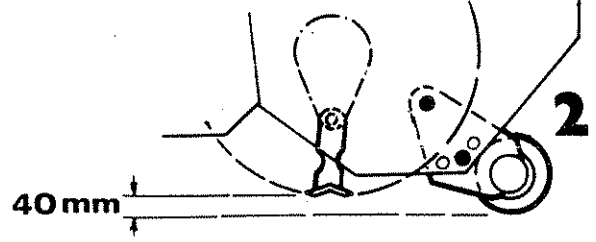
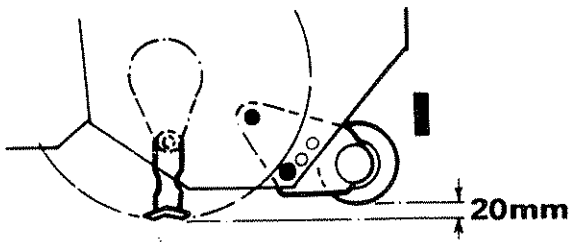
## LEFT AND RIGHT-HAND

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  |                   |

# ROLLER POSITION

Bushed roller.





*For best performance ...*

## **USE ONLY GENUINE McCONEL SERVICE PARTS**

*To be assured of the latest design improvements purchase your  
'Genuine Replacements' from the 'Original Equipment Manufacturer'*

### **McCONEL LIMITED**

*Through your local Dealer or Stockist*

**Always quote:**

- ***Machine Type***
- ***Serial Number***
- ***Part Number***

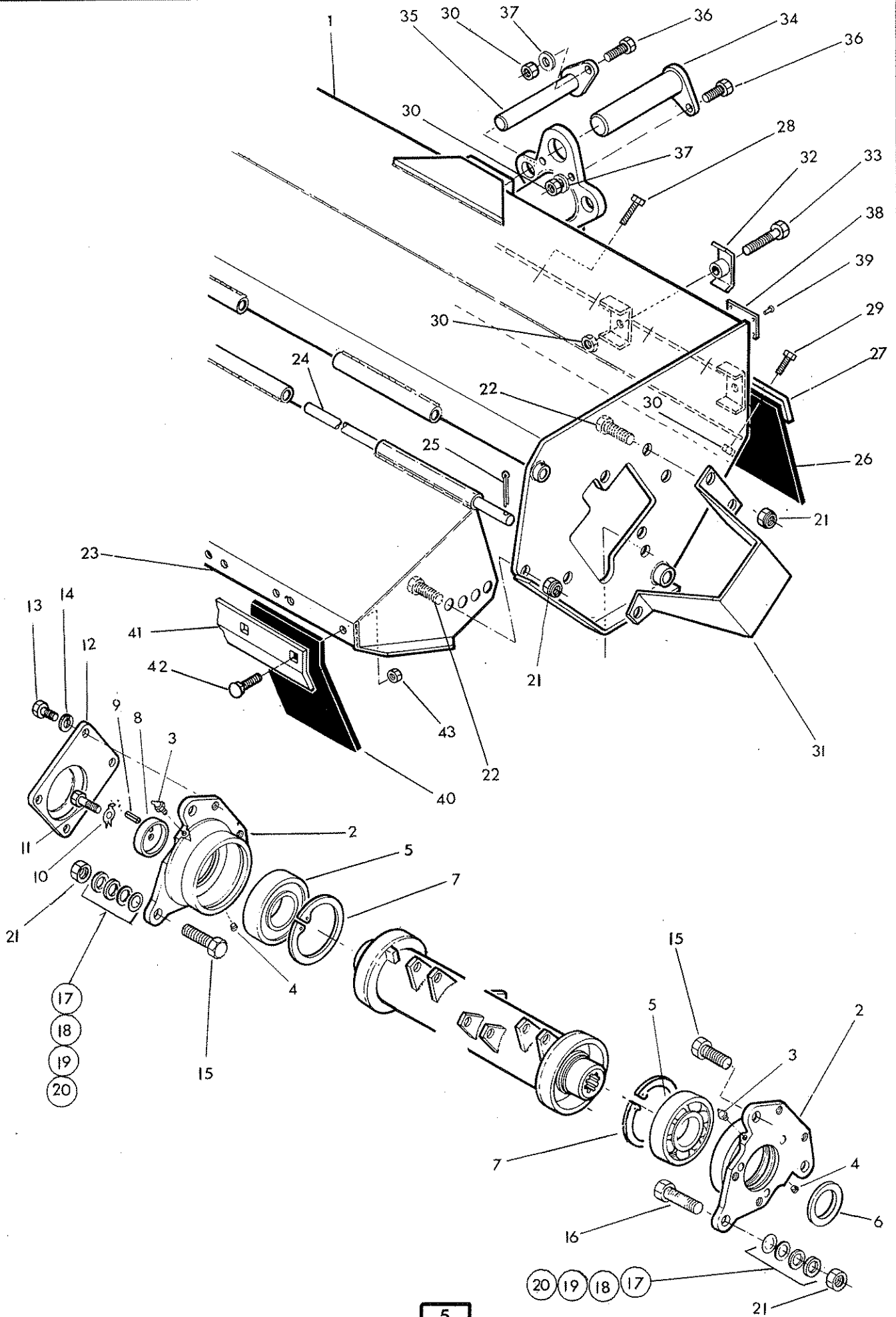
*Design improvements may alter some of the parts listed in this manual –  
the latest part will always be supplied when it is interchangeable with an earlier one.*



CASING



McDONNELL



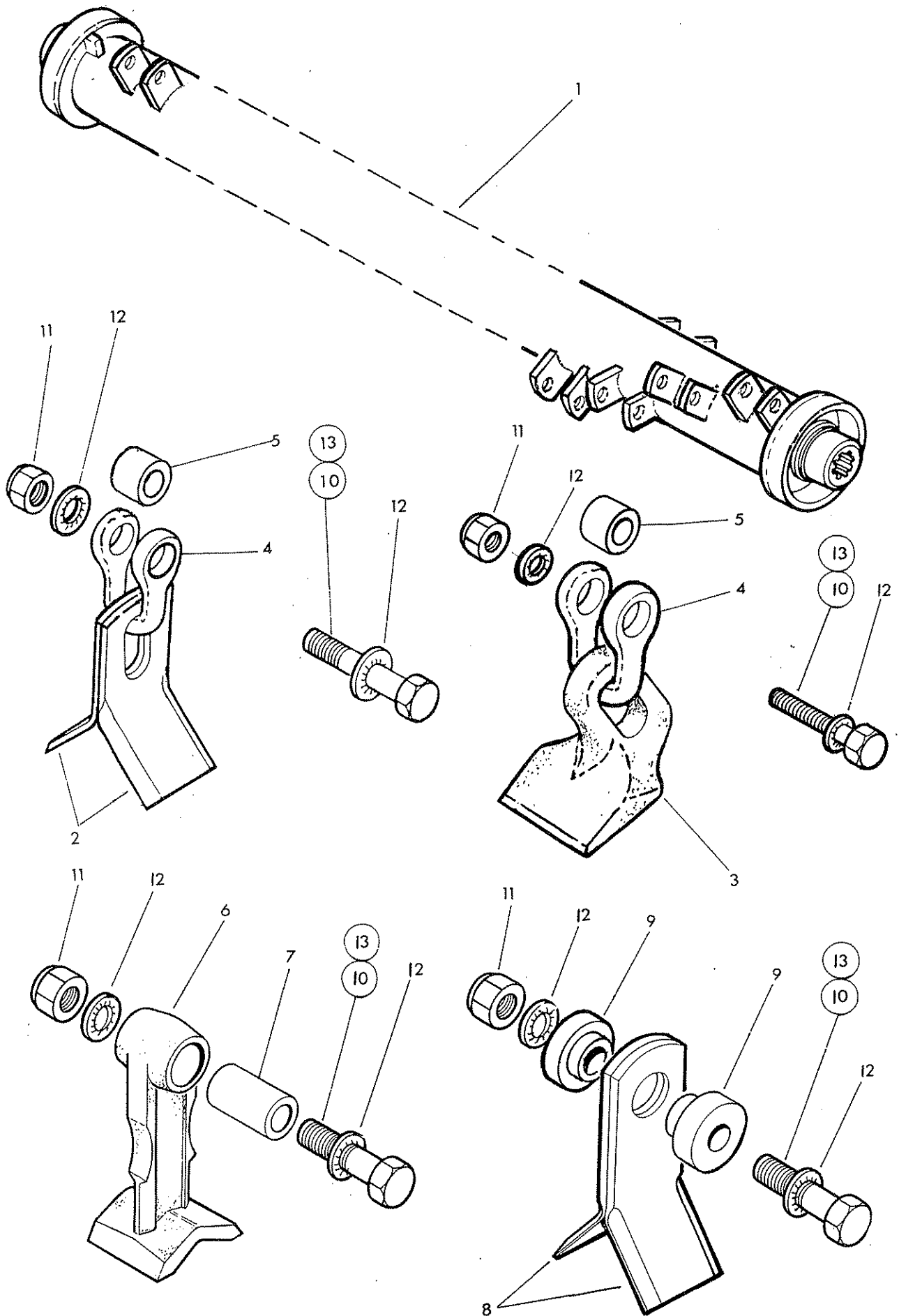


| Ref                          | Part No   | Qty     | Description           |
|------------------------------|-----------|---------|-----------------------|
| <b>FLAIL CASING</b>          |           |         |                       |
| 1                            | 71 91 272 | 1       | Flail casing          |
| 2                            | 71 90 261 | 2       | Bearing housing       |
| 3                            | 09 01 124 | 2       | Greaser               |
| 4                            | 85 82 041 | 2       | Plug                  |
| 5                            | 06 00 018 | 2       | Ball bearing          |
| 6                            | 71 90 015 | 1       | Motor location washer |
| 7                            | 71 90 022 | 2       | Internal circlip      |
| 8                            | 71 90 025 | 1       | Clamp washer          |
| 9                            | 04 21 608 | 1       | Spring dowel          |
| 10                           | 71 90 024 | 1       | Tabwasher             |
| 11                           | 93 13 076 | 1       | Setscrew              |
| 12                           | 71 90 292 | 1       | Cover plate           |
| 13                           | 93 13 045 | 4       | Setscrew              |
| 14                           | 91 00 205 | 4       | Spring washer         |
| 15                           | 03 11 126 | 5       | Setscrew              |
| 16                           | 03 11 146 | 1       | Setscrew              |
| 17                           | 81 21 044 | as reqd | Shim                  |
| 18                           | 81 21 043 | "       | Shim                  |
| 19                           | 71 91 099 | "       | Shim                  |
| 20                           | 71 91 098 | "       | Shim                  |
| 21                           | 01 41 006 | 14      | Self locking nut      |
| 22                           | 03 11 106 | 4       | Setscrew              |
| 23                           | 71 91 279 | 1       | Front hood            |
| 24                           | 71 91 094 | 1       | Hood pivot pin        |
| 25                           | 95 01 406 | 1       | Split pin             |
| 26                           | 71 91 300 | 1       | Rear flap             |
| 27                           | 71 91 319 | 1       | Clamp strip           |
| 28                           | 93 13 075 | 1       | Setscrew              |
| 29                           | 93 13 055 | 8       | Setscrew              |
| 30                           | 91 43 005 | 13      | Self locking nut      |
| 31                           | 71 91 283 | 1       | Motor cover           |
| 32                           | 71 91 096 | 2       | Hose clamp            |
| 33                           | 92 13 095 | 2       | Bolt                  |
| 34                           | 71 91 034 | 1       | Head pivot pin        |
| 35                           | 71 91 043 | 1       | Slave link pin        |
| 36                           | 93 13 075 | 2       | Setscrew              |
| 37                           | 91 00 105 | 2       | Plain washer          |
| 38                           | 73 14 087 | 1       | Serial No. plate      |
| 39                           | 71 03 230 | 4       | Pop rivet             |
| <b>OPTIONAL EXTRA</b>        |           |         |                       |
| <b>FRONT FLAP KIT comp:-</b> |           |         |                       |
| 40                           | 71 91 321 | 7       | Front flap            |
| 41                           | 71 90 035 | 1       | Clamp strip           |
| 42                           | 71 90 350 | 1       | Clamp strip           |
| 43                           | 92 93 054 | 14      | Bolt - cup sq.        |
| 44                           | 91 43 004 | 14      | Self lock nut         |

ROTOR & FLAIL OPTIONS



McCORMICK





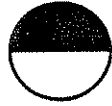
| Ref | Part No | Qty | Description |
|-----|---------|-----|-------------|
|-----|---------|-----|-------------|

**ROTOR AND FLAILS OPTIONS**

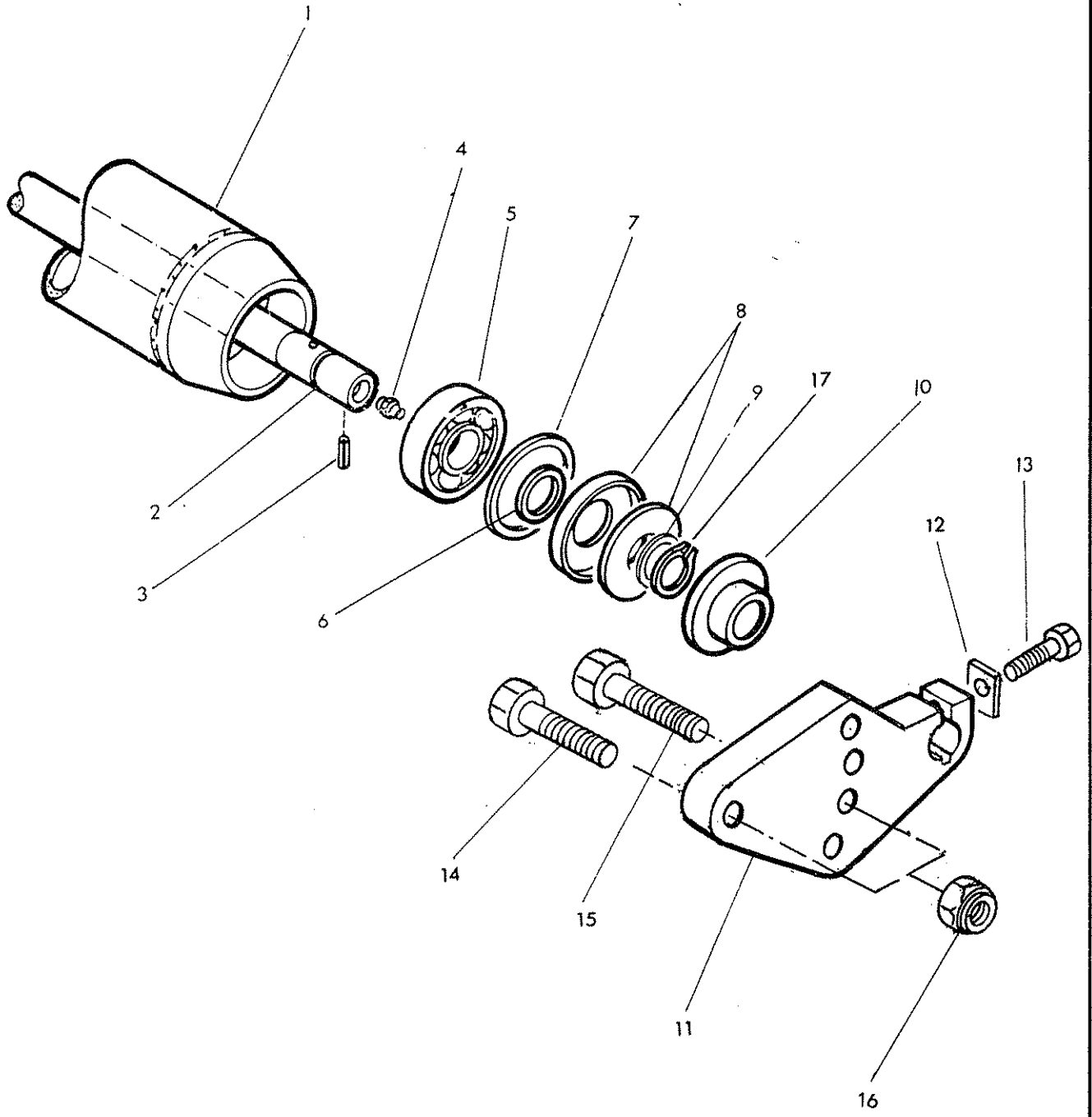
|     |           |    |                            |
|-----|-----------|----|----------------------------|
| 1   | 71 91 372 | 1  | Rotor                      |
| 2   | 71 90 166 | 40 | Flail                      |
| 3   | 71 90 462 | 20 | Flail                      |
| 4   | 71 91 138 | 20 | Shackle                    |
| 5   | 71 91 139 | 20 | Spacer                     |
| 6   | 71 91 320 | 20 | Flail                      |
| 7   | 71 91 054 | 20 | Spacer                     |
| 8   | 71 90 315 | 40 | Flail                      |
| 9   | 71 91 095 | 40 | Bush                       |
| 10  | 71 91 109 | 18 | Bolt - special             |
| 11  | 01 41 005 | 20 | Self locking nut           |
| 12  | 01 00 305 | 40 | Internal shakeproof washer |
| 13* | 71 14 082 | 2  | Bolt - special             |

\* Assembly note - Used in end lugs only

ROLLER

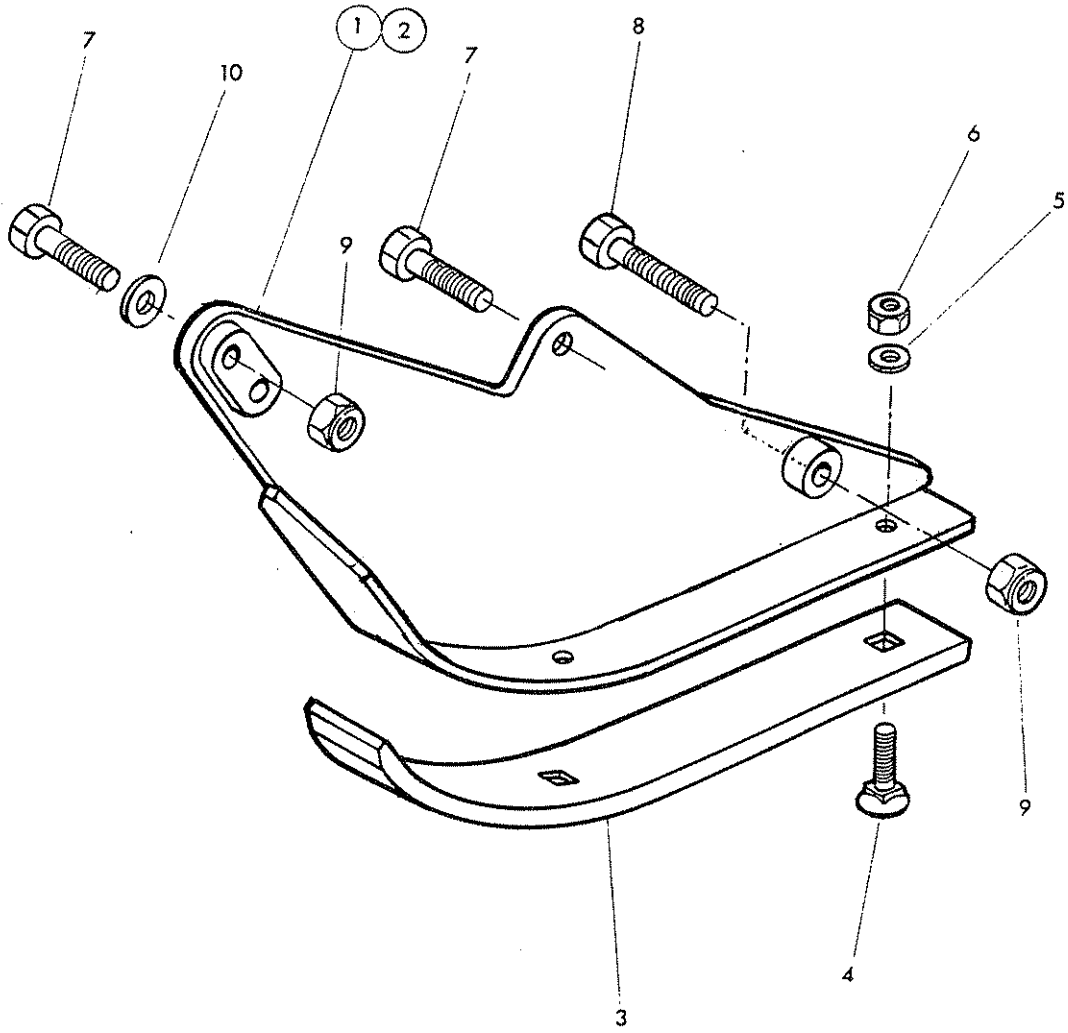


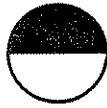
McCONEL





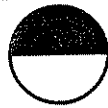
| Ref. Part No.   | Qty.      | Description              |
|-----------------|-----------|--------------------------|
| ROLLER ASSEMBLY |           |                          |
| 1               | 71 91 284 | 1 Roller                 |
| 2               | 71 91 286 | 1 Axle                   |
| 3               | 04 25 408 | 1 Spring dowel           |
| 4               | 09 01 121 | 2 Greaser - straight     |
| 5               | 06 00 088 | 2 Bearing                |
| 6               | 71 91 092 | 2 Spacer washer - small  |
| 7               | 71 91 093 | 2 Spacer washer - large  |
| 8               | 71 91 091 | 2 Sealing washer set     |
| 9               | 71 91 107 | as<br>req<br>Roller shim |
| 10              | 71 91 285 | 2 Roller spacer          |
| 11              | 71 91 378 | 2 Roller bracket         |
| 12              | 41777.01  | 2 Tab washer             |
| 13              | 02 11 165 | 2 Bolt                   |
| 14              | 02 11 166 | 2 Setscrew               |
| 15              | 02 11 186 | 2 Setscrew               |
| 16              | 01 41 006 | 4 Self locking nut       |
| 17              | 04 01 225 | 2 External circlip       |





| Ref. Part No.            | Qty.      | Description                  |
|--------------------------|-----------|------------------------------|
| <b>SKID KIT - Option</b> |           |                              |
| 1                        | 71 98 368 | 1 Skid - L.Hand              |
| 2                        | 71 98 369 | 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 11 106 | 4 Set screw                  |
| 8                        | 03 11 126 | 2 Set screw                  |
| 9                        | 01 41 006 | 4 Self locking nut           |
| 10                       | 01 00 106 | 2 Plain washer               |





**⚠ 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.

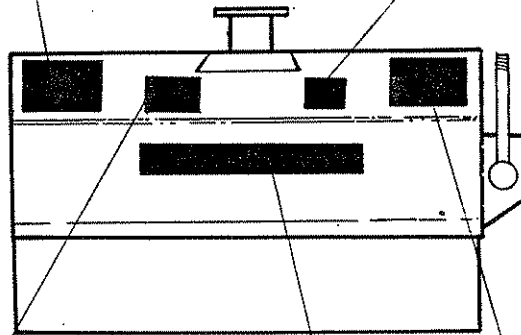
**BEWARE OF FLYING DEBRIS. KEEP PEOPLE AWAY.  
ATTENTION AUX PROJECTIONS. SE TENIR A L'ECART.**



**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



**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  
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 fleaux.  
Patins recommandes.

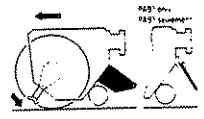
**HEDGE CUTTING  
TAILLE DE HAIES**



With flails cutting upwards.  
Roller set above flails.

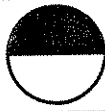
Les fleaux travaillant en  
aspiration.  
Rouleau regle au dessus des  
fleaux.

**HEDGE CUTTING  
TAILLE DE HAIES**



With flails cutting downwards.  
Roller set above flails.

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



| 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     |



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