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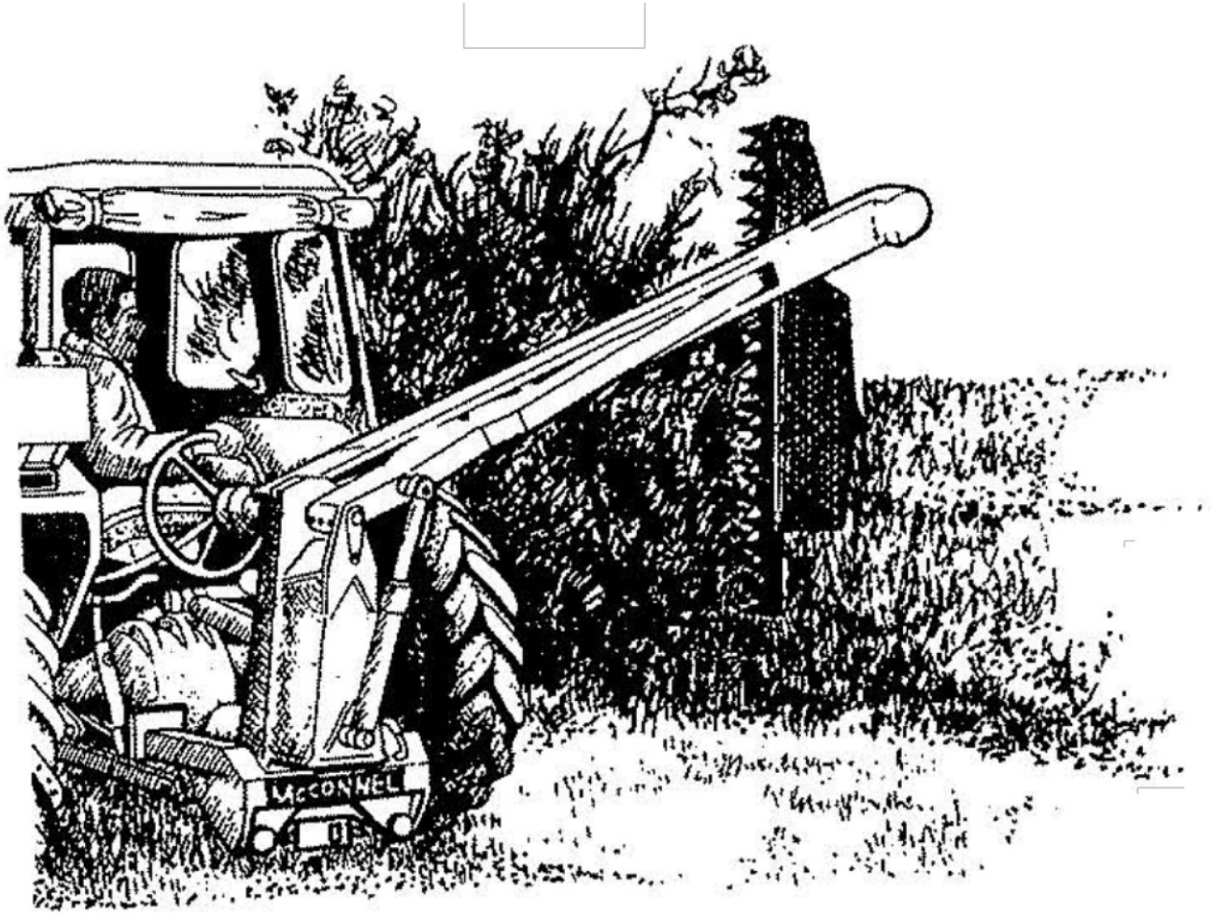
Part No. 10 80 850

SWINGOVER HEDGER

OPERATION AND SPARE PARTS MANUAL



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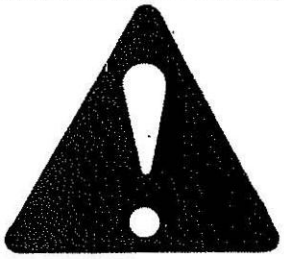
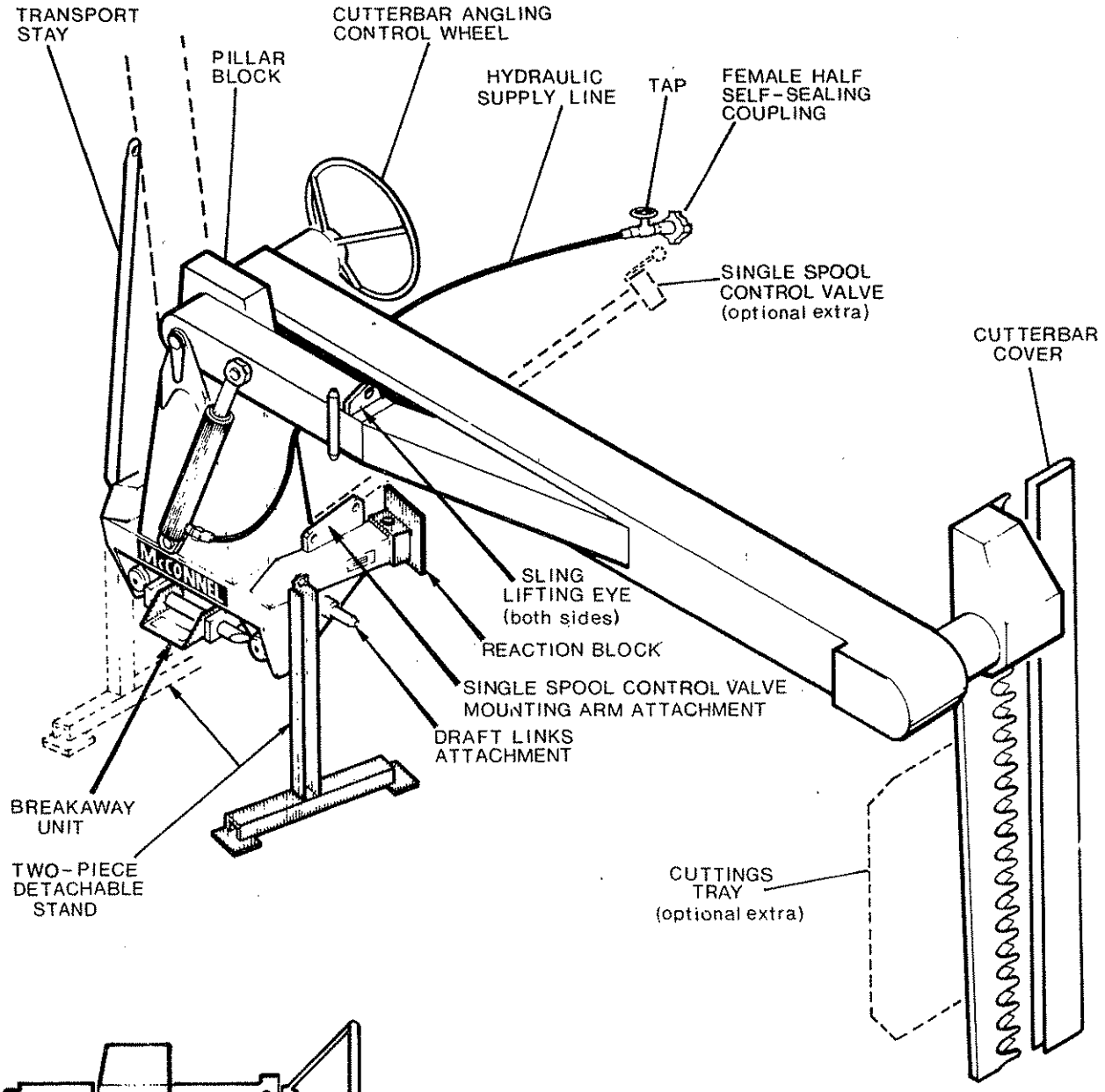
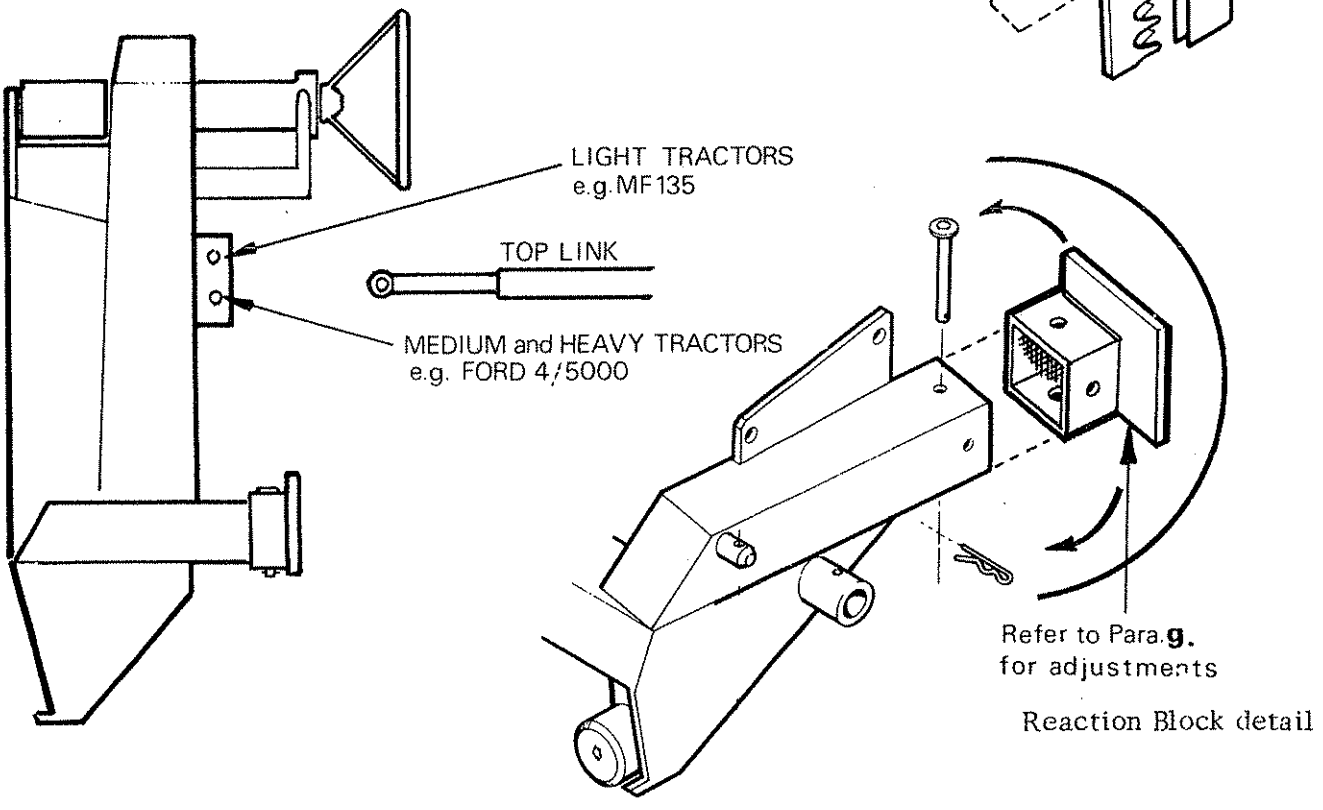


WARNING

SAFETY PRECAUTIONS

NEVER	....	leave the PTO engaged when the tractor is unattended.
	....	exceed 400 RPM on the PTO shaft.
	....	operate the machine without safety guards covering PTO shaft drive belts and chain in position.
	....	park or transport machine with the main arm vertical.
	....	operate machine with the breakaway device 'locked'.
	....	raise machine on the tractor linkage after the PTO driveshaft is fitted.
ALWAYS	....	when travelling on a public highway, the transport stay should be fitted, the breakaway device locked and the cutterbar turned inboard over the cab roof.
	....	make sure there is adequate clearance around tractor before carrying out 'swingover' operation.
	....	before operating machine ensure hydraulic hoses are not kinked frayed or trapped.





Reaction Block detail

SECTION 2 FITTING INSTRUCTIONS

Tractor requirement and preparation

a) Tractor hydraulic pump should be serviceable and capable of delivering a minimum pressure of 2000 psi.

b) LINKAGE ISOLATION IS ESSENTIAL ON ALL TRACTORS.

CAUTION:- The push/pull control knob on Ford isolation valves should be protected against accidental engagement. It should be retained in the 'out' position at all times.

c) Lower draft links and ensure both are set at the same height above level ground by adjusting levelling box.

d) Adjustable stabilizer bar or check chains must be used.

e) Leave tractor PTO shield in place.

Machine preparation and fitting

a) Remove transport stay placing the cutter bar on the ground.

b) Remove the reaction blocks and reverse tractor, stop engine before attaching draft links and stabilizer bar to the machine linkage pins. (use sieeves for Category II linkage).

NOTE: Care should be taken to see that the rear tractor wheel does not foul cutter bar.

c) Fit top link to machine and couple to tractor.

d) Start tractor and raise machine sufficiently to take the weigh fit and adjust stabilizer on tractor to centralize the machine.

e) Connect the swingover's hydraulic supply line to the tractors isolated hydraulic system.

f) Raise machine on linkage sufficiently to remove support legs, then raise or lower to obtain PTO shaft alignment to within 15°. Do not fit the drive shaft at this stage.

g) Fit reaction blocks so that the flange contacts the draft link. The reaction blocks can be rotated to four different positions and if necessary changed from side to side. Both blocks must be set to the same height.

h) Lower the machine on the linkage and adjust top link to bring the pillar vertical.

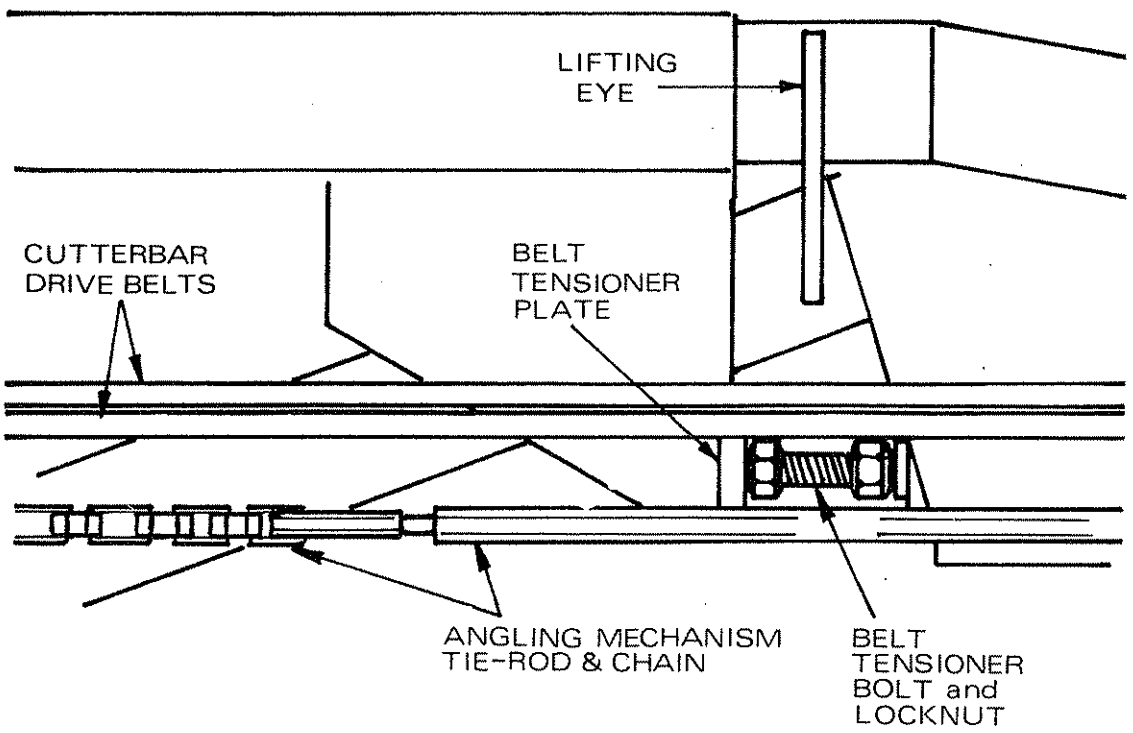
i) Fit PTO drive shaft and cover.

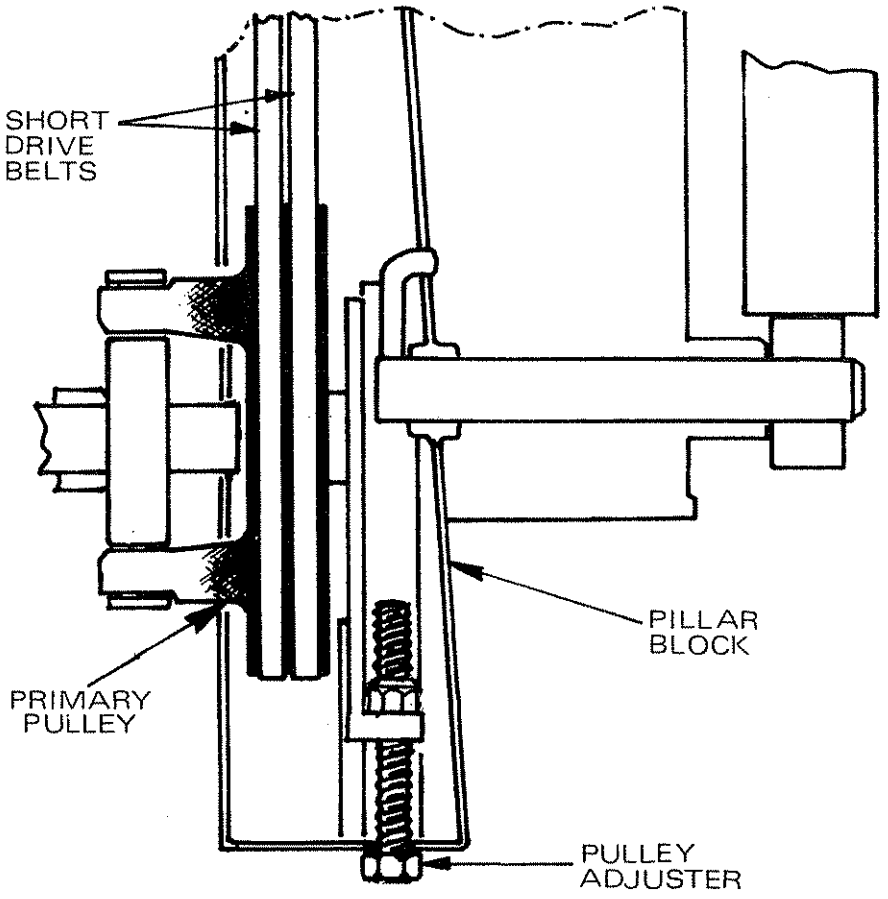
CAUTION: The drive shaft supplied with the machine should be long enough to provide the minimum shaft overlap of 3½" on most common tractors.

On tractors with long draft links eg. M.F. 185 an extra long drive shaft assembly should be fitted part number 10 80 144.

When changing the machine to an alternative tractor it may be necessary to cut off any surplus length of the internal tube to confirm to dimensions shown on page 10.

DRIVING BELTS - ADJUSTMENT DETAILS





FUNCTIONAL CHECKS

After fitting the machine, carry out the following checks and adjustments making sure there is ample space around tractor and cab.

a) With linkage isolated, start tractor, and open tap in hydraulic supply hose.

b) Using tractor quadrant lever, raise the cutter bar 5' off the ground and check that the machine is level. Then lower the cutter bar to ground noting its rate of descent.

c) To suit tractor oil viscosity rate of descent can be adjusted as follows:-

(i) With cutter bar resting on ground, stop tractor.

(ii) Remove hydraulic hose from ram which will reveal a slot headed screw.

(iii) Turn CLOCKWISE to slow rate of descent.
Turn ANTI-CLOCKWISE to increase rate of descent.

Cutterbar

With the tractor p.t.o. disengaged and the engine stopped, remove the belt guards and pull along the 'V' belts to operate the knife through its full cycle of movement. Any tight spots should be investigated. It is possible for the cutterbar mechanism to be damaged or otherwise become misaligned during shipment.
Refer to page 11 Cutterbar Maintenance for adjustment.

Knife drive

The connecting rod guard additionally carries wear strips which support tne knife heel. A check for overheating should be made by operating the machine for a few minutes under no load at about 250 r.p.m. on the p.t.o. Stop tractor and place a hand against the guard in the area of the wear strips. Although it is expected that the guard will get warm, the guard should be re-adjusted if hot spots occur. See page 12

Drive belt tension check

a) Drive belts in the pillar block assembly should have approximately ¾" deflection midway between pulleys. The adjuster (see Fig. 4) is situated in the base of the pillar.

b) Cutterbar drive belts should be tightened sufficiently to eliminate slip during normal working. After any adjustments, the tensioner locknuts should be securely tightened. Belt tension should be checked frequently in the first few hours of work.

Angling Mechanism Chain Tension Check

With the machine arm and cutterbar parallel to ground on the left hand side of the tractor there should be 1½" of vertical movement at cutterbar tip. Adjustment is made on chain tensioner as shown on page 10.

If the chain is too tight then excessively stiff cutterbar angling will result.

General

Machine should be thoroughly lubricated according to the maintenance chart. All hydraulic connections checked for leaks, and hoses are not kinked or fouled.

SECTION 3 OPERATION

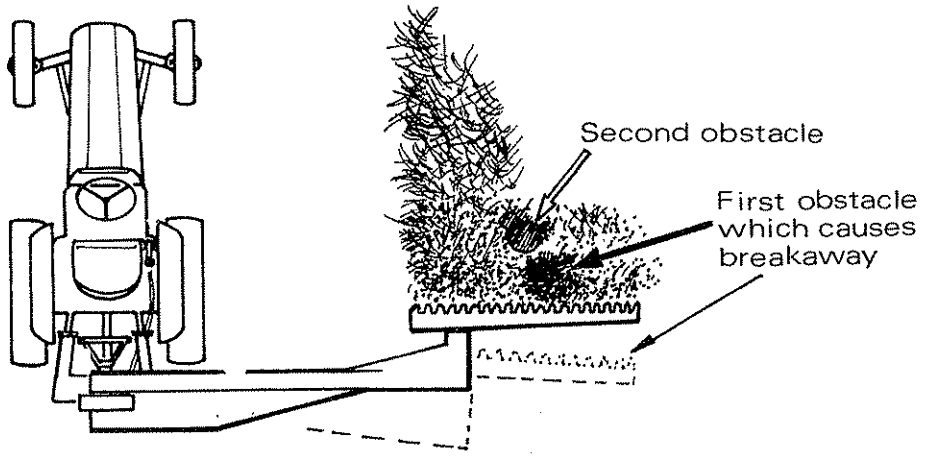
The following points should be observed.

a) PTO Speed Recommended range between 280 - 400 RPM. Run at a speed that gives the smoothest operation consistant with good performance.

b) Linkage Isolation On some tractors linkage isolation is not completely positive, therefore the linkage may creep upwards when the swingover is being used. Should both reaction blocks lose contact with the tractor draft links, the pillar assembly could become unstable and detached from the linkage lift frame. If this creeping occurs, return tractor quadrant lever to neutral, de-isolate linkage to allow machine to settle then isolate linkage again before operating quadrant lever.

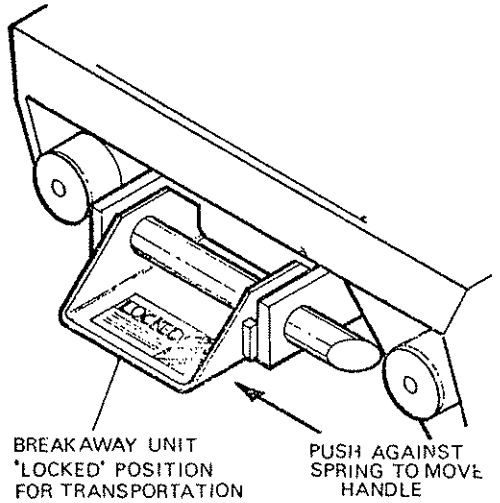
c) Breakaway Action

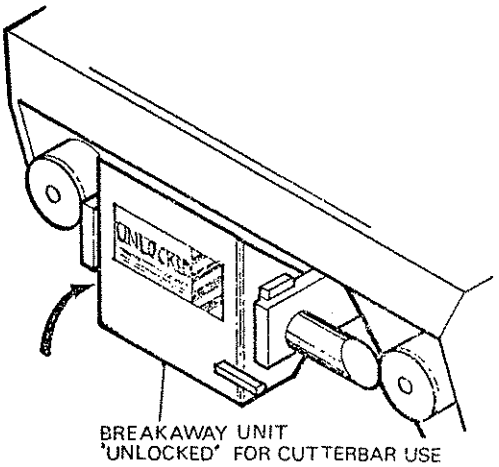
The automatic self-returning breakaway device has been designed to reset the cutterbar within the limits of its travel. The cutterbar will still operate when the breakaway comes into action, therefore operators are warned not to continue driving forwards with the main arm back against the breakaway stop. If another obstacle was encountered, damage to the machine could result.



When the breakaway action occurs and the cutterbar rises out of work, allow the knife to run free before moving forward again.

Do not attempt to use the machine with the breakaway locked.





d) Swingover Action

The cutterbar can be operated on either side of the tractor. Make sure there is adequate clearance and headroom before carrying out the following:-

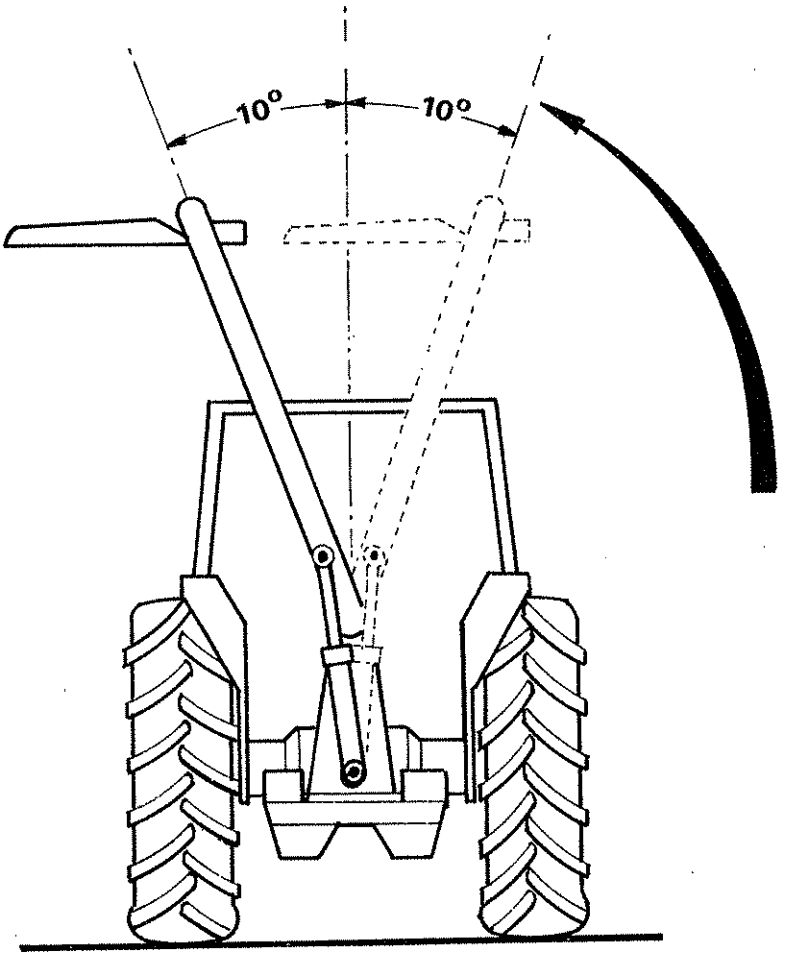
i Raise the arm about 6ft. off the ground and angle cutterbar to the inboard position.

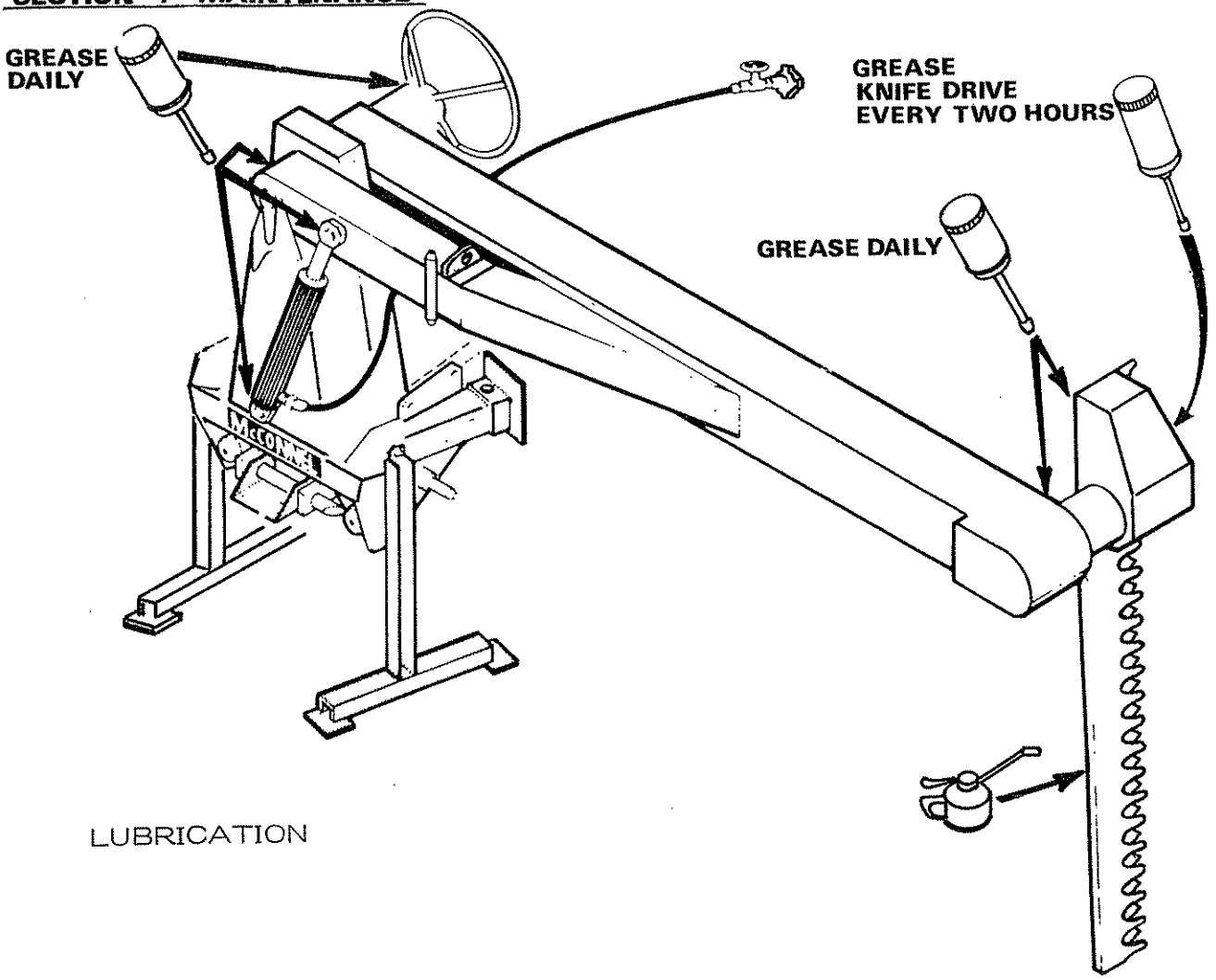
ii Raise the arm quickly to about 10° of the vertical position and return control lever to neutral. The momentum of the cutterbar will carry the arm over the vertical centre position and bring it to rest about 10° after vertical.

iii A lowering movement of the control lever will lower the arm to working position. After a little practice, this operation can be carried out very smoothly.

CAUTION Do not continue to hold control lever in raised position when the arm is vertical or damage to the ram and arm could result.

NOTE The speed of lift is determined by the tractor engine speed and is in no way controlled by the restrictor in the ram.





LUBRICATION

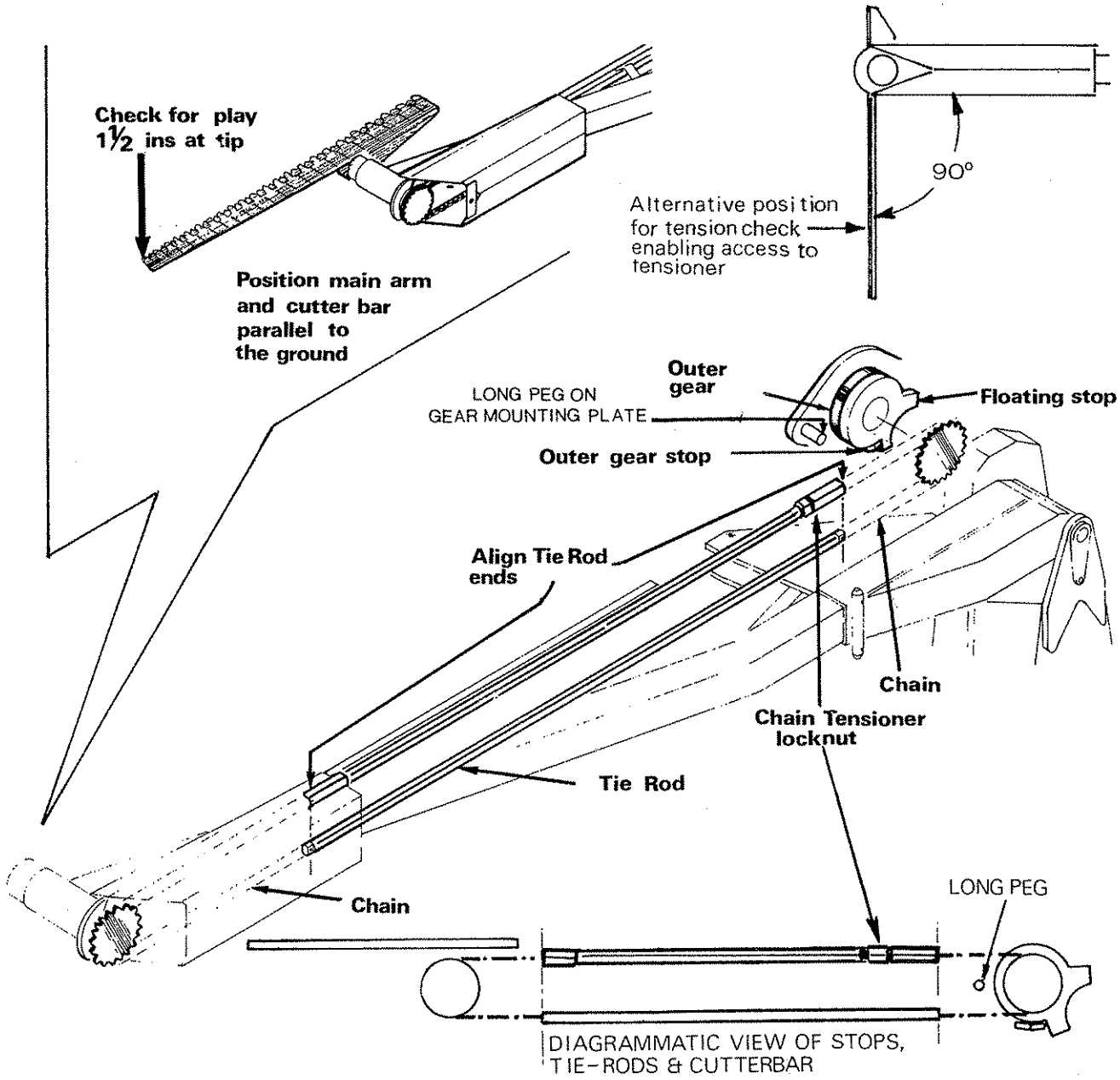
STORAGE

Ensure the swingover is stored on firm level ground and in a safe place. The machine is perfectly stable with the cutterbar tip resting on the ground but the cutterbar should be wrapped and protected against corrosion.

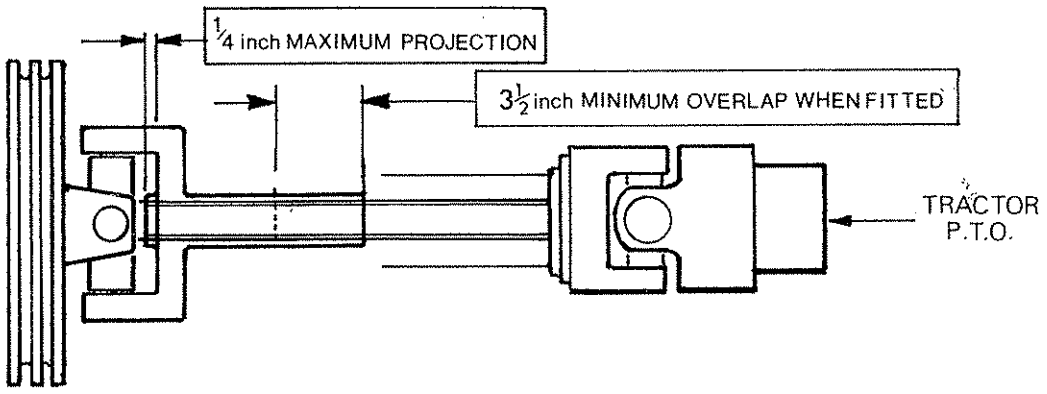
Slacken off drive belts and check their condition, also check the cutterbar, sections, knife clips, connecting rod etc. so that replacements can be ordered.

Lubricate all polished surfaces and apply grease to the exposed portion of the ram rod. Place hydraulic hose where it will not be damaged and cover the self seal coupling with a plastic bag to avoid contamination.

ANGLING CHAIN TENSION AND TIMING DETAILS



DIAGRAMMATIC VIEW OF STOPS, TIE-RODS & CUTTERBAR



PTO DRIVESHAFT FITTING

Cutterbar Maintenance

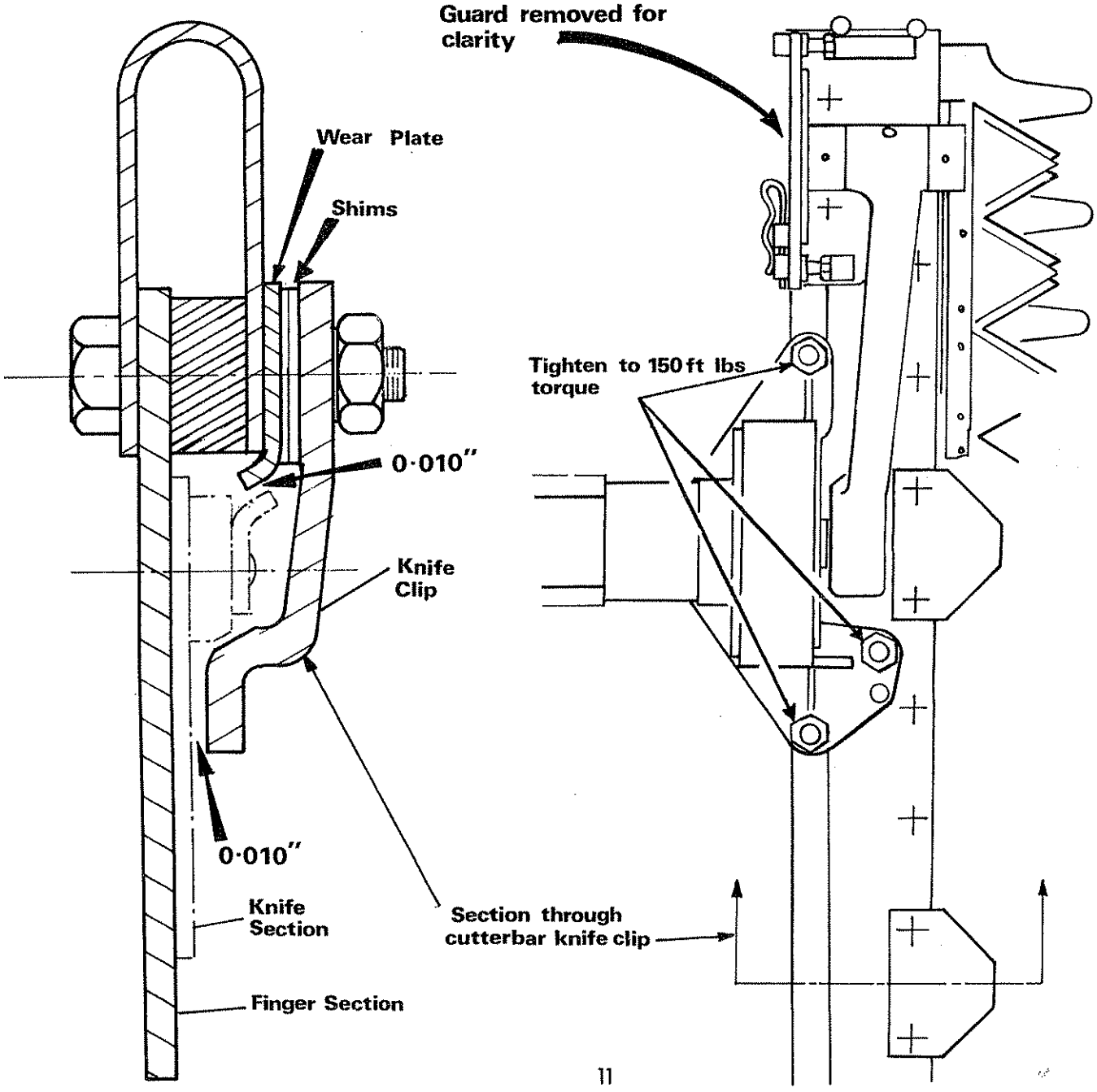
Examine knife clips, knife sections and finger sections for signs of wear and damage, and replace as necessary.

Note : Finger sections can be removed and turned over to give a longer working life.

All bolts must be kept tight. If cutterbar is removed for any reason the three mounting bolts should be tightened to 150 ft/lbs torque when refitting.

Knife Drive

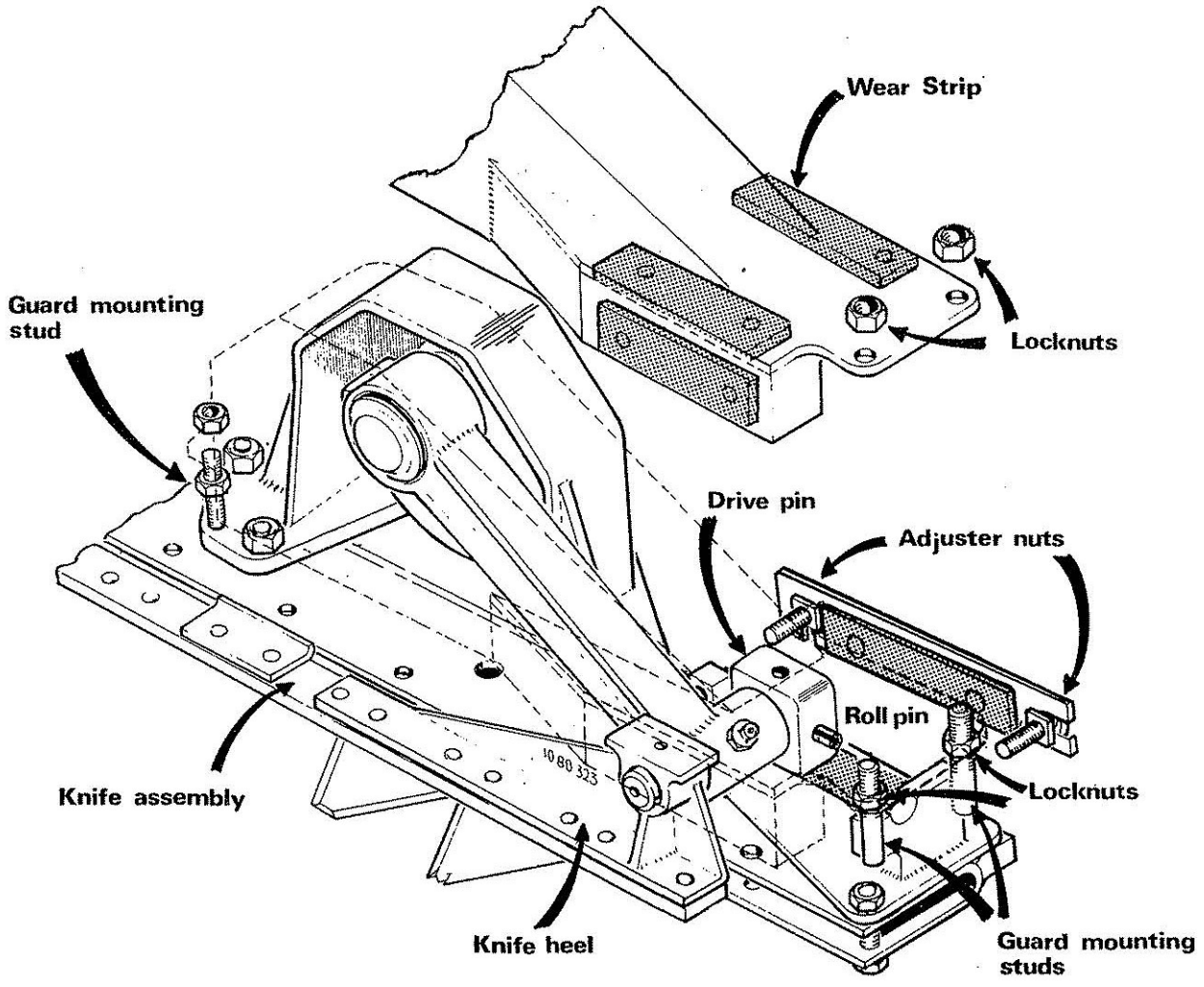
Careful attention must be paid to the initial setting of the knife in the cutterbar. A running clearance of approx. .010" should be maintained between the knife back and the wear plate. This adjustment is obtained by loosening the bolts and nuts that retain the knife clip assembly and moving the wear plate in its slotted holes.
Clearance of .010" between the knife clip and knife section must be maintained by removal of shims.



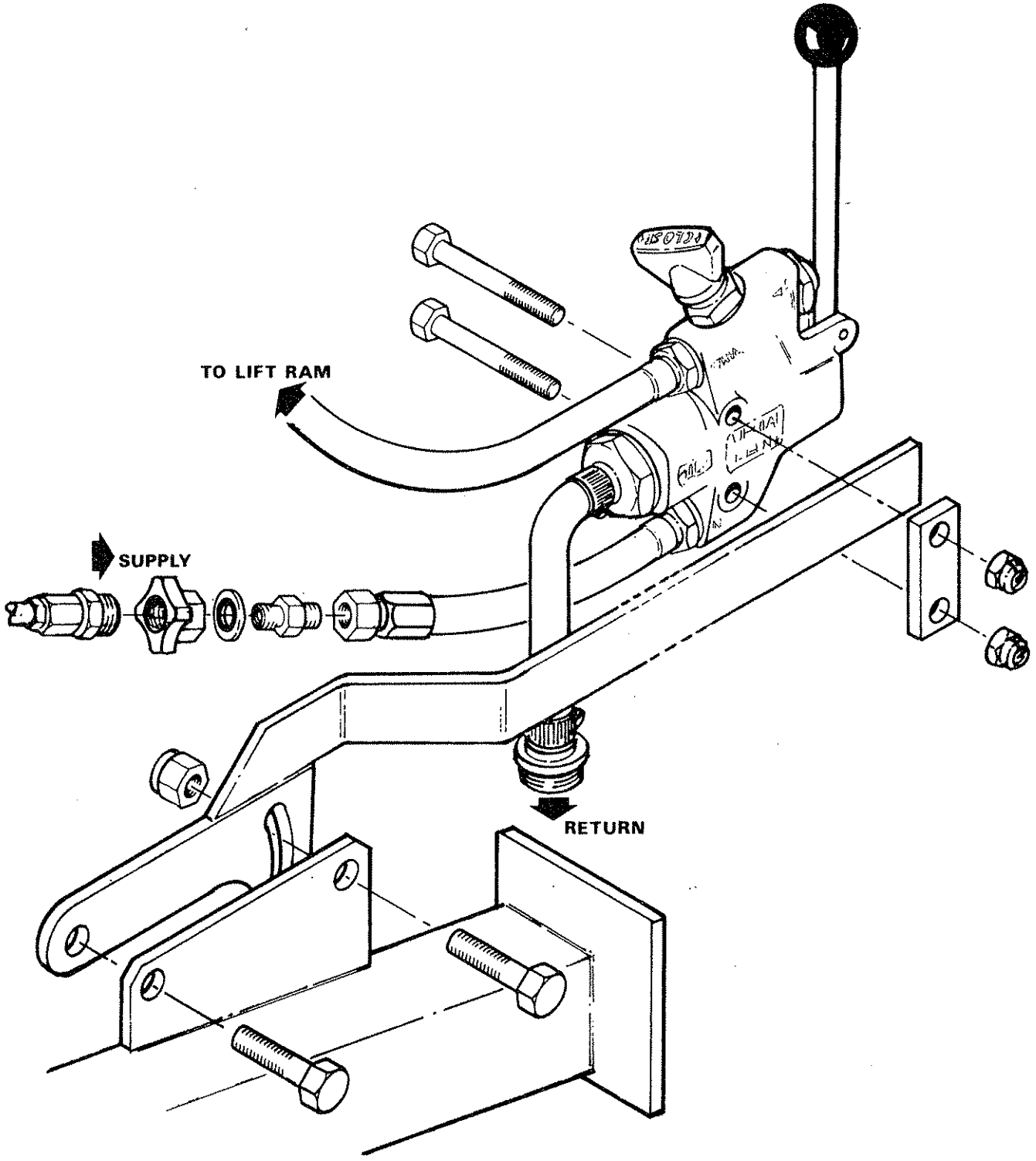
Drive guard adjustment.

The drive guard which supports the knife heel is suspended on three mounting studs. The lower locknuts on these studs must be adjusted so that the guard does not exert excessive pressure on the sliding surfaces of the knife heel when the upper lock nuts are tightened. The guard should be evenly adjusted on the three studs to give a sliding clearance between the wear strips and the top faces of the knife heel and square headed pin. Excessive clearance will cause 'hammering' and eventual failure of the studs and knife back. If adjustment is too tight the rubbing surfaces will rapidly overheat.

The square headed pin is located by the retainer plate and adjusted by two adjuster studs to give a light rubbing clearance. A roll pin embedded in the side of the square head enables the drive pin to be correctly assembled for lubrication purposes.
All locknuts should be firmly tightened after completing adjustment.



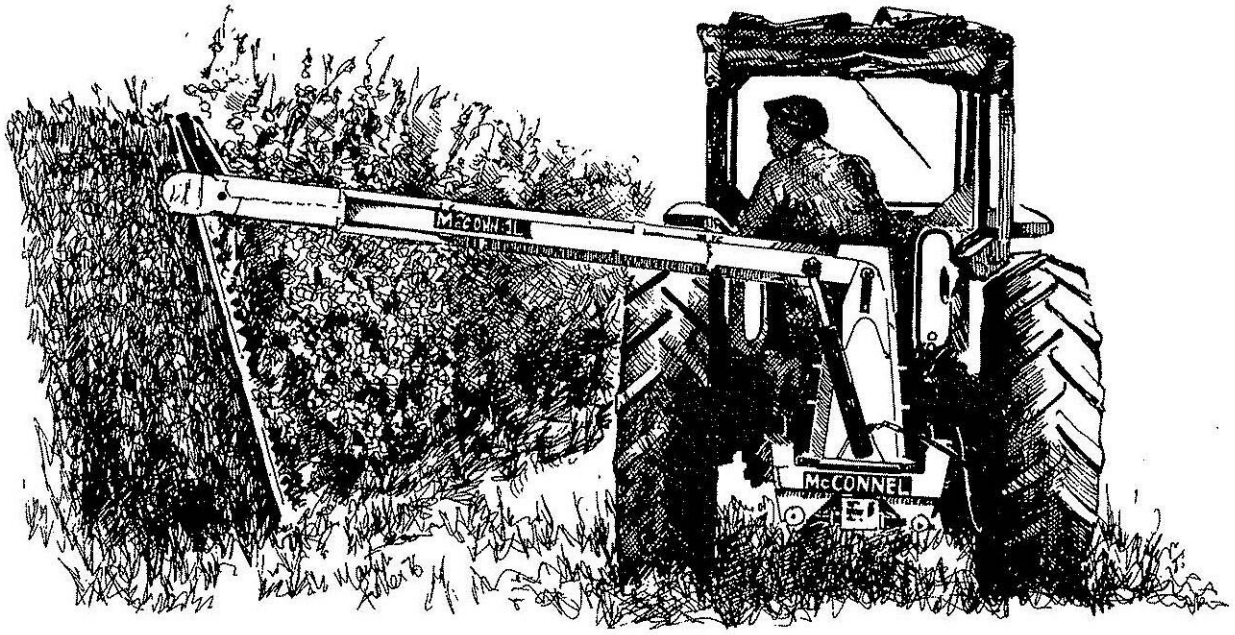
SINGLE SPOOL CONTROL VALVE



McConnel Control Valve

Whenever difficulty is experienced in finding and holding a neutral position of the tractor hydraulic control lever it is recommended that a McConnel Single Spool Control Valve is fitted. The Single Spool Control Valve is designed to provide a more positive and safer control of the SWINGOVER Hedger. The control valve assembly can be fitted on either side of the SWINGOVER linkage lift frame for the convenience of the operator.

Spare Parts Manual
SWINGOVER HEDGER



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 F.W. 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.

THE DOT SYSTEM

Many spares are supplied as Assemblies or as Sub assemblies and to help the customer determine the composition of an Assembly the Dot System is used. The Main Assembly will not show a dot preceding its description and is printed in BLOCK CAPITALS. Subsequent listed parts are preceded by one or more dots until the next major assembly is reached. An increase in the number of preceding dots indicates that the item is an associated part of the preceding item. Whenever the number of dots are decreased by one this indicates the termination of an assembly.

PILLAR, LIFT FRAME & BREAKAWAY UNIT

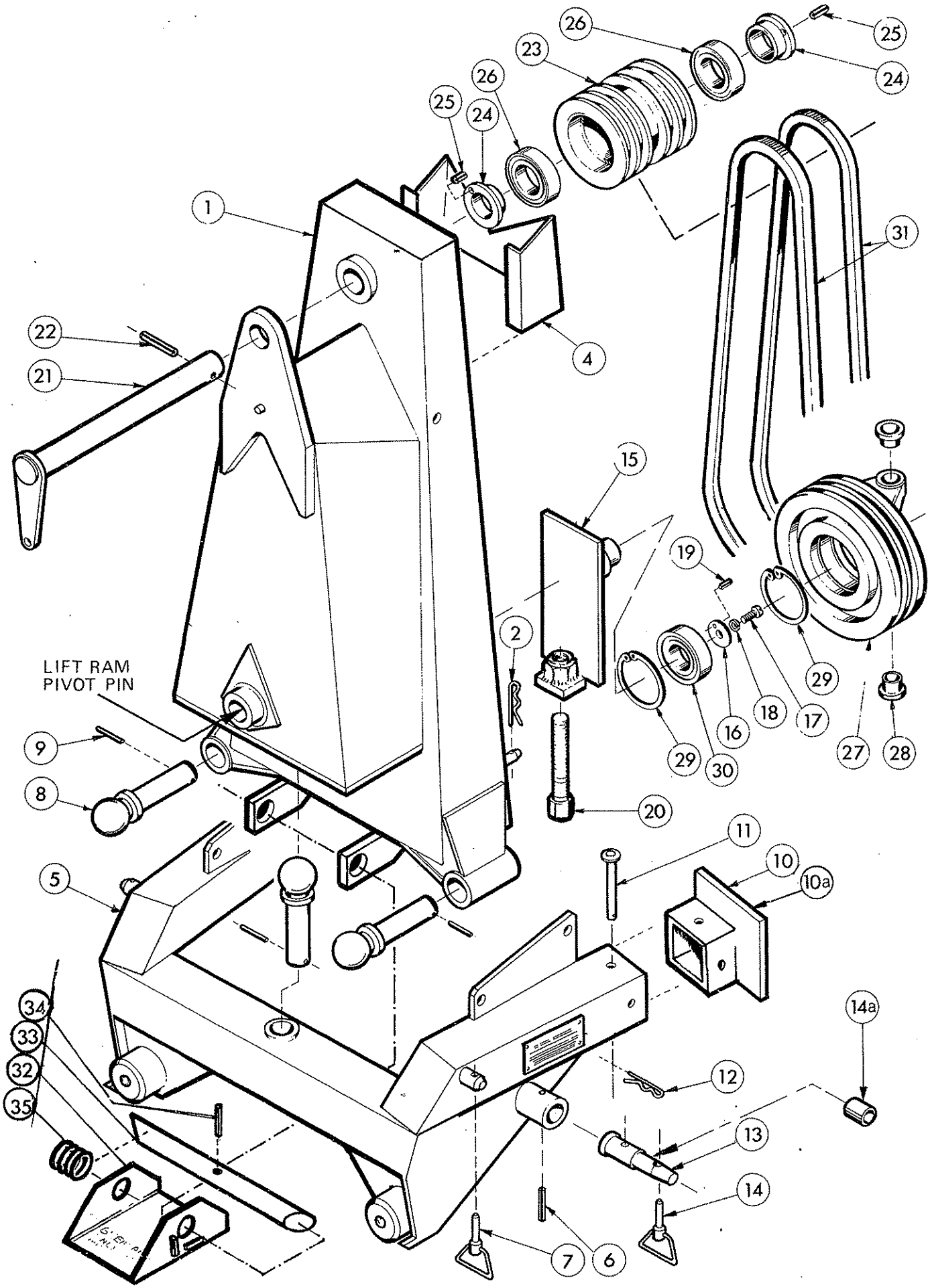


Illustration Ref. Number	Part Number	Qty	Description
	10 80 250	1	SWINGOVER HEDGER ASSEMBLY consisting of:-
1	10 80 251	1	.Pillar Assembly c/w spring cotters
2	04 31 105	2	..Spring cotter
3	14 67 049	1	..Top hitch pin (if fitted) c/w chain and split pins
3a	14 67 063	1	..Sleeve (if fitted)
4	10 80 058	1	.Loose guard (Pillar Assembly)
5	10 80 257	1	.Linkage lift frame c/w pins
6	04 22 714	2	..Spring dowel 7/7" x 7/16" dia.
7	04 31 217	1	..Linchpin
8	10 80 028	3	.Breakaway ball pin c/w spring dowel
9	04 21 628	3	..Spring dowel 1¾" x 3/16" dia.
10	10 80 029	1	.Reaction block, R.H. c/w location pin
10a	10 80 030	1	.Reaction block, L.H. c/w location pin
11	10 80 080	2	..Location pin & spring cotter
12	04 31 105	2	..Spring cotter
13	10 80 069	2	.Linkage pin c/w spring dowel
14	04 21 628	2	..Spring dowel, 1¾" x 3/16" dia.
14a	14 67 096	2	..Sleeve (if fitted)
15	10 80 056	1	.Belt adjusting bracket c/w special washer, setscrew, spring washer & spring dowel
16	10 80 057	1	..Special bearing retaining washer
17	03 11 085	1	..Setscrew, 1" x ½" UNF
18	01 00 205	1	..Spring washer, ½" dia.
19	04 21 810	1	..Spring dowel, 5/8" x ¼" dia.
20	10 80 042	1	.Belt tensioner bolt
21	10 80 024	1	.Arm pivot pin c/w spring dowel
22	04 21 836	1	..Spring dowel, 2¼" x ¼" dia.
23	10 80 270	1	.Counter pulley
24	10 80 059	2	.Counter pulley bearing carrier c/w spring dowel
25	04 21 810	2	..Spring dowel, 5/8" x ¼" dia.
26	06 00 013	2	.Ball bearing assembly
27	10 80 269	1	.Primary pulley c/w bushes & circlips.
28	60 02 150	2	..Bush
29	04 16 280	2	..Circlip, internal
30	06 00 009	1	.Ball bearing assembly
31	10 80 210	2	.V-belt, short (matched set)
32	10 80 294	1	.Breakaway lock handle
33	10 80 125	1	.Breakaway lock bar c/w spring dowel
34	04 22 628	1	..Spring dowel 1¾" x 3/8" dia.
35	10 80 126	1	.Breakaway lock spring

ANGLING MECHANISM, STOPS & ARM SOCKET

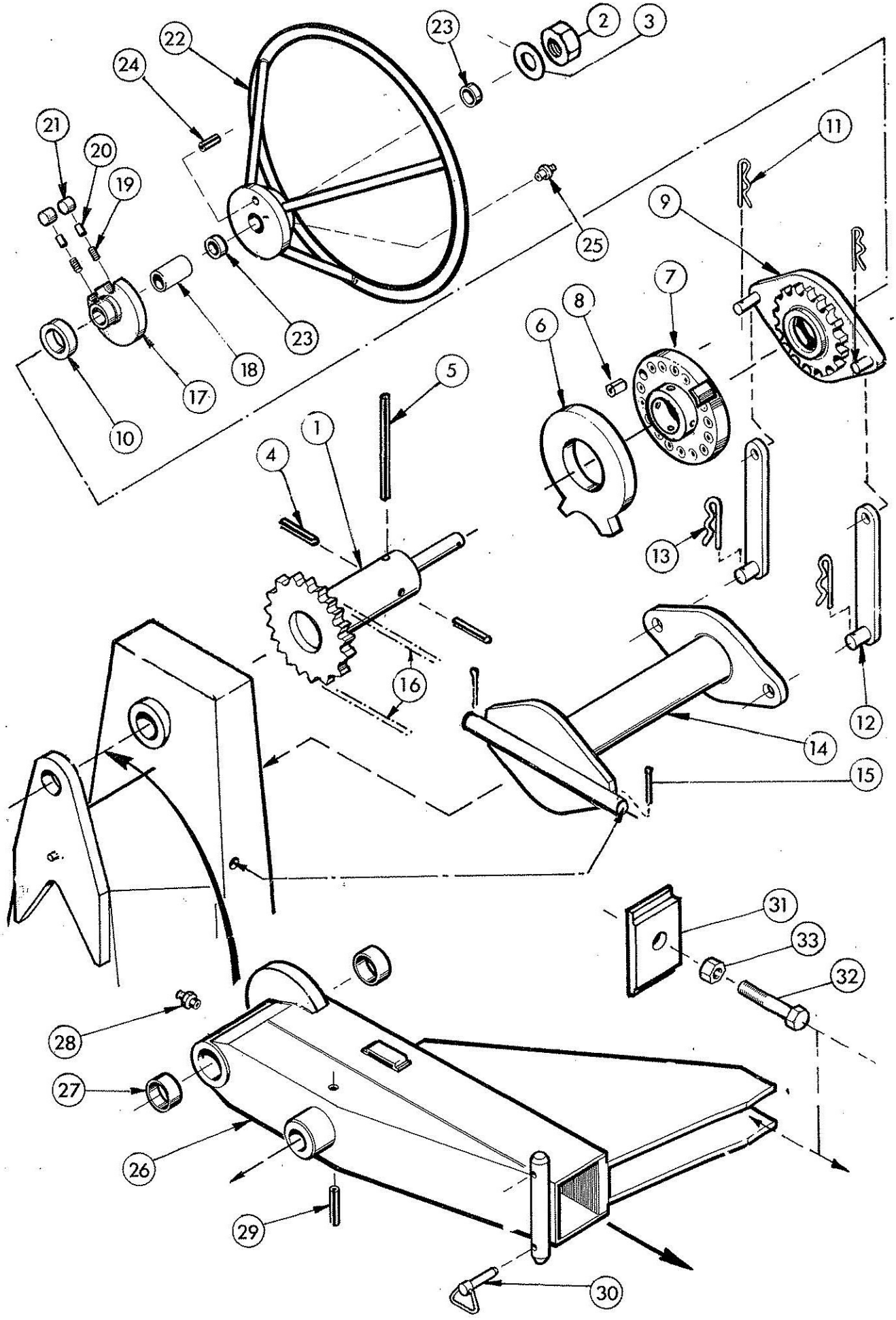
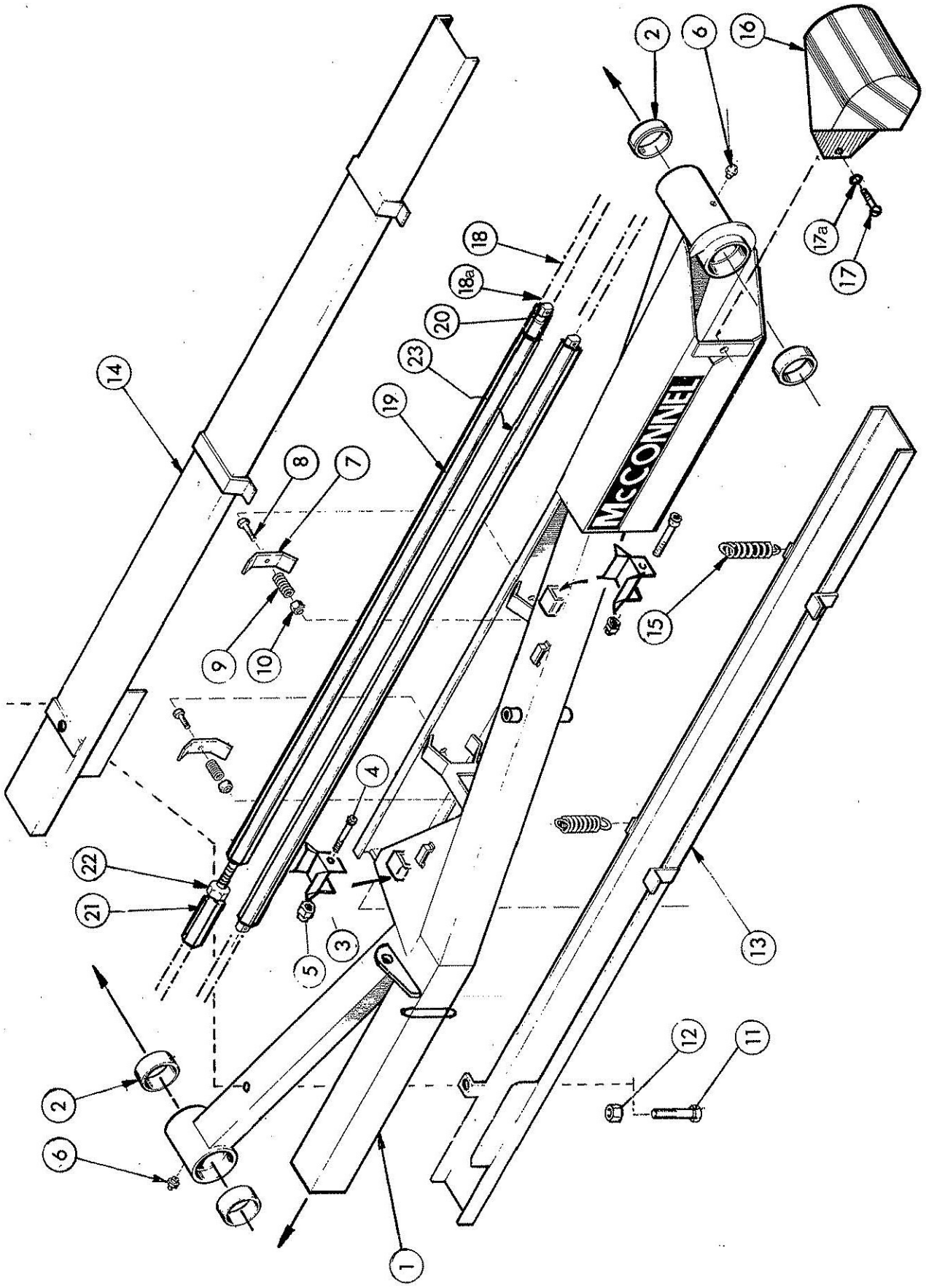


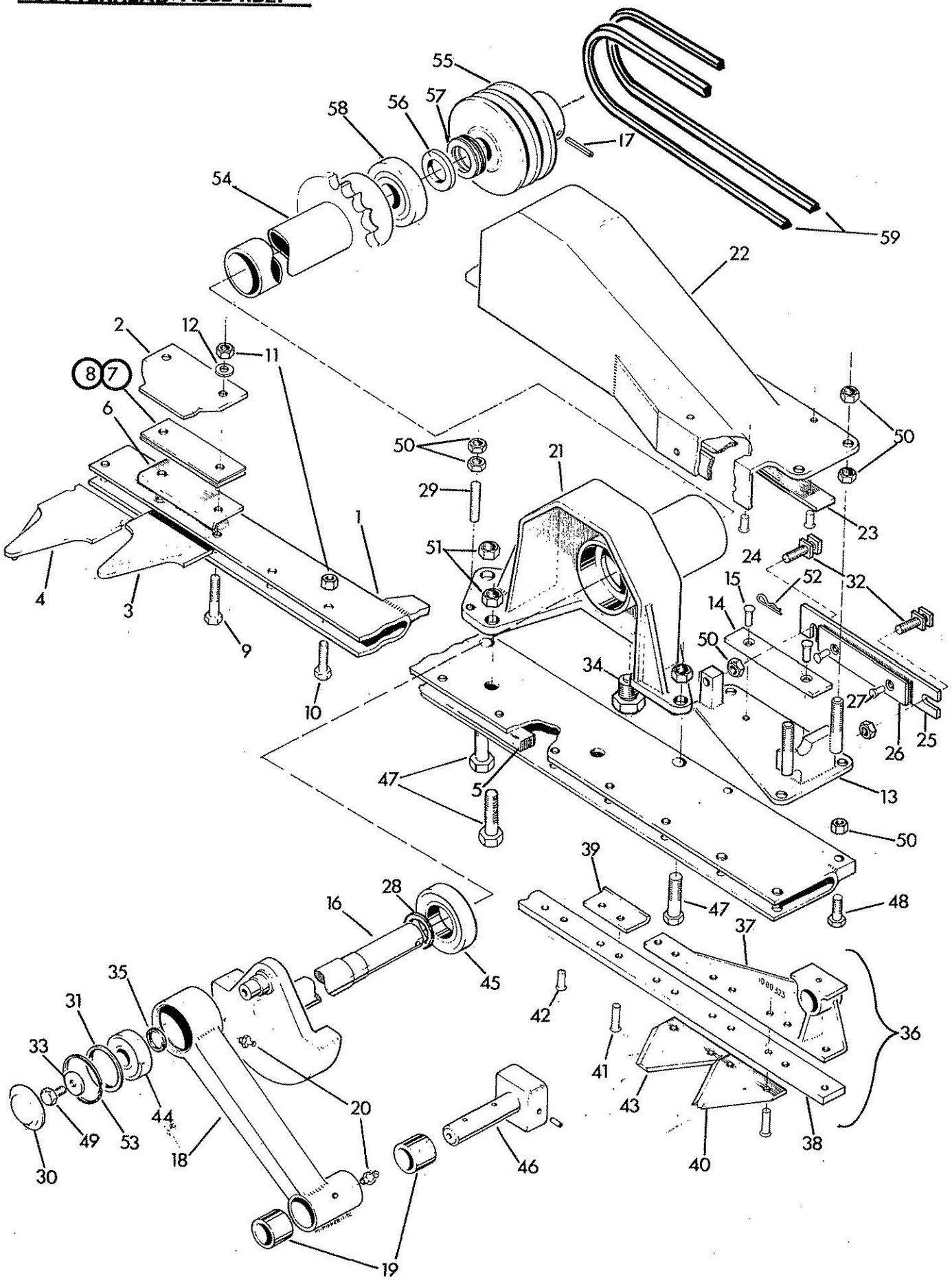
Illustration Ref. Number	Part Number	Qty	Description
1	10 80 263	1	.Angling drive shaft c/w spring dowels, washer & nut
2	01 31 007	1	..Aeronut
3	01 00 107	1	..Washer
4	04 22 832	2	..Spring dowel, 2" x ½" dia.
5	04 22 856	1	..Spring dowel, 3½" x ½" dia.
6	10 80 051	1	.Floating stop
7	10 80 046	1	.Outer gear c/w spring dowels
8	04 22 714	20	..Spring dowel
9	10 80 264	1	.Gear mounting plate c/w bush and spring cotters
10	10 80 047	1	..Bush
11	04 31 105	2	..Spring cotter
12	10 80 052	2	.Torque tube link c/w spring cotter
13	04 31 105	2	..Spring cotter
14	10 80 266	1	.Torque tube
15	05 03 095	2	..Split pin, 1.1/8" x 3/16" dia.
16	10 80 054	2	.Chain
17	10 80 048	1	.Eccentric c/w bushes & springs etc.
18	10 80 142	1	..Bush
19	81 14 009	2	..Spring
20	10 80 050	2	..Follower
21	10 80 049	2	..Roller
22	10 80 265	1	.Angling control wheel c/w bushes and spring dowel etc.
23	60 01 216	2	..Bush
24	04 22 824	1	..Spring dowel, 1½" x ½" dia. (if fitted)
25	09 01 121	1	..Straight greaser (if fitted)
26	10 80 256	1	.Arm socket c/w bushes etc.
27	71 02 180	2	..Bush
28	09 01 121	1	..Straight greaser
29	04 22 640	1	..Spring dowel, 2½" x 3/8" dia.
30	04 31 217	1	..Linchpin
31	10 80 141	1	.Belt tensioner plate
32	10 80 042	1	.Long belt tensioner bolt
33	01 12 007	1	..Locknut, ¾" UNC

MAIN ARM & GUARDS



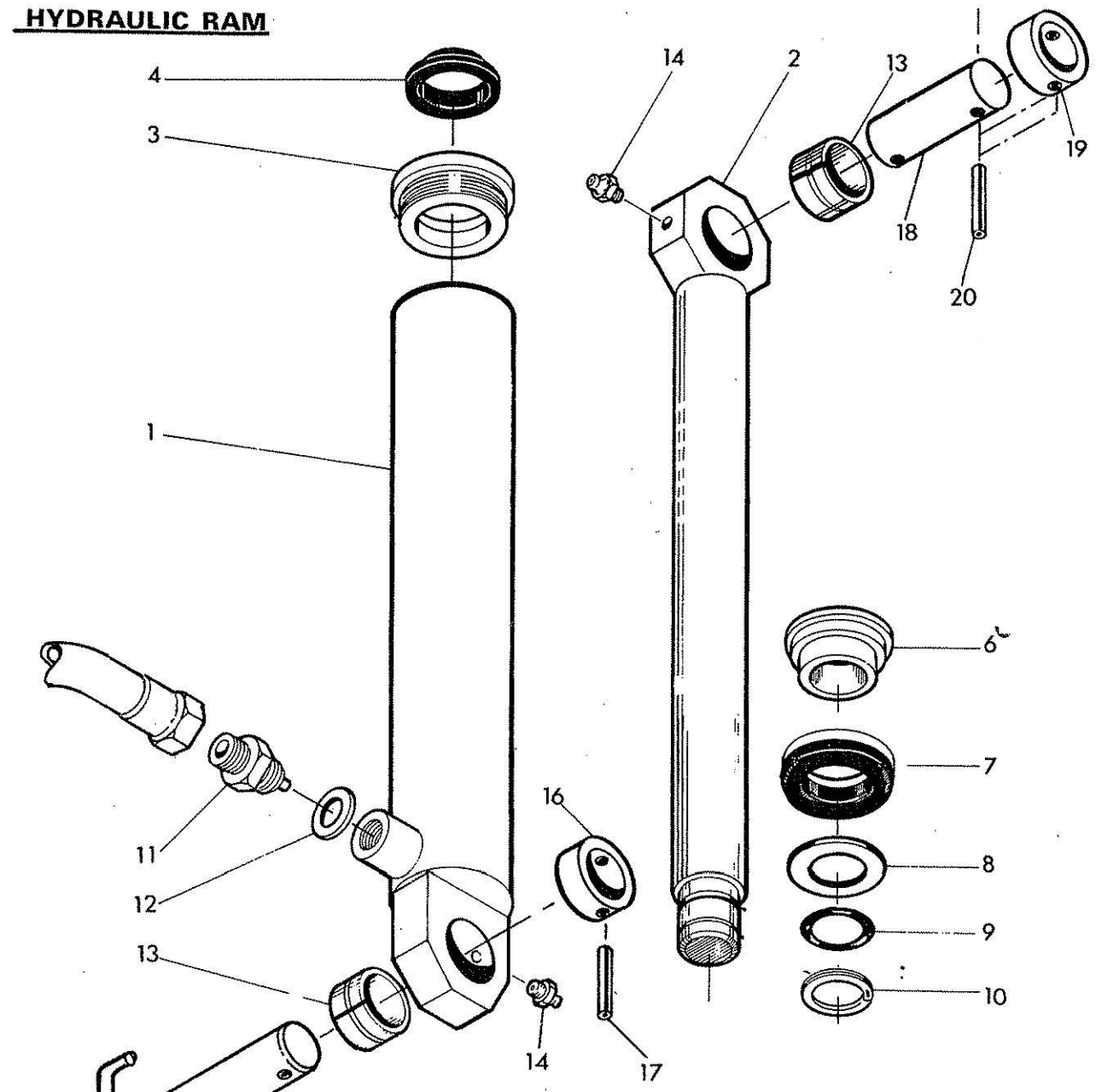
Ref. No.	Part No.	Qty	Description
1	10 80 258	1	MAIN ARM ASSEMBLY c/w bushes etc.
2	10 80 041	4	.Bush
3	10 80 110	4	.Belt guide
4	02 41 201	4	.Capscrew 2½" x ¼" UNF
5	01 41 001	4	.Aeronut ¼" UNF
6	09 01 121	2	.Greaser
7	10 80 071	2	Rod clamp
8	02 11 183	2	Bolt 2¼" x 3/8" UNF
9	60 00 110	2	Spring
10	01 61 003	2	Nyloc nut 3/8" UNF
11	02 11 243	1	Bolt 3" x 3/8" UNF
12	01 41 003	1	Aeronut 3/8" UNF
13	10 80 260	1	Top guard
14	10 80 261	1	Lower guard c/w spring catches
15	70 14 052	2	.Spring catch
16	10 80 262	1	Crankshaft pulley guard c/w setscrew
17	03 11 065	1	.Setscrew ¾" x ½" UNF
17a		1	Spring washer ½"
18	10 80 054	2	Chain
18a	60 01 165	4	Chain connecting link
19	10 80 267	1	Chain tensioner assembly
20	10 80 132	1	.Turnbuckle L.H.
21	10 80 133	1	.Turnbuckle R.H.
22	01 11 004	1	.Locknut
23	10 80 268	1	Tie bar

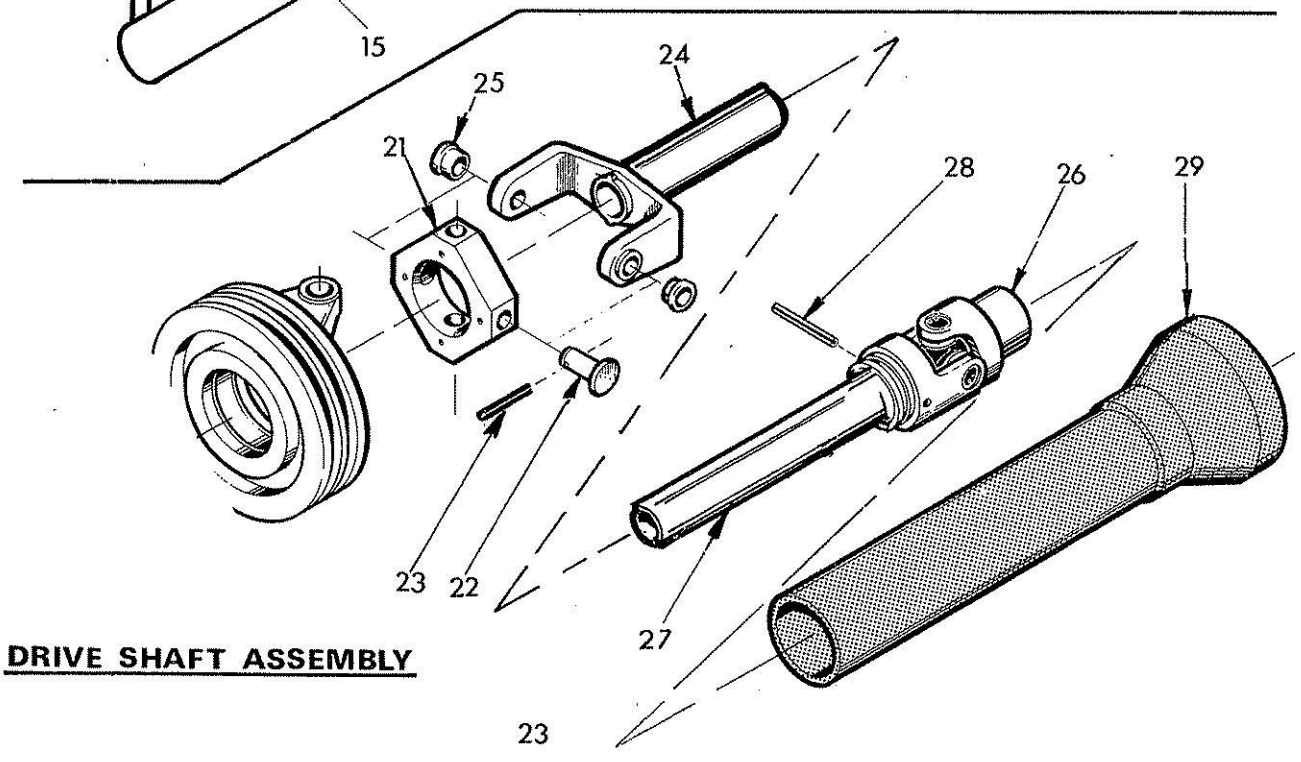
CUTTERHEAD ASSEMBLY



Ref	Part No	Qty	Description
	10 80 280	1	CUTTERHEAD ASSEMBLY
	10 80 326	1	.Cutterbar assembly
1	10 80 325	1	..Cutterbar pressing assembly
2	10 80 100	5	..Knife clip
3	10 80 098	21	..Finger
4	10 80 101	1	..End finger
5	10 80 291	1	..Distance bar
6	10 80 099	5	..Wear plate
7	10 80 102	As req'd	..Shim 2 mm
8	10 80 103	As req'd	..Shim 5mm
9	92 13 085	15	..Bolt 10 x 40 mm
10	92 13 065	9	..Bolt 10 x 30 mm
11	10 80 107	23	..Nut 10 mm
12	01 00 204	10	..Spring washer 7/16"
13	10 80 324	1	.Mounting bracket knife drive
14	10 80 153	1	..Wear strip
15	10 80 097	2	..Rivet 6mm x 15 mm
16	10 80 171	1	.Crankshaft assembly c/w spring dowel
17	04 22 740	1	..Spring dowel 2½" x 7/16" dia.
18	10 80 322	1	.Con rod c/w bushes and greasers
19	71 01 083	2	..Bush
20	09 01 121	2	..Greaser 1/8" BSP (straight)
21	10 80 320	1	.Cutter bar mounting bracket
22	10 80 321	1	.Guard c/w wearstrips and rivets
23	10 80 153	3	..Wear strip
24	10 80 097	6	..Rivet 6mm x 15mm
25	10 80 166	1	.Pin retainer c/w wear strip and rivets
26	10 80 153	1	..Wear strip
27	10 80 097	2	..Rivet 6mm x 15mm
28	10 80 082	1	.Spacer
29	10 80 168	1	.Stud
30	10 80 172	1	.Shield
31	10 80 173	1	.Spacer
32	10 80 174	2	.Adjuster stud
33	10 80 175	1	.Special washer
34	10 80 176	1	.Clamp bolt
35	60 01 075	1	.Felt seal
36	10 80 327	1	.Saw tooth knifebar assembly
	10 80 328	1	.Serrated knife bar assembly
37	10 80 323	1	..Knife heel
38	10 80 287	1	..Knife back
39	10 80 093	5	..Cleaning plate
40	10 80 094	21	..Saw tooth knife section
41	10 80 095	17	..Rivet 6mm x 20mm long
42	10 80 097	25	..Rivet 6mm x 15mm long
43	10 80 096	21	..Serrated knife section
44	06 00 001	1	.Self aligning ball bearing
45	06 00 014	1	.Ball bearing
46	10 80 152	1	.Heel pin c/w spring dowel
	04 21 608	1	..Spring dowel 3/16" x ½" long
47	92 13 157	3	.Bolt M16 x 55
48	92 13 065	2	.Bolt M10 x 30
49	93 13 045	1	.Screw M10 x 20
50	91 13 005	10	.Plain nut M10
51	81 00 001	3	.M16 Conelok nut
52	04 31 105	1	.Spring cotter
53	04 12 136	1	.Internal spirolox ring
54	10 80 281	1	.Cutterhead bearing tube
55	10 80 060	1	.Crankshaft pulley
56	10 80 120	1	.Spacer
57	10 80 115	As req'd	.Shim
58	06 00 009	1	.Ball bearing
59	10 80 209	1	.Set 'V' belts comprising:-
	09 17 421	2	..'V' belt

HYDRAULIC RAM





DRIVE SHAFT ASSEMBLY

Ref. No.	Part No.	Qty	Description
	10 80 301	1	LIFT RAM ASSEMBLY comprising:
** 1	10 80 302	1	.Lift ram barrel
** 2	10 80 116	1	.Ram rod
** 3	10 80 117	1	.Head bush c/w wiper seal
** 4	86 29 115	1	..Wiper seal
** 5	71 01 030	1	.Locking wire
6	10 80 118	1	.Seal carrier
7	86 34 131	1	.Seal
8	10 80 119	1	.Seal retaining washer
9	86 00 119	1	.'O' ring 1" i.d.
10	04 02 120	1	.Spirolox ring
11	81 07 010	1	Adjustable restrictor
12	86 50 103	1	Bonded seal 3/8" BSP
13	71 05 037	2	Bush
14	09 01 121	2	Greaser 1/8" BSP
15	10 80 022	1	Ram pivot pin c/w collar
16	10 80 040	1	.Collar
17	04 22 632	1	.Spring dowel
18	10 80 023	1	Rod pivot pin c/w collar
19	10 80 040	1	.Collar
20	04 22 632	1	.Spring dowel
			DRIVE SHAFT ASSEMBLY
21	10 80 066	1	Spider - drive shaft
22	10 80 067	4	Drive shaft pin c/w spirol pin
23	04 42 520	4	.Spirol pin
24	10 80 271	1	Yoke drive shaft c/w bushes
25	60 02 150	2	.Bush
*	10 80 061	1	Universal coupling c/w guard etc.
26	10 80 063	1	.Universal coupling
27	10 80 062	1	.Coupling tube
28	04 22 640	1	.Spring dowel 2½" x 3/8"
29	10 80 065	1	.Plastic guard

*NOTE Tractors with extra long draft links eg. M.F. 185 use

10 80 144	1	Universal coupling c/w guard etc.
10 80 207	1	.Coupling tube

**NOTE Late model machines are fitted with threaded ram cylinders

10 80 304	1	Lift Ram barrel)	Screw type
10 80 146	1	Head Bush)	

Locking wire 71 01 030 no longer required.

McCONNEL SINGLE SPOOL CONTROL VALVE

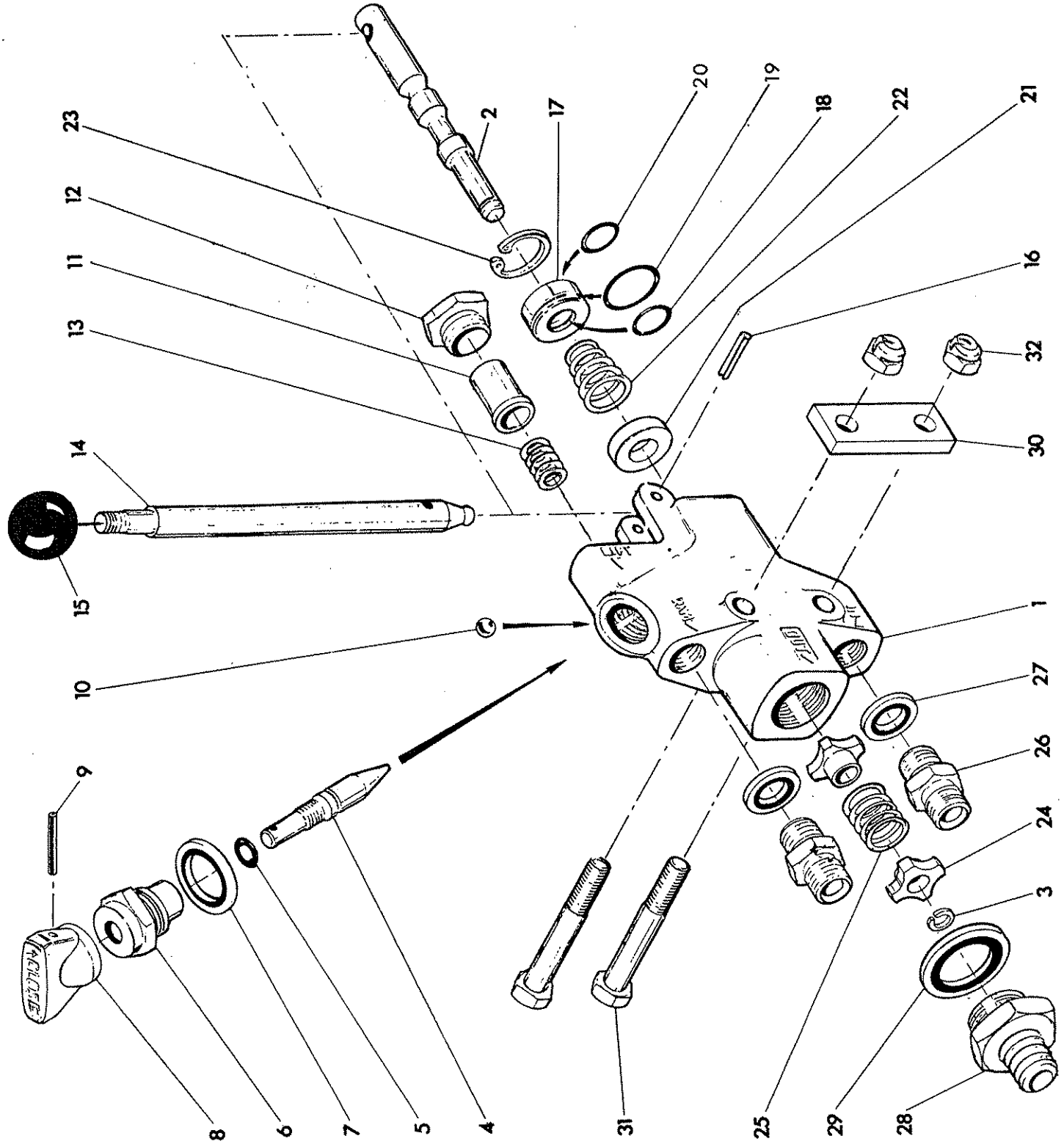
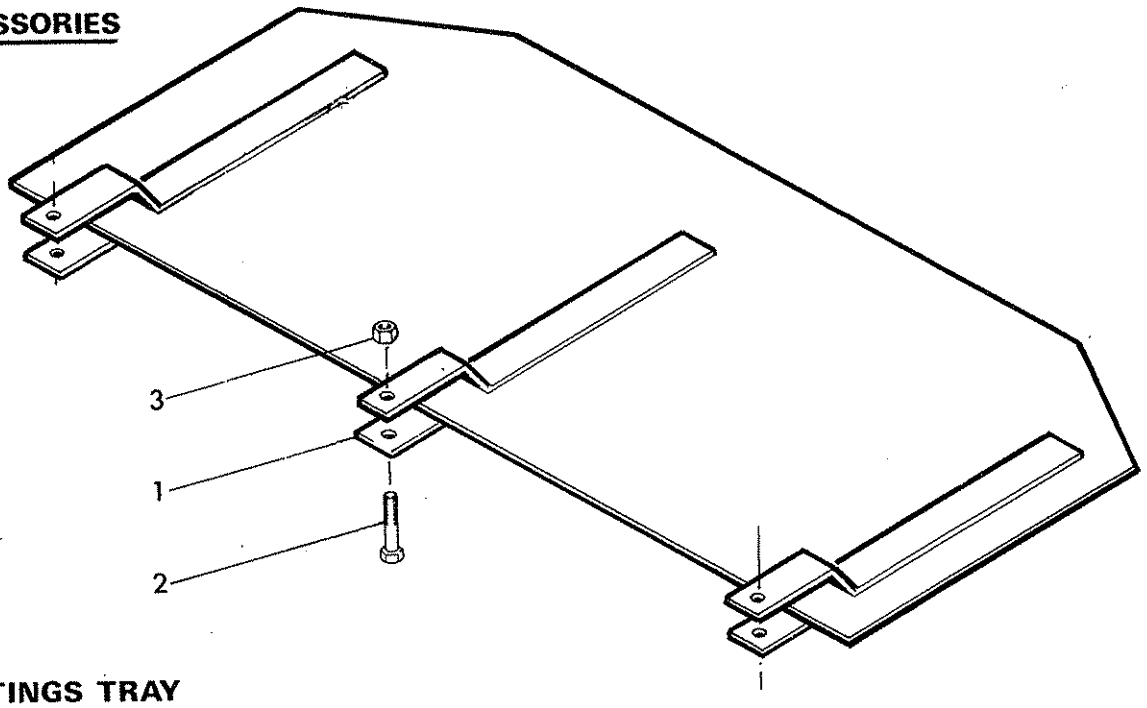


Illustration Ref. Number	Part Number	Qty	Description
	81 06 270	1	SINGLE SPOOL CONTROL VALVE comprising:
1	81 06 271	1	. Valve body
2	81 06 032	1	. Valve spool c/w circlip
3	04 04 106	1	.. Circlip, External, 3/8" dia.
4	81 06 044	1	. Spindle c/w 'O' ring
5	81 06 045	1	..'O' ring
6	81 06 043	1	. Gland nut
7	86 50 104	1	.. Bonded seal, ½" BSP
8	81 08 006	1	. Knob
9	04 20 820	1	. Spring dowel, 1¼" x 1/8" dia.
10	09 05 112	1	. Steel Ball, 3/8" dia.
11	81 06 037	1	. Stop
12	81 06 038	1	. Stop adjusting screw
13	81 06 041	1	. Spring
14	81 06 036	1	. Lever c/w ball knob
15	09 03 121	1	..Ball knob
16	04 21 616	1	. Spring dowel, 1" x 3/16" dia.
17	81 06 035	1	. Insert c/w 'O' rings & scraper
18	86 00 110	1	.. 'O' ring,
19	86 00 401	1	.. 'O' ring,
20	86 40 401	1	.. Scraper ring
21	81 06 022	1	. Seal
22	81 14 003	1	. Spring
23	81 14 077	1	. Circlip, internal, 1" dia.
24	81 06 039	2	. Spring register
25	81 06 047	1	. Spring
26	60 00 113	2	. Adaptor, 3/8" BSP x 3/8" BSP
27	86 50 103	2	.. Bonded seal, 3/8" BSP
28	81 06 040	1	. Return connection
29	86 50 106	1	. Bonded seal, ¾" BSP
30	81 06 042	1	. Clamp plate
31	02 11 223	2	. Bolt, 2¾" x 3/8" UNF
32	01 61 003	2	. Locknut, 3/8" UNF

Also required for the above valve to replace mounting arm 80 07 001 used with earlier type valve.

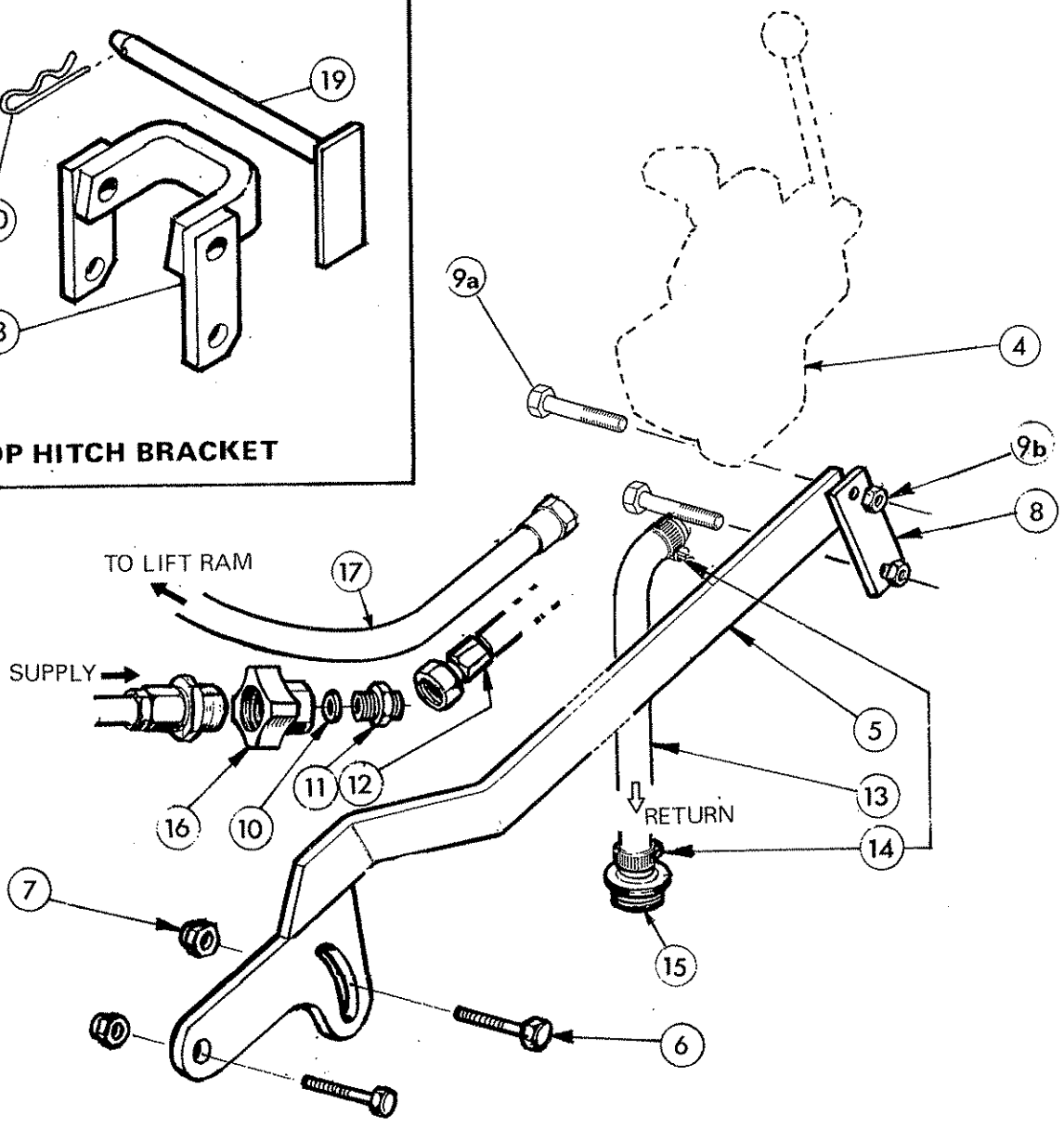
80 06 001	1	Mounting arm
03 11 126	2	1½" x 5/8" UNF bolt
01 41 006	2	5/8" UNF aeronut

ACCESSORIES



CUTTINGS TRAY

TOP HITCH BRACKET



SINGLE SPOOL CONTROL VALVE KIT

Ref. No.	Part No.	Qty	Description
1	10 80 293	1	Cuttings tray c/w nuts & bolts
2	10 80 105	3	.Raised cheese head bolt
3	10 80 107	3	.Nut 10mm
	80 06 285	1	SINGLE SPOOL CONTROL VALVE KIT
4	81 06 270	1	.S/Spool control valve assembly
5	80 06 001	1	.Mounting arm
6	03 11 126	2	.Bolt 1½" x 5/8" UNF
7	01 41 006	2	.Aeronut 5/8" UNF
8	81 06 042	1	.Clamp plate
9a	02 11 223	2	.Bolt 2¾" x 3/8" UNF
9b	01 61 003	2	.Aeronut 3/8" UNF
10	86 50 103	1	.Bonded seal 3/8" BSP
11	60 00 113	1	.Adaptor 3/8" x 3/8" BSP
12	85 11 043	1	.Hose 58" long S/S
13	85 05 058	1	.PVC hose 5/8" bore
14	09 04 204	2	.Hose clips
15		1	.Return connection (according to tractor model)
16	35 90 023	1	Self seal coupling
17	85 41 003	1	Flexible hose 73" long S/135°
The following items are special equipment only			
18	10 80 130	1	Top hitch bracket c/w pin
19	10 80 129	1	.Top hitch pin
20	04 31 105	1	..Spring cotter

NOTE The above mentioned hitch pin is for M.F. 135
Ford 2000 & 3000 require two top hitch pins.

SUPPORT STAND, GUARD AND TRANSPORT STRUT

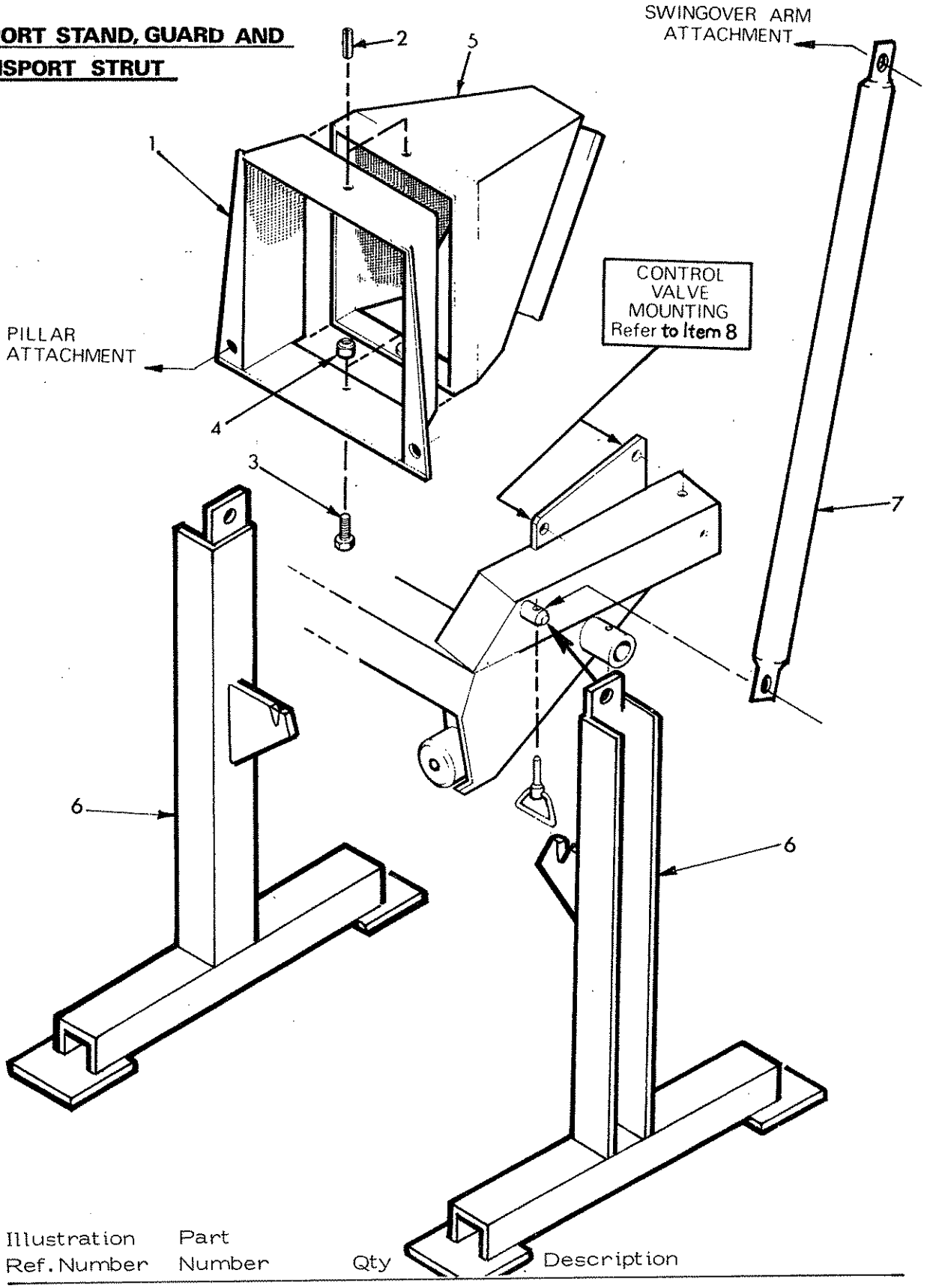
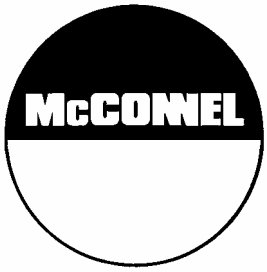


Illustration Ref. Number	Part Number	Qty	Description
1	10 80 272	1	.Universal joint guard c/w nut, bolt & spring dowel
2	04 22 714	1	..Spring dowel, 7/8" x 7/16" dia.
3	03 11 063	1	..Bolt, ¾" x 3/8" UNF
4	01 41 003	1	..Aeronut, 3/8" UNF
5	10 80 273	1	.Shroud, drive shaft
6	10 80 277	2	.Stand support
7	10 80 108	1	.Transport strut



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