



**parts
and
instruction
manual**

no. 72J2

Price \$1.40

John Shearer
communications

**JOHN SHEARER
DISC PLOUGH**

FRONT
(5GP)





JOHN SHEARER LIMITED

ESTABLISHED 1877
INCORPORATED IN SOUTH AUSTRALIA

HEAD OFFICE & FACTORY

BOX 42 KILKENNY

SOUTH AUSTRALIA 5009

TELEPHONE — 45 4651

TELEGRAMS & CABLES — SHEARER ADELAIDE

TELEX — AA88109

STREET LOCATION — SHARE STREET & KILKENNY ROAD

WHEN ORDERING SPARE PARTS PLEASE STATE:

1. MODEL, SERIAL NUMBER & SIZE (OF THE MACH./IMP).
2. PART NUMBER & DESCRIPTION (OF THE SPARE PART).
3. NUMBER OF PARTS REQUIRED.
4. FORWARDING INSTRUCTIONS.
5. CORRECT NAME & ADDRESS OF DESTINATION.



MODEL & SERIAL NUMBER PLATE
IS PLACED ON THE LEFT HAND FRONT
OF THE MAIN FRAME.

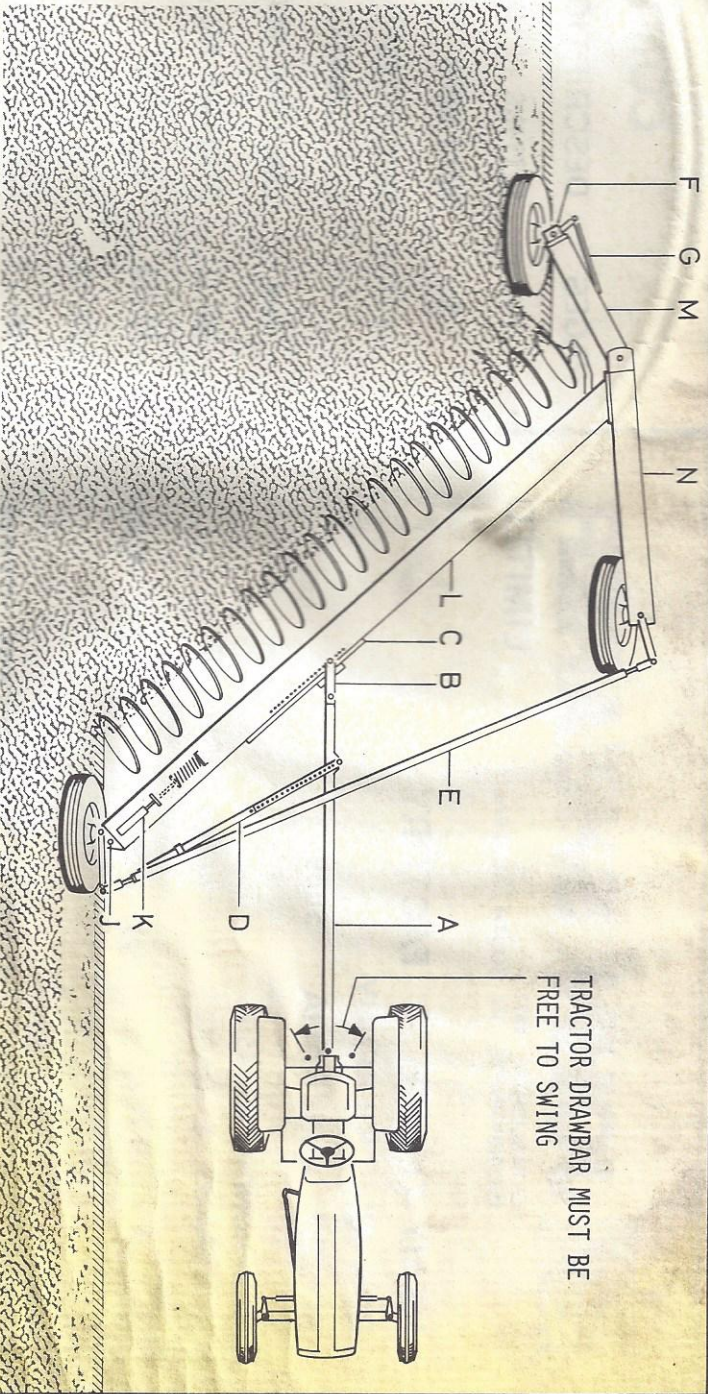
MADE & PRINTED IN AUSTRALIA BY JOHN SHEARER LIMITED.

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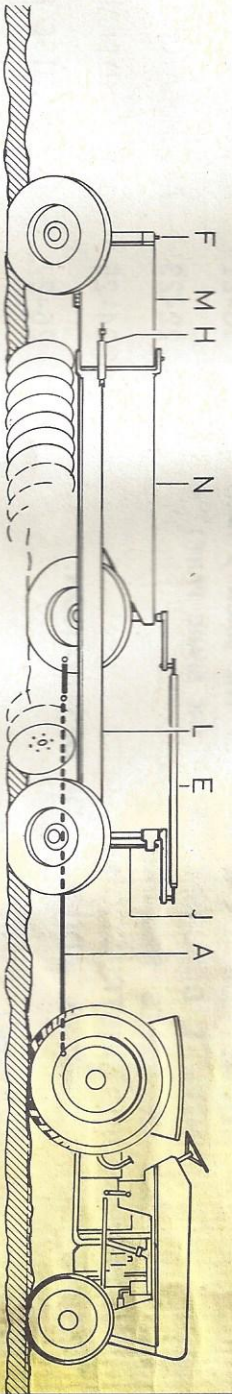
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- A - POLE HITCH
- B - LINK, DRAWBAR
- C - DRAWBAR
- D - STEERING BAR
- E - TRACKBAR
- F - LIFT CYLINDER
- G - ROD, STEERING
- H - RAM OR SCREW
TAIL STEERING
- J - STANDARD, FRONT HYDRAULIC
- K - ACCUMULATOR, JUMPER
- L - BEAM, MAIN
- M - BEAM, TAIL
- N - BEAM, LAND



TRACTOR DRAWBAR MUST BE FREE TO SWING



NORMAL PLOUGHING



JUMPING OUT AT BOTH FURROW WHEELS

SETTING UP INSTRUCTIONS
SEE PAGES 3 AND 4



Tractor drawbar must be free to swing.

1. Adjust level of plough frame as on "Setting Up" transfer on the land beam.
2. Set maximum permissible pressure on jump hydraulics as shown on indicator at K.
3. Set width of cut to maximum that gives acceptable ploughing, by extending cylinder (or screw) H.
4. With pole hitch connected to drawbar somewhere near central, adjust the steering bar and trackbar so that front wheels run truly in the direction of ploughing.
5. Set tail wheel steering so that wheel normally runs in the furrow just clear of the furrow wall.
6. Plough a first round at slow speed, adjusting the tail wheel height to achieve the required depth of ploughing. Setting of maximum width of cut, and a slow speed, will minimize soil throw and consequent build-up against fences.
 - jumper pressure at maximum allowable as in (2)
 - main beam level and adjusted to give required working depth
 - tractor at desired operating speed
 - tractor position relative to the furrow as desired. (See note below).
7. On the second round, when the plough has two wheels in a furrow of required depth, and with the plough in the toughest area of the paddock, set:
 - jumper pressure at maximum allowable as in (2)
 - main beam level and adjusted to give required working depth
 - tractor at desired operating speed
 - tractor position relative to the furrow as desired. (See note below).

NOTE RE TRACTOR POSITIONING

Some farmers prefer to drive with a tractor wheel in the furrow, while others prefer to drive with all wheels on unploughed ground. Driving in the furrow may provide easier maintenance of accurate plough positioning and thus a better join of work.

Driving on the land provides uniform traction conditions on both drive wheels and a straighter pull on the tractor drawbar. This improves tractor performance by providing a true pull on the drive wheels as well as avoiding waste draught used in counteracting front wheel drift and heavy steering loads.

Your 5GP, because of the inbuilt weight and the distribution of it will generally work satisfactorily with a straight pull on a tractor out of the furrow and we recommend you take advantage of this.

8. Increase width of cut until the plough "jumps out of the furrow".
 - If it jumps out at both furrow wheels, the line of draught is correct.
 - If it jumps out at the front only, the line of draught should be moved to the left (towards tail wheel) on the drawbar. Readjust steering bar to suit.
 - If it jumps out at the rear only, the hitch is moved towards the right (front furrow wheel).

If the plough cannot be made to "jump out", the conditions are relatively easy and the line of draught will be unimportant.
Repeat step 8 until the line of draught is correct.



9. Go ahead ploughing, setting the width of cut to provide the best compromise between:

- adequate "cut out" between discs
- maximum acres/hour
- required soil mixing and inversion desired.

10. Having set all other variables, reduce the hydraulic jumper pressure to that which just maintains the required depth of working. This will:

- minimize loadings on discs/bearing etc.
- enable discs to follow upwards ground irregularities at an even ploughing depth
- minimize any tendency to bulldoze (should this occur due to encountering a heap of straw, fallen tree branch etc. a brief pressure drop will allow the plough to clear).

11. Depth of ploughing is best maintained in varying conditions by adjustment of jumper hydraulic pressure as required.

12. The above instructions suit a hydraulically loaded plough but they also apply to a spring loaded plough except that it is necessary to manually adjust the spring settings to that required to just achieve the ploughing depth required. Also it is necessary to use the tail wheel lift cylinder to maintain the working depth required as soil conditions vary.

Unless otherwise noted, parts listed apply to all implements.

- 14 18 22 26(hydraulic & spring) & 30(hydraulic)
- 14H = (14 furrow - hydraulic loaded jumpers)
- 14S = (14 furrow - spring loaded jumpers)
- 14HS = (14 furrow - hydraulic or spring loaded jumpers)

NOTE ! This manual to be read in conjunction with manual 83J1 (tandem hitch, for single or dual wheel implement) and Product Bulletin No. 107J1 (kit, convert single tail wheel to dual tail wheels).

NOTE ! Your 5GP is despatched from our factory primed with MOBILFLUID 423 transmission oil, or an equivalent from an alternative reputable supplier. This oil is compatible with that specified by, and meets the requirements of, all tractor manufacturers, including those with power shift transmissions, common hydraulic systems, wet clutches and wet brakes.

LUBRICATION

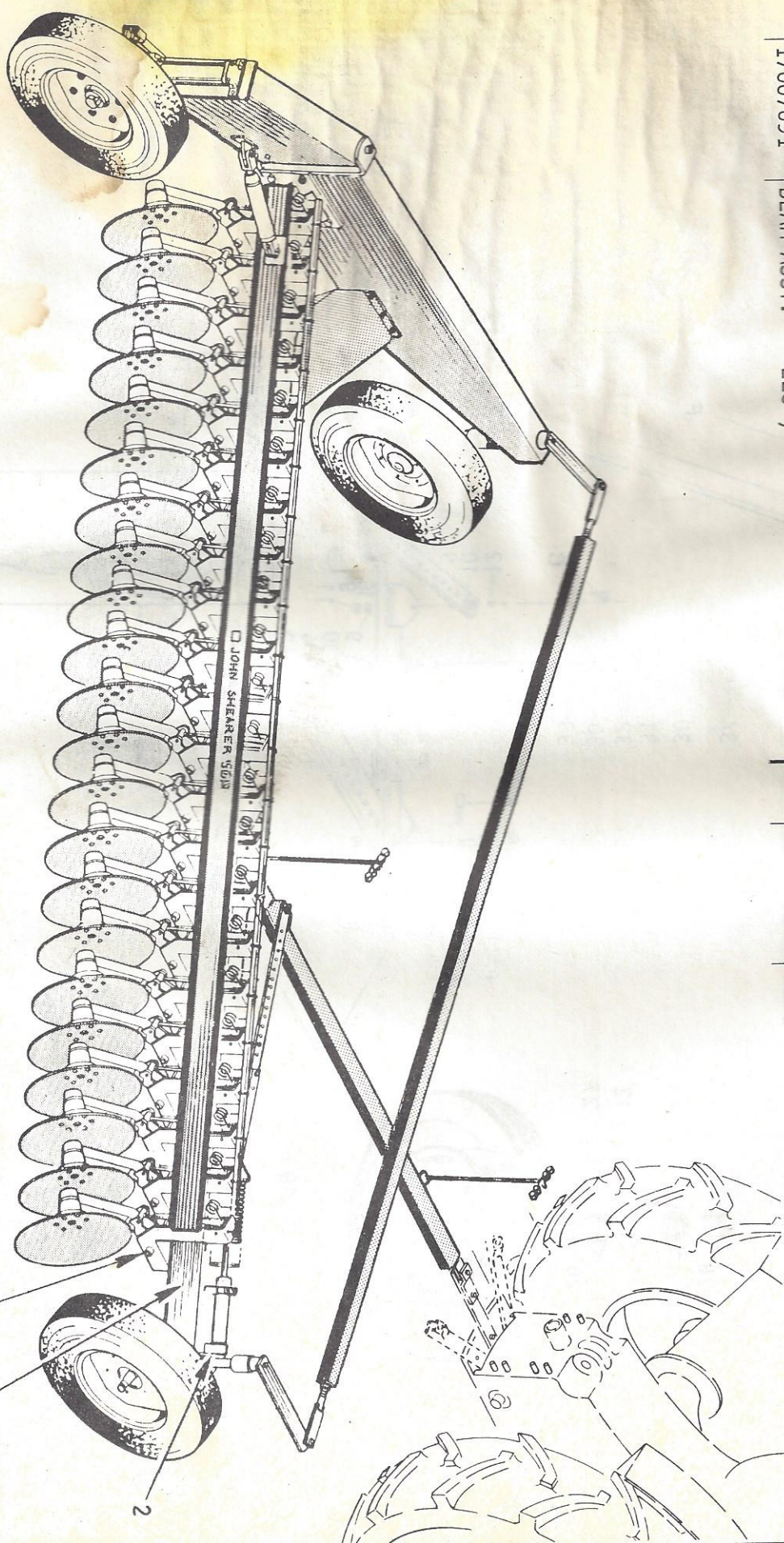
- Steering joints - daily
- Disc hubs - monthly
- Wheel hubs - seasonally

MAIN BEAM

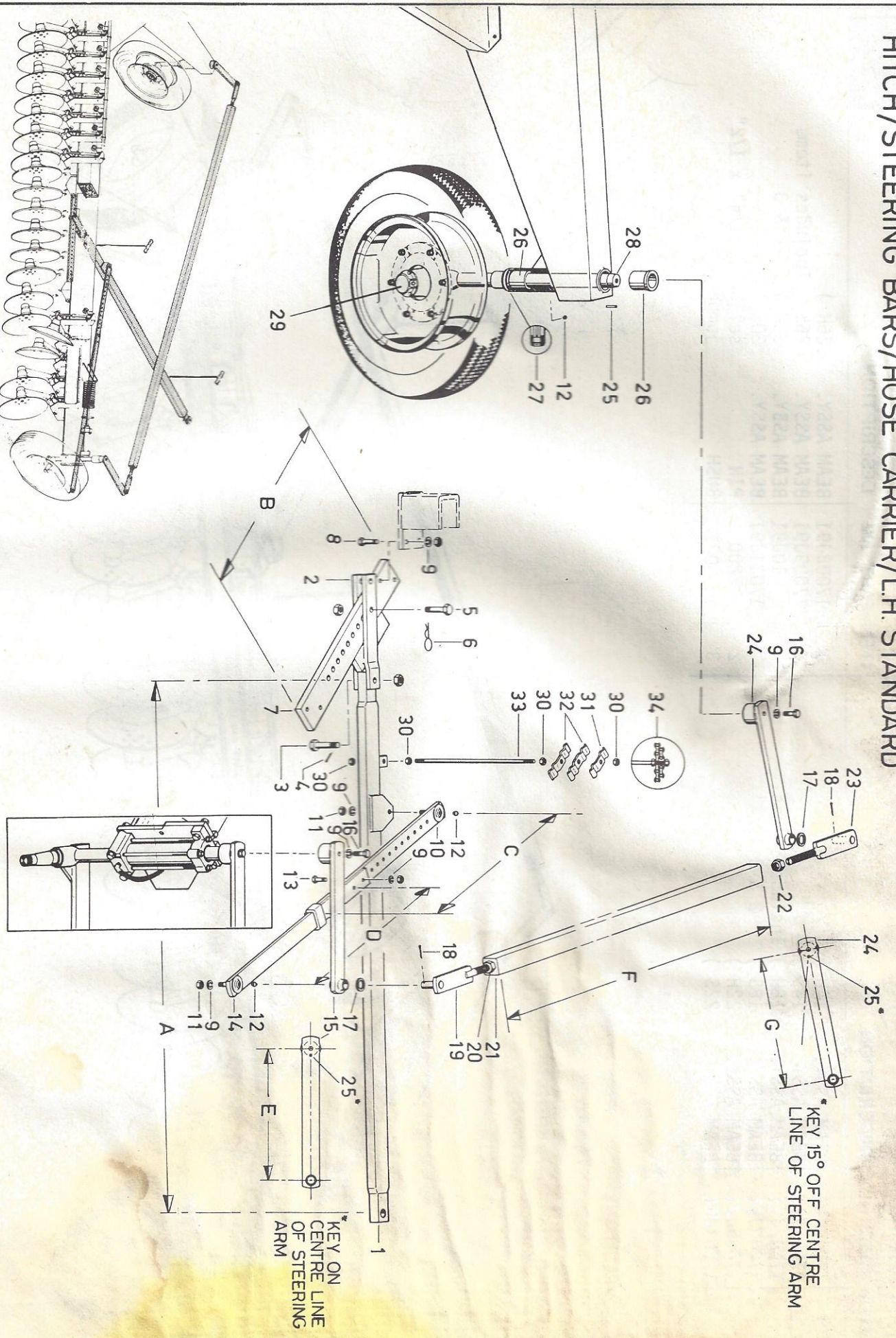
19. 177M72J2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	17000J91	BEAM ASSY.	1	17008J91	BEAM ASSY.
	17001J91	BEAM ASSY.		17009J91	BEAM ASSY.
	17002J91	BEAM ASSY.		17010J91	BEAM ASSY.
	17003J91	BEAM ASSY.		17011J91	BEAM ASSY.
	17006J91	BEAM ASSY.	2	SKP200	PIN
	17007J91	BEAM ASSY.	3	15140J1	BUSH
					26H)
					26S) Includes 1 items
					30H) 2 & 3
					30S)
					setlock 1-1/4" x 1/2"
					jumper spindle



HITCH/STEERING BARS/HOSE CARRIER/L.H. STANDARD

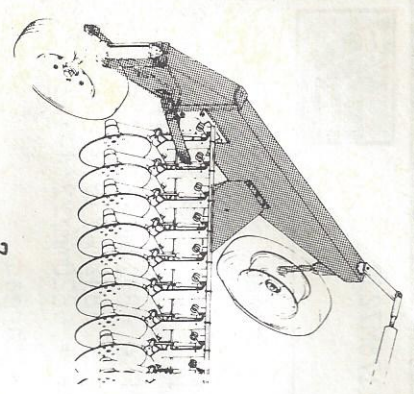


HITCH/STEERING BARS/HOSE CARRIER/L.H. STANDARD

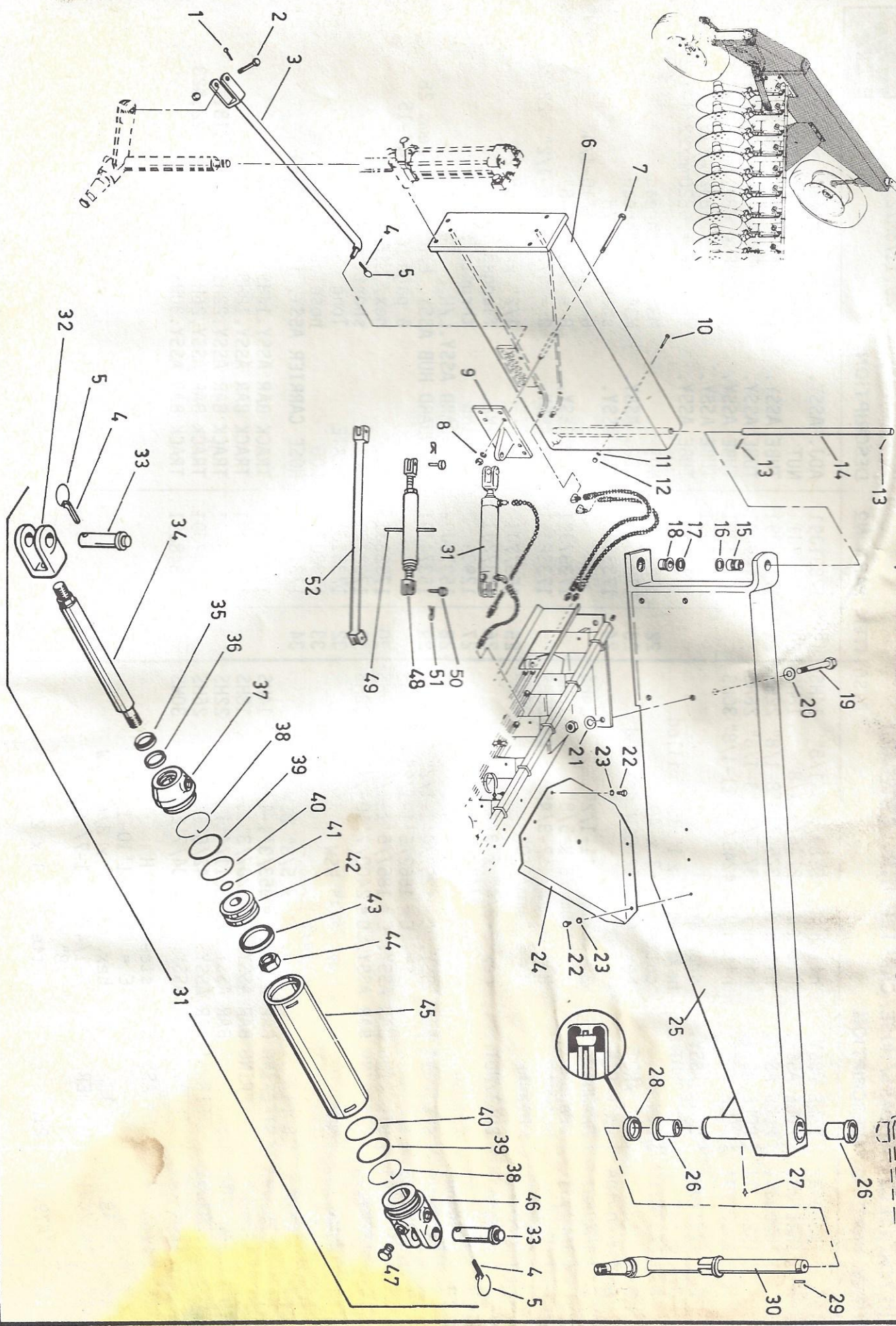
29.1176M72J2



ITEM	PART NO	DESCRIPTION	DISC	ITEM	PART NO	DESCRIPTION
1	15260J91	POLE ASSY.	14HS	19	17331J91	ADJ. ASSY.
	15261J91	POLE ASSY.	18HS	20	17267J1	NUT
	15263J91	POLE ASSY.	22HS	21	17148J91	TUBE ASSY.
	15264J91	POLE ASSY.	26HS		17149J91	TUBE ASSY.
	17081J91	POLE ASSY.	30HS		17151J91	TUBE ASSY.
2	17317J91	LINK ASSY.			17152J91	TUBE ASSY.
3	OS185	BOLT/NUT			17153J91	TUBE ASSY.
4	17878J1	PIN		22	17266J1	NUT
5	KD104	BOLT/NUT		23	17330J91	ADJ. ASSY.
6	H160-106	HAIR-PIN		24	17336J91	ARM ASSY.
7	15278J1	DRAWBAR	14HS			
	15279J1	DRAWBAR	18HS		17337J91	ARM ASSY.
	15281J1	DRAWBAR	22/26HS		17338J91	ARM ASSY.
	17083J1	DRAWBAR	30HS	25	15377J1	KEY
8	HRH145	BOLT/NUT		26	15372J1	BEARING
9	SPW8	WASHER		27	12939	BEARING
10	15282J91	STEERING BAR ASSY.	14HS	28	15375J92	STANDARD ASSY. L/H
	15283J91	STEERING BAR ASSY.	18HS	29	15374J91	STANDARD HUB ASSY. L/H incl. items 28 & page 16 items 3,7-15
	15285J91	STEERING BAR ASSY.	22HS	30	17323J1	NUT
	15286J91	STEERING BAR ASSY.	26HS	31	17322J1	PLATE
	17084J91	STEERING BAR ASSY.	30HS	32	17321J1	PLATE
11	WHN9	NUT		33	17320J1	ROD
12	D999	NIPPLE		34	17319J91	HOSE CARRIER ASSY. items 30-33
13	HRH114	BOLT/NUT				
14	15287J91	STEERING BAR ASSY.	14HS		17343J91	TRACK BAR ASSY. 14HS
	15288J91	STEERING BAR ASSY.	18HS		17344J91	TRACK BAR ASSY. 18HS
	15290J91	STEERING BAR ASSY.	22HS		17346J91	TRACK BAR ASSY. 22HS
	15291J91	STEERING BAR ASSY.	26HS		17347J91	TRACK BAR ASSY. 26HS
	17085J91	STEERING BAR ASSY.	30HS		17348J91	TRACK BAR ASSY. 30HS
15	17339J91	ARM ASSY.				
16	HR143	BOLT				
17	15176J1	WASHER				
18	17879J1	PIN				



LAND/TAIL BEAM & RELATED PARTS



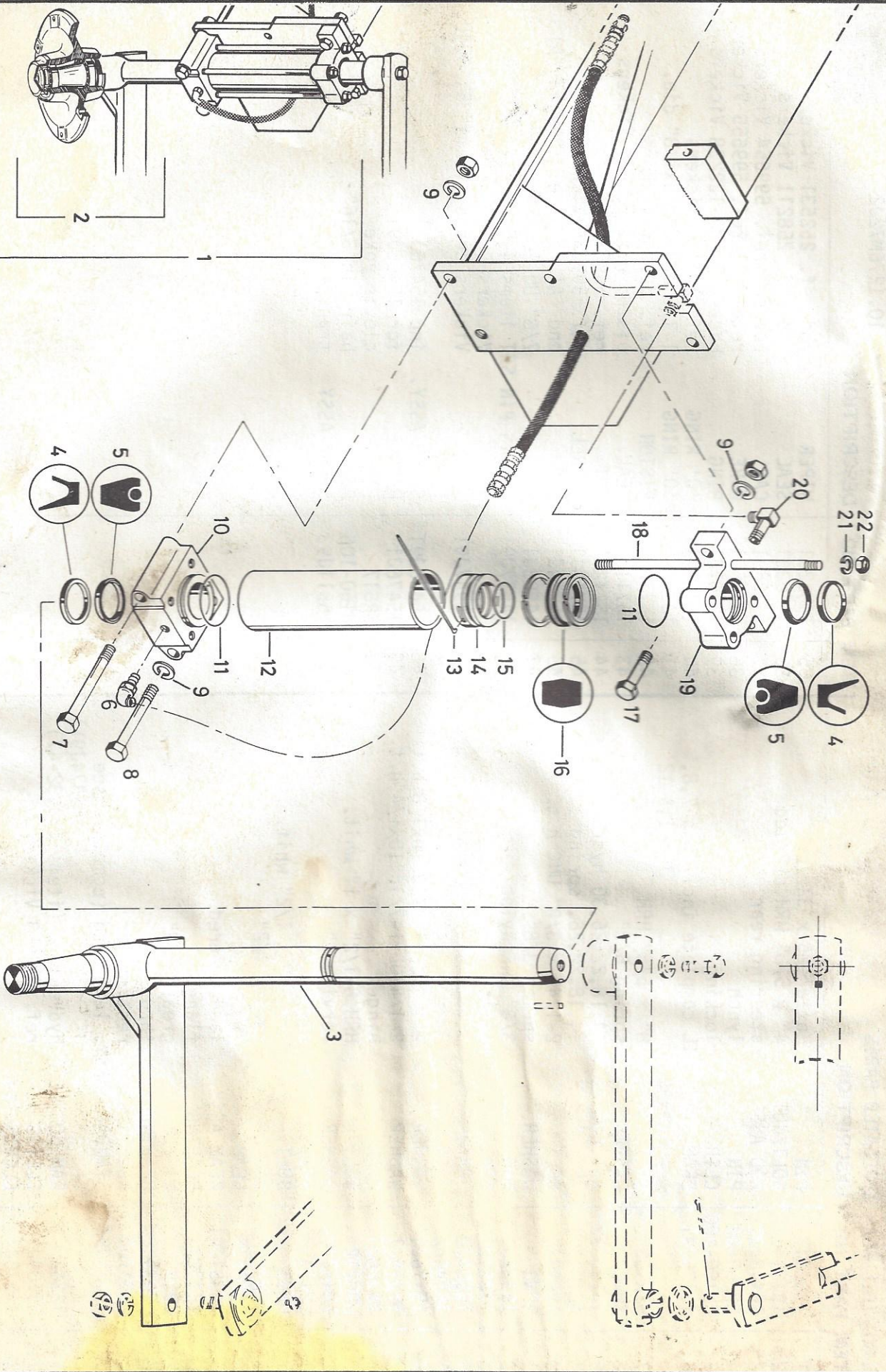
10-1276M72J2

LAND/TAIL BEAM & RELATED PARTS

10. 1276M72J2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	17586J1	PIN	35	14562J1	WIPER
2	13131	BOLT/NUT	36	14563J1	SEAL
3	15448J92	ROD ASSY.	37	15705J1	CAP
4	CR160-99	PIN	38	15706J1	WIRE
5	CR160-100	CLIP	39	15707J1	RING
6	15175J91	BEAM ASSY. TAIL complete inc. items 7, 8, 10, 11, & 12	40	15708J1	'0' RING
7	HRH130	BOLT/NUT	41	10959	'0' RING
8	SPW6	WASHER	42	15710J1	PISTON
9	15190J92	RAM LUG ASSY	43	15711J1	SEAL
10	15191J92	" "	44	15712J1	NUT
11	15532J1	BOLT	45	15716J1	BARREL
12	SPW3	WASHER	46	15714J1	CAP
13	15336J1	NUT	47	16893J1	PLUG
14	17881J1	PIN		14577J91	CLEVIS PIN SET items 4, 5, 32 ref. M3000P
15	15504J2	SHAFT		15947J91	KIT
16	15140J2	BUSH	48	15466J91	SCREW ASSY.
17	15176J1	WASHER	49	15476J1	HANDLE
18	15316J1	WASHER	50	SR617	PIN
19	15368J1	BUSH	51	H160-106	PIN
20	HRH212	BOLT	52	15511J93	STRAP ASSY
21	FBW11	WASHER			
22	SPW11	WASHER			
23	HR81	BOLT			
24	SPW4	WASHER			
25	15505J2	BEAM			
26	15351J91	BEAM ASSY.			
27	15372J1	BEARING			
28	D999	NIPPLE			
29	12939	BEARING			
30	15377J1	KEY			
	15375J92	STANDARD ASSY. Left hand (complete see 15374J91)			
31	12343	RAM COMPLETE			
32	15704J1	hydraulics (items 4, 5, 32-47)			
33	14576J1	CLEVIS			
34	15715J1	CLEVIS-PIN			
		ROD			
		piston ref. 599659 Vickers			



STANDARD ASSEMBLY - FRONT R/H HYDRAULIC

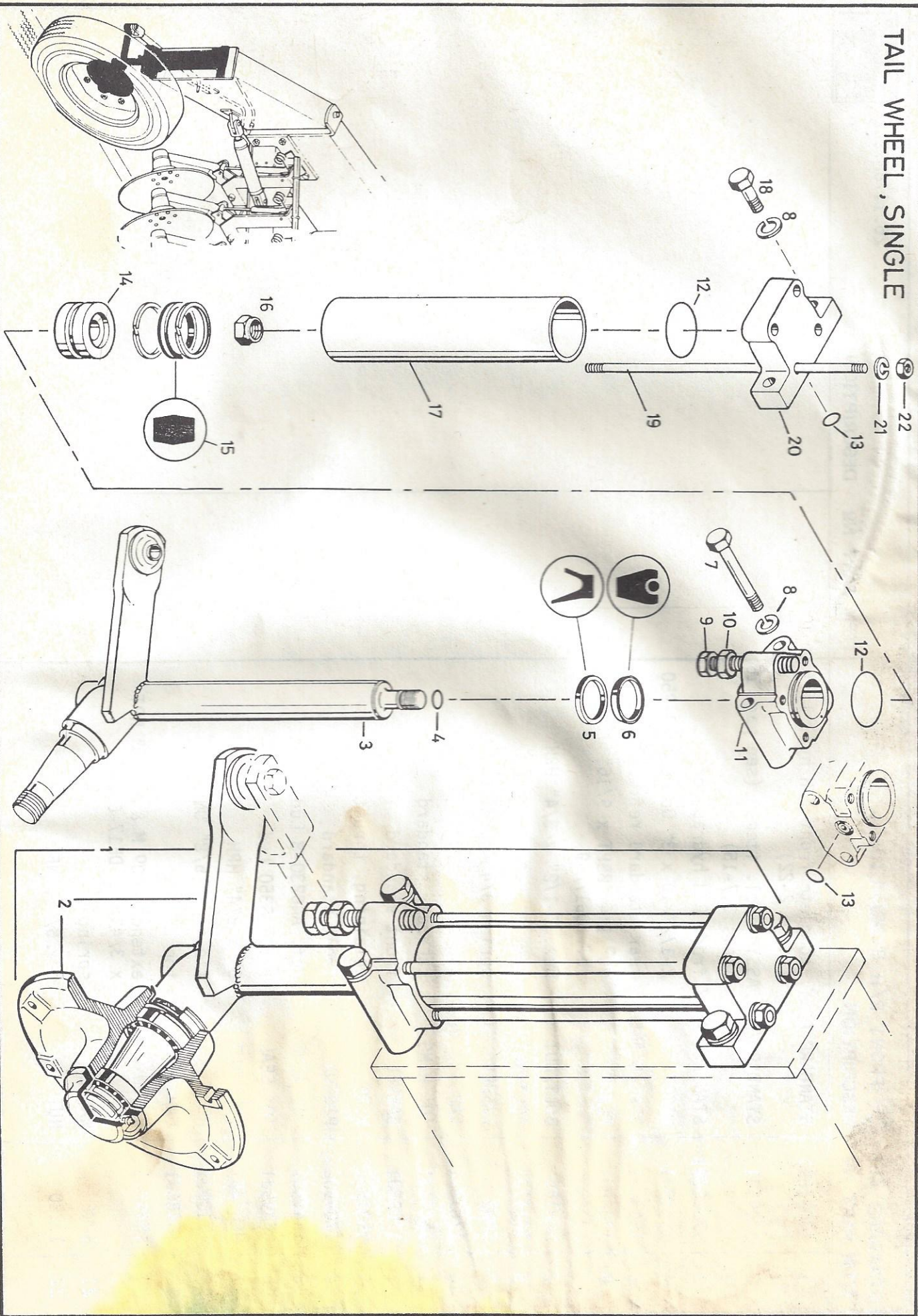
STANDARD ASSY. - FRONT R/H HYDRAULIC

26.1176M72J2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	17091J91	STANDARD ASSY. complete front R/H hyd. 11ft (items 2-22)			
2	17095J1	STANDARD/HUB ASSY. incl. item 3 (see page 16 items 3,7-15)			
3	17096J91	STANDARD ASSY. front R/H hydraulic			
* 4	16489J1	WIPER 2-1/2" ID x 3" OD ref. 62-250			
* 5	15436J1	SEAL-GLAND rear standard ref. L359			
6	17068J1	ELBOW 90° 1/4" BSPT x 9/16" JIC ref. DB17/49			
7	HRH155	BOLT/NUT hex. 6-1/2" x 3/4" HRH			
8	15447J1	BOLT/NUT hex. 6" x 3/4" h.t.			
9	SPW8	WASHER spring 3/4"			
10	17898J1	CAP bottom			
11	15441J1	'O' RING cap-rear standard			
12	17098J1	BARREL front standard			
13	15315J1	WIRE retaining, thrust			
14	17099J2	PISTON front standard			
15	16496J1	'O' RING ref. AN6230-8 Lud.			
16	16495J1	'O' SEAL ref. LS350 Lud.			
17	HRH146	BOLT/NUT 3" x 3/4" HRH			
18	17100J1	ROD tie front 5/8" UNF			
19	16486J1	CAP top			
20	16498J1	ELBOW extended 90° M & M 3/8" NPT x 3/4" JIC DE17-612			
21	SPW6	WASHER spring 5/8"			
22	11220	NUT hex. 5/8" UNF.			

TAIL WHEEL, SINGLE



TAIL WHEEL - SINGLE

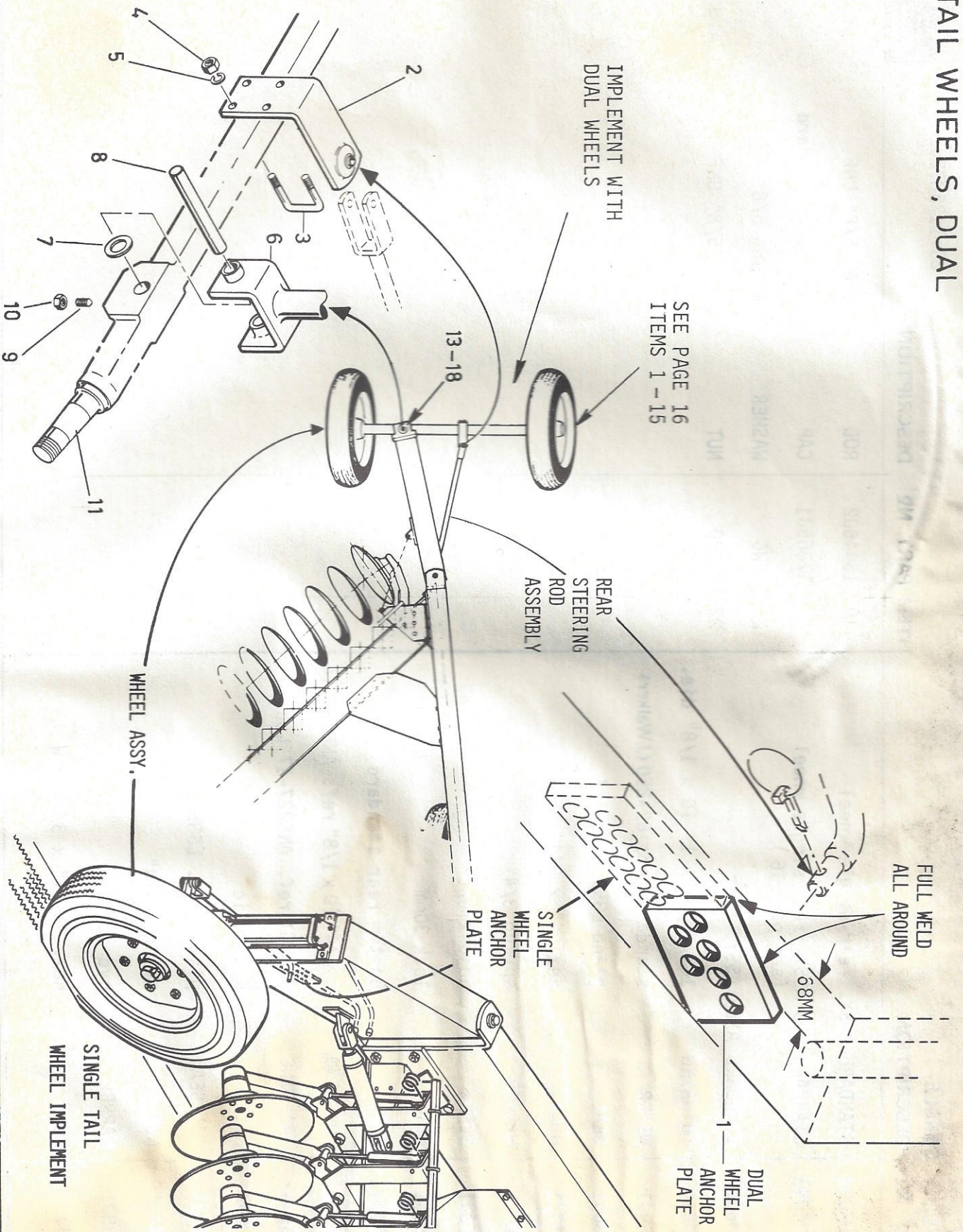
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ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	15430J93	STANDARD ASSY. rear single wheel	19	15446J2	ROD tie, 5/8" UNF
2	15431J93	STANDARD HUB ASSY. rear single wheel (see page 16)	20	17865J1	CAP top rear standard
3	15432J93	STANDARD AXLE ASSY. rear	21	SPW6	WASHER spring 5/8"
4	15445J1	'0' RING 1-1/4" OD x 1" ID x 1/8" dia.	22	11220	NUT hex. 5/8" UNF
5	16489J1	WIPER standard ref. 62-250 (J.Walker)			
6	15436J1	SEAL gland L359 Ludowici			
7	15447J1	BOLT hex. 6" x 3/4" BSW			
8	SPW8	WASHER spring 3/4"			
9	17470J1	SCREW adjustment			
10	17261J1	NUT lock 30mm			
11	17864J1	CAP bottom rear standard			
12	15441J1	'0' RING 3-1/4" ID x 1/8" ref. AN6230-14			
13	10959	'0' RING 7/8" ID ref. AN6227-17 Lud.			
14	15439J2	PISTON hydraulic			
15	16495J1	'J' SEAL piston ref. LS350 Lud.			
16	15444J1	NUT nylon 1-1/4"			
17	15438J1	BARREL hydraulic			
18	HR143	BOLT hex. 2-1/4" x 3/4" BSW			

TAIL WHEELS, DUAL

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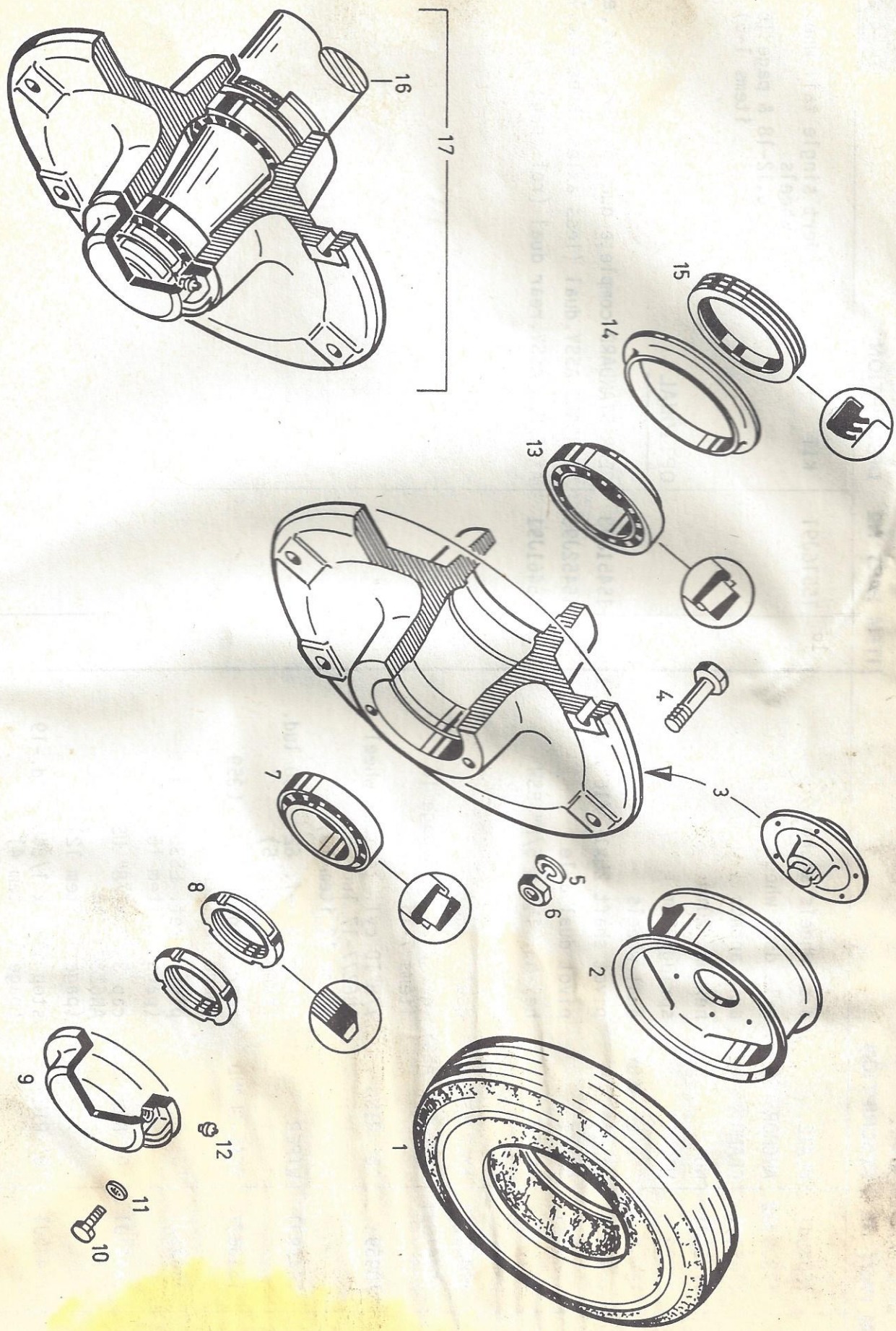
TAIL WHEELS, DUAL

10.177M/2J2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	15543J1	PLATE dual wheels anchor	15516J91	KIT to convert single tail wheel to dual wheels (items 1-10, 12-18 & page 16 items 1-6)	
2	17308J92	ANCHOR ASSY. axle dual wheel			
3	17551J1	CLAMP axle anchor			
4	17550J1	NUT hex-hd. 20mm			
5	18023	WASHER spring 20mm			
6	15453J93	SADDLE ASSY. dual wheels			
7	15176J1	WASHER pivot shaft 2 1/4 x 1-7/16" x 1/8" h. t.	15451J93	REAR STANDARD complete dual (axles, hubs, etc)	
8	15512J1	SHAFT pivot dual axle	15452J93	STANDARD ASSY. dual (less axles, hubs etc.)	
9	SD1540	SCREW hex-hd. 1 1/2" x 5/8" BSW	15461J91	AXLE/HUB ASSY. rear dual (ref. page 16)	
10	WHN8	NUT 5/8" BSW			
11	15462J91	AXLE ASSY. dual			
12	15461J91	AXLE HUB ASSY inc. item 10 & page 16 items 7-15			
13	10959	'0' RING 7/8" ID cyl. to tail wheel AN6277-17 Lud. (page 12 item 13)			
14	16489J1	WIPER standard ref. 62 - 250 Lud. (page 12 item 5)			
15	15436J1	SEAL-GLAND rear standard ref. L359 (page 12 item 6)			
16	16495J1	'J' SEAL piston ref. LS350 Lud. (page 12 item 15)			
17	15441J1	'0' RING cap 3 1/4" ID x 1/8" US Std. AN6230 - 14 (page 12 item 12)			
18	15445J1	'0' RING stop 1" ID x 1/8" US Std. -19 (page 12 item 4)			

WHEEL, AXLE, HUB, TYRES





WHEEL, AXLE, HUB, TYRES

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	11280	TYRE 8.25 x 20 x 10 ply Highway or Hi-miler	16	17096J91	STANDARD ASSY. front R/H hydraulic (see page 10)
	11281	TUBE 8.25 x 20		15375J92	STANDARD ASSY. L/H (see page 6)
	14682J1	FLAP 8.25 x 20 (included with tyre & tube)		15432J93	STANDARD ASSY. rear (see page 12)
2	15318J91	RIM ASSY. 20"		17095J91	STANDARD/HUB ASSY. front R/H items 3,7-16
3	15307J1	HUB wheel		15374J91	STANDARD/HUB ASSY. L/H items 3,7-16
4	15249J1	BOLT hex. 2" x 1/2" UNF h.t.		15431J93	STANDARD/HUB ASSY. rear, items 3,7-16
5	SPW4	WASHER spring 1/2"			
6	NFN6	NUT hex. wheel, 1/2" UNF			
7	15203J1	BEARING wheel, cup JLM104910, <i>TINKEN</i>		<i>SET 107</i>	
8	15205J1	NUT cone JLM104948, 50mm			
9	15305J1	CAP spindle, 50mm			
10	SD2097	SCREW hub			
11	STW3	WASHER hex. set, 7/8" x 5/16" UNC h.t.			
12	D999	NIPPLE star 5/16"			
13	15306J1	BEARING grease 1/8"			
14	TC462	RING wheel, cup JLM508710, <i>TINKEN</i>		<i>JLM 50 8748</i>	
15	TC461	SEAL cone JLM508748, 60mm wear, triple tipped seal ref. 16994 Flaveis triple tipped ref. 16946 Flaveis			

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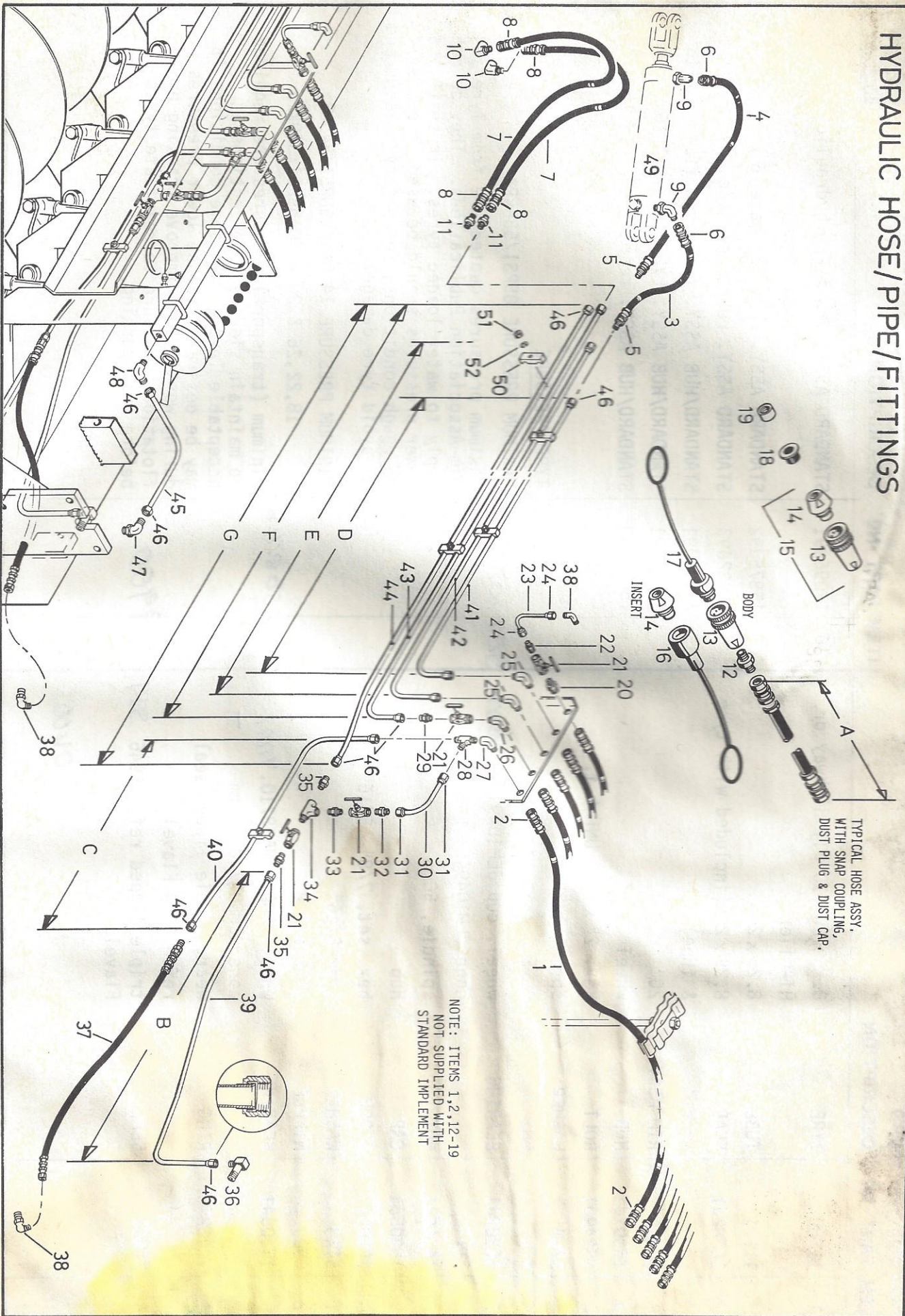
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TYRE PRESSURE
MAXIMUM PRESSURE 85PSI/586kPa
 Maximum pressures quoted are from Tyre and Rim Association Publications. They do not apply to water loaded tyres. In that case lower pressures should be used, especially in rough conditions, for safety reasons and to avoid tyre damage.

MINIMUM PRESSURE 14 DISC 50PSI/345kPa
18,22,26 & 30 DISC 55PSI/380kPa

Minimum (transport) pressures are required to maintain side wall deflections at acceptable levels. In some conditions it may be desirable to use lower pressures during working, to improve tracking or flotation. Be sure to reinflate tyres before transporting.

HYDRAULIC HOSE/PIPE/FITTINGS



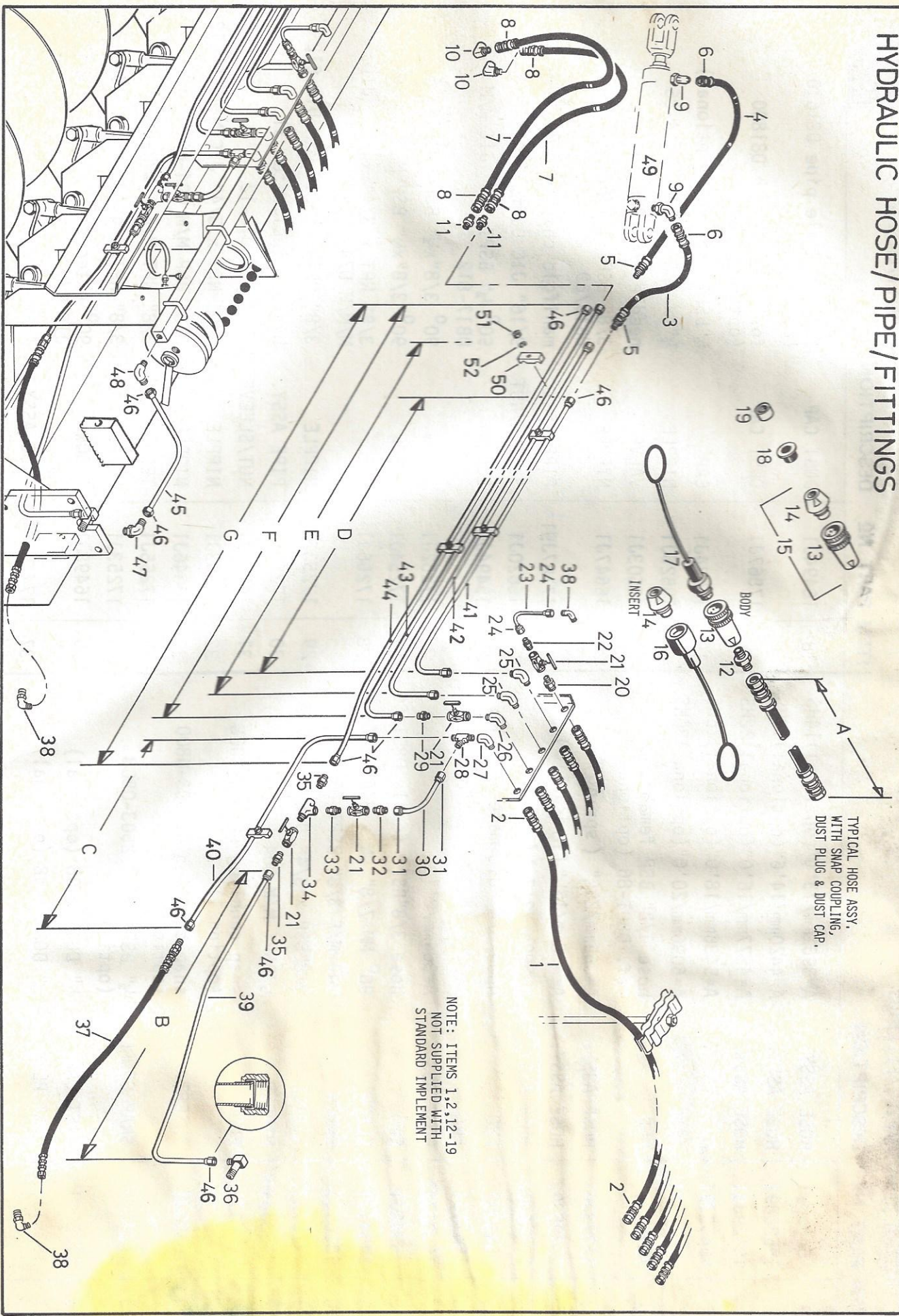
HYDRAULIC HOSE/PIPE/FITTINGS

29.1176M72J2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	16455J91	HOSE ASSY. A=3962mm/13'0"(optional)14HS	18	16494J1	DUST CAP for 3/8" male pipe D81610 (optional)
	15528J91	HOSE ASSY. A=4420mm/14'6"(optional)18HS		17867J1	DUST CAP for 1/2" male pipe D81800 (optional)
	15529J91	HOSE ASSY. A=4877mm/16'0"(optional)22HS	19	15534J1	CAP 1/2" BSP T male (optional)
	16456J91	HOSE ASSY. A=5486mm/18'0"(optional)26HS	20	15525J1	NIPPLE 1/2" x 3/8" BSP M/M D04-86
	17185J91	HOSE ASSY. A=6096mm/20'0"(optional)30HS	21	15503J1	VALVE needle 3/8" BSP F/F
2	16359J1	END hose 1/2" BSP female ref. D801-86 (optional)	22	16647J1	NIPPLE 3/8" BSP x 9/16" JIC M/M D815/69
3	15333J91	HOSE ASSY. A=565mm/22 1/4" (spring)	23	17187J91	PIPE ASSY. manifold charge incl. item 24
	15495J92	HOSE ASSY. A=438mm/17 1/4" (hydraulic)	24	15620J1	SLEEVE/NUT 9/16" JIC Duff. D14-9
4	15496J93	HOSE ASSY. A=800mm/2'7-1/2"	25	15494J1	ELBOW 90° 1/2" BSP T x 3/4" JIC M/M D817-812
5	16450J1	END hose 3/4" JIC male D809-126	26	17252J1	ELBOW 90° 3/8" x 1/2" BSP M/M S49-6
6	15451J1	END hose 3/4" JIC female D805-126	27	17254J1	ELBOW 90° 3/8" x 1/2" BSP M/F D30-86
7	15500J92	HOSE ASSY. A=864mm/2'10"	28	17256J1	TEE 3/8" NPT x 3/4" x 3/4" JIC M/M D74-61212
8	16342J1	END hose 3/8" BSP female D801-66	29	17253J1	NIPPLE 3/8" NPT x 3/4" JIC M/M D15-612
9	14541J1	ELBOW 90° MM 7/8" UN x 3/4" JIC	30	17250J91	PIPE ASSY. by-pass incl. item 31
10	15501J1	ELBOW 90° M/F 3/8" BSP T D30-66	31	14359J1	NUT/SLEEVE 3/4" JIC D14-12
11	17257J1	NIPPLE 3/8" BSP x 3/4" JIC D815-612	32	17253J1	NIPPLE 3/8" NPT x 3/4" JIC M/MD15-612
12	15531J1	NIPPLE 1/2" BSP T M/M D04-88 (optional)	33	16346J1	NIPPLE 3/8" BSP M/M D04-66
13	16349J1	BODY snap coupling DG2503-0008 (optional)	34	17255J1	TEE 3/8" NPT M/F/F D72-666
14	16350J1	INSERT snap coupling DG2503-0800 (optional)	35	17253J1	NIPPLE 3/8" NPT x 3/4" JIC M/M D15-612
15	16348J91	SNAP COUPLING 1/2" BSP F/F DG2503-0808 (optional)	36	16498J1	ELBOW 90° extended 3/8" NPT x 3/4" JIC M/M
16	17259J1	DUST CAP 1/2" DG2508-08 (optional)	37	17410J91	HOSE ASSY. A=835mm/2'8-7/8"
17	16351J1	DUST PLUG 1/2" DG2509-08 (optional)			

HYDRAULIC HOSE/PIPE/FITTINGS



TYPICAL HOSE ASSY.
WITH SNAP COUPLING,
DUST PLUG & DUST CAP.

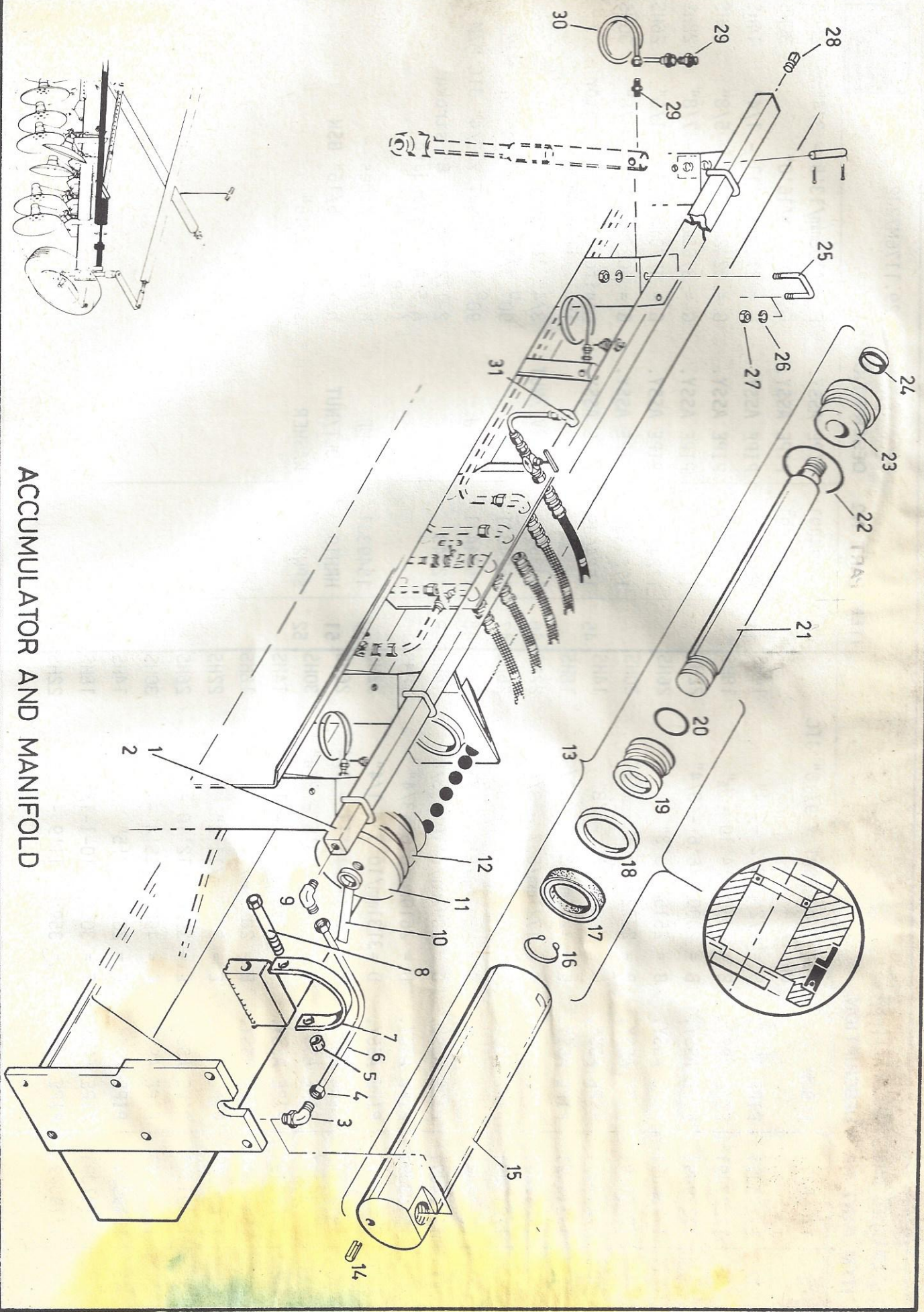
NOTE: ITEMS 1, 2, 12-19
NOT SUPPLIED WITH
STANDARD IMPLEMENT

29.1176M72J2



HYDRAULIC HOSE/PIPE/FITTINGS

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
38	17068J1	ELBOW 90° 1/4" BSPT x 9/16" JIC DB/17-49			
39	17226J91	PIPE ASSY. B = 972mm/3'2 - 1/4"	44	17194J91	PIPE ASSY. F = 4108mm/13'5 - 3/4"
	17227J91	PIPE ASSY. B = 1486mm/4'10 - 1/2"		17195J91	PIPE ASSY. F = 4877mm/16'0"
	17229J91	PIPE ASSY. B = 2000mm/6'6 - 3/4"		17238J91	PIPE ASSY. G = 2724mm/8'11 - 1/4"
	17230J91	PIPE ASSY. B = 2515mm/8'3"		17239J91	PIPE ASSY. G = 3242mm/10'7 - 5/8"
	17231J91	PIPE ASSY. B = 2772mm/9'1 - 1/8"		17241J91	PIPE ASSY. G = 3756mm/12'3 - 7/8"
40	17214J91	PIPE ASSY. C = 683mm/2'2 - 7/8"	45	17242J91	PIPE ASSY. G = 4270mm/14'0 - 1/8"
	17215J91	PIPE ASSY. C = 1216mm/3'11 - 7/8"		17243J91	PIPE ASSY. G = 5039mm/16'6 - 3/8"
	17217J91	PIPE ASSY. C = 1721mm/5'7 - 3/4"	46	14359J1	SLEEVE/NUT 3/4" JIC Duff. D14-12
	17218J91	PIPE ASSY. C = 2245mm/7'4 - 3/8"	47	15248J1	ELBOW 90° 3/4" UNF x 3/4" JIC M/M
	17219J91	PIPE ASSY. C = 2502mm/8'2 - 1/2"	48	15244J1	ELBOW 90° 3/8" BSPT x 3/4" JIC M/M
41	17124J91	PIPE ASSY. D = 2092mm/6'10 - 3/8"	49	12343	RAM 2-1/2" bore x 8" stroke A.S.A.E. standard (see page 8)
	15483J91	PIPE ASSY. D = 2610mm/8'6 - 3/4"	50	15493J1	CLAMP hydraulic pipes
	15485J91	PIPE ASSY. D = 3131mm/10'3 - 1/4"	51	HRH19	BOLT/NUT hex. 1" x 5/16" BSW
	15486J91	PIPE ASSY. D = 3651mm/11'11 - 3/4"	52	SPW2	WASHER spring 5/16"
42	17125J91	PIPE ASSY. E = 4413mm/14'5 - 3/4"			
	15488J91	PIPE ASSY. E = 2365mm/7'9 - 1/8"			
	15490J91	PIPE ASSY. E = 2883mm/9'5 - 1/2"			
	15491J91	PIPE ASSY. E = 3404mm/11'2"			
	17127J91	PIPE ASSY. E = 3975mm/12'10 - 1/2"			
	17190J91	PIPE ASSY. E = 4686mm/15'4 - 1/2"			
	17191J91	PIPE ASSY. F = 2565mm/8'5"			
43	17193J91	PIPE ASSY. F = 3080mm/10-1-1/4"			
		PIPE ASSY. F = 3594mm/11'9 - 1/2"			



ACCUMULATOR AND MANIFOLD

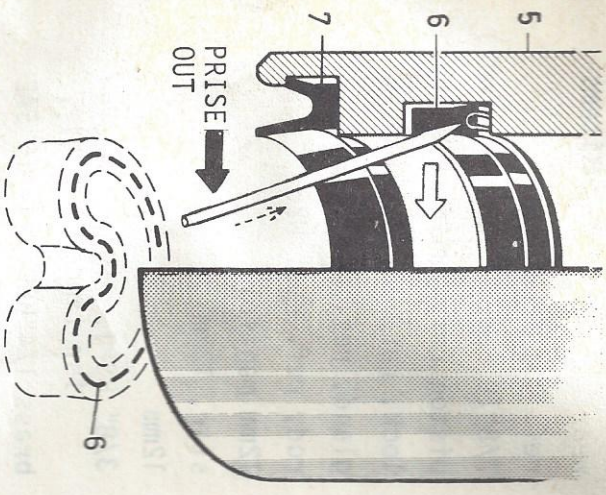
ACCUMULATOR AND MANIFOLD

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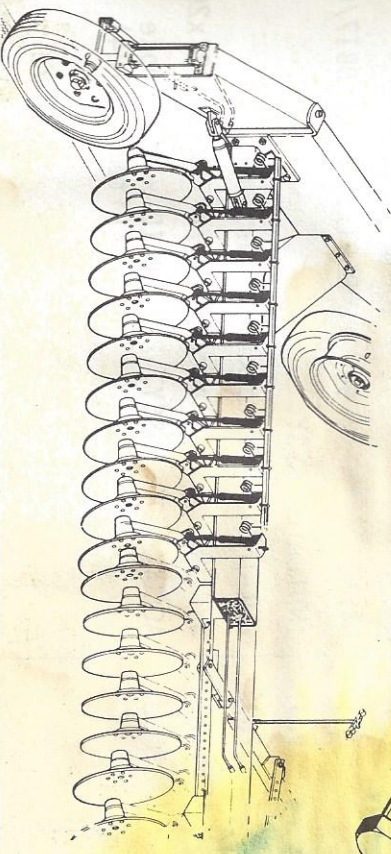
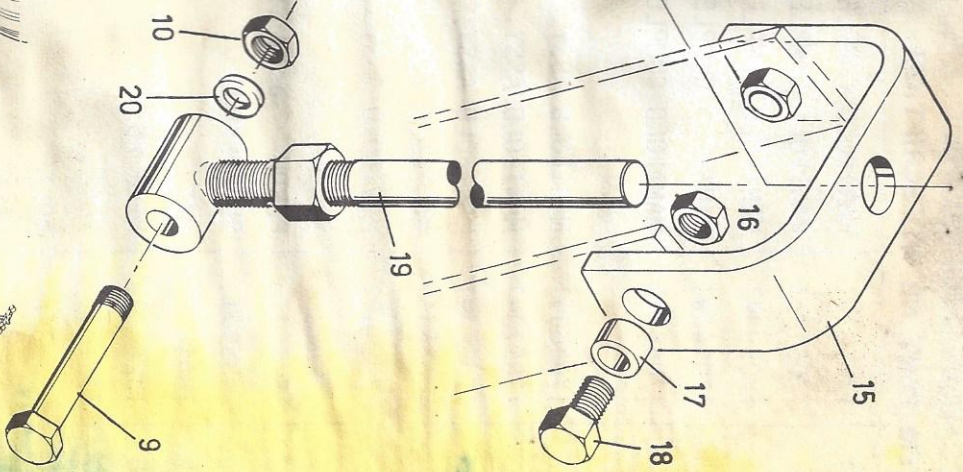
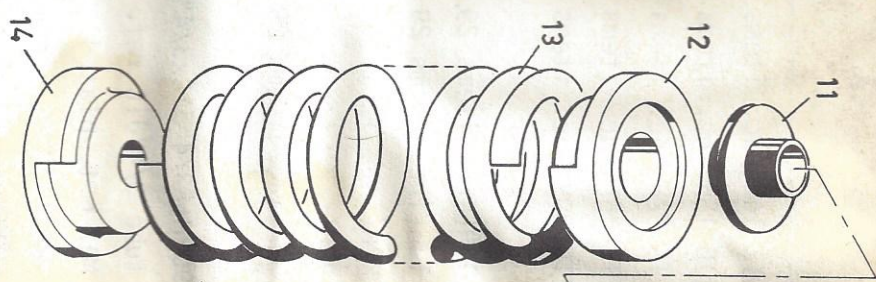
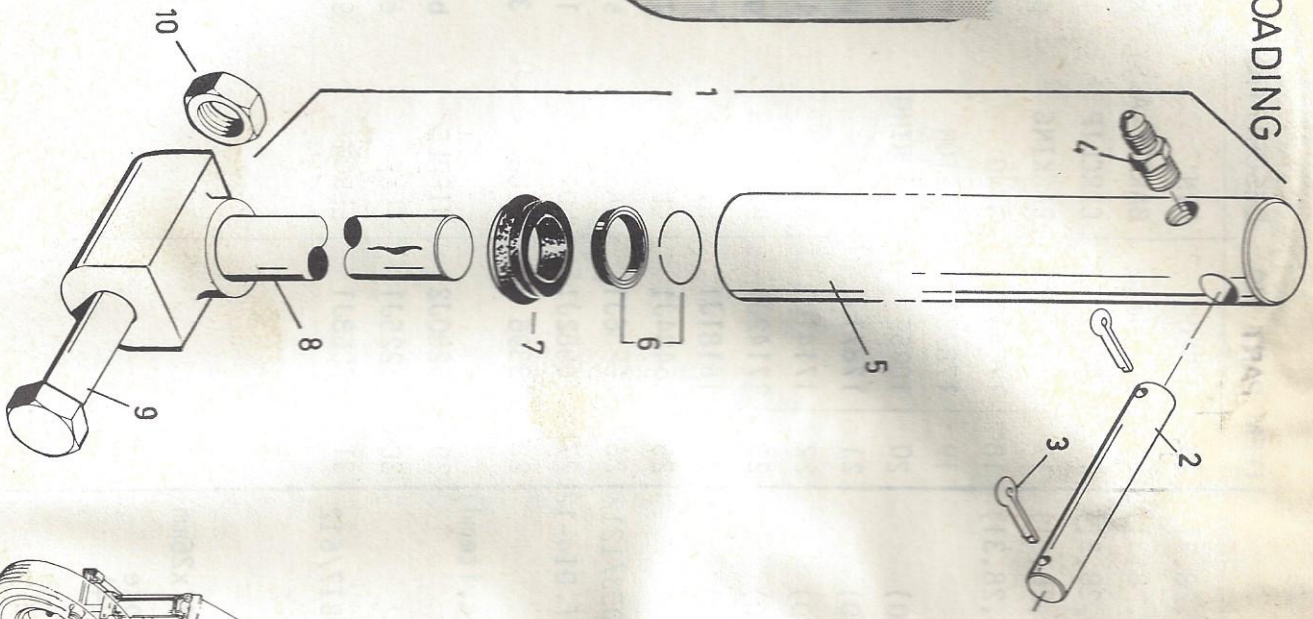


ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	17050J91	MANIFOLD COMPLETE 14H(inc. items 2,9,28,31)	14	SKP200	PIN set-lock 1-1/4" x 1/2"
	17051J91	MANIFOLD COMPLETE 18H(inc. items 2,9,28,31)	15	17143J1	BARREL ASSY. ref. 12562 (Plessey)
	17053J91	MANIFOLD COMPLETE 22H(inc. items 2,9,28,31)	16	17873J1	CIRCLIP 1-1/8" external
	17054J91	MANIFOLD COMPLETE 26H(inc. items 2,9,28,31)	17	16473J1	PACKING piston } ref. L25-SAWR(Plessey)
	17055J91	MANIFOLD COMPLETE 30H(inc. items 2,9,28,31)	18	17144J1	RING wear } order both items
2	17056J91	MANIFOLD ASSY. 14H(inc. items 29 & 30)	19	17872J1	PISTON ref. 13195 (Plessey)
	17057J91	MANIFOLD ASSY. 18H(inc. items 29 & 30)	20	10959	'0' RING 7/8" ID ref. AN6227-17 (Lud.)
	17059J91	MANIFOLD ASSY. 22H(inc. items 29 & 30)	21	17871J1	ROD piston ref. 13196 (Plessey)
	17060J91	MANIFOLD ASSY. 26H(inc. items 29 & 30)	22	17141J1	RING lock, ref. 10763 (Plessey)
	17061J91	MANIFOLD ASSY. 30H(inc. items 29 & 30)	23	17142J1	BEARING gland, ref. 10810 (Plessey)
3	15248J1	ELBOW accum. 90°M+F3/4" JICx3/4" UN D53/1212	24	16181J1	WIPER rod, ref. Lud. W26
4	14359J1	SLEEVE/NUT tube 3/4" JIC ref. Duff. D14-12	25	16484J1	CLAMP 12mm manifold
5	18414	NUT M12 h.t. plated	26	16886J1	WASHER star, 12mm
6	15246J91	PIPE ASSY. manifold to accum. (inc. item 4)	27	16882J1	NUT 12mm
7	17970J1	YOKE cylinder accumulator	28	13396	PLUG 3/8" BSPT. D59/6 (remove for tandem hitch)
8	18413	BOLT 12 x 100 h.t. plated	29	15280J2	NIPPLE brass 1/4" BSPT x 7/16" SAE
9	15244J1	ELBOW 90°3/8" BSPTx3/4" JIC DB17/612	30	15225J1	TUBE coiled ram
10	15519J1	INDICATOR ASSY.	31	17068J1	ELBOW 90° 1/4" BSPT x 9/16" JIC DB17/49
11	15252J92	RETAINER ASSY. accumulator spring			
12	15253J1	SPRING accum. 4-1/2" IDx21-1/2" x26mm			
13	17270J92	ACCUMULATOR ASSY. 2-1/2" ID x 8" stroke (items 15-24)			

JUMPER HYDRAULIC & SPRING LOADING



TO REMOVE OLD SEAL USE
SCRIBER OR SHARPENED WIRE.
TAKE CARE NOT TO DAMAGE
SEAL RECESS.



JUMPER - HYDRAULIC & SPRING LOADING

13.1276M72J2



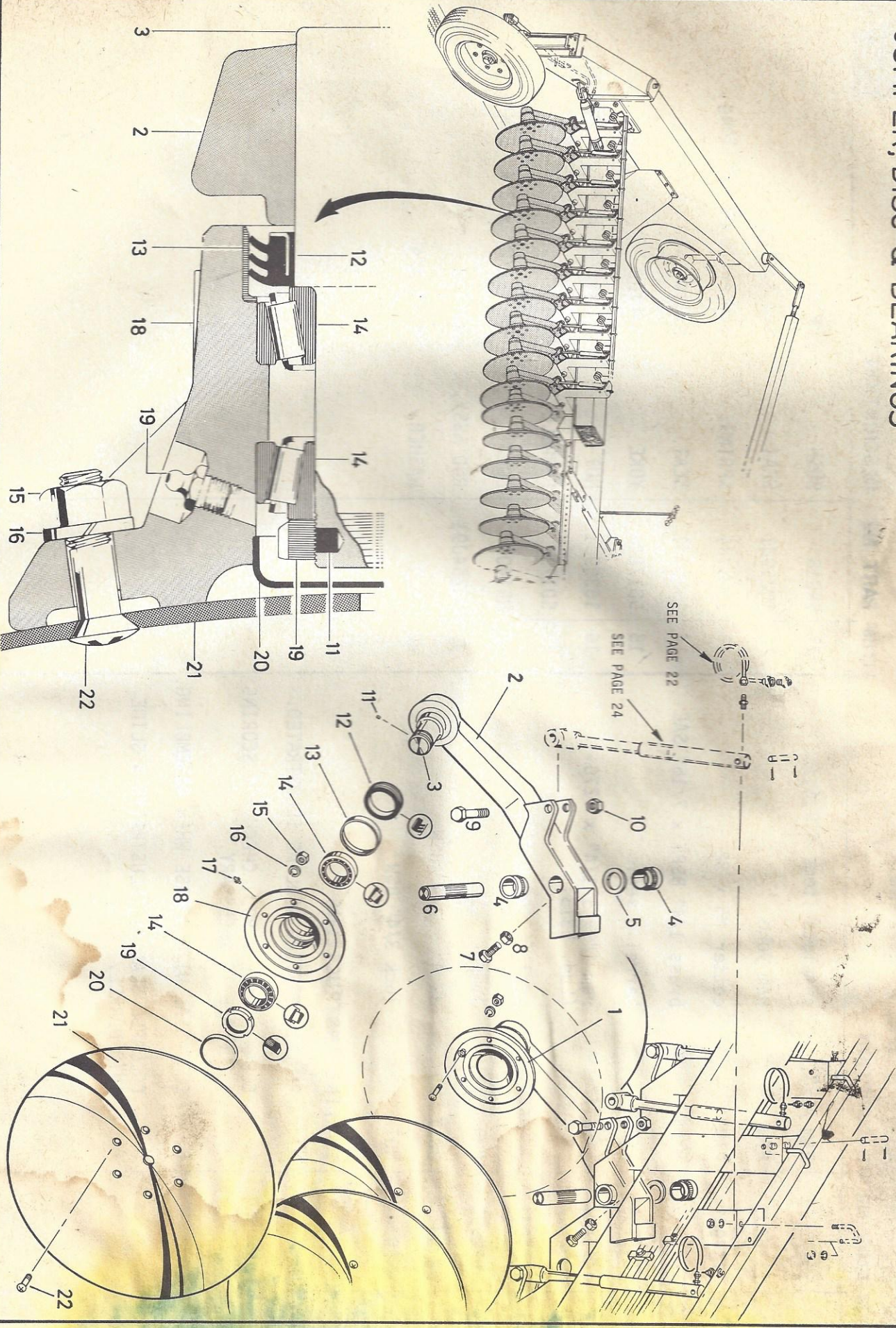
ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	15213J91	RAM ASSY. complete items 4,5,6,7,8	11	SR518	BUSH nylon
2	15224J1	PIN ram yoke	12	15259J1	SEAT top spring
3	17579J1	PIN cotter M5 x 32	13	15257J1	SPRING Jumper 16 mm 18" long
4	15280J2	NIPPLE brass 1/4" BSPT x 7/16" SAE	14	15258J1	SEAT bottom spring
5	16467J91	KIT barrel & seals	15	SD1784A	YOKE spring
6	15218J1	SEAL ram 1" x 1-1/4" x .270 (Lud. L313)	16	16369J1	NUT lock 3/4" BSW 8 mm thick
7	15219J1	SCRAPER seal (62100 Wyclitp)	17	SD1792	FERRULE yoke
8	15220J91	ROD ASSY. Jumper	18	HR140	BOLT HR 1-1/2" x 3/4" BSW
9	HR150	BOLT HR 4" x 3/4" BSW	19	16254J91	ROD ASSY. spring
10	WHL9	NUT lock 3/4" BSW	20	FBW9	WASHER flat 3/4"

FITTING INSTRUCTIONS

- A - REMOVE EXISTING SEAL AS ILLUSTRATED.
- B - CLEAN BARREL & ROD, CHECK FOR SCORING & REPLACE IF NECESSARY.
- C - COAT SEAL WITH GREASE WHEN ASSEMBLING.
- D - COLLAPSE SEAL AS ILLUSTRATED & SLIDE INTO BARREL.

JUMPER, DISC & BEARINGS

3-1276M72J2

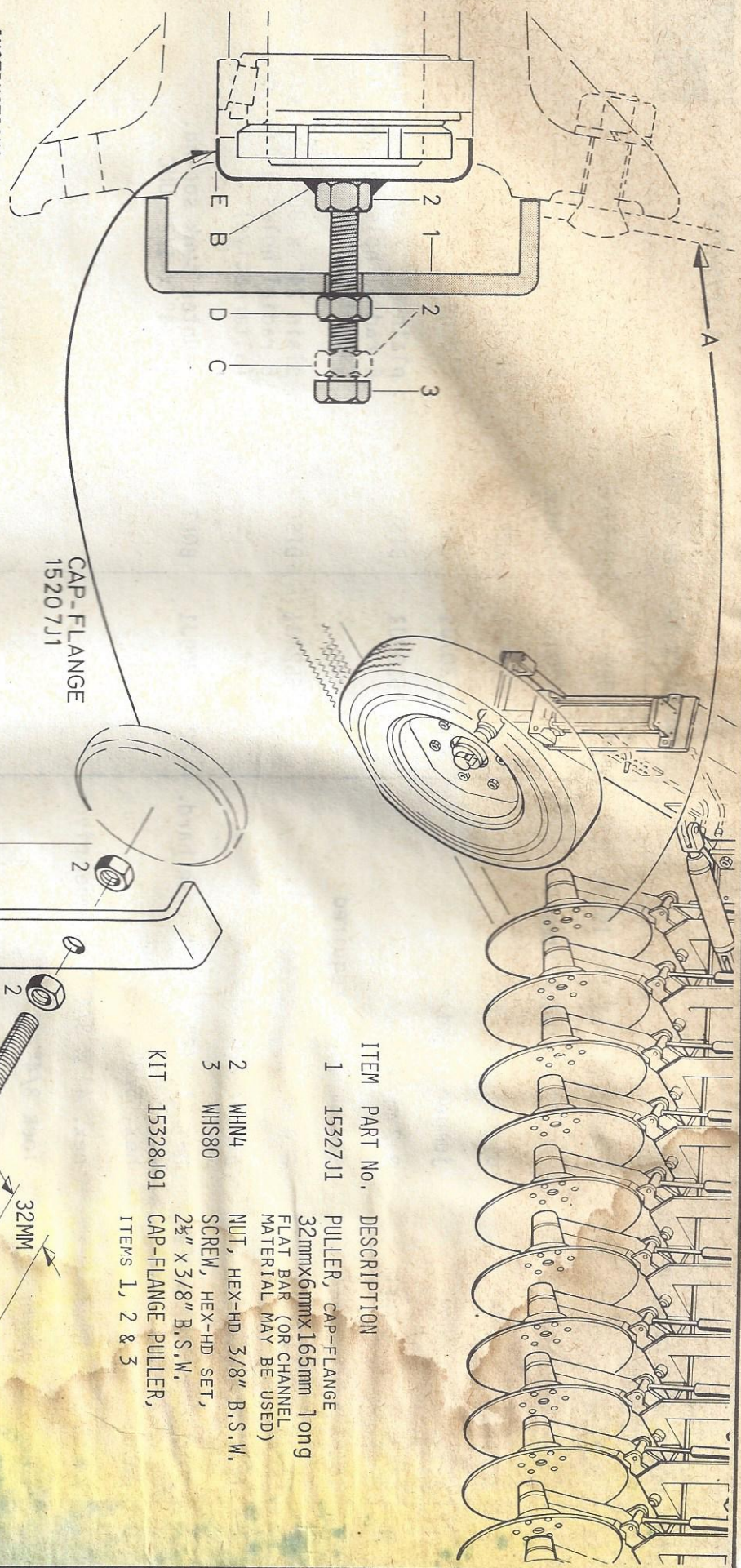


ER, DISC & BEARINGS

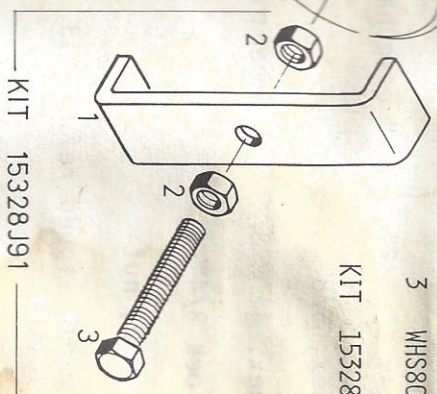
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ITEM NO	PART NO	DESCRIPTION	ITEM NO	PART NO	DESCRIPTION
1	15194J91	JUMPER ASSY. items 2,3, 11-14, 16-20	17	D999	NIPPLE grease 1/8"
2	15195J91	JUMPER ARM SUB ASSY. includes item 3	18	15204J1	FLANGE disc
3	15196J1	SPINDLE disc-jumper arm	19	15205J1	NUT spindle 50 mm
4	15140J1	BUSH jumper spindle	20	15207J1	CAP flange
5	15176J1	WASHER 3.2 mm)	21	15208J1	DISC plain 24" x 3/16" x 1" rd. hole 6 radial holes 3-1/4" dish (supplied)
	15332J1	WASHER 4.8 mm) as required			
	15316J1	WASHER 6.4 mm)		15524J1	DISC plain 24" x 86. x 1" rd. hole 6 radial holes 3-1/4" dish (alternative)
6	15212J5	SHAFT jumper arm			
7	SD1540	SET SCREW hex. 1-1/2" x 5/8" case hard.	22	15209J1	BOLT counter sunk soc-hd. 1-3/4" x 1/2" UNC
8	WHN8	NUT hex. 5/8"			
9	HR150	BOLT hex. 4" x 3/4" HR Jumper pivot			
10	WHL9	NUT lock 3/4"			
11	15206J1	INSERT nylon, nut			
12	12395	SEAL triple tipped ref. 16913 Flavels			
13	12396	RING wear ref. 17254 Flavels			
14	15203J1	BEARING 50 mm ref. cup JLM104910 cone JLM104948			
15	15210J1	NUT plated 1/2" UNC			
16	SPW4	WASHER spring 1/2"			



CAP-FLANGE
15207J1



KIT 15328J91

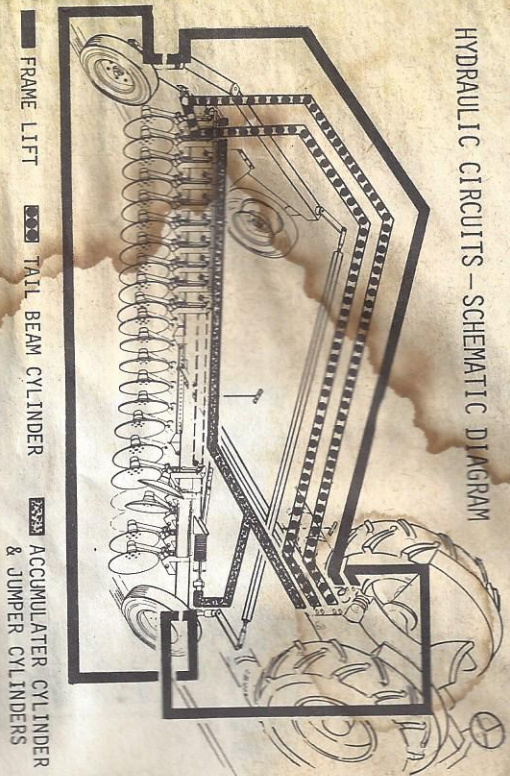
ITEM	PART No.	DESCRIPTION
1	15327J1	PULLER, CAP-FLANGE 32mmx6mmx165mm long FLAT BAR (OR CHANNEL MATERIAL MAY BE USED)
2	WHN4	NUT, HEX-HD 3/8" B.S.W.
3	WHS80	SCREW, HEX-HD SET, 2 1/2" X 3/8" B.S.W.
KIT 15328J91		CAP-FLANGE PULLER, ITEMS 1, 2 & 3

INSTRUCTIONS -

- A - REMOVE DISC
- B - TACK WELD NUT TO CENTRE OF CAP-FLANGE
- C - WITH NUT UNDER HEAD INSERT SCREW THROUGH 11MM HOLE IN CHANNEL AND TIGHTEN SCREW TO WELDED NUT.
- D - TURN NUT AGAINST CHANNEL WHICH WILL LIFT SCREW AND CAP-FLANGE.
- E - WHEN RE-ASSEMBLING APPLY PLIABOND (OR EQUIVALENT) TO MATING SURFACES.

KIT, CAP-FLANGE PULLER,
JUMPER BEARINGS

HYDRAULIC CIRCUITS - SCHEMATIC DIAGRAM



All hydraulic circuits terminate with plugged ends. Tractors having less remote outlets than plough has hydraulic functions, logically suggests snap couplings on plough outlets.

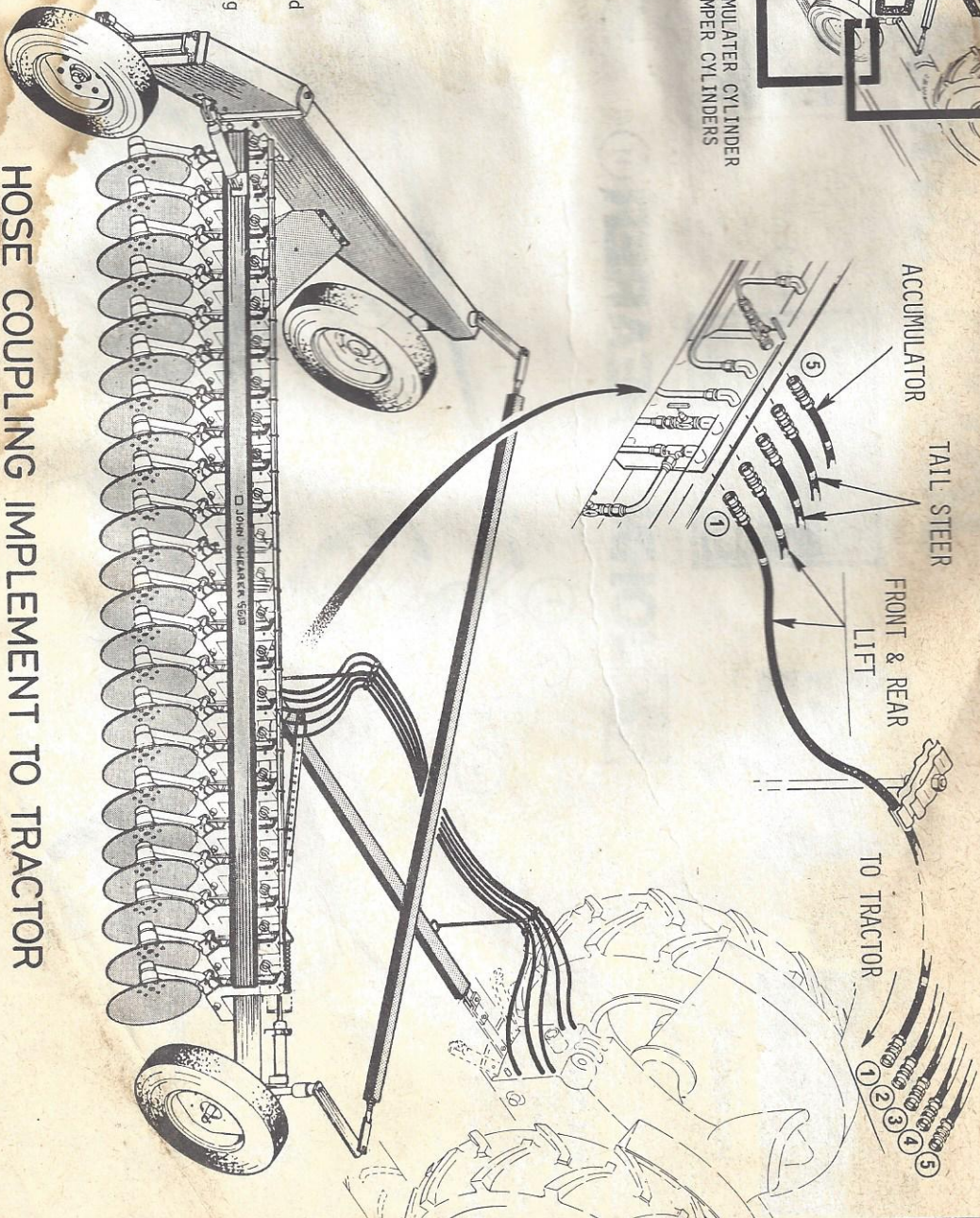
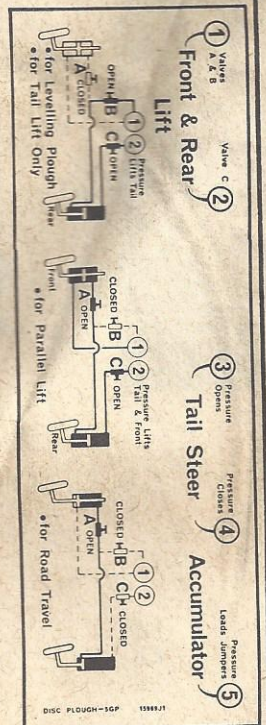
On tractors with more remote outlets than plough requires, it may be more convenient to leave hoses, with tractor snap couplings, permanently on plough.

NOTE!

1. The accumulator ram is a single acting circuit only and requires one operating hose. Tail steer and rear lift circuits are double acting and require two hoses.
2. Rear lift and accumulator circuits have inbuilt needle valves. This permits the plough to be operated with these circuits "pre-set" and the hoses then disconnected and used on another circuit, e.g. if the tractor has only one remote service and tail steering is the most valuable function to operate "on the go" in the particular conditions e.g. say on hillsides.

On the other hand the tail steer cylinder has no needle valve. If it is decided to operate without hoses on this circuit, it is necessary to either...

- (a) Fit the screw tail steer turnbuckle;
- (b) Have snap couplings on the plough which will hold circuit pressures in the plough while working.



HOSE COUPLING IMPLEMENT TO TRACTOR

TRANSFERS



21-1276M72J2

PLOUGH W-1-D-E
YOUR SGP IS CAPABLE OF WORKING 3 INCHES (25mm) OR WIDER PER DISC IN MOST CONDITIONS.

USE THIS ABILITY

DISCS	ft. lbs.	m
14	9-4	2-8
18	12-0	3-6
22	15-8	4-4
26	19-6	5-2
30	23-4	6-0

IT WILL SAVE YOU FUEL TIME DAMAGE WEAR

SETTING UP
WITH PLOUGH SHOWN AND ON LEVEL GROUND:

1. TIGHTEN FRONT TRAILER SO THAT ALL DISCS TOUCH GROUND.
2. ADJUST DEPTH STOP (AT REAR LIFT CYLINDER) SO THAT IT OPERATES 2" (50mm) AFTER ALL DISCS TOUCH GROUND.

BEST PLOUGHING TIPS:

1. ADJUST TAIL STEER TO ONE ABRUPT WIDTH OF CUT.
2. AVOIDER TONGING ON JUMPERS UNTIL REQUIRED PLOUGHING DEPTH IS ACHIEVED.
3. ONLY ADJUST UP OR DOWN PLOUGH WHEN WILL NO TONGING BEHIND.
4. OPEN UP W-1-D-E-R WHEN POSSIBLE.
5. CONTROL PLOUGHING DEPTH BY ADJUSTING OF JUMPER LOADING PRESSURE.

JOHN SHEARER



JOHN SHEARER

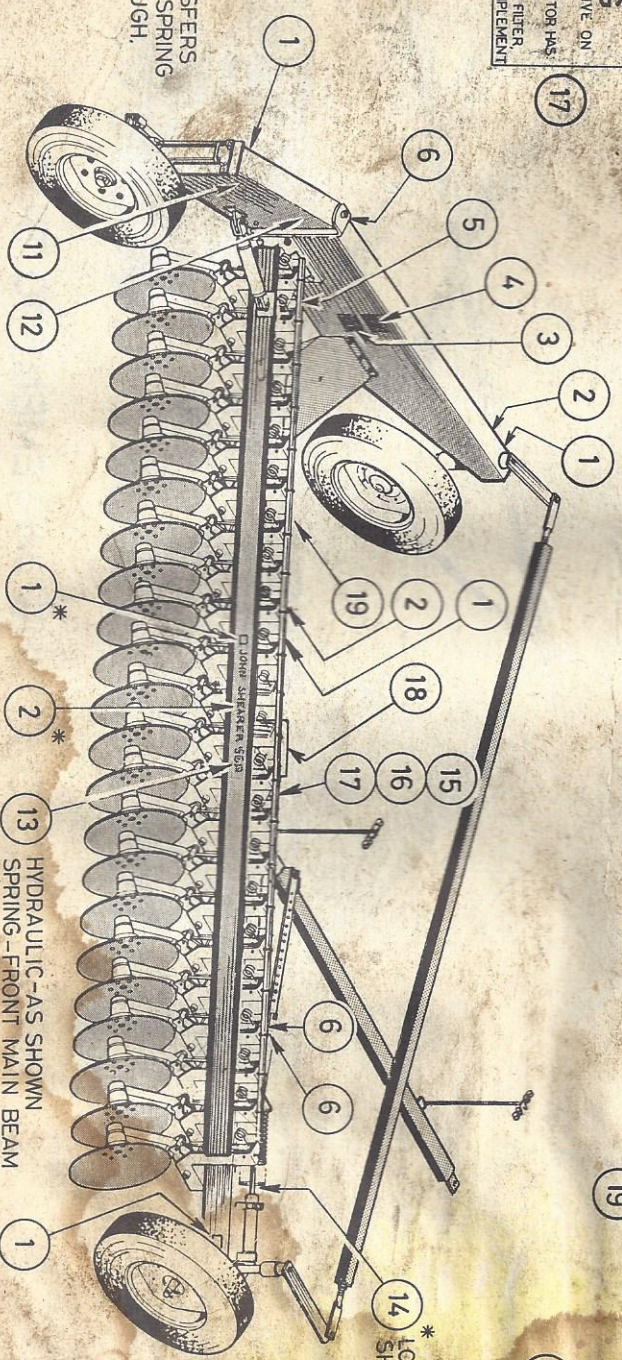
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HYDRAULIC FLUID
WE USE AND RECOMMEND MOBILfluid 423 HEAVY DUTY HYDRAULIC FLUID, A PRODUCT OF MOBIL OIL AUSTRALIA LIMITED. MOBILfluid 423 IS COMPATIBLE WITH OTHER HYDRAULIC FLUIDS. IT IS SUITABLE FOR USE AS A MULTI-PURPOSE TRANSMISSION/HYDRAULIC FLUID ON MACHINERY WITH POWER SHIFT TRANSMISSIONS, FITTED WITH HYDRAULIC SYSTEMS, WET CLUTCHES AND WET BRAKES.

WARNING
AVOID DAMAGE TO THE LIFT MECHANISM BY ADJUSTING STROKE SPEED OF THE SPEED CONTROL VALVE TO FULL LOAD ENGINE SPEEDS OF 1100-1150 RPM. LOAD ENGINE 1.5 - 2.0 SECONDS FOR 8" STROKE 3.0 - 4.0 SECONDS FOR 16" STROKE *FASTER SPEEDS CAN CAUSE DAMAGE

WARNING
HYDRAULIC SYSTEMS THRIVE ON CLEAN OIL
ENSURE THAT YOUR TRACTOR HAS:
• CLEAN OIL AND
• AN EFFECTIVE OIL FILTER
PRIOR TO COUPLING THIS IMPLEMENT



* THESE TRANSFERS DELETED ON SPRING LOADED PLOUGH.

* LOCATE EXACTLY AS SHOWN ON DWG B5757

Approved by The Associated Companies of Manufacturing, and The Department of Overseas Trade.