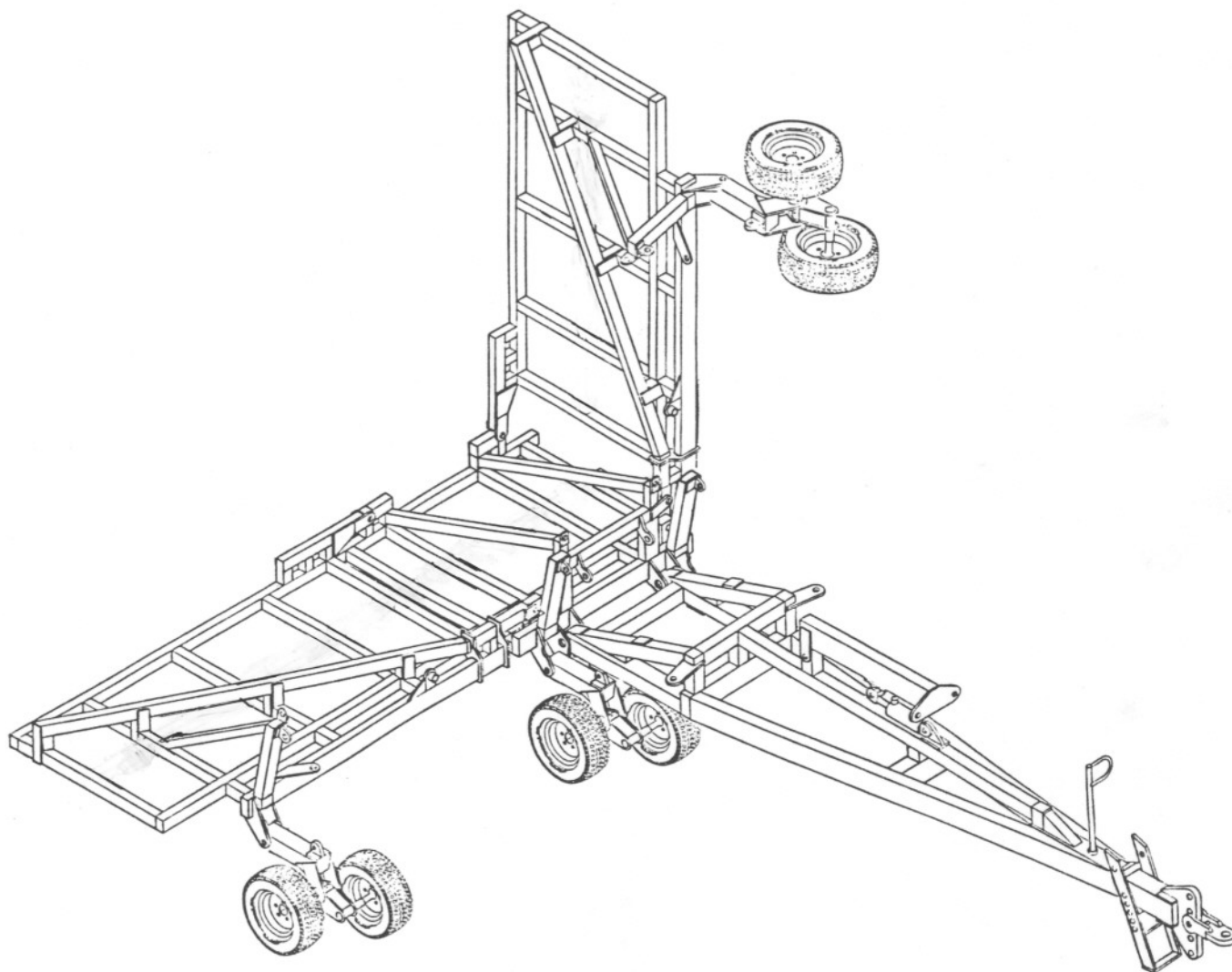


**ALL-FARM SEEDBED  
CULTIVATOR**



# FRONT FOLDING ALL-FARM SEEDBED CULTIVATOR



OPERATORS MANUAL  
&  
SPARE PARTS BOOK

## WARRANTY

In this warranty **SIMBA INTERNATIONAL LIMITED** is referred to as "the Company".

1. Subject to the provisions of this warranty the Company warrants each new machine sold by it to be sold free from any defect in material or workmanship.
2. If the machine or part thereof supplied by the Company is not in accordance with the warranty given in clause 1 the Company will at its option;-
  - (a) make good the machine at the Company's expense, or
  - (b) make an allowance to the purchaser against the purchase price, or
  - (c) accept the return of the machine and at the buyers option either
    - i. repay or allow to the buyer the invoice price thereof, or
    - ii. replace the machine as soon as reasonably practical.
3. This warranty shall not oblige the Company to make any payment in respect of loss of profit or other consequential loss or contingent liability of the Purchaser alleged to arise from any defect in the machine or impose any liability on the Company other than that contained in clause 2.
4. Any claim under this warranty must be notified to the Company in writing specifying the matters complained of within 12 months from the date of receipt by the Purchaser or his nominee of the machine.
5. Any claim under this warranty must be made by the original purchaser of the machine and is not assignable to any third party.
6. If the purchaser hires out the machine to any third party the warranty shall apply only to matters notified to the Company in writing within 90 days of the date of delivery and clause 4 shall be read as if the period of 90 days were substituted for the period of 12 months.
7. **The Warranty will cease to apply if:-**
  - (a) any parts not made, supplied or approved in writing by the Company are fitted to the machine, or
  - (b) any repair is carried out to the machine other than by or with the express written approval of the Company, or
  - (c) any alterations not expressly authorised by the Company in writing are made to the machine, or
  - (d) the machine is damaged by accident, or
  - (e) the machine is abused or overloaded or used for a purpose or load beyond its design capabilities.
8. Any dispute as to whether the goods are sold free from any defect in workmanship or materials shall be referred to a single arbitrator to be agreed between the Company and the Buyer or in default of agreement to be nominated by the President for the time being of the Law Society of England and Wales.

## **DECLARATION OF CONFORMITY**

Simba International Limited hereby declare that the Product described in this Operators Manual, and defined by the Serial Number Plate attached to the Chassis of the Machine (a part copy of which is detailed overleaf and must be completed indicating the relevant machine details), conforms with the following Directives and Regulations, and has been certified accordingly.

**Section 6 of the Health and Safety at Work etc. Act 1974.**

**EC Machinery Directive 89/392/EEC, as amended by 91/3688/EEC, 93/44/EEC, and 93/688/EEC.**

**The Supply of Machinery (Safety) Regulations 1992 (S.I. 1992/3073) as amended (S.I. 1994/2063).**

**The Provision and Use of Work Equipment Regulations 1998 (S.I.1992/2932 as amended 1995).**

### **THE MANUFACTURER**

Simba International Limited.  
Woodbridge Road,  
SLEAFORD. NG34 7EW.  
Lincolnshire.  
England.

Telephone 01529 304654.

### **CERTIFIED ON BEHALF OF SIMBA INTERNATIONAL LIMITED.**

Philip J. Wright. BSc (Hons) C Eng. MI Agr.E  
Technical Director.

C €



SIMBA MACHINERY LIMITED.  
FRONT FOLDING ALL-FARM SEEDBED CULTIVATOR  
OPERATORS MANUAL & SPARE PARTS BOOK.

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## 1. INTRODUCTION

The Simba Front-Folding All-Farm Seedbed Cultivator is designed to be superior to the more conventional Seedbed machines both in terms of working and transport features.

Two types of tine are available as required which are mounted on independently sprung frames. The wheels are positioned ahead of the tine area ensuring versatility of tine spacing and maximum trash clearance.

Depth control is infinitely adjustable by a simple direct turnbuckle to each wheel.

Simple hydraulic circuits are used throughout for longer term durability and ease of maintenance.

Various secondary fitments are available to increase the versatility of the machine.

Due to the large size of the machine it is especially important that anybody who intends to operate or repair this machine reads this manual in its entirety.

### IMPORTANT SAFETY POINTS



WARNING: ALWAYS STAND CLEAR OF THE FOLDING WINGS UNLESS FULLY SUPPORTED BY TRANSPORT CHAINS.



WARNING: ALWAYS LOWER THE WINGS WHEN THE MACHINE IS NOT IN USE.



WARNING: ALWAYS KEEP TRANSPORT SPEED BELOW 20 MPH (32 KPH) ALWAYS KEEP WORKING SPEED BELOW 7 MPH (11 KPH)



WARNING: EXERCISE EXTREME CAUTION WHEN TURNING CORNERS AND WHEN OPERATING ON SLOPES.

The Simba All-Farm Seedbed Cultivator is NOT designed for use on unlevel, hard ploughing or directly on to stubble with out an initial pre-cultivation (with springtine, disc etc.) Use (or abuse) under such conditions may well lead to excessive point and levelling board wear, or more severe breakage.

## 2. ASSEMBLY

Reference to the illustrations at the rear of this manual will be of use when assembling this machine.

Locate a flat area for assembly and place the centre section and wings in their relative positions on the ground.



Raise the machine off the ground, using blocks, until the height is sufficient to fit the tines and points (although these should not be fitted at this stage).

Attach the wings to the mainframe using the greaseable bolts (item 3, p.11).

Position and attach the wheel legs (items 1 & 2, p.19) to the lugs on centre and wing frames, using the bolts (item 6, p.11).

Attach the wheel leg adjusters (items 5 - 11, p.19) between the wheel legs and the wing and centre sections. Hubs and wheel assemblies can now be attached.

Attach the drawbar to the centre section using the greaseable bolts (item 5, p.11). The drawbar support unit (item 21, p.17) and its cylinder (item 10, p.17), pipes and chains, the drawbar jack (item 4, p.17), and front shackle (item 2, p.17) may also be attached.

The wing lift cylinders (item 9, p.11) and tilt mechanism cylinders (item 17, p.17) can now be fitted. When fitting the wing cylinder ensure that the cylinder floating link (item 13, p.11) is in the correct orientation, as illustrated.

Pipe up the hydraulic system as illustrated on page . By using this diagram and its associated descriptions on the opposite page, you should encounter no problems in assembling the hydraulic circuitry. The adjustment and operation of the various valves is outlined in subsequent sections of this manual. At this stage, leave the pressure reducing valve as set at the factory.

Once the hydraulic system is piped up, it should be checked. Firstly by visually checking against the drawing, and secondly by activating the system, before access to the hydraulic pipes is hindered by the tines and crumbler etc. Connect to a suitable tractor initially.

Ensure that the pipes are connected so that they do not trap or foul the wings as they fold. EXERCISE GREAT CARE when folding for the first time.

Details on folding the wings appears in the operation section of the manual.

Never stand underneath the wings when in the raised position.

Lower the machine, and continue to lower until the relief valve (WHICH MUST BE LEFT AT THE FACTORY PRESET PRESSURE) blows. Increase adjustment until there is JUST sufficient pressure to tilt the machine rearward to the cylinder stroke limit (400mm).

Lower the machine back onto the supports.

Fit the appropriate tines in their respective positions as indicated on the tine frames. Attach the tine frames to the main frame using bolts (item 28, p.11), ensuring that the spring bar and spring (items 9 & 10, p.13) are in position.

Connect the wing to centre support chains (item 21, p.11)

Before operating the machine ensure all bolts are tight and any appropriate grease points are greased. Reference to the Maintenance section of this manual should be made at this point.

### 3. OPERATION

#### INITIAL SETUP PRIOR TO OPERATION

Hitch the assembled implement onto a suitable tractor. Note that hitching an unfolded machine is simplified by using the tilt cylinders to adjust the drawbar height.

If the machine is in the folded state, use the following procedure to unfold.

1. Ensure all hydraulic shutoff valves are open to allow passage of oil.

2. Lower the front wing support unit (item 21, p.17) by contracting the cylinder, and remove the retaining hooks to enable the wings to unfold.

3. Activate the tilt/ unfold cylinders. These should be extended to initially open the wings, and then tilt the entire unit rearward to the working position.

IMPORTANT NOTE: TAKE GREAT CARE when initially operating the system (or after hydraulic overhaul) as air in an unpurged system can lead to rapid movements and excessive shock loads being imparted.

4. Adjust the wheels and rear crumbler to give the desired depth setting.

5. Fold the machine, noting the precautions relating to new or overhauled machines above.

6. Prior to raising the front transport unit, check the tilt cylinders are unstressed. The mainframe stop bolts (item 8, p.11) are fitted with washers under the heads. Add or remove washers until it is possible to rattle the hydraulic cylinders when the stop bolt heads are taking the load.

8. After the main wings are folded, couple the wing chain hooks and raise the front transport unit to secure the wings. The machine is now ready for final field setup and operation.

### FIELD SETUP AND OPERATION

#### PREPARING FOR WORK

1. Open all three hydraulic shutoff valves.
2. Lower the front transport unit and uncouple the hooks to enable the wings to be unfolded.
3. Ensure any chains, etc. are clear of snagging on moving frame sections.
4. Activate the tilt/ fold circuit to open the wings and tilt the frame rearward to ground level.
5. Continue to operate the unfolding system until the wing folding cylinders (item 9, p.11) are fully extended. Cylinder stroke is 400mm.
6. Lock the shutoff valves to the wing cylinders in the off setting to isolate these cylinders.  
NOTE: It is important to ensure the cylinders are fully extended otherwise wing float is impaired. The wing cylinders are isolated from the tilt cylinders to avoid stressing this area continuously when lifting the machine at turns in work.
7. The machine is now ready for work (see section on field adjustments and techniques).

#### PREPARING FOR ROAD TRANSPORT

1. Open all hydraulic shutoff valves.
2. Ensure the transport unit (item 21, p.17) is down (cylinder contracted).
3. Activate the tilt system to raise the mainframe and then fold the wings forward. TAKE CARE. Do not allow the wings to move quickly otherwise damage may result.
4. Ensure the wings are fully inward. Couple the hooks and raise the transport unit.
5. Close the transport unit shutoff valves (item 13, p.17).
6. The machine is now ready for road transport.

## FIELD ADJUSTMENTS AND TECHNIQUES

Prepare the machine for work as outlined previously.

**ADJUST THE PRESSURE REDUCING VALVE** to give just enough pressure to enable the tilt cylinders to fully extend to tilt the unit rearward. Greater pressure may cause damage. It is good practice to initially reduce the setting prior to extending the cylinders, and progressively increase the adjustment until the cylinders fully extend. It is often necessary to slightly increase pressure in the work situation from that set previously. IT IS NOT NECESSARY TO ADJUST THE VALVE AGAIN even if the machine is adjusted elsewhere.

Working depth is adjusted by the depth wheels, combined with the rear crumbler. Due to the differing centre and wing weights, it is necessary to adjust each section individually to ensure even depth across the width of the machine.

### ADJUSTING THE DEPTH WHEELS

Tilt forward and run onto hard ground. Tilt rearward fully to reduce pressure on the wheels. Adjust as necessary.

### PRINCIPLES OF OPERATION

The basic technique of operation is to tilt the frame rearward onto the crumbler for turns, allowing the frame to return to a level setting, running between wheels and crumbler when in work. The hydraulics can be operated in the "float" setting in work, or alternatively held and adjusted on the move by the operator to regulate the amount of soil ahead of the levelling boards. For either method, the frame should be tilted rearward slightly if soil builds up in front of the machine. The wheels then act as a depth limiter to limit excessive build up when on an initial pass over rough ground.

Once the depth and pitch has been set via the wheels and crumbler, the levelling boards can be adjusted as required. The leading board is designed to cut and level rather than carry soil, as such working obliquely to the plough seam or wheelings will give optimum results.

The secondary board spring tension should be adjusted to crush any clod passing over the first board, and to give the required amount of consolidation. Excess tension may lead to a rapid build up of soil extending to the front board. It is necessary to balance the tension of the rear board with the depth of the front to give the required effect.

It is possible to raise or remove the rear crumbler roll in order to operate the machine as a light springtine. In this manner it is possible to create a stale seedbed prior to a final pass with the all-farm in conventional mode to form the final seedbed.

#### 4. TRANSPORT

Refer to the previous section for detail on folding and preparing the machine for road transport.

The transport unit is designed to minimise stress on the wings, centre and drawbar when folded, and to act as a secondary device to retain the wings in the transport position. As such, the shutoff valves should be turned off when in transport.

The implement should be regarded as both a high and a wide vehicle in transport, and due care exercised when turning, on slopes and in the proximity of overhead obstructions.

Whenever possible, unhitch the implement with the wings UNFOLDED in the work position, and with the weight on the tines, not the wheels. As such, the tilt cylinders can be used to adjust the shackle height.

The over centre front jack should only be used if the unit is unhitched on a firm surface. In all other cases, unhitch as described when unfolded to enable the hydraulics to assist adjusting the drawbar height.

#### 5. MAINTENANCE

##### NUTS & BOLTS

All nuts and bolts should be kept dirt free, threads well greased and as tight as recommended. However bolts at pivot points should not be over tightened.

On a new machine re-tighten all nuts & bolts after 5 hours work and again after 15 hours. This also applies to parts that have been removed or replaced. After the initial 15 hours of work a once a week check is sufficient.

##### MAXIMUM NUT AND BOLT TORQUES

M16	GRADE 4.6	- 10 KG.M.	(73 lb.ft.)
	GRADE 8.8	- 24 KG.M.	(176 lb.ft.)
M20	GRADE 4.6	- 20 KG.M.	(146 lb.ft.)
	GRADE 8.8	- 48 KG.M.	(352 lb.ft.)
M24	GRADE 4.6	- 30 KG.M.	(220 lb.ft.)
	GRADE 8.8	- 80 KG.M.	(587 lb.ft.)
	GRADE 10.9	- 110 KG.M.	(807 lb.ft.)
M30	GRADE 4.6	- 60 KG.M.	(440 lb.ft.)
	GRADE 8.8	- 150 KG.M.	(1100 lb.ft.)
M36	GRADE 4.6	- 110 KG.M.	(807 lb.ft.)
	GRADE 8.8	- 280 KG.M.	(2055 lb.ft.)

Grease the appropriate bolts daily where nipples are fitted. These are:-

Wing hinge pivot bolts.  
Drawbar to mainframe main pivot bolts.  
Walking axle main pivots (if fitted).

Regularly check all above bolts and housings for wear. Additionally, check all cylinder attachment pins for wear. Note that the main tilt housings, and all necessary cylinder attachment points are fitted with replaceable sprung bushes for ease of maintenance.

Never use a hammer to assist tightening. Using an incorrect size or grade of bolt may result in extensive damage.

#### GREASE POINTS

Grease any grease points daily with a standard agricultural grease, the only exception to this are crumbler bearings (if fitted) which should only be greased once every three months. Wheel bearings are pre-packed at the factory and at the end of each season should be inspected and re-greased.

#### TYRE PRESSURES

Tyre pressures should be checked weekly, and **MUST NOT** exceed the maximums shown below.

<u>TYRE SIZE</u>	<u>MAX. P.S.I.</u>	<u>MAX. BAR</u>
10.0/75-15, 10 PLY	50	3.5
11.5/80-15, 10 PLY	60	4
12.5/80-15, 10 PLY	80	5.5
15/55-17, 10 PLY	50	3.5

#### WEARING PARTS

Any wearing parts (points, etc.) must be replaced as necessary or damage to a more expensive item may occur.

#### SPARE PARTS ORDERS

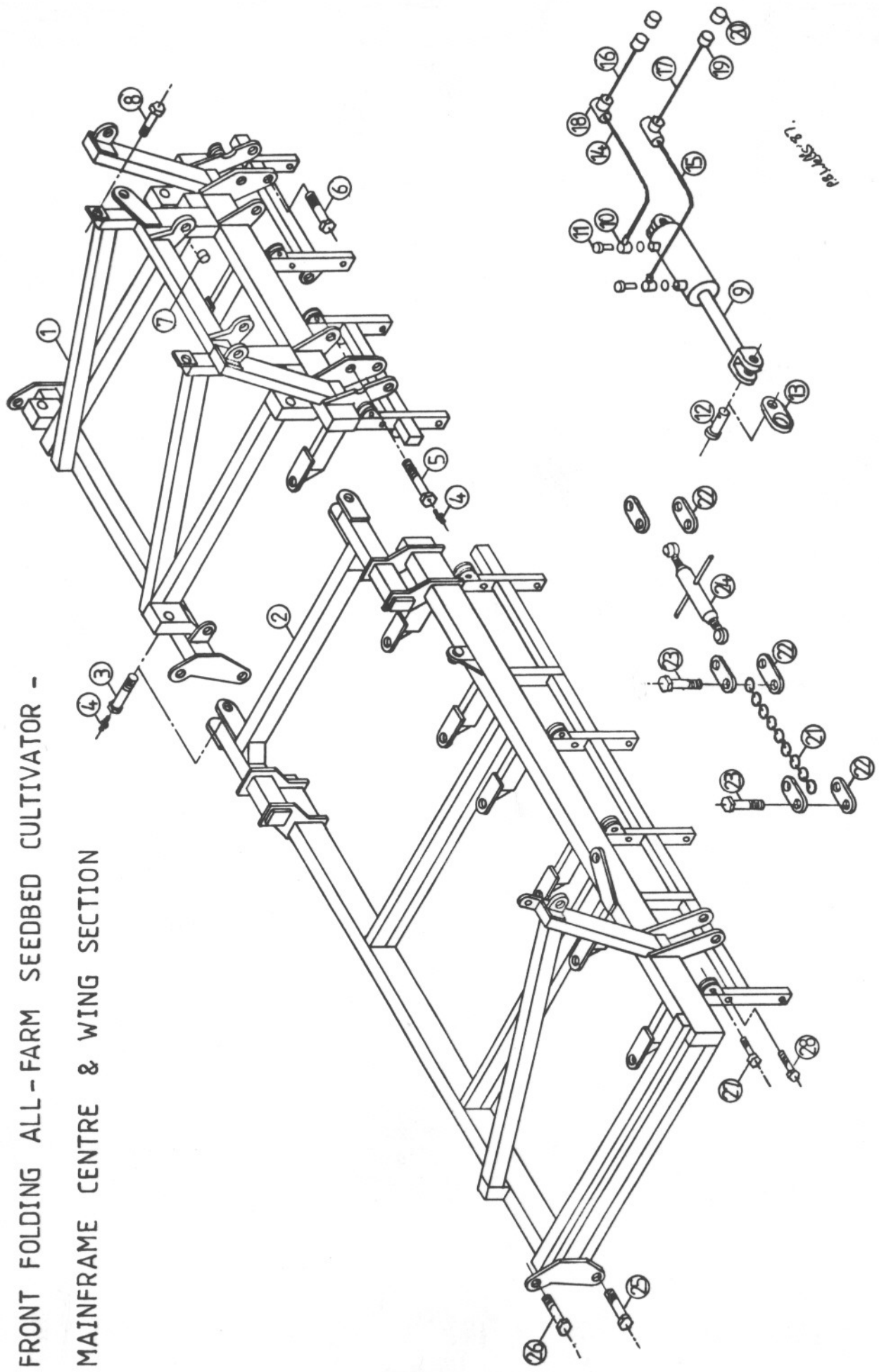
Parts in brackets **MUST** be ordered separately if they are required.

Eg. 0027 BOLT M24 (NUT 0717)

ABBREVIATIONS

CAT	-	CATEGORY
CTS	-	CENTRES
DIA	-	DIAMETER
D/A	-	DOUBLE ACTING
H/D	-	HEAVY DUTY
FT	-	FEET
F/WASHER	-	FLAT WASHER
L/H	-	LEFT HAND
L/NUT	-	LOCK NUT
M	-	METRE
MM	-	MILIMETRE
NI	-	NOT ILLUSTRATED
PT NO	-	PART NUMBER
R/H	-	RIGHT HAND
S/WASHER	-	SPRING WASHER

FRONT FOLDING ALL-FARM SEEDBED CULTIVATOR -  
 MAINFRAME CENTRE & WING SECTION





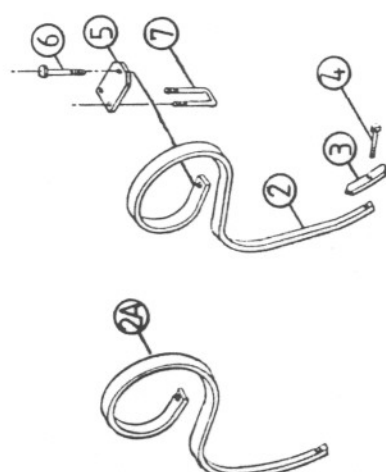
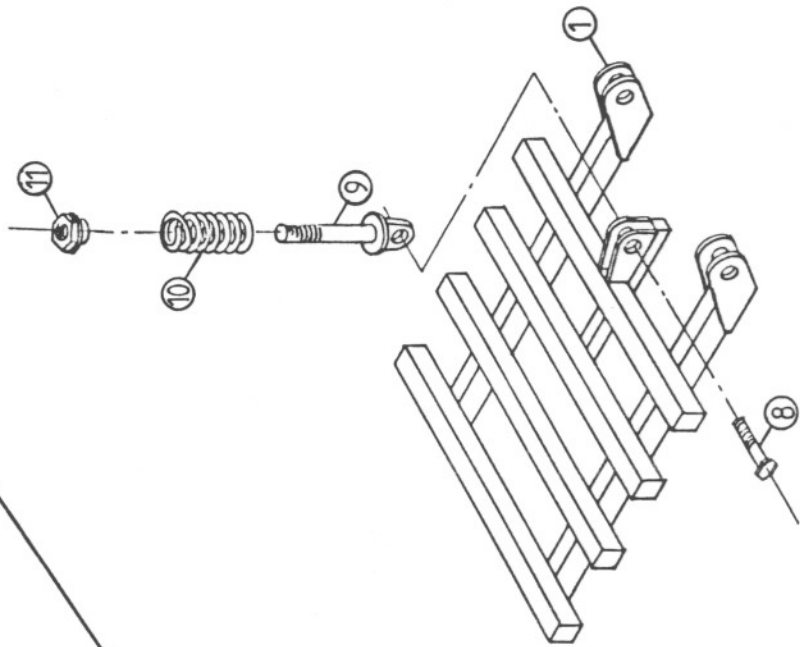
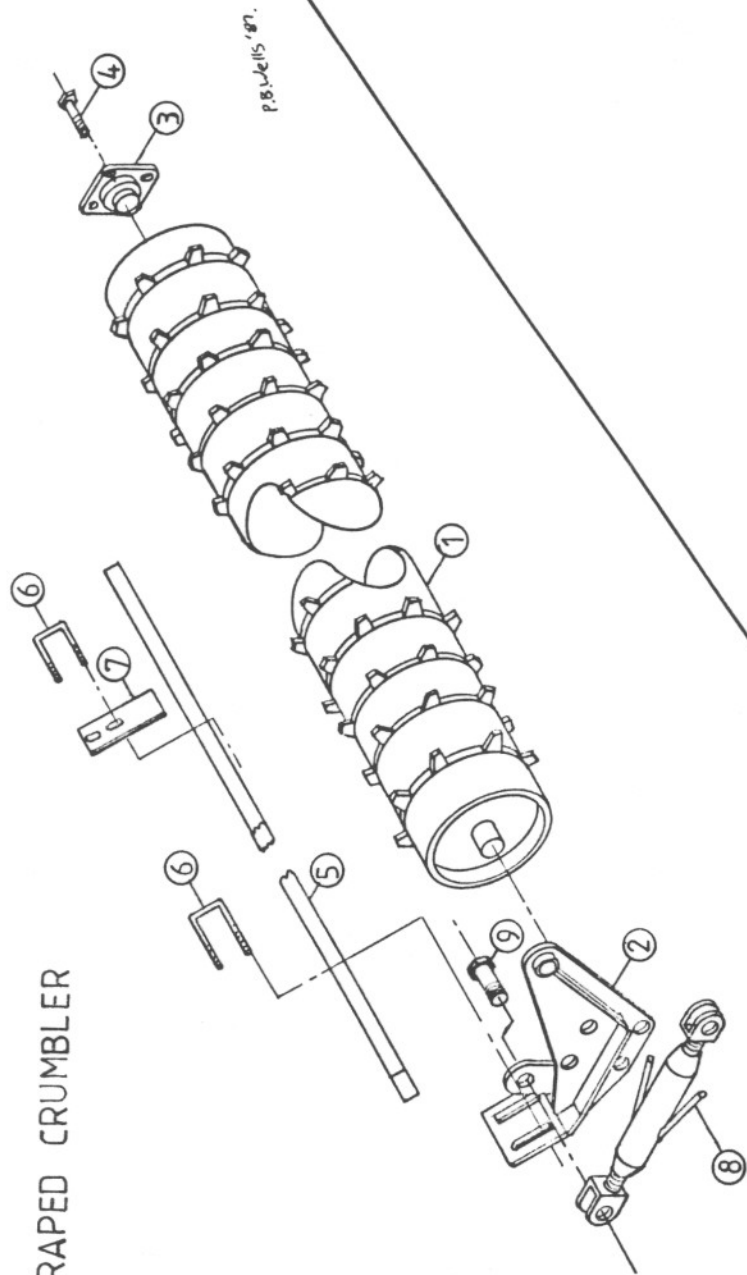
# FRONT FOLDING ALL-FARM CULTIVATOR

## MAINFRAME - CENTRE & WING SECTIONS

<u>ITEM NO.</u>	<u>PT.NO.</u>	<u>DESCRIPTION</u>
1	2901	MAINFRAME CENTRE SECTION
2	2902	WING FRAME R/H
	2903	WING FRAME L/H (N.I.)
3	2852	WING PIVOT GREASEABLE BOLT M36 (F/WASHER 2609, L/NUT 2012)
4	0071	GREASE NIPPLE
5	2854	DRAWBAR PIVOT GREASEABLE BOLT M60 (CASTLE NUT 1698, SPLIT PIN 2754)
6	0051	WHEEL AXLE PIVOT 1 3/4" BSW (F/WASHER 2623, S/WASHER 2633, NUT 0248)
7	1645	CYLINDER PIVOT BUSH
8	0054	DRAWBAR STOP BOLT M30 (SPACER WASHER 2608, S/WASHER 2598, NUT 0896)
9	0164	HYDRAULIC CYLINDER 100 X 400 D/A
	0165	CYLINDER SEAL KIT FOR 100 X 400 D/A
10	0200	BANJO BLOCK
	2263	BONDED WASHER
11	0724B	RESTRICTED BANJO BOLT
12	0210	CYLINDER PIN 25 X 115mm (LYNCH PIN 2484)
13	2867	CYLINDER FLAP
14	0183	HYDRAULIC HOSE 9ft
15	0182	HYDRAULIC HOSE 8ft
16	0181	HYDRAULIC HOSE 7ft
17	0177	HYDRAULIC HOSE 3ft
18	0204	'T' ADAPTOR
19	0203	MALE - MALE ADAPTOR
20	0205	QUICK RELEASE COUPLING
21	2895	WING SUPPORT CHAIN
22	1105	SUPPORT CHAIN RETAINING PLATE
23	0019	CHAIN RETAINING BOLT M24 (L/NUT 2010)
24	0157	CHAIN ADJUSTER
25	0015	CRUMBLER PIVOT BOLT M24 (F/WASHER 2604, L/NUT 2010)
26	1102	CRUMBLER ADJUSTER BOLT M16 (F/WASHER 2602, L/NUT 2008)
27	1901	LEVELLING BOARD BOLT M16 (F/WASHER 2602, L/NUT 2008)
28	0017	SPRING ASSISTED FRAME M24 (F/WASHER 2604, L/NUT 2010)

WHEN ORDERING SPARE PARTS PLEASE QUOTE, PART NUMBER,  
MODEL AND SERIAL NUMBER.

SCRAPED CRUMBLER



SPRING ASSISTED FRAME

P.B. Wells '87.

## FRONT FOLDING ALL-FARM CULTIVATOR

### SCRAPER CRUMBLER

#### ITEM NO. PART NO. DESCRIPTION

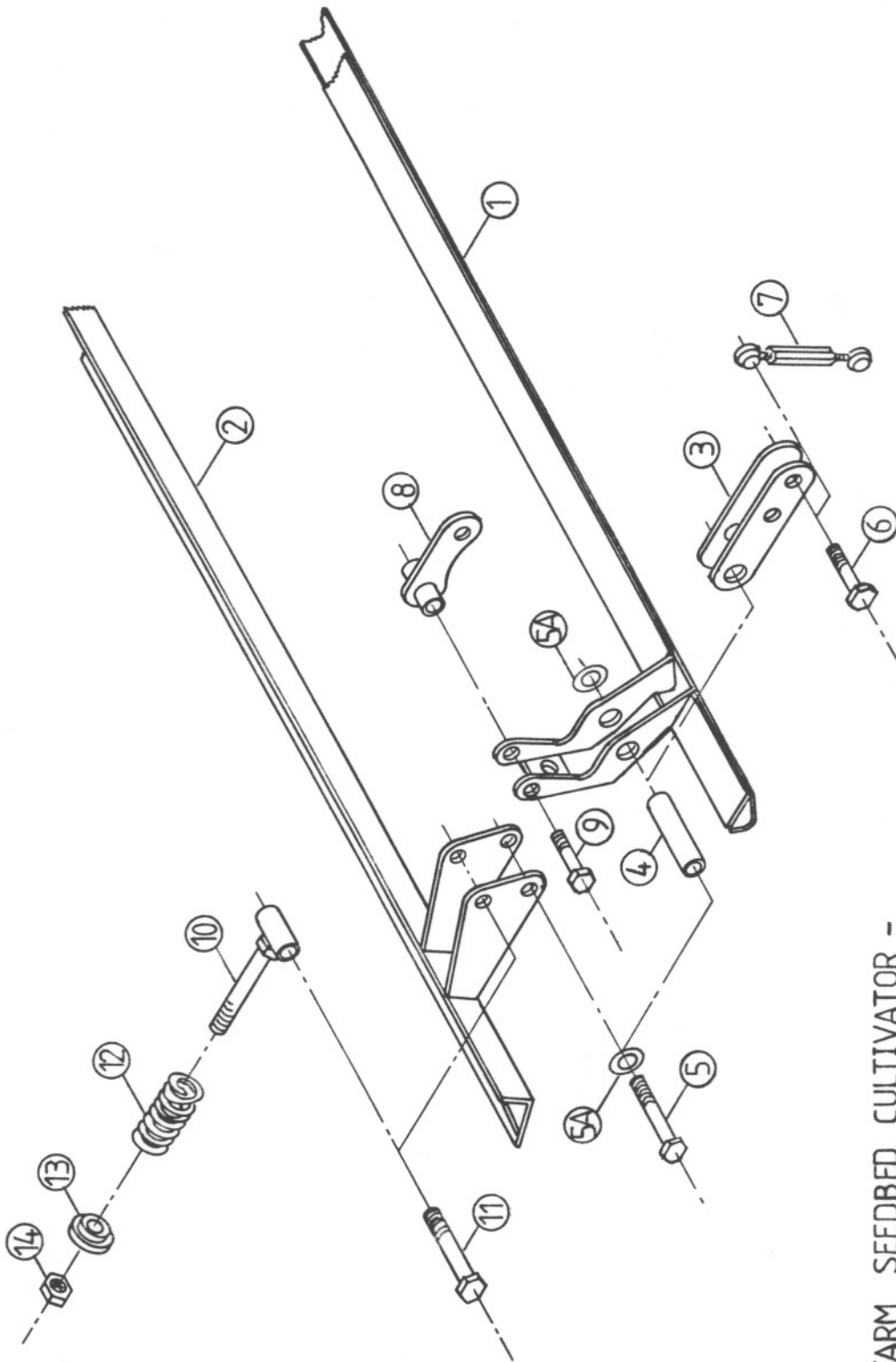
1	1354	SCRAPED CRUMBLER REEL (STATE OVERALL DIMS)
2	1832	CRUMBLER ARM R/H
	1833	CRUMBLER ARM L/H
3	1834	CRUMBLER BEARING
4	0004	BEARING BOLT M12 (F/WASHER 2601, L/NUT 2007)
5	1835	SCRAPER RAIL
6	1676	RETAINING 'U' BOLT M12 (F/WASHER 2601, L/NUT 2007)
7	1359	CRUMBLER SCRAPER
8	1845	DEPTH CONTROL ADJUSTER
9	1102	ADJUSTER BOLT M16 (F/WASHER 2602, L/NUT 2008)

### SPRING ASSISTED FRAME

#### ITEM NO. PART NO. DESCRIPTION

1	1836	TINE FRAME (PLS. STATE WIDTH)
2	1637	SPRING TINE - STRAIGHT
2A	1277	SPRING TINE - CURVED
3	1278	POINT
4	1018	POINT BOLT & NUT
5	1257	RETAINING PLATE
6	0006	RETAINING BOLT M12 (F/WASHER 2601, L/NUT 2007)
7	0002	RETAINING 'U' BOLT M12 (F/WASHER 2601, L/NUT 2007)
8	0407	SPRING ASSEMBLY BOLT M20 (F/WASHER 2603, L/NUT 2009)
9	1837	SPRING BAR
10	1023	SPRING
11	1839	NUT - SPECIAL

WHEN ORDERING SPARE PARTS PLEASE QUOTE PART NUMBER,  
MODEL, AND SERIAL NUMBER.



ALL-FARM SEEDBED CULTIVATOR -  
 LEVELLING BOARD ASSEMBLIES

51.81.81

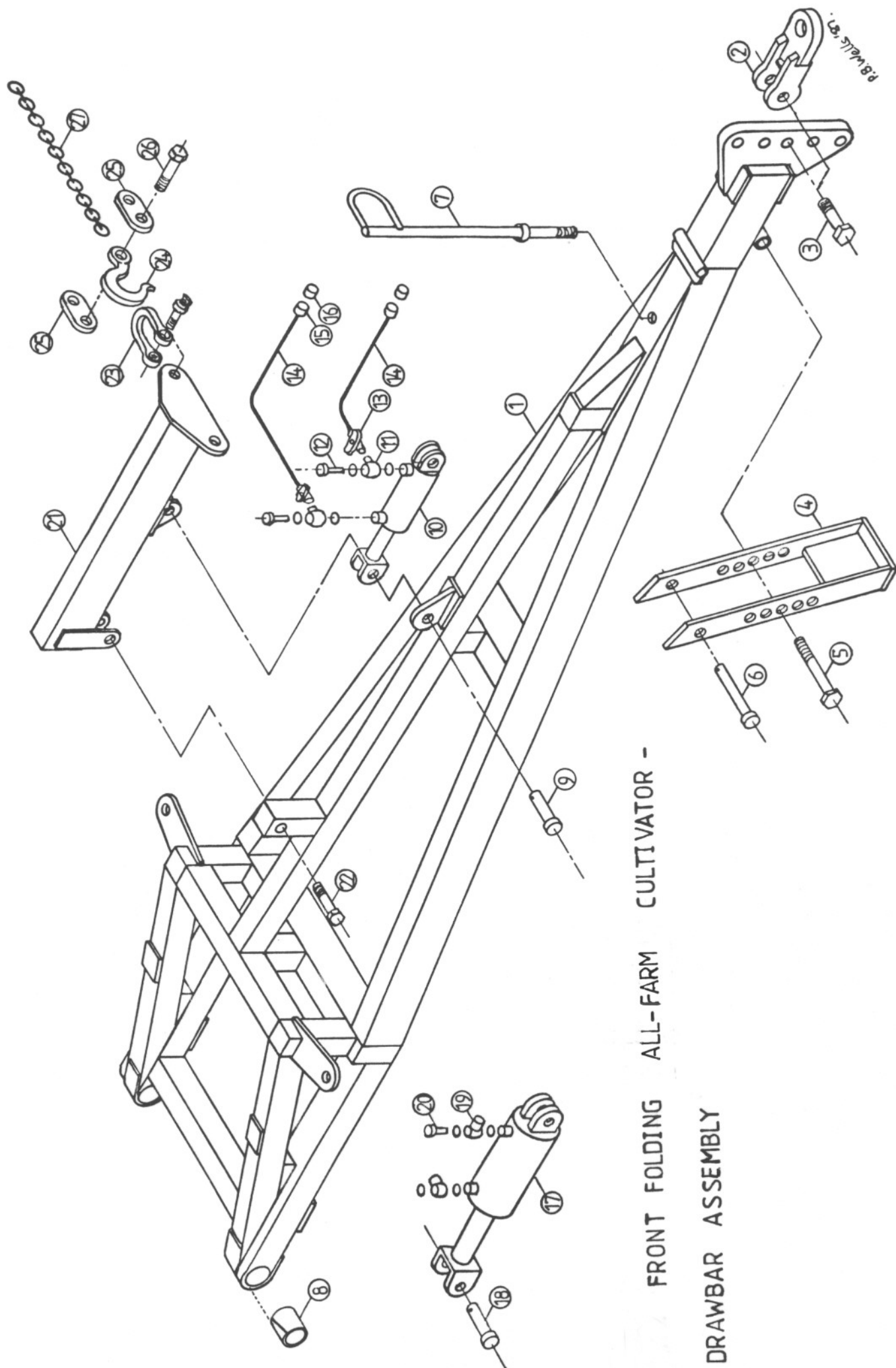
# FRONT FOLDING ALL-FARM CULTIVATOR

## LEVELLING BOARD ASSEMBLIES

### ITEM NO. PART NO. DESCRIPTION

1	--	PRIMARY LEVELLING BOARD
2	--	SECONDARY LEVELLING BOARD
3	2579	ADJUSTER PIVOT
4	2580	PIVOT BUSH
5	1352	PIVOT BOLT M16 (F/WASHER 2602, L/NUT 2008)
5A	2698	PIVOT BOLT WASHER - FOR USE ON SINGLE LEVELLING BOARD MODELS
6	1901	ADJUSTER BOLT M16 (F/WASHER 2602, L/NUT 2008)
7	2327	LEVELLING BOARD ADJUSTER
8	2581	MAIN FRAME LINK
9	2318	LINK BOLT M16 (F/WASHER 2602, L/NUT 2008)
10	2583	TENSION ADJUSTER BAR
11	1352	ADJUSTER RETAINING BOLT M16 (F/WASHER 2602, L/NUT 2008)
12	1023	TENSION SPRING
13	2584	SPRING RETAINING COLLAR
14	2008	SPRING RETAINING NUT M16

WHEN ORDERING SPARE PARTS PLEASE STATE PART NUMBER,  
MODEL AND SERIAL NUMBER.



FRONT FOLDING ALL-FARM CULTIVATOR -

DRAWBAR ASSEMBLY

# FRONT FOLDING ALL-FARM CULTIVATOR

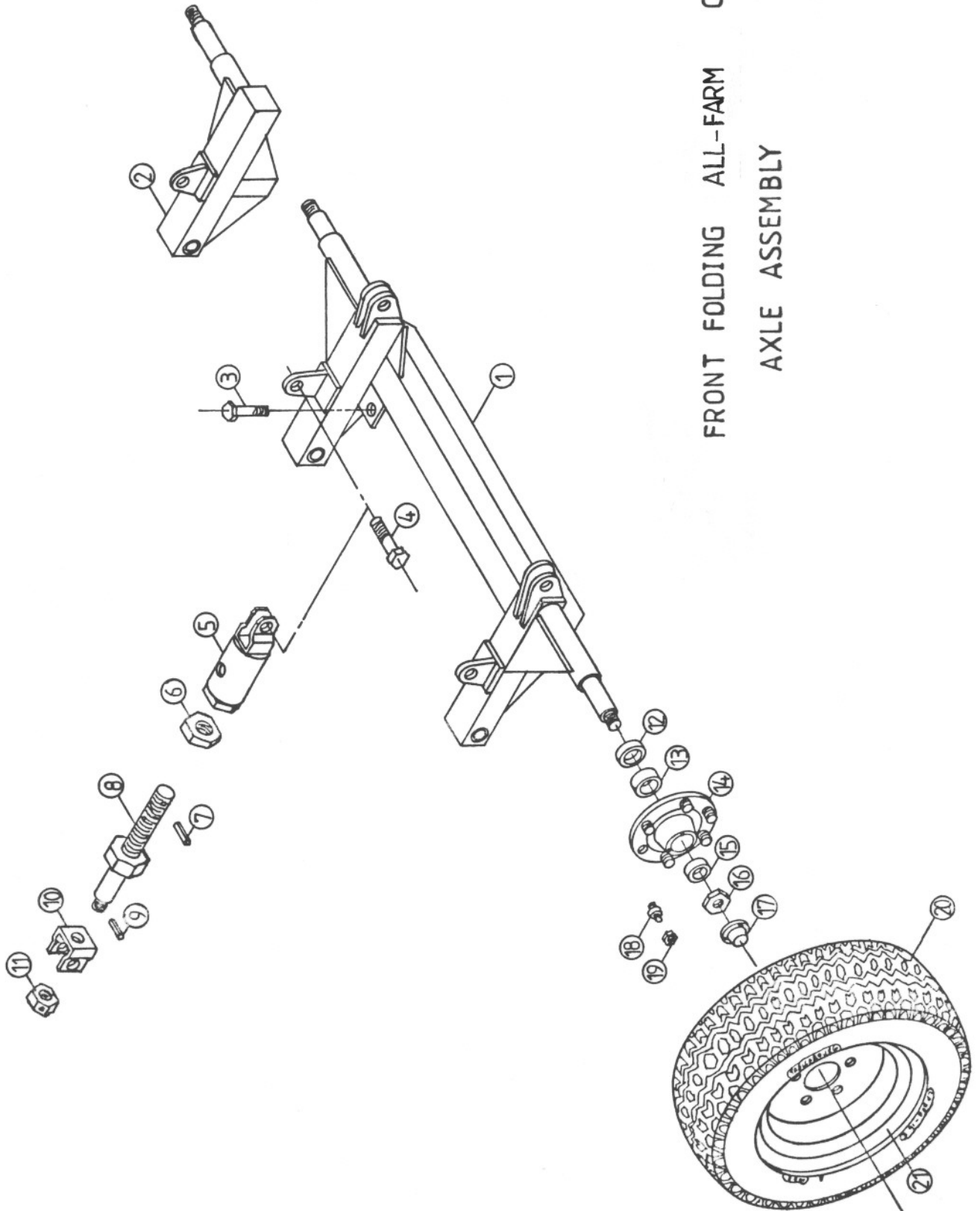
## DRAWBAR ASSEMBLY

<u>ITEM NO.</u>	<u>PT. NO.</u>	<u>DESCRIPTION</u>
1	2891	FRONT DRAWBAR
2	2466	FRONT SHACKLE - TYPE B
3	0043	SHACKLE BOLT M36 (S/WASHER 2599, NUT 0427)
4	0377	OVER CENTRE JACK
5	0378	OVER CENTRE JACK RETAINING BOLT M36 (F/WASHER 2609, S/WASHER 2599, NUT 0427)
6	0379	JACK RETAINING PIN 36 X 260mm (LYNCH PIN 2484)
7	0305	HOSEMAST M24 (F/WASHER 2604, S/WASHER 2593, NUT 0717)
8	2890	DRAWBAR PIVOT BUSH
9	0210	CYLINDER PIN 25 X 115mm (LYNCH PIN 2484)
10	0160	SUPPORT UNIT HYDRAULIC CYLINDER 100 X 230 D/A
	0161	CYLINDER SEAL KIT FOR 100 X 230 D/A
11	0200	BANJO BLOCK
	2263	BONDED WASHER 1/2"
12	0724B	RESTRICTED BANJO BOLT
13	0774	SHUT OFF VALVE
14	0185	HYDRAULIC HOSE 11ft
15	0203	MALE - MALE ADAPTOR
16	0205	QUICK RELEASE COUPLING
17	1055	TILT MECHANISM HYDRAULIC CYLINDER 125 X 400D/A
	1056	CYLINDER SEAL KIT FOR 125 X 400 D/A
18	0389	CYLINDER PIN 30 X 125mm (LYNCH PIN 2484)
19	0200	BANJO BLOCK
	2263	BONDED WASHER 1/2"
20	0201	BANJO BOLT
21	2892	WING SUPPORT UNIT
22	0036	WING SUPPORT UNIT BOLT M30 (F/WASHER 2608, L/NUT 2011)
23	2310	'D' SHACKLE
24	1039	EYE HOOK
25	2894	RETAINING PLATE
26	0057	RETAINING BOLT M16 (F/WASHER 2602, S/WASHER 2038, NUT 1358)

WHEN ORDERING SPARE PARTS PLEASE QUOTE, PART NUMBER, MODEL AND SERIAL NUMBER.

18. 5/16" x 1 1/2"

# FRONT FOLDING ALL-FARM CULTIVATOR - AXLE ASSEMBLY



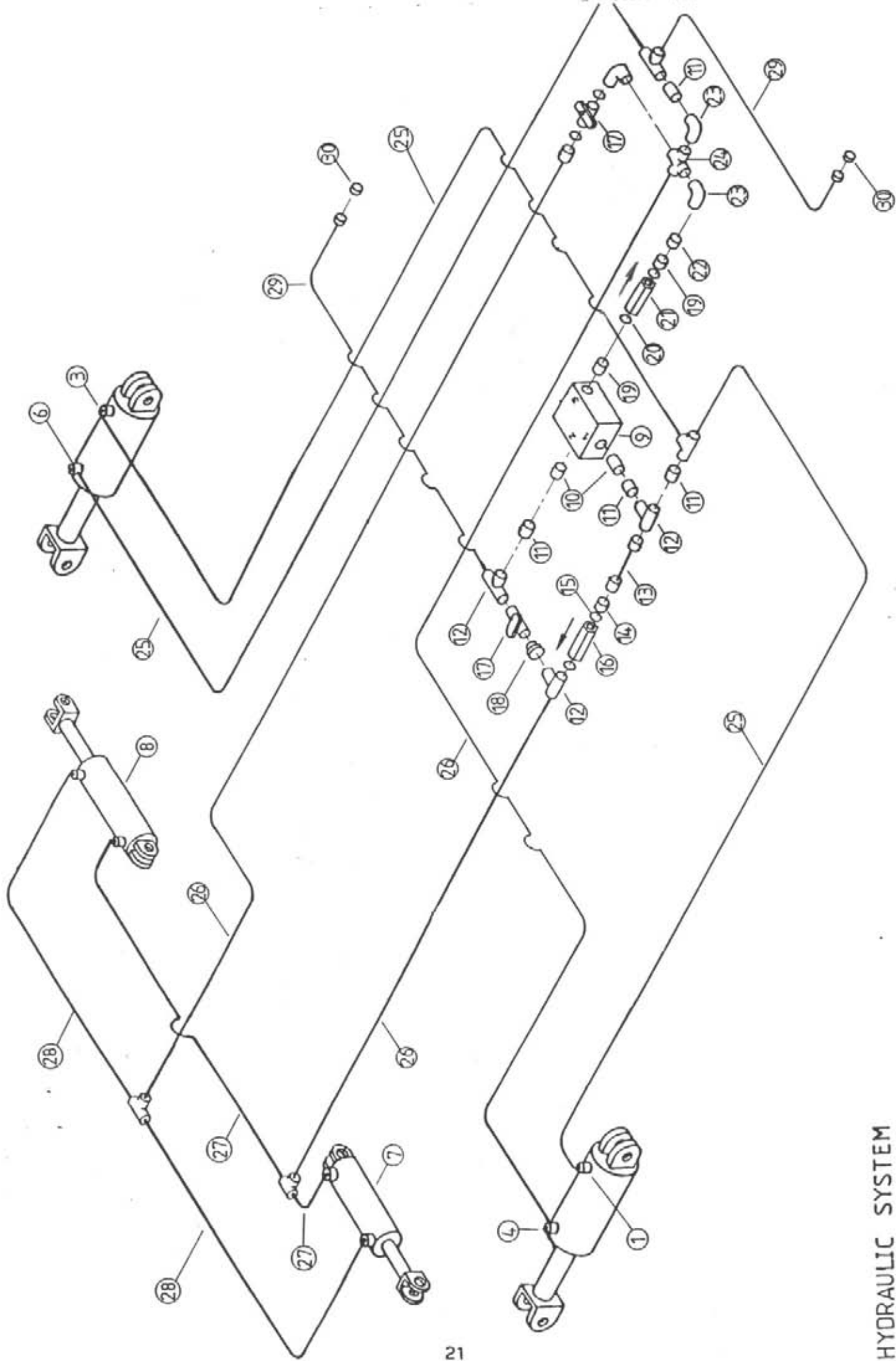


# FRONT FOLDING ALL-FARM CULTIVATOR

## AXLE ASSEMBLY

<u>ITEM NO.</u>	<u>PT.NO.</u>	<u>DESCRIPTION</u>
1	2896	MAIN CENTRE SECTION AXLE
2	2897	WING AXLE LEG L/H
	2898	WING AXLE LEG R/H
3	----	N/A
4	0017	ADJUSTER BOLT M24 (F/WASHER 2604, L/NUT 2010)
5	2873	ADJUSTER BODY
6	2667	HALF NUT 1 3/4" BSW
7	2874	ROLL PIN M8 X 60
8	2876	ADJUSTER ROD
9	2875	ROLL PIN M8 X 50
10	2877	ADJUSTER CLEVIS
11	2878	DRILLED NUT M30
5-11	2879	WHEEL LEG ADJUSTER COMPLETE (520 - 620mm CTRS)
12	0365	GREASE SEAL
13	0366	INNER BEARING CUP & CONE
14	0462	HUB CASTING
15	0367	OUTER BEARING CUP & CONE
16	0369	CASTLE NUT (SPLIT PIN 2488)
17	0370	DUST CAP
	0469	RETAINING BOLT (3 PER HUB REQUIRED)
	0739	GASKET
18	0708	WHEEL STUD L/H
	0709	WHEEL STUD R/H
19	0470	WHEEL NUT L/H
	0471	WHEEL NUT R/H
12-19	0461	6 STUD HUB COMPLETE L/H
	0641	6 STUD HUB COMPLETE R/H
20	0143	12.5/80-15, 14 PLY TYRE (TUBE 0144)
	1508	15.0/55-17, 8 PLY TYRE (TUBE 1510)
21	0146	6 HOLE RIM TO SUIT 12.5/80-15 TYRE
	1509	6 HOLE RIM TO SUIT 15.0/55-17 TYRE

WHEN ORDERING SPARE PARTS PLEASE QUOTE, PART NUMBER,  
MODEL AND SERIAL NUMBER.



## HYDRAULIC SYSTEM

<u>ITEM NO.</u>	<u>PT. NO.</u>	<u>DESCRIPTION</u>
1	----	DRAWBAR TILT CYLINDER - END PORT R/H
2	----	
3	----	DRAWBAR TILT CYLINDER - END PORT L/H
4	----	DRAWBAR TILT CYLINDER - ROD PORT R/H
5	----	
6	----	DRAWBAR TILT CYLINDER - ROD PORT L/H
7	----	WING LIFT CYLINDER R/H
8	----	WING LIFT CYLINDER L/H
9	4514	PRESSURE REDUCING VALVE
10	0390	1/2"-3/4" MALE - MALE ADAPTOR
11	0202	1/2" FEMALE - FEMALE ADAPTOR
12	0204	'T' ADAPTOR
13	0176	2FT HYDRAULIC HOSE
14	0203	1/2" MALE - MALE ADAPTOR
15	2263	DOWTY WASHER
16	2737	ONE WAY VALVE
17	0774	SHUT OFF TAP
18	0206	1/2" MALE - FEMALE ADAPTOR
19	2881	1/4" MALE - MALE ADAPTOR
20	2741	1/4" DOWTY WASHER
21	4512	ONE WAY VALVE
22	2882	1/4"-1/2" FEMALE - FEMALE ADAPTOR
23	2734	90° MALE - FEMALE ELBOW
24	0209	4 WAY ADAPTOR
25	0177	3FT HYDRAULIC HOSE
26	0179	5FT HYDRAULIC HOSE
27	0182	8FT HYDRAULIC HOSE
28	0183	9FT HYDRAULIC HOSE
29	0197	23FT HYDRAULIC HOSE
30	0205	MALE QUICK RELEASE COUPLING

WHEN ORDERING SPARE PARTS PLEASE QUOTE PART NUMBER,  
MODEL NUMBER AND SERIAL OF THE MACHINE.