

Standen

Eureka

Stone Burier and Cultivator

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England

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IMPORTANT

- **This operator's handbook should be regarded as part of the machine. Suppliers of both new and second-hand machines are advised to retain documentary evidence that this handbook was supplied along with the machine.**
- **On installation of the machine (i.e. starting off in the field), the New Machine Installation Record Card should be completed by the dealer/distributor and be countersigned by the customer. The document is proof that the correct procedures have been followed.**
- **The New Machine Installation Record Card should be returned to Standen Engineering Limited within 7 days of installation. Failure to do so may invalidate the machine warranty.**

On delivery, check that the machine is as ordered and has not been damaged in transit. Please report any shortfall to your Standen dealer.

The contents of this handbook, although correct at the time of publication, may be subject to alteration by the manufacturers without prior notice.

Standen Engineering Limited operate a policy of continual product development. Therefore, some illustrations and/or text within this publication may differ from your machine.

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1.1 - INTRODUCTION

Introduction to the Handbook

This handbook provides the information for the operation, adjustment and maintenance of your Standen Eureka. To enable you to achieve the best results from the machine, the manufacturer recommends that you read the handbook thoroughly prior to using the machine for the first time.

Record below the details of your machine:

Dealer's Name:	
Address:	
Telephone No:	
Machine Serial No:	
Date Purchased:	
Date Started Work:	



This symbol indicates important safety messages within this handbook. When you see this symbol, be alert to the possibility of injury to yourself or others and/or damage to the machine and carefully read the message that follows.

Throughout this handbook the terms 'front', 'rear', 'left hand' (LH), 'right hand' (RH) are derived from the tractor drivers position facing forward in the normal direction of travel.

Adjustments to the machine may have to be made singly or in combination according to soil conditions. Always allow the machine to settle to a new setting before making further adjustments.

Recommended lubrication and maintenance instructions are included in this handbook and if followed will help to keep the machine in a safe working condition.

Warranty

Should the machine suffer any faults or defects within the warranty period, please contact your dealer. The warranty shall be effective only if the dealer is informed of any such defect as soon as practicable upon discovery.

1.2 - SAFETY PRECAUTIONS

Safety

The Standen Eureka has been designed to comply with current Safety Regulations. However, as with all farm machinery there will be inherent dangers whilst operating and carrying out maintenance on the machine. The following list of precautions should therefore be brought to the attention of all persons operating and working on the machine. The list is not exhaustive. All farm machinery is potentially dangerous and great care must be exercised by the operators at all times. Standen Engineering Limited will not accept liability for damage or injury caused by their products except when such liability is specifically imposed by English statute.

Operation



The machine must never be operated by untrained personnel or children.



Never set machinery in motion without giving prior notice to the pickers. Ensure that everyone in the vicinity is aware of your intentions.



Never allow children in the vicinity where machines are working.



Never wear loose clothing and always tie back long hair whilst working on the picking area of the machine.



Before carrying out any work on the machine, lower the machine to the ground, switch off the tractor engine, apply the handbrake, remove the ignition key and disconnect the PTO shaft.



Never attempt to fit drive chains or drive belts to the machine while the drive sprockets or pulley are in motion.



Normal safe working procedures should be adopted at all times. Reduce speed when transporting the machine on sloping ground.

Operation continued



Do not work on ground where there is a possibility of overturning, or across steep slopes.



The working area should be kept clear and free of obstructions at all times.



Be alert for hidden obstructions. Should the machine hit an obstruction, stop and check for damage before proceeding.



Wear substantial or proper safety footwear. Avoid loose clothing near moving parts. Wear gloves when handling the implement or parts with sharp edges.



The operator must not leave the tractor seat until the machine has been lowered to the ground, the tractor engine switched off, the handbrake applied and the ignition key removed.



Never reverse or turn unless the machine is in the fully raised position.



All guards, covers, warning transfers and safety devices must be correctly fitted and operable at all times.



Inspect the machine on a regular basis and replace damaged or worn parts as necessary.



Inspect the machine for damage after use. Rectify as required.



Never operate the machine in a state of disrepair.

Transport



When in transport, the rear frame assembly must be locked in the raised position.



Only transport the machine at a speed suitable to the prevailing conditions. Be aware of the weight and overall length of the machine at all times.

Maintenance



When left free standing, i.e. not attached to the tractor, the machine must be on level ground.



Never work under the machine when its in the raised position.



Before working on the machine, all free moving parts should be locked to prevent them moving.



Inspect the hydraulic hoses and fittings for cuts and abrasions. Replace immediately.



The hydraulic system may be under pressure with the machine at rest. Ensure all residual pressure is released before disconnecting any pipework.

Maintenance continued



Regularly lubricate the machine as per the operators handbook and check the tightness of all nuts and bolts.



Always use mechanical or additional help when lifting heavy parts.



Safety is the responsibility of the persons working with this machine. Think 'Safety' at all times. Read and remember the contents of this handbook.

1.3 - INSTALLATION

The Standen Eureka is a one pass cultivator and stone burier.

The machine digs a carpet of soil at a pre-selected depth, the soil is accelerated from the shares by a belt which throws all the soil against a vertical web running in an upward direction. All the loose soil passes through the web and falls to the ground. Clods will be crumbled by the action the web, the broken particles passing through the web to join the loose soil. All the material that is too large to pass through the vertical web falls onto a horizontal web which transfers it onto the ground just behind the shares. A full width set of press wheels consolidates the seed bed and a choice of tines and packer rollers finish the seed bed.

Tractor Suitability

The recommended tractor is a four wheel drive with at least 135 HP. These powers may need to be varied to achieve optimum output under different soil conditions. The machine requires a constant hydraulic oil supply from the tractor of a minimum of 50 litres/minute with a low back pressure/free return to the tractor.

In addition two single acting spool valves are required to actuate the two hydraulic ram systems on the machine.

The Eureka is designed to be towed from the pick-up hitch hook of the tractor, and requires a tractor PTO speed of 800 rpm.

Attaching the Machine

With the machine standing on firm, level ground, reverse the tractor up to the machine aligning the drawbar and pick-up hitch. Raise the machine on the pick-up hitch. Switch off the tractor engine and apply the handbrake before making any other connections. Remove the drawbar foot (item 2, fig 1) and place it in the storage position (item 3, fig 1). The drawbar foot must be re-positioned before disconnecting the machine from the tractor.

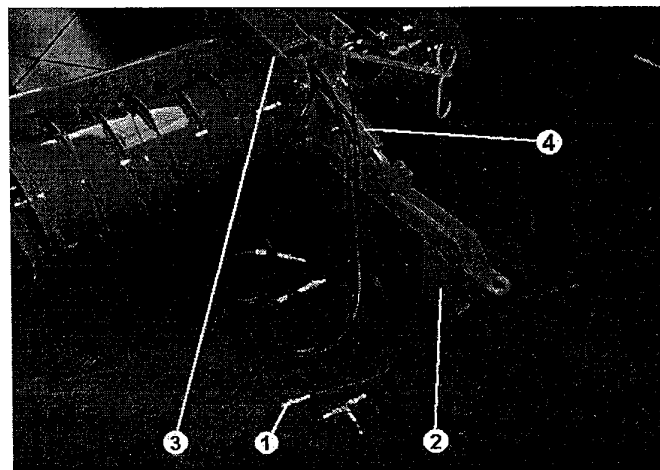


Fig 1

There are four hydraulic hoses that require attaching to the tractor, two hoses for the flow and return from and to the vertical web hydraulic motor, and one each for the two hydraulic ram systems.

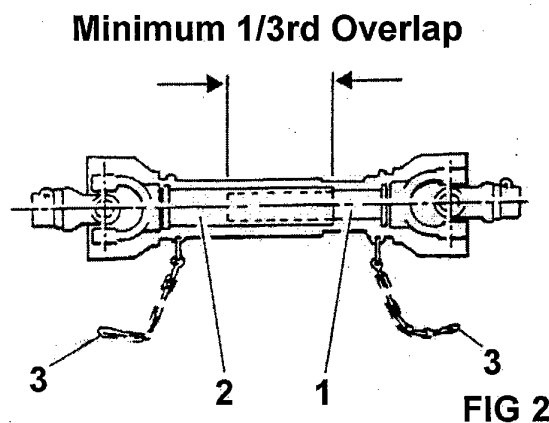
1. Connect the hydraulic motor return hose marked blue to the tractor manufacturer's recommended low back pressure return coupling.
2. Connect the hydraulic motor pressure hose marked red to the tractor outlet recommended for constant supply.
3. Connect the hydraulic hose from the drawbar lift ram (item 1, fig 1) to one of the tractor single acting spool valves.
4. Connect the remaining hydraulic hose (rear lift ram circuit) to the other tractor single acting spool valve.

PTO Shaft



It is essential that the PTO shaft is matched to the tractor to give the correct drive line and to ensure that it is safe to work. An incorrectly fitted or badly guarded PTO shaft can be lethal. Do not take chances.

The PTO shaft supplied with the machine may require cutting to the correct length to suit individual tractors but should be kept as long as possible in all cases.



1. Separate the male shaft (item 1, fig 2) and female shaft (item 2, fig 2) and fit them to the tractor and harvester respectively.
2. Support the shafts alongside each other and mark the maximum possible length.

'EUREKA' DIGGER FLOAT VALVE.

THE DIGGER FLOAT VALVE IS FITTED TO THE 'EUREKA' TO PROVIDE WEIGHT TRANSFER FROM THE MACHINE DRAWBAR ONTO THE TRACTOR, AND TO ALLOW THE DEPTH ROLLER AT THE FRONT OF THE DIGGER TO FOLLOW THE GROUND SURFACE WITH MINIMUM SOIL COMPRESSION.

IF TOO MUCH WEIGHT IS CARRIED ON THE DEPTH ROLLER OF THE MACHINE, THERE IS NO WEIGHT TRANSFER ONTO THE TRACTOR, AND THE DIGGING DEPTH CONTROL WILL BE UNEVEN.

TOO HIGH A CARRY OFF PRESSURE WILL CAUSE THE MACHINE TO RIDE OUT OF WORK, OR NOT TO LOWER TO DEPTH.

CONNECTIONS;

PORT 'A' - TRACTOR SPOOL VALVE. (LIFT COUPLING)

PORT 'B' - TRACTOR SPOOL VALVE. (LOWER COUPLING)

PORT 'C' - MACHINE LIFT RAM.

VALVE '5' - SHOULD BE FULLY CLOSED WHEN WORKING.

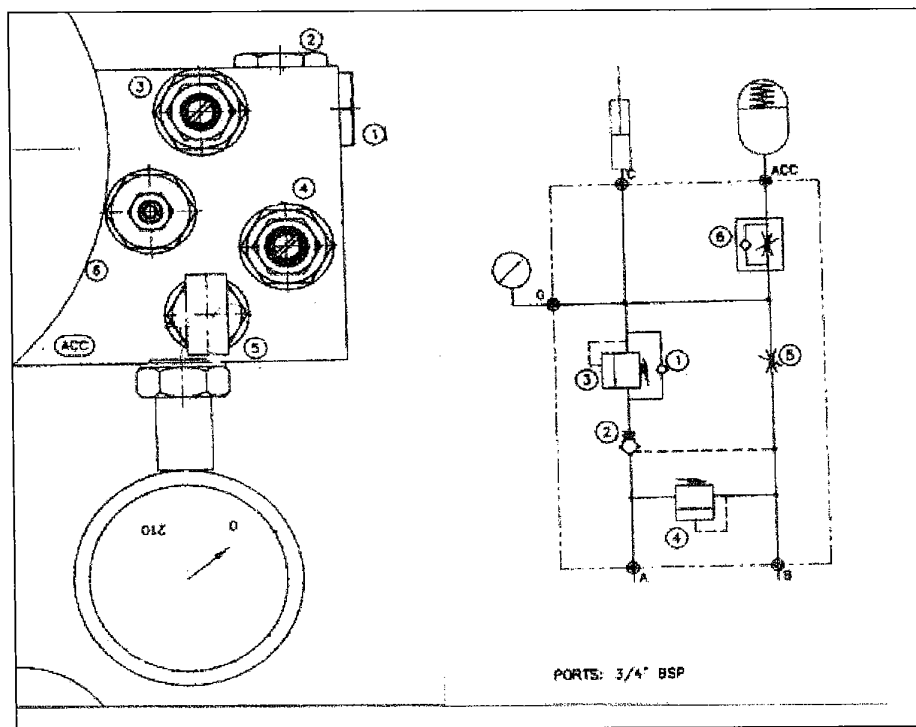
SAFETY NOTE: THIS SYSTEM CONTAINS OIL STORED AT HIGH PRESSURE. BEFORE CARRYING OUT ANY MAINTAINENCE, OR DISCONNECTING ANY HOSES RELEASE THE PRESSURE BY CONNECTING PORT 'B' TO AN OPEN TRACTOR VALVE, AND VENT THE PRESSURE BY OPENING VALVE '5'.

OPERATION;

WHEN THE MACHINE IS LIFTED OUT OF WORK, THE ACCUMULATOR AND DRAWBAR RAM ARE FULLY PRESSURISED, AND HELD RAISED BY THE CHECK VALVE '2'. THIS CHARGES THE ACCUMULATOR SYSTEM EACH TIME THE MACHINE IS RAISED.

WHEN THE MACHINE IS LOWERED, THE TRACTOR HYDRAULICS RELEASE THE CHECK VALVE '2', AND THE MACHINE LOWERS UNTIL THE CARRYOFF PRESSURE SET BY VALVE '3' IS REACHED.

TO ADJUST THE CARRY OFF PRESSURE;



LIFT, AND LOWER THE MACHINE TO SET THE PRESSURE, AND NOTE THE READING SHOWN ON THE GAUGE. A RECOMENDED START PRESSURE IS 100 BAR.
ADJUST VALVE '3', (TURN IN TO INCREASE PRESSURE, AND TURN OUT TO DECREASE PRESSURE).

LIFT, AND LOWER THE MACHINE TO SET THE PRESSURE, AND NOTE THE NEW READING SHOWN ON THE GAUGE.

OPERATE THE MACHINE IN WORK, AND REPEAT THIS UNTIL THE APPROPRIATE SETTING IS FOUND.

OPERATING THE TRACTOR LIFT VALVE WILL MANUALLY OVERRIDE THE PRESET PRESSURE BY LOCKING A HIGHER PRESSURE INTO THE SYSTEM UNTIL THE LOWER VALVE IS OPERATED RETURNING THE SYSTEM TO THE PRESET PRESSURE.

VALVE 4 SETS THE OPERATING PRESSURE THAT RELEASES THE LIFT HOLDING PILOT OPERATED CHECK VALVE (VALVE 2).

IF THE MACHINE WILL NOT LOWER INTO WORK WHEN A HIGH CARRY-OFF PRESSURE HAS BEEN SET IT MAY BE NECESSARY TO INCREASE THE PILOT PRESSURE BY TURNING IN THE SCREW ON VALVE 4.

IF THE PILOT PRESSURE IS SET TOO HIGH THEN THE TRACTOR HYDRAULICS WILL BE OPERATING AT A HIGHER PRESSURE THAN NEEDED TO LOWER THE MACHINE.

1.4 - OPERATION

Drawbar

The drawbar has a lift ram (item 4, fig 1) and when actuated, lifts the front of the machine clear of the ground. When in work the machine is lowered and because the lift ram (item 4, fig 1) is a single acting type and with the tractor hydraulics in float the machine is able to dig at a constant pre-set depth.

Depth Roller

The depth roller controls the depth at which the machine digs. Two depth handles, one either side of the depth roller, adjust the depth roller to achieve the required digging depth. To adjust, swing the handle (item 1, fig 3) to its working position (see fig 3) and rotate the handle until the required depth is achieved. When adjusting the depth roller always adjust the roller equally to achieve an even dig; an indicator on the front of the adjuster helps to achieve this. When not in use the handle (item 1, fig 3a) must be in its storage position (see fig 3).

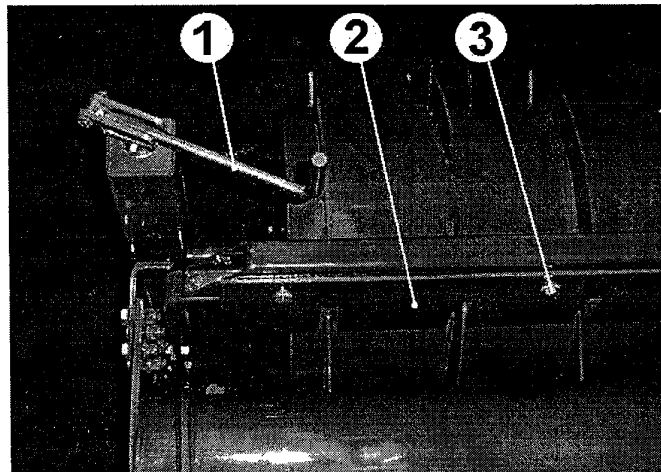


Fig 3

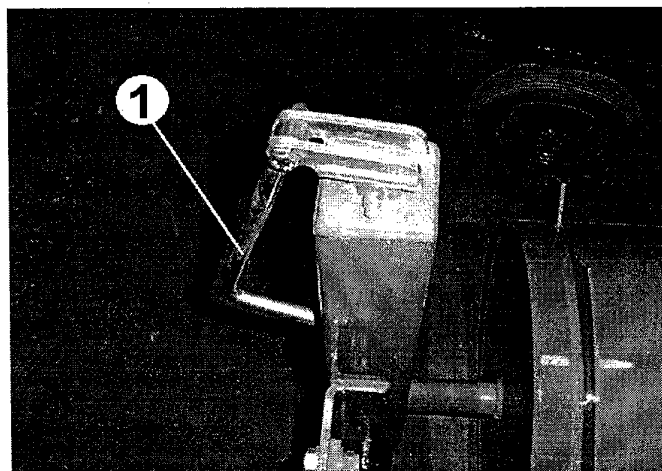


Fig 3a

3. Cut the surplus length equally from both male and female drive tubes and guards.



Ensure a minimum of 1/3rd overlap and check that there is no possibility of the shafts butting up when the tractor linkage is raised.

4. Once the correct length of shaft has been obtained, remove all rough edges and swarf.
5. Grease the shafts to ensure they telescope correctly and then fit the shaft in place.
6. Check the PTO shaft does not foul any part of the machine or tractor and inspect the guards to make sure they are fitted correctly and are not damaged.
7. Finally, attach the safety chains (item 3, fig 2) to secure anchoring points on the tractor and machine ensuring that the chains will not over-tighten when the machine is turning.

Refer to the manufacturers instructions, these are fitted to all PTO shafts when the machine is delivered.

The depth roller has a scraper fitted to keep the roller clean; the scraper (item 2, fig 3) is adjustable. To adjust, slacken the retaining bolt (item 3, fig 3) and slide the scraper to the required position.

Share and Conveyor Belt

Shares beneath the depth roller dig a bed of soil and transfers it onto a conveyor belt. Once on the conveyor belt, the soil is accelerated and thrown at the vertical web.

Rear Web

This web is hydraulically driven and is adjustable for speed. The angle at which the web operates is also adjustable. The vertical web is available in various pitches of 35 mm, 40 mm, 50 mm and 70 mm giving gaps of 23 mm, 28 mm, 38 mm and 58 mm respectively.

To adjust the speed of the web, simply turn the control knob (item 1, fig 4). The higher the number, the faster the speed.

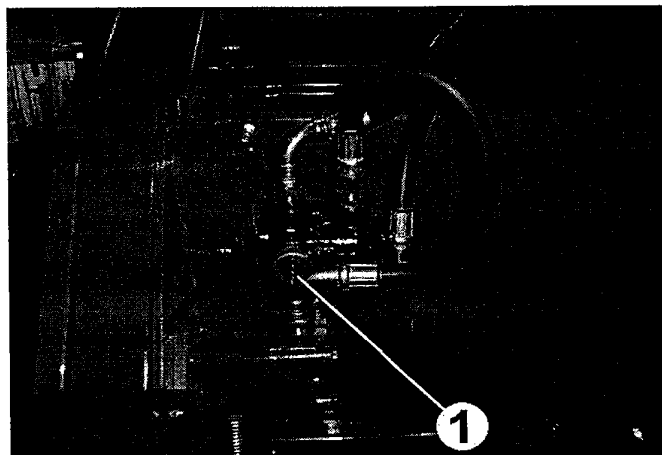


Fig 4

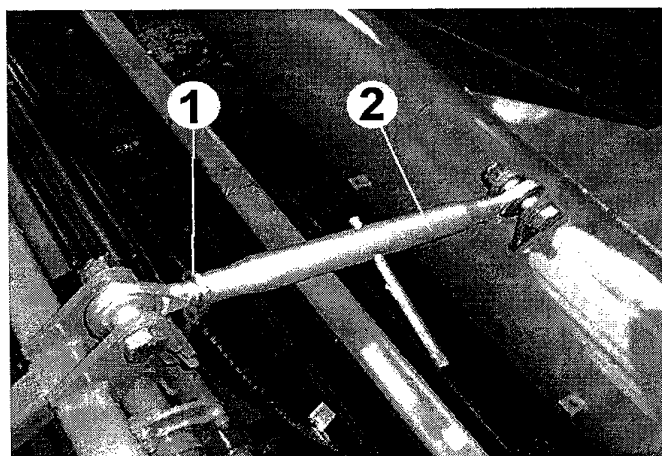


Fig 5

To adjust the angle of the web, loosen the lock tab (item 1, fig 5) and turn the adjuster sleeve (item 2, fig 5) using the tommy bar. The speed, angle and pitch of the web are all important to achieve optimum separation. The speed and angle should be adjusted to allow the web to work efficiently. Too faster speed or too shallower angle could result in too much soil being thrown over the vertical rear web, conversely the speed being too slow and too steeper angle will cause minimal separation.

Lower Web

All clods, stones etc. that cannot pass through the rear web drop onto the lower web which transfers them onto the ground. The lower web is available in various pitches to give varying separation. These are 35 mm, 40 mm and 50 mm giving gaps of 23 mm, 28 mm and 38 mm respectively.

The lower web is supplied with a set of manual agitators to give an extra supply of separation.

Drives

The various drives on Eureka are provided by roller chain. There are three roller chain drives, one for the conveyor belt, one for the rear web and one for the lower web. Each of these chains are tensioned by a spring-loaded tensioner. To adjust, slacken the lock nut (item 1, fig 6) and turn the adjuster nut (item 2, fig 6). Do not over-tighten the chain drives as this can result in premature wear.

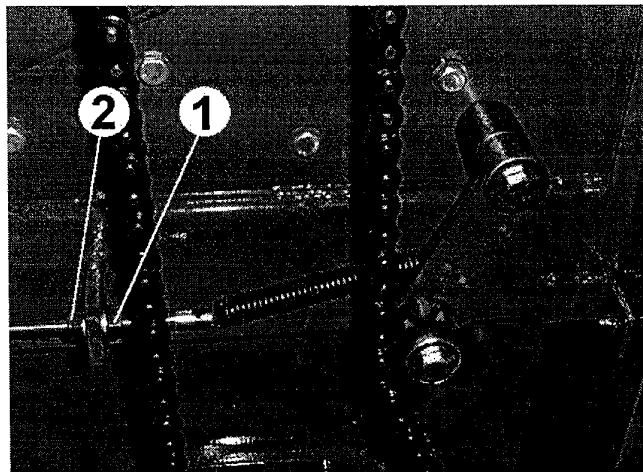


Fig 6

A clutch (item 1, fig 7) supplies the safety mechanism for the drive system. Under normal circumstances this clutch should not require maintenance. If extra adjustment is required to stop the clutch slipping, turn the adjusting bolts (item 2, fig 7) clockwise; always adjust the bolts equally. Too much adjustment to this clutch could result in damage to any part of the drive system including the gearbox (item 3, fig 7) or any of the webs.

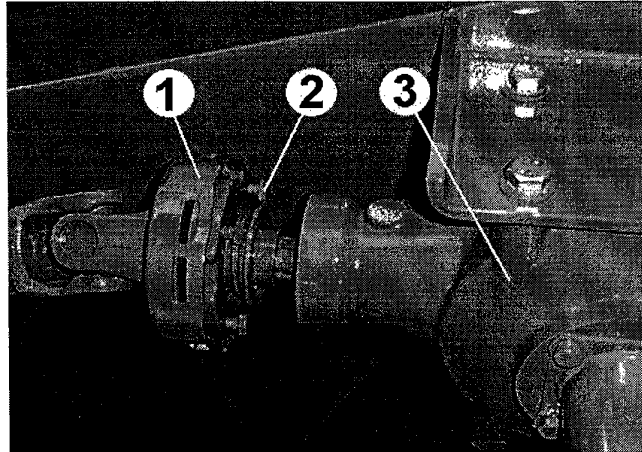


Fig 7

Press Wheels

A set of press wheels consolidates the seed bed. Scrapers have been provided to keep the wheels clean. To adjust, loosen the retaining bolt (item 1, fig 8) and slide the scraper (item 2, fig 8) to the required position.

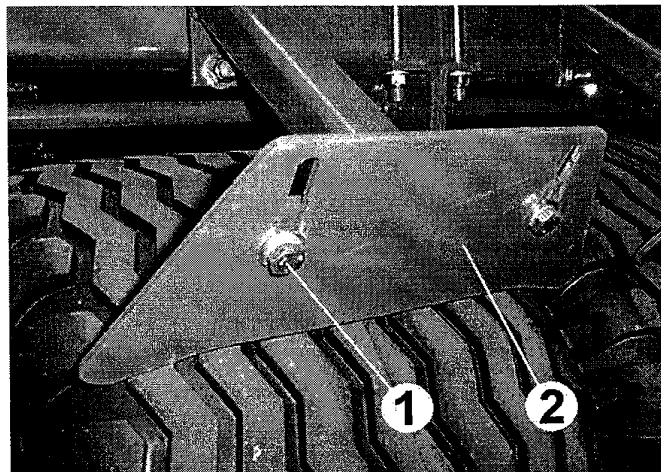


Fig 8

Lift Frame

Behind the press wheels, a lift frame (item 1, fig 9) provides the support for the tines crumbler roller etc. The frame has two lift rams (item 2, fig 9) which when actuated lifts the frame and simultaneously the tines etc. At the point at where the hydraulic hose is connected to the tractor, a lock valve is fitted. This allows the lift frame to be locked in its up position when disconnecting the machine from the tractor. To lock, the handle (item 1, fig 10) should be in the position shown. Conversely, to unlock the handle should be in the unlock position, see fig 10a.

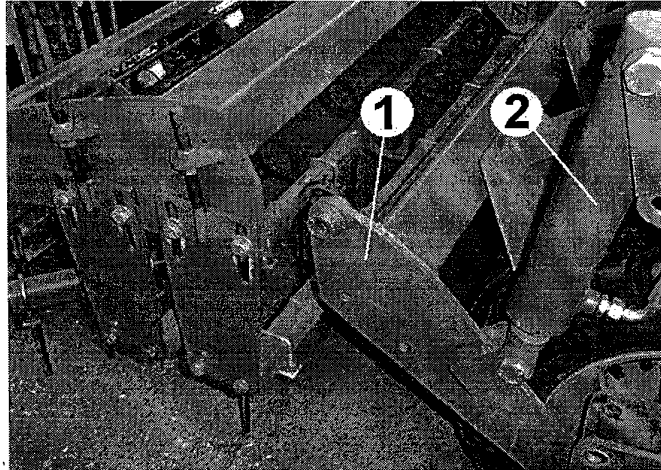


Fig 9

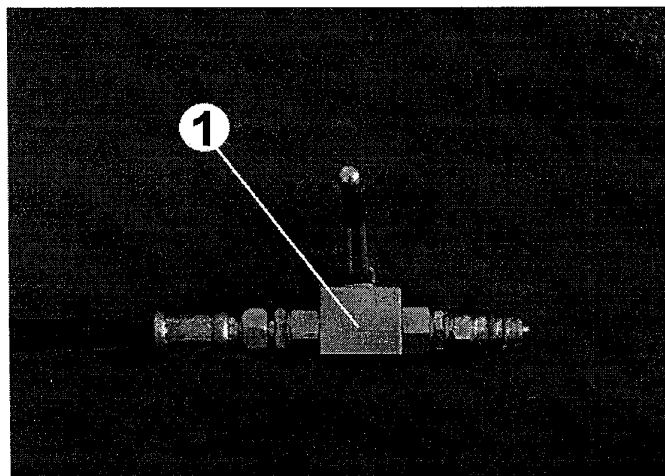


Fig 10

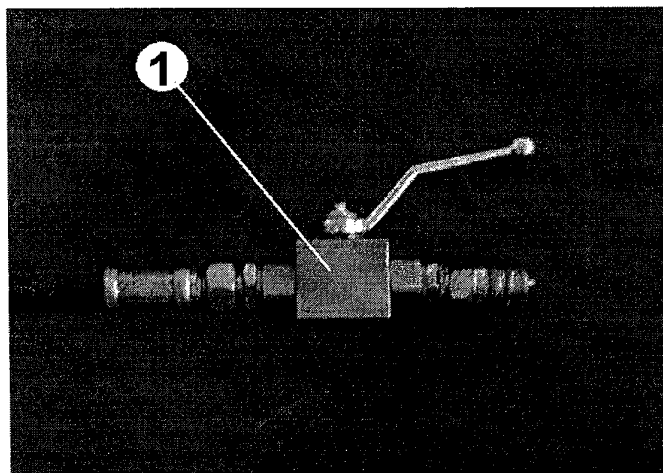


Fig 10a

1.5 - MAINTENANCE

Mechanical Drives

Drive chains and belts must be maintained at the correct tension. The various adjustments are detailed within this handbook. Maintaining correct tension, alignment and lubrication will ensure the efficient running of the harvester and prolong the life of the drive components.

The input drive shaft from the tractor PTO should be checked for damage regularly and the inner and outer tubes checked to ensure a free sliding movement. Binding between the input drive shaft components will cause severe end loading on the gearbox input shaft leading to premature failure of the gearbox.

Split Web Drive Sprockets

Split web drive sprockets are fitted as standard on all of the web drive shafts. The sprockets allow for worn sprockets to be replaced or alternative pitch sprockets to be fitted without dismantling the drive shafts.

Most drive sprockets will have been split on initial installation, but if not they should be split with a hammer and sharp chisel. Before splitting a sprocket on or off the machine, remove the fixing bolts. Keep the split halves of the sprockets in the correct pairs to prevent mis-match when fitting.

Lubrication

Regular lubrication will ensure that the Standen Eureka provides a long and efficient service life. Depending on soil and weather conditions, the service schedule can vary. It is recommended that the harvester is given a thorough inspection at least weekly during the working season and at this time the machine should be greased and the gearbox oil levels checked.

Shafts and bearings fitted with grease nipples should be lubricated using a good quality general-purpose grease. Bearings must not be allowed to run dry. When greasing, it is better to give a little frequently than a lot at long intervals.

Some of the bearings are sealed and pre-lubricated. Care should be taken not to flood these bearings with grease or the seals may burst allowing grease to escape and dirt to get in. Should this happen, more frequent greasing will be required in order to keep the dirt at bay. When lubricating sealed bearings, only two strokes of the grease gun every twenty acres of work is necessary.

Non-sealed bearings should be greased at least once a day or every ten acres.

Spring Tines/'S' Tines

A set of spring tines or 'S' tines are supplied with the machine. The angle and depth at which the tines operate can be adjusted. To adjust the angle, slacken the pivot bolt (item 1, fig 11) and remove the retaining bolt (item, 2, fig 11), pivot the support bar (item 3, fig 11), replace the retaining bolt to give the required angle and finally, re-tighten the pivot bolt (item 1, fig 11). To adjust the depth, slacken the retaining bolts (item 4, fig 11) and turn the adjuster nuts (item, 5, fig 11). Always adjust the support bar (item 3, fig 11) equally.

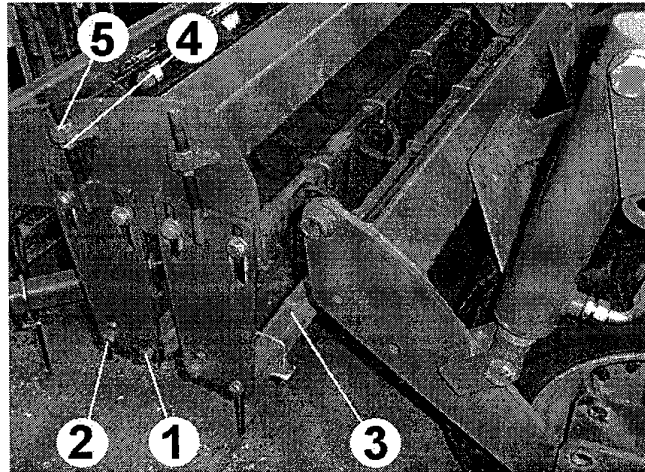


Fig 11

Crumbler/Spiral Packer Roller

The crumbler/spiral packer roller is fitted to the same frame as the tines. This frame is able to float to give an even seed bed preparation. The roller can be adjusted to give a suitable position in respect to the tines. To adjust, slacken the lock tab (item 1, fig 12) and lengthen or shorten the top link by turning the sleeve (item 2, fig 12). This either pitches the roller up or down.

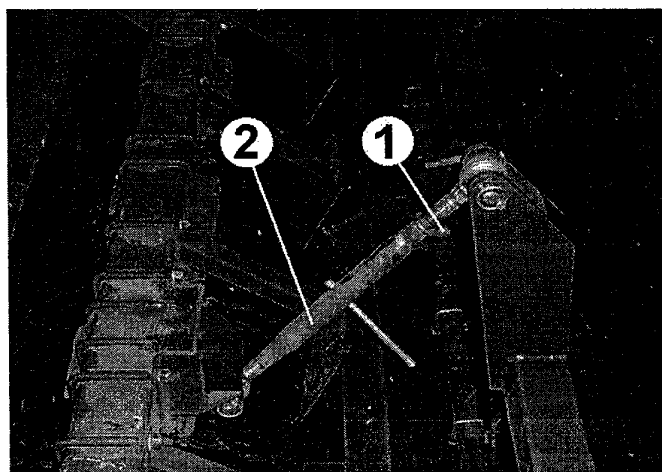


Fig 12

When checking the chain and gear drives, proprietary chain lubricant or a smear of grease should be applied to prolong their life.

The gearboxes should be checked occasionally and topped up with EP90 gear oil.

Universal couplings (such as the PTO shaft) should be dismantled periodically and their shafts smeared with grease.

Apply grease to all pivot points, slide-ways and exposed threads etc. to ensure they operate easily and remain free of corrosion.

Particular care must be taken to ensure that grease or oil does not come into contact with the 'V' belts or slip clutches.

Service Schedule

On Delivery and After the First 2 hours

Nuts, Bolts and Keyways	Check Tightness
Machine	Lubricate

Every Day (or every 10 acres)

Hydraulic Oil (Tractor)	Check Level
Nuts, Bolts and Keyways	Check Tightness
Non-sealed Bearings	Lubricate
Hydraulic Hoses and Fittings	Check Condition
Machine Components	Check Condition

Every Two Days (or every 20 acres)

Sealed Bearings	Lubricate
Chain Drives	Check Tension and Lubricate

End of Season

Machine	Clean Down Thoroughly
Machine Components	Check Condition
Machine	Lubricate
Bright Surfaces	Treat with Rust Preventative
Paintwork	Touch-Up
Slip Clutches	Slacken Off
Machine	Store in a Dry Place

1.6 - SPECIFICATIONS

Nut/Bolt Tightening Torque

Description	Torque
Wheel Nuts	185 lb/ft
M6 Nyloc Zinc Plated Nut	10 lb/ft
M8 Nyloc Zinc Plated Nut	23 lb/ft
M10 Nyloc Zinc Plated Nut	44 lb/ft
M12 Nyloc Zinc Plated Nut	87 lb/ft
M16 Nyloc Zinc Plated Nut	208 lb/ft
M20 Nyloc Zinc Plated Nut	380 lb/ft
M24 Nyloc Zinc Plated Nut	690 lb/ft
Cleaner Roller Shaft Nut	22 lb/ft
M6 Bolt/Steel Nut	7 lb/ft
M8 Bolt/Steel Nut	19 lb/ft
M10 Bolt/Steel Nut	38 lb/ft
M12 Bolt/Steel Nut	70 lb/ft
M16 Bolt/Steel Nut	170 lb/ft
M20 Bolt/Steel Nut	325 lb/ft
M24 Bolt/Steel Nut	565 lb/ft

Dimensions

Length	8.6 m
Width (in Transport)	3.3 m
Height (in Transport)	2.5 m

Technical Data

Weight	5.2 Tonnes
Tractor HP Requirement	135 HP min.
Tractor Hydraulic Flow Rate	50 Litres/Minute min.
Tyre Pressure	10 PSI

Standen Engineering's Policy of continual product development means that specifications may be altered without prior notice. All dimensions are approximate.

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Eureka 3000

DISCS

47172	DISC LEG	2
47272	DISC	2
2000703003	DUST CAP	2
2000703002	SPACER	2
2000703001	DISC SPINDLE	2
6009RS	BEARING	2
6009ZJV	NILOS RING	2
6009	BEARING	2
W0116	CIRCLIP (Ø75 INTERNAL)	2
W0117	CIRCLIP (Ø45 EXTERNAL)	2

Eureka 3000

DEPTH ROLLER

47021	LEG	2
47022	LH MOUNTING	1
47023	RH MOUNTING	1
47163	HANDLE	2
47164	PIVOT BRACKET	2
33279	ADJUSTER SCREW	2
47279	DEPTH ROLLER	1
47135	SCRAPER BAR MOUNTING	2
47136	LH INDICATOR	1
47137	RH INDICATOR	1
47280	SCRAPER BAR	1
47281	OUTER SCRAPER	2
SL40A	BEARING	2

Eureka 3000

BELT AND MAIN DRIVES

47027	BELT	1
47028	LOWER ROLLER	1
47029	SUPPORT ROLLER	9
47030	RETURN ROLLER	4
47031	DRIVE ROLLER	1
47032	LH BEARING SUPPORT	1
47033	RH BEARING SUPPORT	1
47034	ADJUSTER BRACKET	2
47035	ADJUSTER	2
47036	EDGE STRIP	16
47037	EDGE STRIP (UPPER)	2
47038	LH STONE DEFLECTOR	2
47039	RH STONE DEFLECTOR	2
47053	MAIN DRIVE SHAFT	1
47054	GEARBOX (SEE SEPARATE PAGE)	1
47055	INTERMEDIATE DRIVE SHAFT	1
47056	1½" PITCH x 21T SPROCKET	1
47057	1½" PITCH x 25T SPROCKET	1
47058	JOCKEY SPIGOT	1
47059	JOCKEY ARM	1
47060	1½" PITCH x 11T SPROCKET	1
11557/5	SPLINED YOKE	3
11557/7	UNIT PACKAGE	2
24008	DRIVE SHAFT	1
27788	PTO DRIVE SHAFT	1
41483/1	CLUTCH ASSEMBLY	1
42800	SPRING TENSIONER	1
47156	RUBBER INFILL LH MOUNTING ANGLE	1
47157	RUBBER INFILL RH MOUNTING ANGLE	1
47158	RUBBER INFILL BLOCK	2
47162	FRONT BEARING PLATE	1

47166	MACHINED SETSCREW	2
47175	BEARING GUARD	2
6206RS	BEARING	2
PS766	TENSION SPRING	1
SF50	BEARING	2
SFT25A	BEARING	24
SFT30A	BEARING	2
SL25A	BEARING	2
SP44M	BEARING HOUSING	1
SP93A/78	DRIVE CHAIN (1½" PITCH)	1
SS060051/010	STEEL SPACER (BELT DRIVE SPROCKET)	1
SS060051/024	STEEL SPACER (BELT DRIVE ROLLER)	2
6207RS	BEARING (FRONT BEARING HOUSING)	2
SL35A	BEARING	1
47237	UPPER CLAMP STRIP	2
47240	LOWER LH CLAMP STRIP	1
47241	LOWER RH CLAMP STRIP	1
47247	SIDE RUBBER	2
47244	LH DEFLECTOR	1
47245	RH DEFLECTOR	1
47246	SCRAPER	2

Eureka 3000

47054 GEARBOX CONSISTS OF:-

47054/1	CASING	1
47054/2	END PLATE	1
47054/3	OUTPUT SHAFT	1
47054/4	END PLATE GASKET	1
6210	BEARING (6210)	1
TH00500308	BEARING (30210)	1
47054/5	BEARING (32210)	1
47054/6	BEARING (32009)	1
47054/7	OIL SEAL (50 x 90 x 10) (<i>OUTPUT</i>)	1
47054/8	OIL SEAL (45 x 80 x 10) (<i>INPUT</i>)	1
47054/9	BLANKING PLUG	1
47054/10	LEVEL/FILLER PLUG (3/8 BSP)	3
47054/11	INPUT PINION & OUTPUT GEAR SET	1

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REAR WEB ASSEMBLY

11706	JOCKEY SPACER	1
12209	HYDRAULIC MOTOR	1
13327	JOCKEY SPROCKET	1
32405	FLOW DIVIDER	1
32671	JOCKEY SPIGOT	1
47041	DRIVE SHAFT	1
47042	BEARING MOUNTING	2
47143	ADJUSTER BOLT	2
47044	PIVOT PIN	2
47046	21T SPROCKET	1
47047	34T SPROCKET	1
47145	CLAMP STRIP	3
47146	UPPER RUBBER DEFLECTOR	2
47160	REAR WEB FRAME	1
47165	REAR PANEL	1
47174	BEARING GUARD	1
BM184A	JOCKEY ARM	1
BM212M	SPRING TENSIONER	1
MFC50	BEARING	1
PS871/77	CHAIN	1
RP71	SPRING	1
SF50	BEARING	2
19356	ROLLER ASSEMBLY	10
47083	ROLLER ASSEMBLY	2
47189	ROLLER ASSEMBLY	4
23228	ROLLER ASSEMBLY	2
11706	JOCKEY SPROCKET SPACER	1
13327	JOCKEY SPROCKET	1
32671	JOCKEY SPIGOT	1
28053	ADJUSTABLE TOP LINK	1
47174	BEARING GUARD	1

47208	LH TOP GUARD	1
47209	RH TOP GUARD	1
63012RS	BEARING (JOCKEY SPROCKET)	2
PS871/77	DRIVE CHAIN	1
RP71	SPRING	1
47009N/35	1300 WEB (35 MM)	1
47009N/40	1300 WEB (40 MM)	1
47009N/50	1300 WEB (50 MM)	1
47009N/70	1300 WEB (70 MM)	1
47009W/35	1600 WEB (35 MM)	1
47009W/40	1600 WEB (40 MM)	1
47009W/50	1600 WEB (50 MM)	1
47009W/70	1600 WEB (70 MM)	1
47079/35	WEB SPROCKET (FLANGED) 35 MM PITCH	4
47079/40	WEB SPROCKET (FLANGED) 40 MM PITCH	4
47079/50	WEB SPROCKET (FLANGED) 50 MM PITCH	4
47079/70	WEB SPROCKET (FLANGED) 70 MM PITCH	4
47080/35	WEB SPROCKET (UNFLANGED) 35 MM PITCH	2
47080/40	WEB SPROCKET (UNFLANGED) 40 MM PITCH	2
47080/50	WEB SPROCKET (UNFLANGED) 50 MM PITCH	2
47080/70	WEB SPROCKET (UNFLANGED) 70 MM PITCH	2
47278	RUBBER DIRT SHIELD	2
47282	LH DEFLECTOR	7
47283	RH DEFLECTOR	8
47288	RESTRICTOR CHAIN	1

FOR WEB BREAKDOWNS, SEE SEPARATE PAGE

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LOWER WEB ASSEMBLY

47042	BEARING MOUNTING	1
47048	LOWER WEB FRAME	1
47049	LH BEARING MOUNTING	1
47050	GEAR AND 40T SPROCKET	1
47051	35T GEAR	1
47078	LOWER WEB SHAFT	1
47147	DRIVE SPIGOT	1
47148	LH LOWER DEFLECTOR	1
47149	RH LOWER DEFLECTOR	1
47174	BEARING GUARD	1
MFC50	BEARING	1
SF50	BEARING	2
6208RS	BEARING (FOR 47050)	2
19356	ROLLER ASSEMBLY	10
12506	ROLLER ASSEMBLY	2
47083`	ROLLER ASSEMBLY	2
47189	ROLLER ASSEMBLY	4
KA16036	AGITATOR ROLLER	4
47084	AGITATOR ROLLER	2
11706	JOCKEY SPROCKET SPACER	1
13327	JOCKEY SPROCKET	1
32194	JOCKEY SPIGOT	1
47052	21T SPROCKET	1
63012RS	BEARING (JOCKEY SPROCKET)	2
BM184A	JOCKEY ARM	1
BM82M	SPRING TENSIONER	1
PS871/145	DRIVE CHAIN	1
RP71	SPRING	1
47009N/35	1300 WEB (35 MM)	1
47009N/40	1300 WEB (40 MM)	1
47009N/50	1300 WEB (50 MM)	1

47009N/70	1300 WEB (70 MM)	1
47009W/35	1600 WEB (35 MM)	1
47009W/40	1600 WEB (40 MM)	1
47009W/50	1600 WEB (50 MM)	1
47009W/70	1600 WEB (70 MM)	1
47079/35	WEB SPROCKET (FLANGED) 35 MM PITCH	4
47079/40	WEB SPROCKET (FLANGED) 40 MM PITCH	4
47079/50	WEB SPROCKET (FLANGED) 50 MM PITCH	4
47079/70	WEB SPROCKET (FLANGED) 70 MM PITCH	4
47080/35	WEB SPROCKET (UNFLANGED) 35 MM PITCH	2
47080/40	WEB SPROCKET (UNFLANGED) 40 MM PITCH	2
47080/50	WEB SPROCKET (UNFLANGED) 50 MM PITCH	2
47080/70	WEB SPROCKET (UNFLANGED) 70 MM PITCH	2

FOR BREAKDOWN OF WEBS, SEE SEPARATE PAGE

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LOWER WEB ASSEMBLY (ISSUE 2)

47042	BEARING MOUNTING	1
47048	LOWER WEB FRAME	1
47049	LH BEARING MOUNTING	1
47255	GEAR AND 40T SPROCKET	1
47051	35T GEAR	1
47078	LOWER WEB SHAFT	1
47256	DRIVE SPIGOT	1
47148	LH LOWER DEFLECTOR	1
47149	RH LOWER DEFLECTOR	1
47174	BEARING GUARD	1
MFC50	BEARING	1
SF50	BEARING	2
6208RS	BEARING (FOR 47255)	2
19356	ROLLER ASSEMBLY	8
47189	ROLLER ASSEMBLY	4
KA16036	AGITATOR ROLLER	4
47084	AGITATOR ROLLER	2
11706	JOCKEY SPROCKET SPACER	2
13327	JOCKEY SPROCKET	2
32194 RP 91 SP 108A	JOCKEY SPIGOT	1 2
47052	21T SPROCKET	1
63012RS	BEARING (JOCKEY SPROCKET)	2
BM184A	JOCKEY ARM	2
BM82M	SPRING TENSIONER	1
PS871/145	DRIVE CHAIN	1
RP71	SPRING	2
47009N/35	1300 WEB (35 MM)	1
47009N/40	1300 WEB (40 MM)	1
47009N/50	1300 WEB (50 MM)	1
47009N/70	1300 WEB (70 MM)	1
47009W/35	1600 WEB (35 MM)	1

47009W/40	1600 WEB (40 MM)	1
47009W/50	1600 WEB (50 MM)	1
47009W/70	1600 WEB (70 MM)	1
47079/35	WEB SPROCKET (FLANGED) 35 MM PITCH	4
47079/40	WEB SPROCKET (FLANGED) 40 MM PITCH	4
47079/50	WEB SPROCKET (FLANGED) 50 MM PITCH	4
47079/70	WEB SPROCKET (FLANGED) 70 MM PITCH	4
47080/35	WEB SPROCKET (UNFLANGED) 35 MM PITCH	2
47080/40	WEB SPROCKET (UNFLANGED) 40 MM PITCH	2
47080/50	WEB SPROCKET (UNFLANGED) 50 MM PITCH	2
47080/70	WEB SPROCKET (UNFLANGED) 70 MM PITCH	2
41149	SPIGOT	1
47254	IDLER SPROCKET	1
47257/28	28T SPROCKET	1
6008RS	BEARING	2
63012RS	BEARING	2
SS050017/050	STEEL SPACER	6
47284	AGITATOR (50 MM PITCH)	6
KA16010	AGITATOR (42 MM PITCH)	6
KA16012	AGITATOR (36 MM PITCH)	6
KA16021	STEEL ROLLER ASSEMBLY	4
KA16023	STEEL ROLLER ASSEMBLY	2

FOR BREAKDOWN OF WEBS, SEE SEPARATE PAGE

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GUARDS

47061	GUARD TUBE	1
47062	GUARD TUBE RETAINING PLATE	1
47076	MAIN DRIVE SHAFT GUARD	1
47091	HYDRAULIC PIPE GUARD	1
47103	LOWER WEB DRIVE BACK FRAME	1
47104	LOWER WEB DRIVE GUARD	1
47105	BELT DRIVE GUARD BACK FRAME	1
47106	BELT DRIVE GUARD	1
47107	REAR WEB DRIVE GUARD	1
47108	REAR WEB GUARD BACK FRAME	1
13118	SUPPORT BRACKET	1
42087	HINGE ASSEMBLY	8
42458	SLAM LOCK	3
47168	LH SIDE PANEL	1
47169	RH SIDE PANEL	1
47178	RH SIDE FINGER GUARD	1
47179	RH SIDE BEARING GUARD	1
47213	REINFORCING STRAP	1
BM196	SAFETY GUARD	1
47223	DIRT SHIELD	1
43620	COVER PLATE	1

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WHEEL ASSEMBLY

47012	WHEEL HUB	6
47013	WHEEL SUPPORT	12
47014	AXLE	6
47090	SCRAPER	6
47109	'U' BOLT	18
47117	SCRAPER MOUNTING	6
47118	WHEEL	6
47167	TIE BAR	6
6010RS	BEARING	12
SS060051/092	STEEL SPACER	6
SS060051/095	STEEL SPACER	6
13208	WHEEL STUD	36
13209	WHEEL NUT	36

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3 POINT LINKAGE AND TINE FRAMES

43048	ADJUSTABLE LINK	1
47109	'U' BOLT	2
47110	ADJUSTABLE LINK MOUNTING BRACKET	1
47111	LOWER LINK BRACKET	2
47112	CLAMP PLATE	2
47113	MOUNTING FRAME	1
47153	TINE MOUNTING FRAME	1
47171	SPACER STRIP	2
47176	PIN (Ø 25 MM)	2
47177	PIN (Ø 28 MM)	2
PS714/5	LINCH PIN	4
41337	HYDRAULIC RAM	2

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CRUMBLER ROLLER KIT

47101	CRUMBLER ROLLER PLATE	2
47159	CRUMBLER ROLLER	1
SFT35A	BEARING	2

SPIRAL PACKER

47099	LH MOUNTING PLATE	1
47100	RH MOUNTING PLATE	1
47134	FLEXICOIL ROLLER C/W BEARINGS (SF2)	1

SPRING TINE KIT

47098	MOUNTING BAR	2
47119	TINE	35
47120	'U' BOLT	35
47121	CLAMP PLATE	35
47218	TINE BEAM DEPTH MOUNTING BRACKET	4
47219	TINE BEAM DEPTH LEG	4
47220	TINE FRAME DEPTH ADJUSTER SCREW	4
33278	HANDLE	4
33285	DEPTH WHEEL ADJUSTER BOSS	4

'S' TINE KIT

10240	CULTIVATOR POINT	30
10316	'S' TINE	30
47098	MOUNTING BAR	2
47142	CLAMP	30
47218	TINE BEAM DEPTH MOUNTING BRACKET	4
47219	TINE BEAM DEPTH LEG	4
47220	TINE FRAME DEPTH ADJUSTER SCREW	4
33278	HANDLE	4
33285	DEPTH WHEEL ADJUSTER BOSS	4

'A' BLADE AND TINE KIT

10316	32 x 10 SPRING TINE	7
10318	6" 'A' BLADE LH	1
10319	6" 'A' BLADE RH	1
10320	7" 'A' BLADE	5
33278	HANDLE	4
33285	DEPTH WHEEL ADJUSTER BOSS	4
47098	TINE MOUNTING BAR	2
47119	TINE	12
47120	TINE U BOLT	12
47121	TINE CLAMP PLATE	12
47142	SPRING TINE CLAMP	7
47218	TINE BEAM DEPTH MOUNTING BRACKET	4
47219	TINE BEAM DEPTH LEG	4
47220	TINE FRAME DEPTH ADJUSTER SCREW	4

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HYDRAULICS

10140	MALE QUICK RELEASE COUPLING	4
11066	BREATHER	2
11115	$\frac{3}{4}$ BSP MALE/MALE ADAPTOR	2
11123	$\frac{3}{4}$ BSP DOWTY SEAL	3
11124	$\frac{1}{2}$ BSP DOWTY SEAL	11
11295	$\frac{1}{2}$ BSP - $\frac{3}{4}$ BSP MALE/MALE ADAPTOR	3
12315	$\frac{1}{2}$ BSP - $\frac{1}{2}$ BSP MALE/MALE ADAPTOR	3
12322	$\frac{3}{4}$ BSP MALE TEE	1
12323	$\frac{1}{2}$ BSP MALE TEE	1
16356	$\frac{1}{2}$ BSP - $\frac{1}{4}$ BSP MALE/MALE ADAPTOR	2
22118	BREATHER MOUNTING	2
27447	$\frac{1}{4}$ " HOSE ASSEMBLY	1
33146	$\frac{1}{2}$ " HOSE ASSEMBLY	1
41114	$\frac{3}{4}$ BSP MALE- $\frac{3}{4}$ BSP FEMALE COMPACT 90° ELBOW	1
41404	$\frac{5}{8}$ " HOSE ASSEMBLY	1
41407	$\frac{1}{2}$ " HOSE ASSEMBLY	2
42145	HOSE/PTO SUPPORT	1
47123	$\frac{5}{8}$ " HOSE ASSEMBLY	2
47206	HIGH PRESSURE BALL VALVE	1
TBMW338	$\frac{3}{4}$ BSP MALE - $\frac{3}{4}$ BSP FEMALE ADAPTOR	1
TBMW659	$\frac{1}{2}$ BSP MALE - $\frac{3}{4}$ BSP FEMALE ADAPTOR	1

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SPARES PARTS FOR WEBS WITH 2 HOLE CONNECTORS ('F' TYPE)

PART NO.	WEB BAR	DROP-AWAY LINK	TRACTION BELT	CONNECTOR	WEB BAR RIVET	CONNECTOR RIVET	BACK PLATE	JOINING ROD
47009N/35	(96)	47009N/35/2	47009N/35/3	47009N/35/4	47009N/35/1	47009N/35/5	47009N/35/7	47009N/35/8
47009N/40	(83)	47009N/40/2	47009N/40/3	47009N/40/4				
47009N/50	(66)	47009N/50/2	47009N/50/3	47009N/50/4	47009N/35/1	47009N/35/5	47009N/35/7	47009N/35/8
47009N/70	(47)	47009N/70/2	47009N/70/3	47009N/35/4				
47009W/35	(96)	47009W/35/2	47009N/35/3	47009N/35/4	47009W/35/1	47009N/35/5	47009N/35/7	47009W/35/8
47009W/40	(83)	47009W/40/2	47009N/40/3	47009N/40/4				
47009W/50	(66)	47009W/50/2	47009N/50/3	47009N/50/4	47009W/35/1	47009N/35/5	47009N/35/7	47009W/35/8
47009W/70	(47)	47009W/70/2	47009N/70/3	47009N/35/4				
QUANTITY	IN BRACKETS	1	3	6	A/R	A/R	A/R	1

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SPARES PARTS FOR WEBS WITH 4 HOLE CONNECTORS

PART NO.	WEB BAR	DROP-AWAY LINK	TRACTION BELT	FEMALE CONN	MALE CONN	WEB BAR RIVET	CONNECTOR RIVET	BACK PLATE	JOINING ROD
47009N/35	(96)	47009N/35/2	47009N/35/3	W0628/1(3)	W0628/2(3)	47009N/35/1			47009N/35/8B
47009N/40	(83)	47009N/40/2	47009N/40/3	37094/1 (3)	37094/2 (3)				
47009N/50	(66)	47009N/50/2	47009N/50/3	37499/1 (3)	37499/2 (3)	47009W/35/1			
47009N/70	(47)	47009N/70/2	47009N/70/3	W0628/1(3)	W0628/2(3)				
47009W/35	(96)	47009W/35/2	47009N/35/3	W0628/1(3)	W0628/2(3)	47009W/35/1			47009W/35/8B
47009W/40	(83)	47009W/40/2	47009N/40/3	37094/1 (3)	37094/2 (3)				
47009W/50	(66)	47009W/50/2	47009N/50/3	37499/1 (3)	37499/2 (3)	47009W/35/1			
47009W/70	(47)	47009W/70/2	47009N/70/3	W0628/1(3)	W0628/2(3)				
QUANTITY	IN BRACKETS	1	3	3	3	A/R	A/R	A/R	1