

ScanStone

SOIL PREPARATION SYSTEMS

Operator's Instruction Manual

BEDMAKERS

Models

3842-SB 3842-AR 3842-AR+



INSTALLATION & REGISTRATION DOCUMENT

ScanStone
SERVICE SUPPORT

Machine Details:

Machine Model:	
Serial No:	
Invoice No:	
Delivery Note No:	
Installation Date:	

Purchaser Details:

Farm / Business Name:	
Address:	
Postcode:	
Contact Tel:	

Acceptance by Purchaser:

I / We have taken delivery and inspected the machine as detailed on this form and acknowledge that it conforms to my / our order placed with the aforementioned dealer / distributor.

I / We have been instructed in the operation, routine servicing procedures and safety precautions and acknowledge the receipt of the Operators instruction manual

I / We understand my / our entitlement to the benefits of the warranty.

I / We will ensure that all operators of the machine will be properly instructed on the operator's manual and that the operator's manual will be available to the users at all times.

Owner

Manager

Contractor

Purchaser Signature: _____

Purchaser Name: _____

Date: _____

Operating Instructions:

I / We have carried out the pre-delivery inspection and have delivered and installed the machined detailed on this form.

I / We have explained to the purchaser, the operation, routine servicing procedures and safety precautions involved with this machine and passed on to the purchaser / operator the operators manual.

I / We have advised the purchaser of his entitlement to warranty.

I / We have carried out the relevant checklist with the purchaser or operator overleaf.

Dealer / Company Representative Details:

Name:	
Depot Address:	

Signature: _____

Name: _____

Date: _____

Please Note: This form should be completed by the Dealer / Company representative / Retail customer within 7 days of the installation. Please return to the below postal address or email address.



EC Declaration of Conformity

in accordance with BS EN ISO/IEC 17050-1:2004



RGS Forfar Ltd.

East Mains of Burnside, Forfar, Angus, Scotland DD8 2RX

declare that:

Equipment:..... **3 Bed Former**
Model No. **3842-SB 3842-AR 3842-AR+**
Serial No.

in accordance with the following directive:

2006/42/EC

Conforms with the essential requirements of the Machinery Directive and its amending directives

has been designed and manufactured to the following specifications:

BS EN ISO 12100-1 2003 Safety of Machinery - Basic concepts, general principles for design - Basic terminology, methodology.

BS EN ISO 12100-2 2003 Safety of Machinery - Basic concepts, general principles for design - Technical principles and specifications.

BS EN 982: 1996

Safety of machinery. Safety requirements for fluid power systems and their components - Hydraulics

BS EN ISO 4254-1: 2009

Agricultural machinery - Safety - Part 1: General requirements

BS EN ISO 13857: 2008

Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.

Signed:-

A handwritten signature in black ink, appearing to read 'R. Skea', written over a horizontal line.

Gordon Skea
Director
RGS Forfar Ltd.



at:- RGS Forfar Ltd. Forfar, Angus, UK
on:- 7th April 2010

Foreword

ScanStone 3842-SB, 3842-AR and 3842-AR+ series machines have been designed specifically for ridging and bed making purposes and are not intended for any other use. The manufacturer shall not be liable for damage resulting from mis-usage. The user shall bear all responsibility. Intended use also comprises adherence to the operating, maintenance and servicing instructions outlined by the manufacturer.

The machine must only be used in perfect working condition, in accordance with the aforementioned intended use and with instructions outlined in the operator's handbook. Any functional disorders, especially those which may affect safety of personnel must be rectified without delay.

Following the setting up and operating instructions provided should allow the operator to achieve the best performance from the machine which should result in increased reliability. Owing to wide variations in operating conditions however, it is impossible for the manufacturer to make comprehensive statements in this publication regarding performance or methods of working.

The efficiency of the machine always depends on the suitability of the operating conditions. Working on Steep inclines or land that is too wet can significantly affect the finished work.

Operators should read carefully the Safety notes contained within the manual prior to using the machine in order to help avoid dangerous situations, expensive repairs and prolonged downtime. In addition operator's should also read all relevant legislation regarding health, safety and accident prevention applicable to the country in which the machine is to be used or resold.

ScanStone products are manufactured to the highest possible standards and specifications in the UK using carefully selected materials and components and in accordance with recognised safety standards.

The right to change specifications, equipment and maintenance instructions at any time, without notice is reserved as part of our policy of continuous development and improvement.

No liability can be accepted for any inaccuracies or omissions in this manual, although every possible care has been taken to make it as complete and accurate as possible.

Owners who encounter a problem not covered in the manual should contact their dealer or ScanStone direct at the following address:-

The Service Manager,

RGS Forfar Ltd.

East Mains of Burnside, Forfar, Angus, Scotland. DD8 2RX

tel & fax: 00 44 (0) 1307 818994

e-mail:- rgssales@btconnect.com

The serial number plate is attached to the toolbar cross member. Use the space on the sample plate below to record the serial number for future reference.

ScanStone POTATO SYSTEMS	
SERIAL No.	
MODEL	
YEAR	
UNLADEN WEIGHT (KG)	
DRAWBAR WEIGHT (KG)	
AXLE WEIGHT (KG)	
RGS Forfar Ltd. Burnside, Forfar, Scotland	
CE	

Warranty

ScanStone when supplying new goods guarantee subject to certain conditions that those goods are free of defects both in material and workmanship.

The following conditions apply:-

- That the machine has only been used for ridging and bed making purposes.
- That service and warranty work is carried out only by authorised ScanStone dealerships.
- That the original specification of the machine has not been altered by unauthorised modification.

Correct operation of the machine and regular maintenance will help to prevent breakdowns. If however, operating trouble is experienced during the warranty period the following actions should be adopted:-

Notify the dealer from whom the machine was purchased, quoting the model and serial number.

This should be done immediately!

Do not operate the machine. Even though the original failure may be covered by warranty - resultant damage to the machine arising from delay in reporting the fault will not be covered.

It should be noted that items consumed during normal maintenance services, by operation of the machine and by factors over which the manufacturer has no control are not automatically warrantable.

These items include - hydraulic and lubricating oils and ground engaging parts.

The manufacturer cannot accept liability for damage to machines or third party through operational negligence.

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Part 1 Safety Precautions

Ignoring these precautions may result in serious personal injury or damage to the machine.



Warning Symbol

This symbol is used throughout the manual to draw attention to important information where particular care is required to ensure safe operation and maintenance of the machine.

General

The operator's handbook should be considered as a part of the machine and should be available for immediate use at any time during operation of the machine. Suppliers of new and second hand machines are advised to obtain documentary evidence that this manual was provided with the machine at time of sale.

Owners of machines should ensure that prior to commencement of work the operator has read and understood the operator's handbook and in particular the information regarding safety. This also applies to persons involved in setting up, maintenance and cleaning of the machine.



Reading the instructions after work has begun is too late!

Operator's should also consult the tractor handbook for information and instructions on mounting implements and other related safe working methods.

Before starting work

- Do not add to or modify any part of the machine which could affect safety without the prior approval of the manufacturer. This also applies to welding work.
- Check that warning and safety decals are in good condition. Replace any which are missing or those which have become illegible.
- Check the machine to ensure all services are operational and functioning correctly.
- Inspect the field for hazards such as large boulders, poles, overhead power lines and uneven ground. Take care when working to avoid obstacles and when working in unstable conditions.
- Warn bystanders to keep clear of the machine whilst working or when hydraulic functions are operational.
- Use personal protective equipment when circumstances require or to meet legislation. e.g. ear plugs.
In extremely dry conditions face masks should be worn if dust levels are unacceptable.

During work

- Reduce tractor speed when working on sloping ground.
- Never leave the driving position of a moving or running tractor.
- Avoid ridging across the face of slopes or on uneven ground where there is a danger of the tractor overturning.
- Check the machine regularly during operations for signs of wear and damage especially if an obstacle is struck.
- Do not allow children to play anywhere near the ridger or on the headlands when the machine is operational especially if hydraulic marker arms are fitted.

After work

- Never park the machine or carry out maintenance work when underneath overhead power lines.
- Adhere to replacement intervals noted in the manual if applicable even if signs of wear to components are not evident.

Safe maintenance and servicing

- Check operator's instruction book for details of service and maintenance schedules.
- Before commencement of maintenance work - position the machine on flat level ground and secure using the tractor handbrake. Use the support stand (provided with auto-reset models) for extra stability.
- Always remember to remove the tractor ignition key!
- Take care when carrying out maintenance under the machine. Make sure adequate support devices are in position to prevent sudden lowering.
- When large assemblies are to be lifted make sure lifting devices, slings and suspension systems have the necessary lifting capacity and are properly attached.

Do not allow anyone to stand below suspended loads.

- After cleaning the machine check all hydraulic pipes and hoses for leaking or operational damage.
Repair before putting the machine back in service.
- When servicing is complete, check all nuts and bolts loosened during repairs have been tightened satisfactorily.
- Dispose of hydraulic fluids, filters and contaminated materials safely with due consideration to the environment.
- Always use genuine ScanStone spare parts.

Part 1

Servicing the Hydraulic system.



Warning - The hydraulic system works under high pressure.

- When servicing or repair work is to be carried out on the machine use only suitably qualified engineers working to the relevant hydraulic standards and codes of practice.
- Check hydraulic lines regularly for any sign of leakage. Do not tighten a leaking fitting whilst the hydraulic system is pressurised. Always de-pressurise before maintenance to hydraulic components.
- Ensure hoses are properly fitted, free from twisting and clear of moving parts of machinery.
- Always replace hoses at the first sign of damage.

Road Transportation

- Check that the machine is free of earth, stones and clods, tools or other items of loose equipment before driving on public roads.
- Retract the marker arm outer tubes and secure with the pinch screws. Use the marker arm locking pins to hold the markers in the upright position, Fig 1.
- When turning or at bends - take the width and load of the machine into consideration.
- When stopped - secure the machine to prevent rolling or unauthorised use.

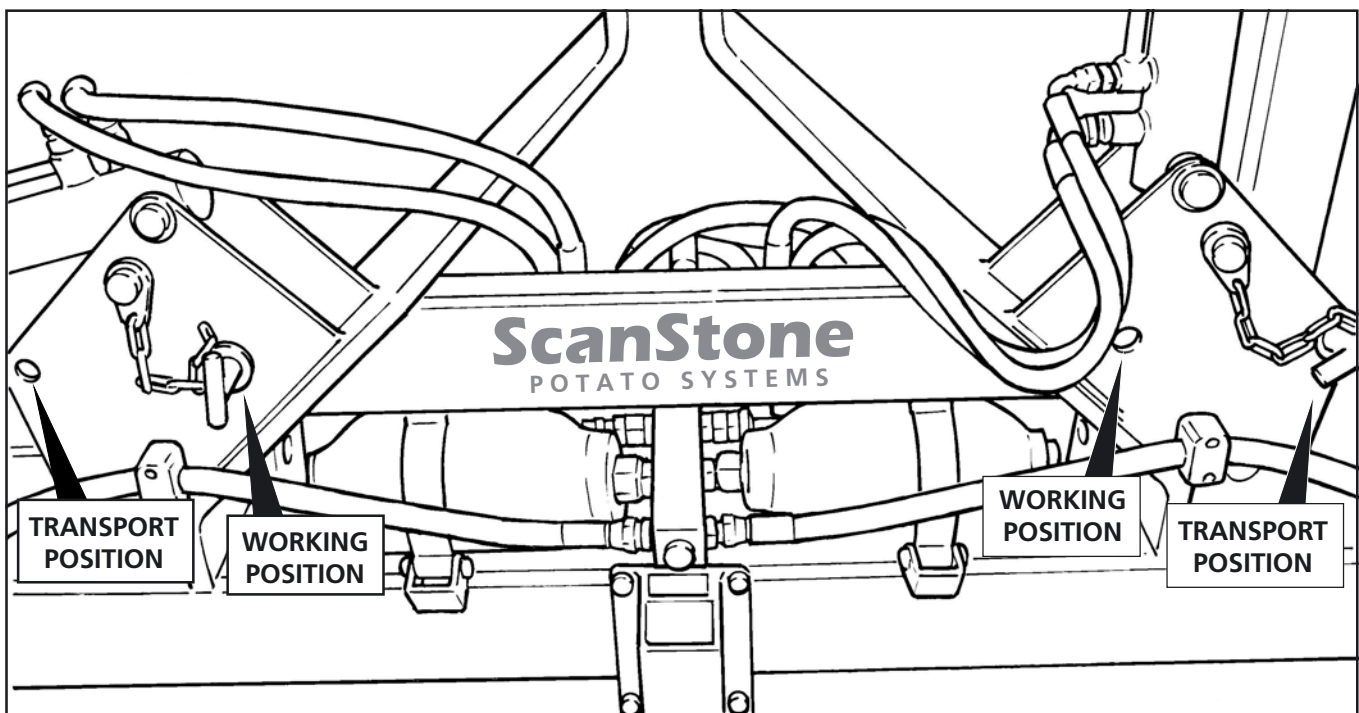


Fig 1

Part 2 Setting up, Adjustment and Maintenance

Attaching to the tractor Three Point Linkage

The machine is fitted with standard category 2 three point linkage. This linkage combines the ridger / bed maker and the tractor into a single working unit. Lift and position are controlled hydraulically.

Consult the Tractor Operator's manual for instructions on mounting implements and for rear hitch adjustment.



During hitching operations or when using external lift controls, the operator must at all times keep outside the drawbar frame.

The stabilizer chains on each lower link should be evenly adjusted to reduce side play to approximately 1½" (38mm) to each side of the tractor.

Fit front end weights if required for stability and steering control as load will be transferred from the front to the rear wheels of the tractor when the three point linkage is raised.

Adjustment of Ploughs

The effective length of the mouldboard stays can be adjusted to increase or decrease the plough width allowing the operator to vary the shape of the bed to suit the type and condition of the soil.

To adjust the width:-

Loosen the nut attaching the inner end of the stays to the plough mounting leg, Fig 2:1.

Loosen the locknuts attaching the stays to the mouldboard brackets, Fig 2:2 and increase or decrease the stay length to suit the new setting required.

Ensure both sides are adjusted equally before tightening nuts.

Although a trial run is often the best way to decide on bed shape - wider plough widths which produce shallow sided ridges are generally more suited to heavier clay type soils. In moist sandy conditions - narrower ploughs producing a steeper wall angle are more suitable.

If bed tilling or stone and clod separation is to take place after ridging - note that ridged beds should be prepared with tops as flat as possible. This will help to minimise wear damage to the centre of the machines.

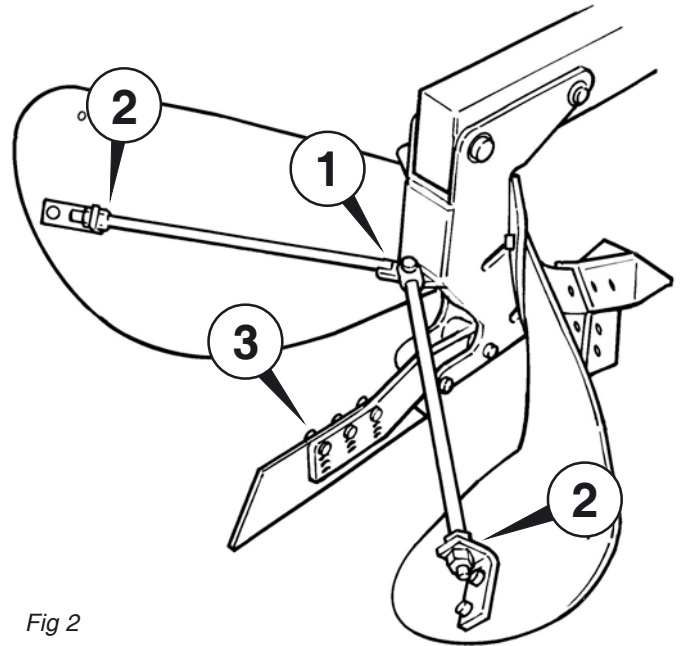


Fig 2

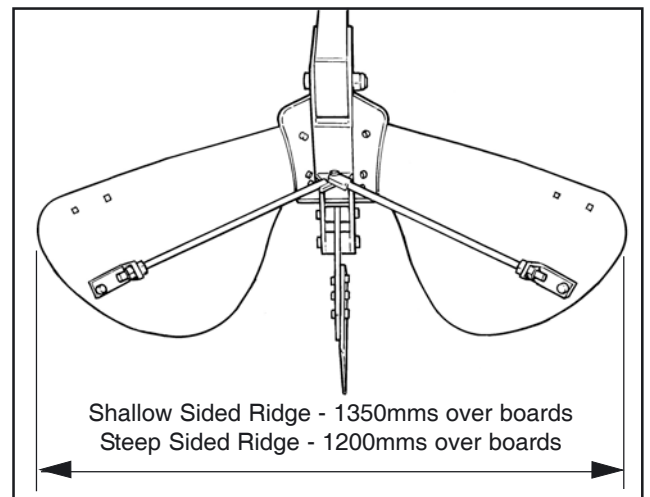
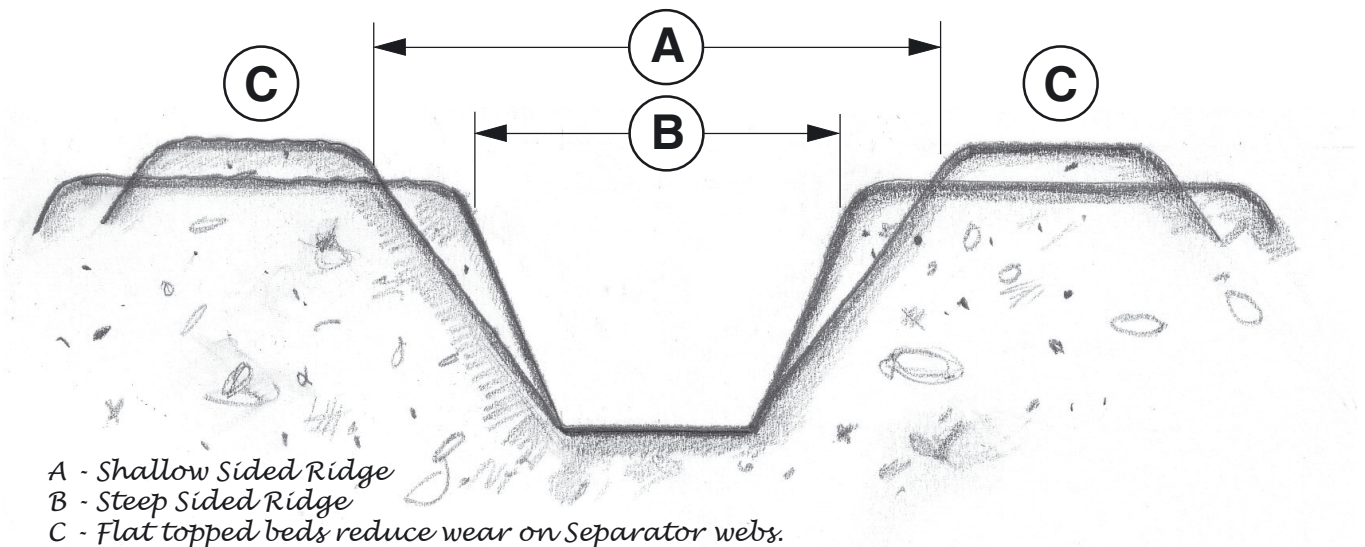


Fig 3



A - Shallow Sided Ridge
 B - Steep Sided Ridge
 C - Flat topped beds reduce wear on Separator webs.

Fig 4

Part 2

Hydraulic System Pressure

On Auto-reset models the hydraulic system is pre-charged using the tractor hydraulics to a pressure setting sufficient to hold the ploughs in work.

Accumulators are positioned either side of the headstock.

NOTE: Alternative accumulators are used on the equipment depending on which plough body system is installed.

Standard ScanStone plough bodies are fitted with 1.4 litre accumulators and AR+ Double Action plough bodies are fitted with 2.0 litre accumulators, Fig 6.

Follow the instructions below to pressurise the system:-

- Starting with the first accumulator - couple the quick release pressurising hose (from the accumulator lock valve, Fig 5:1) to the tractor auxiliary hydraulic outlet.
 - Open the system lock valve by turning in an anticlockwise direction, Fig 5:2.
 - Operate the tractor auxiliary system to obtain a pre-charge working pressure shown on the gauge **according to the table below.**
 - Close the lock valve by turning in a clockwise direction.
 - Disconnect the quick release pressurising hose from the accumulator lock valve and repeat procedure for the second accumulator.
- Tie up to prevent the hose end from trailing on the ground during operation.

The system is now charged and ready for use.

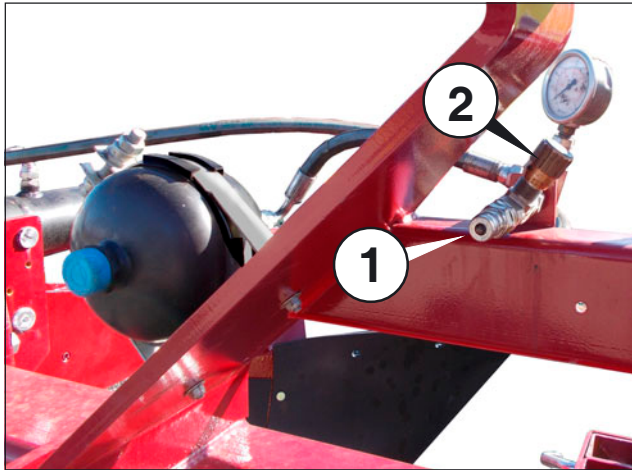


Fig 5

Accumulator type	Pre-charge Working Pressure
1.4 Ltr.	172 bar (2500 psi)
2.0 Ltr.	115 bar (1670 psi)



Do not use the lock valve to depressurise the system, or at any other time unless the pressure hose is connected to the tractor hydraulic outlet.

Accumulator Pressure

If Standard ScanStone bodies are fitted the 1.4 litre accumulators are each pre-charged to 170 bar (2465 psi). For AR+ Double Action type bodies the 2 litre accumulators fitted are each pre-charged to 110 bar (1595 psi).

Accumulators require no user maintenance.

If a fault develops with an accumulator the operator should notify his ScanStone dealer.

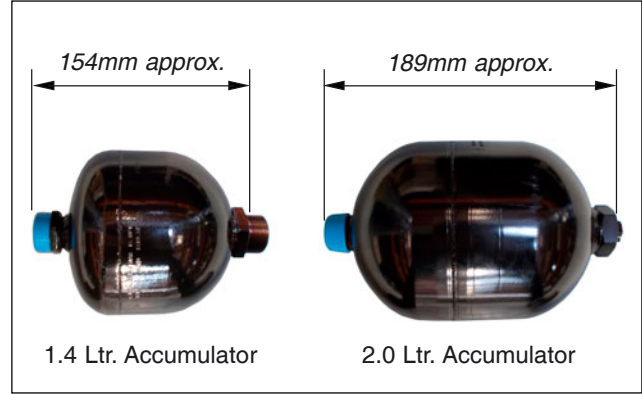


Fig 6

Marker Arm Hydraulics

Optional hydraulically operated marker arms can be fitted to allow the operator to retract the markers when turning at headlands or when folding for transportation. (see Fig 1 for pin position details).



Always ensure pin is moved from transport to working position before unfolding markers. Failure to do so could result in damage to the machine.

To fold / unfold:-

Connect the quick release hoses to the tractor auxiliary outlets.

Use the tractor spool lever to operate the marker rams to fold or unfold.

Note: When the markers are supplied they may be set up to operate in one of the two following ways:-

- When the spool lever is engaged the marker arms at each side of the machine will fold together.
- or
- When the spool lever is engaged the first marker arm will unfold to the working position followed by the other, and vice-versa when folding.

Operators who wish to change from one system to the other can do so by disconnecting the two hose ends on one of the marker arm rams and changing their positions.

Marker Arms and Discs

Marker Arms consist of inner and outer sliding tubes held by pinch screws, Fig 7:1, which when loosened allow the operator to extend the inner tube to the required position. A pig tail spring attached to the end of the inner tube holds the marker disc in work.

To increase or decrease the marking depth - remove bolts and reposition them in any of the holes provided, Fig 7:2.

Note: Always retract the marker arm outer tubes and secure with pinch screws before travelling on public roads.

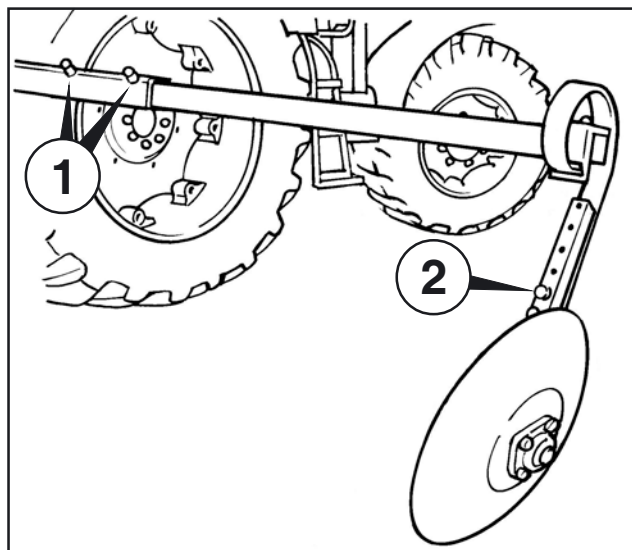


Fig 7

Coupling to the ScanStone Bed Tiller

Before coupling to the Bed Tiller the linkage kit should be fitted to the Tiller as shown, Fig 8.

The kit consists of a linkage mount frame, Fig 8 (A), 2 mount brackets (B), a top link extension bracket (C), 2 top links (D), 2 latches (E), and all necessary pins and bolts.

Fit the pivot pins in either of the 3 height adjustment holes in the mount brackets, Fig 8:1.

Remove the latch retaining bolts, and raise latches ready to mount the Bedmaker, Fig 8:2.

Mount the Bed Tiller on the tractor 3 point linkage and raise the Support Stand.

Fit lower link pins to the Bedmaker, in either upper or lower holes, Fig 8:3.

Reverse the mounted Tiller slowly toward the Bedmaker until in position below the Bedmaker lower link pins. Raise the Bed Tiller to engage the lower link pins and ensure they are properly seated in the linkage jaws. Re-fit the latch plate retaining bolts.

Connect the top links and adjust so that the Bedmaker is leaning back slightly.

Test run the combined unit adjusting the top link if necessary to ensure that the ridge bottom width is sufficient for stone and clod placement during separation and that the plough points are not bringing up uncultivated soil onto the ridge.

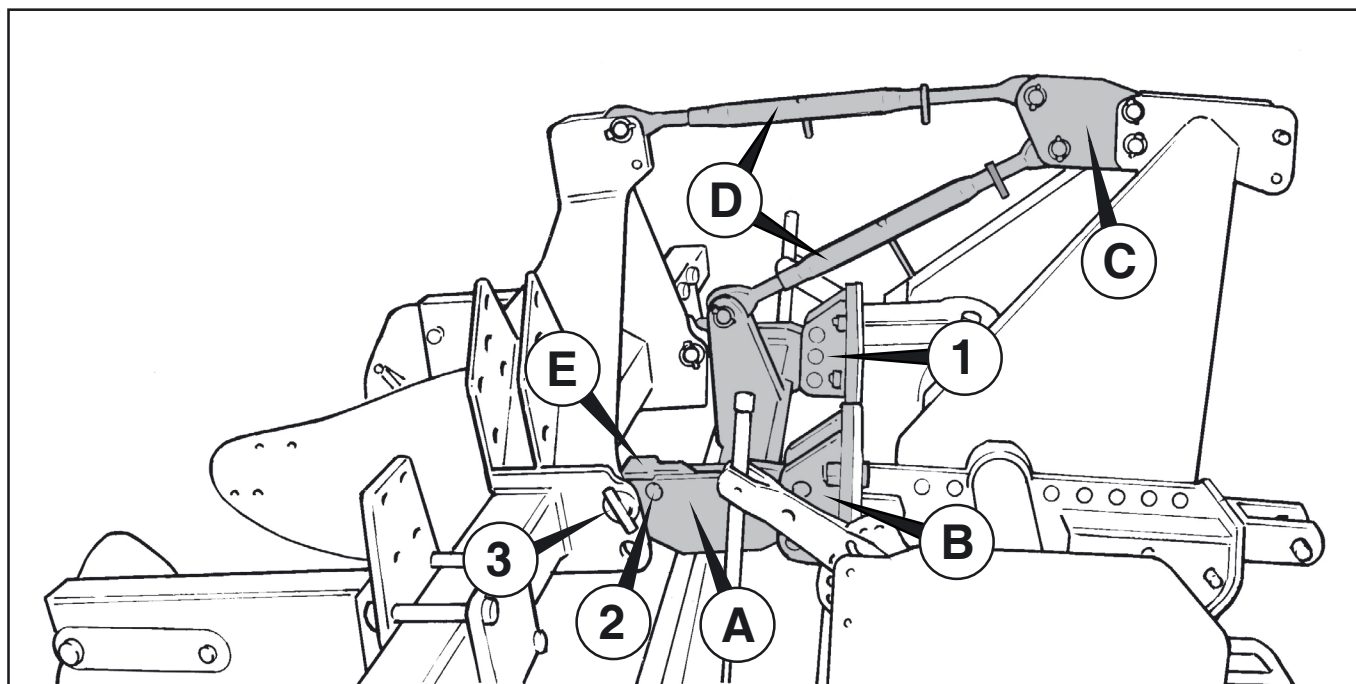


Fig 8

Part 2

Shearbolts

Plough Stems are connected to the beams using special Shearbolts, Fig 9:1. These Shearbolts will snap free should the plough become snagged on an underground obstruction.

Do not replace the shearbolts with ordinary bolts as this could cause serious damage to the mounting plates.

Lubrication

6 grease nipples are fitted on Auto-reset models.

These are located on ram ends and beam pivot pins, Fig 10: 1, 2 & 3. Grease daily.

Grease nipples are fitted on marker disc bearings (2 per disc) - grease every 40 hours.

End of Season Storage

- Clean the machine thoroughly to remove all remains of dirt.
- Check for any signs of wear or damage, and replace badly worn parts as necessary.
- Inspect shearbolts for damage replacing only with special ScanStone shearbolts.
- Grease all plough parts thoroughly.
- Store the machine in dry conditions under cover.
- Tie up all hydraulic hoses ensuring ends are clear of the ground.

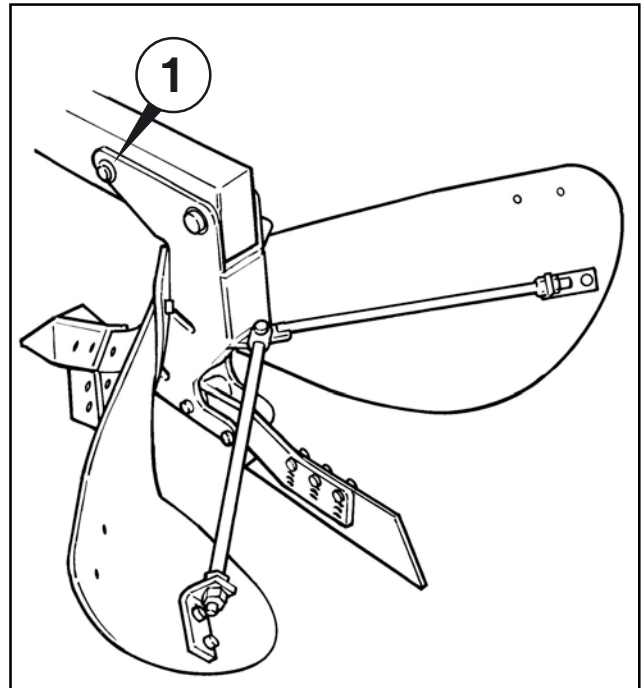


Fig 9

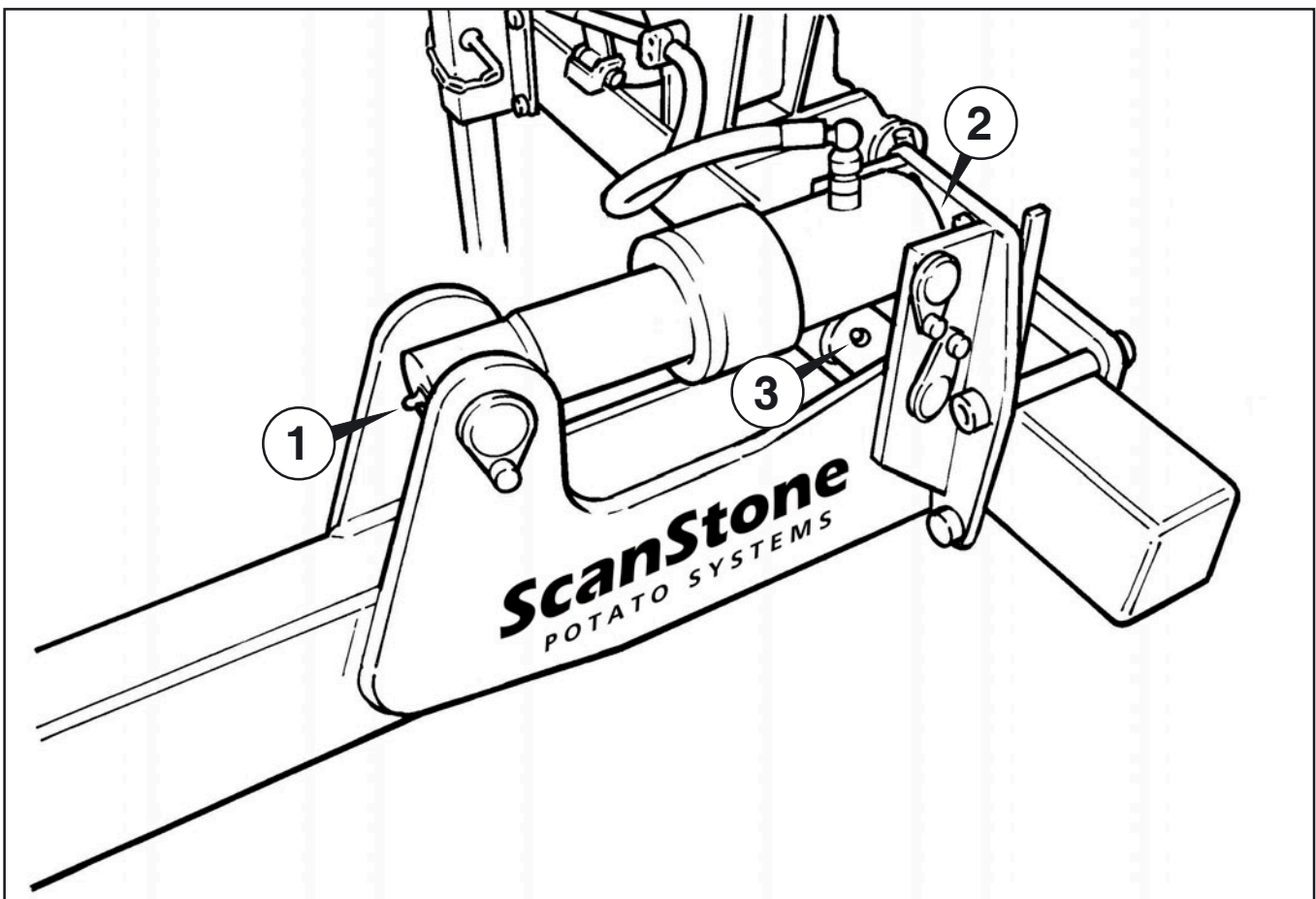


Fig 10

Part 3 Troubleshooting

Problem	Probable Causes	Suggested Remedy
<ul style="list-style-type: none"> ● Ploughs trip too easily. 	<ul style="list-style-type: none"> ● Extremely hard or compacted subsoil. ● Low hydraulic pressure. 	<ul style="list-style-type: none"> ● Subsoiling/deep cultivation required with chisel plough or similar prior to ridging. ● Charge the hydraulic system pressure as described on page 2.2 and to the pressures given in the table. ● Connect the quick release pressurising hose to the tractor auxiliary outlet, and allow the hydraulic oil to flow back to the tractor. With the ploughs in the ground move the tractor forward until the ploughs are in the maximum trip position. Disconnect the hose from the first ram and drain the remaining oil into a container for safe disposal. Take care to avoid sudden discharge of oil due to residual system pressure when disconnecting the ram hose. Use the tractors hydraulic system to flush the hose allowing oil to expel as much air as possible. Loosely reconnect the hose to the ram to allow any remaining air to be bled before final tightening up of connector. Repeat these procedures for the second ram. The system should now be free of trapped air and can be charged up to working pressure.
<ul style="list-style-type: none"> ● Excessive Shearbolt failure. 	<ul style="list-style-type: none"> ● Ploughs are snagging under large rocks, tree roots or other obstacles. 	<ul style="list-style-type: none"> ● Reduce system working pressure and tractor forward speed when working in fields which have roots or other hidden obstructions. ● Have the accumulator pressures checked by your local ScanStone dealer.

Maintenance Note

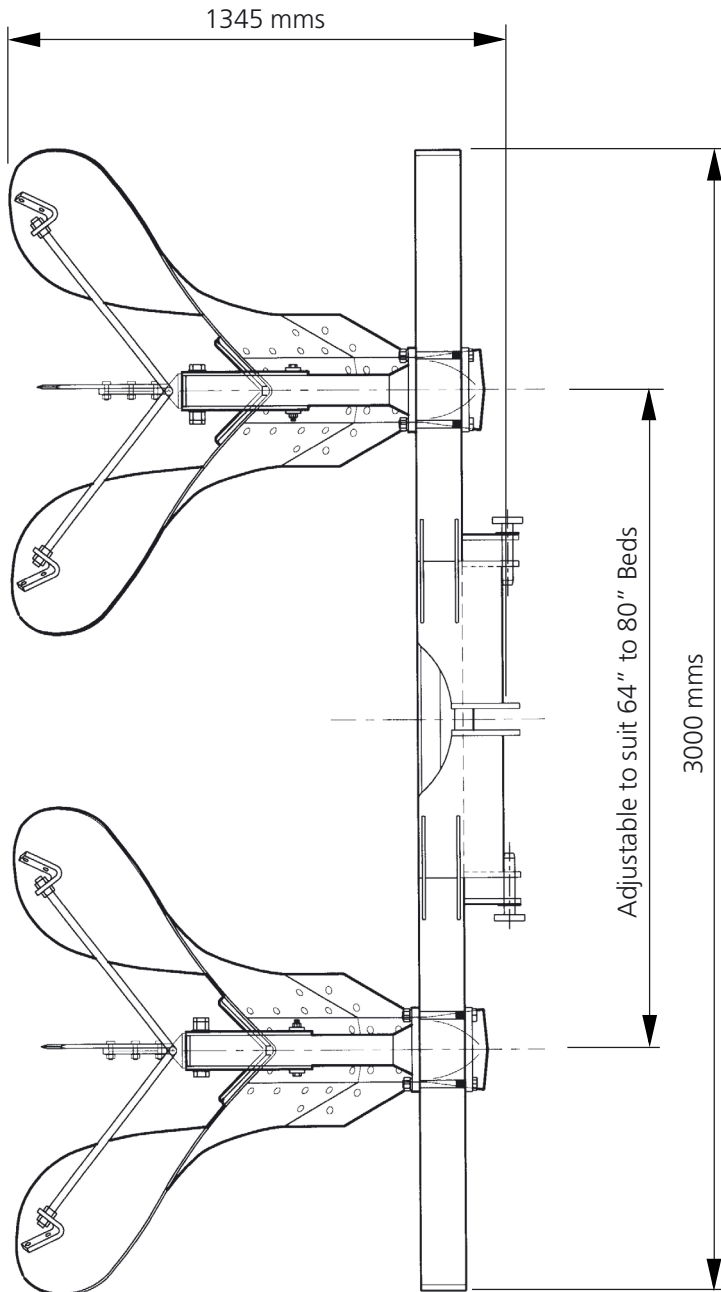
Hose Replacement Intervals - Hoses should be replaced every 5 years even if signs of wear or damage is not apparent.

When replacing hoses always use the correct specification*:-

*SAE 100 R2 AT ● DIN EN 853 2SN

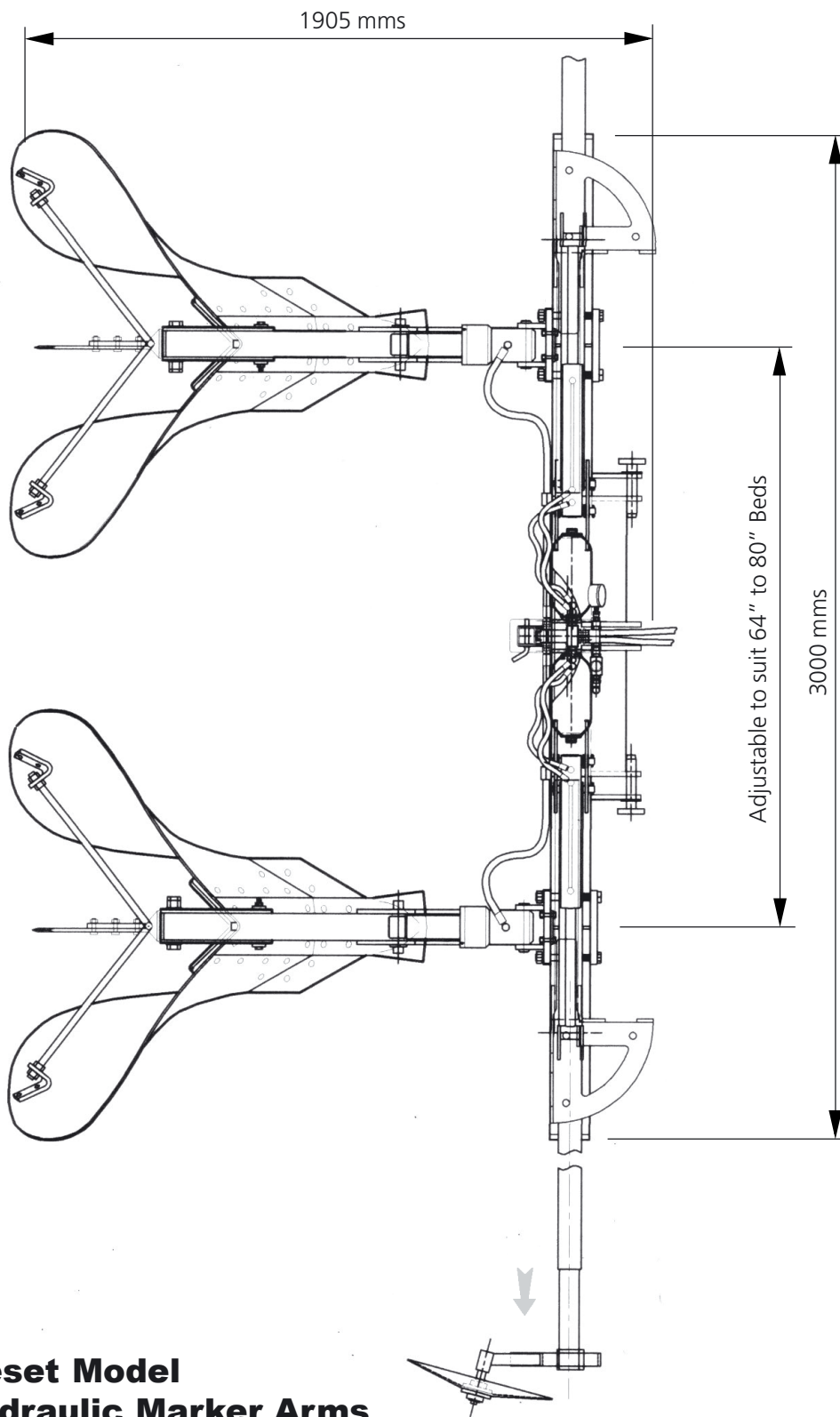
SIZE	WORKING PRESSURE	MIN. BURST PRESSURE
1/4"	400 bar (5800 psi)	1600 bar (23200 psi)
3/8"	330 bar (4800 psi)	1320 bar (19150 psi)

Part 4 Machine Specifications



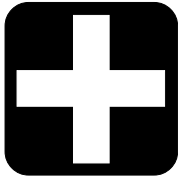
Shearbolt Model

Toolbar Width	3000 mms
Length	1345 mms
Row Widths available	64" - 80"
Weight c/w Markers and Fins	574 Kg - 1265 Lbs
Weight without Markers and Fins	449 Kg - 990 Lbs
o/a Height to Head Stock	1330 mms
o/a Height with folded Markers	3000 mms approx.



**Auto-Reset Model
with Hydraulic Marker Arms**

Toolbar Width	3000 mms
Length	1905 mms
Row Widths available	64" - 80"
Weight c/w Markers and Fins	708 Kg - 1561 Lbs
Weight without Markers and Fins	583 Kg - 1285 Lbs
o/a Height to Head Stock	1330 mms
o/a Height with folded Markers	3000 mms approx.



Handling Oil & Grease

Oil and grease products used on this machine are not considered to be particularly hazardous to health unless ingested. Handle these products responsibly and in accordance with good industrial hygiene and safety practices.

Contact with skin:-

Wash skin with plenty of soap and water for several minutes. Seek medical attention if irritation develops or persists.

Contact with eyes:-

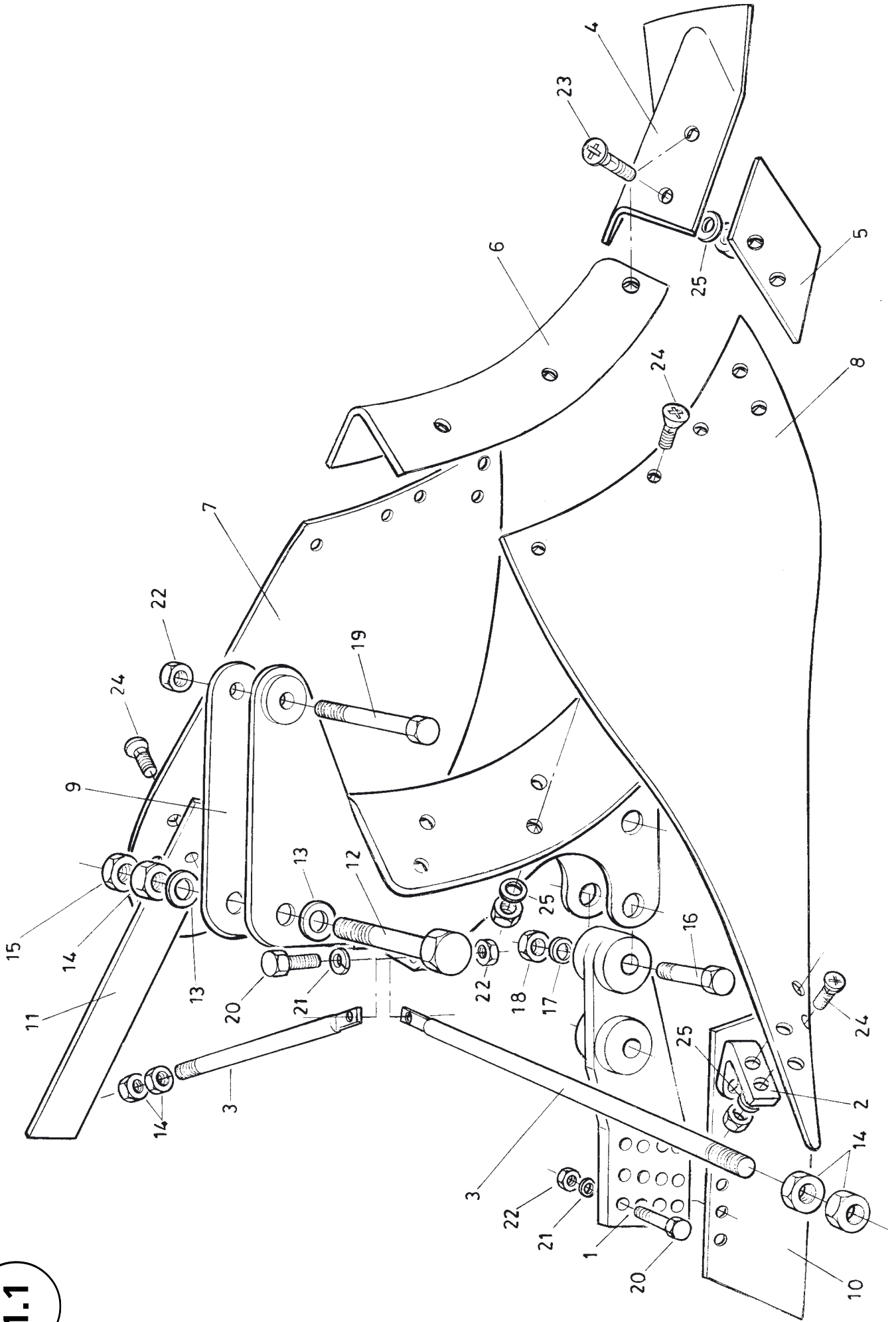
Flush eyes with plenty of water for several minutes. Seek medical attention if irritation develops or persists.

Warning: *Diesel fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause serious personal injury, blindness or death. Fluid leaks, under pressure, may not be visible. Use a piece of cardboard or wood to find leaks. DO NOT use your bare hand. Wear safety goggles for eye protection. If any fluid is injected into the skin, it MUST be surgically removed within a few hours by a doctor familiar with this type of injury.*

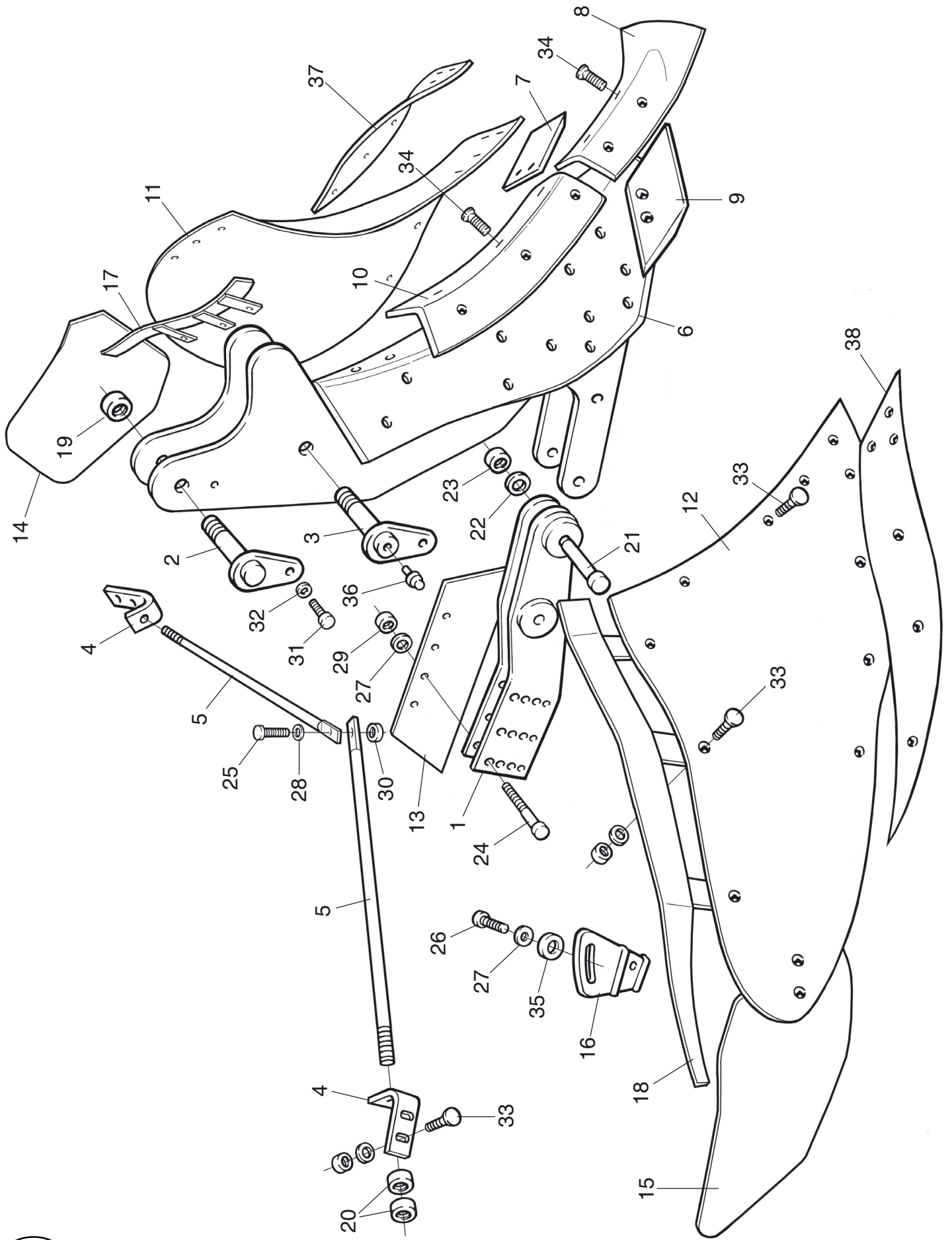
Parts List - Assembly Groups

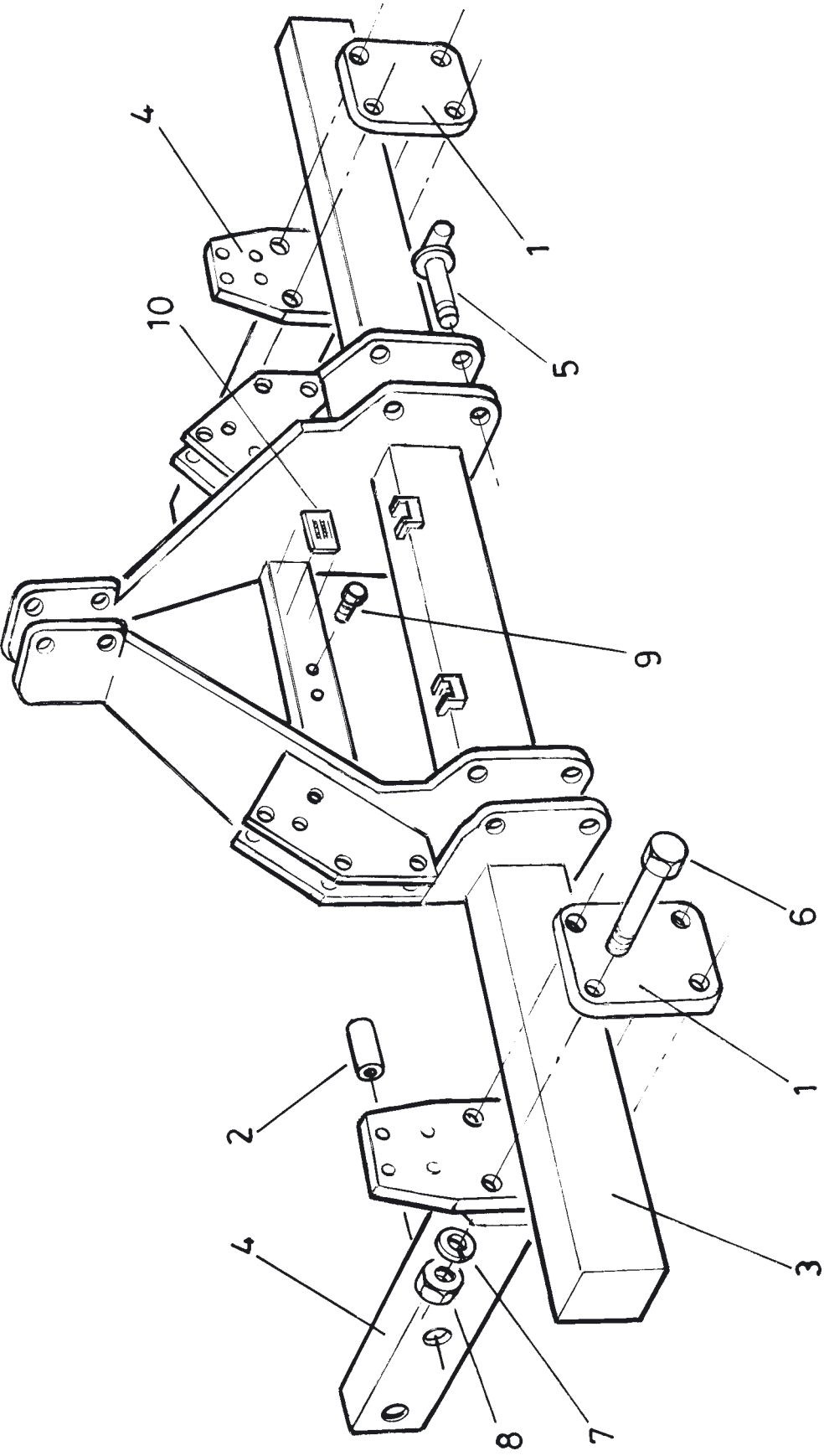
- 1.1 - Plough Assembly
- 1.2 - AR+ Plough Assembly
- 2 - Toolbar & Shearbolt Beams
- 3.1 - Toolbar & Auto-Reset Beams
- 3.2 - Heavy Duty Toolbar & Auto-Reset Beams
- 4.1 - Marker Arms & Discs (Up to 2014)
- 4.2 - Marker Arms & Discs (2015 onwards)
- 5.1 - Auto Reset Hydraulics (Up to 2014)
- 5.2 - Auto Reset Hydraulics (2015 onwards)
- 6 - Marker Arm Hydraulics

1.1



1.2



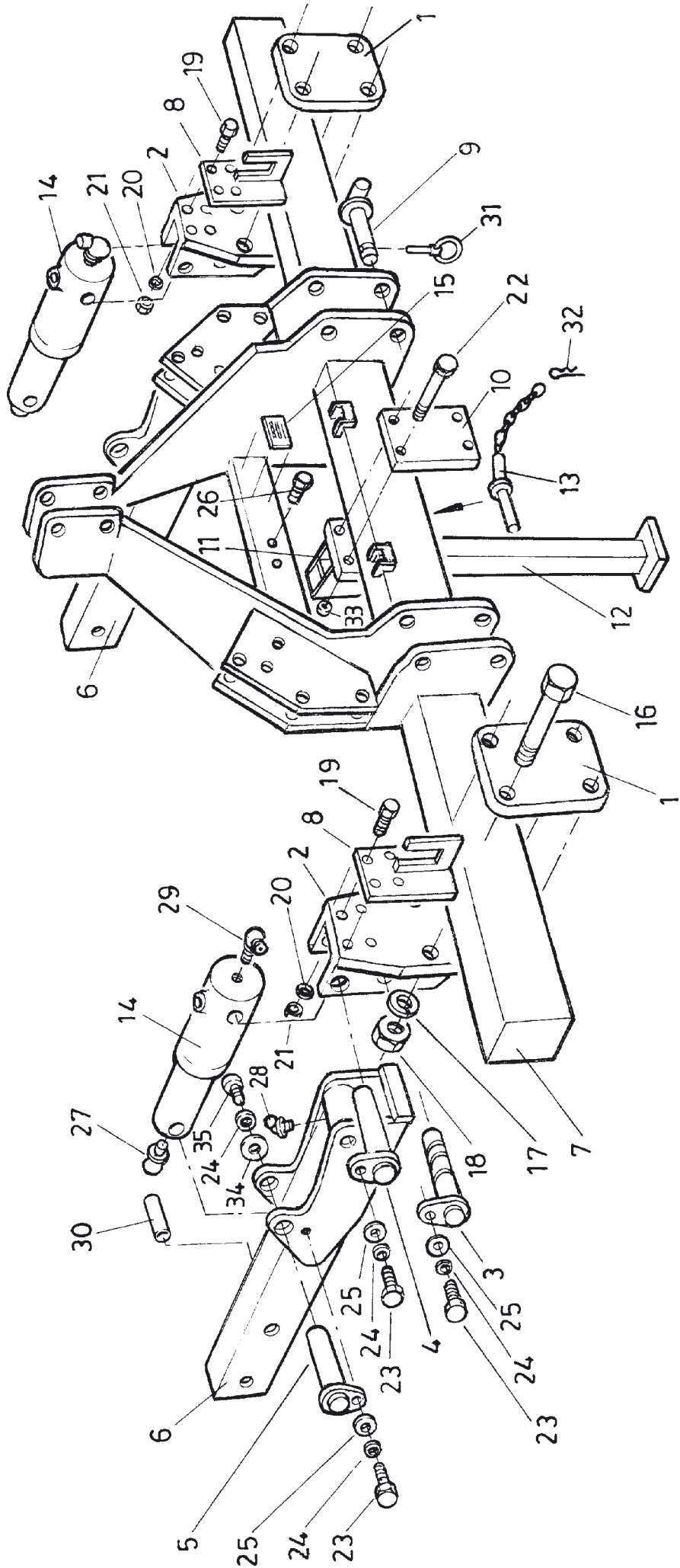


Assembly Group 2 - Toolbar & Shearbolt Beams

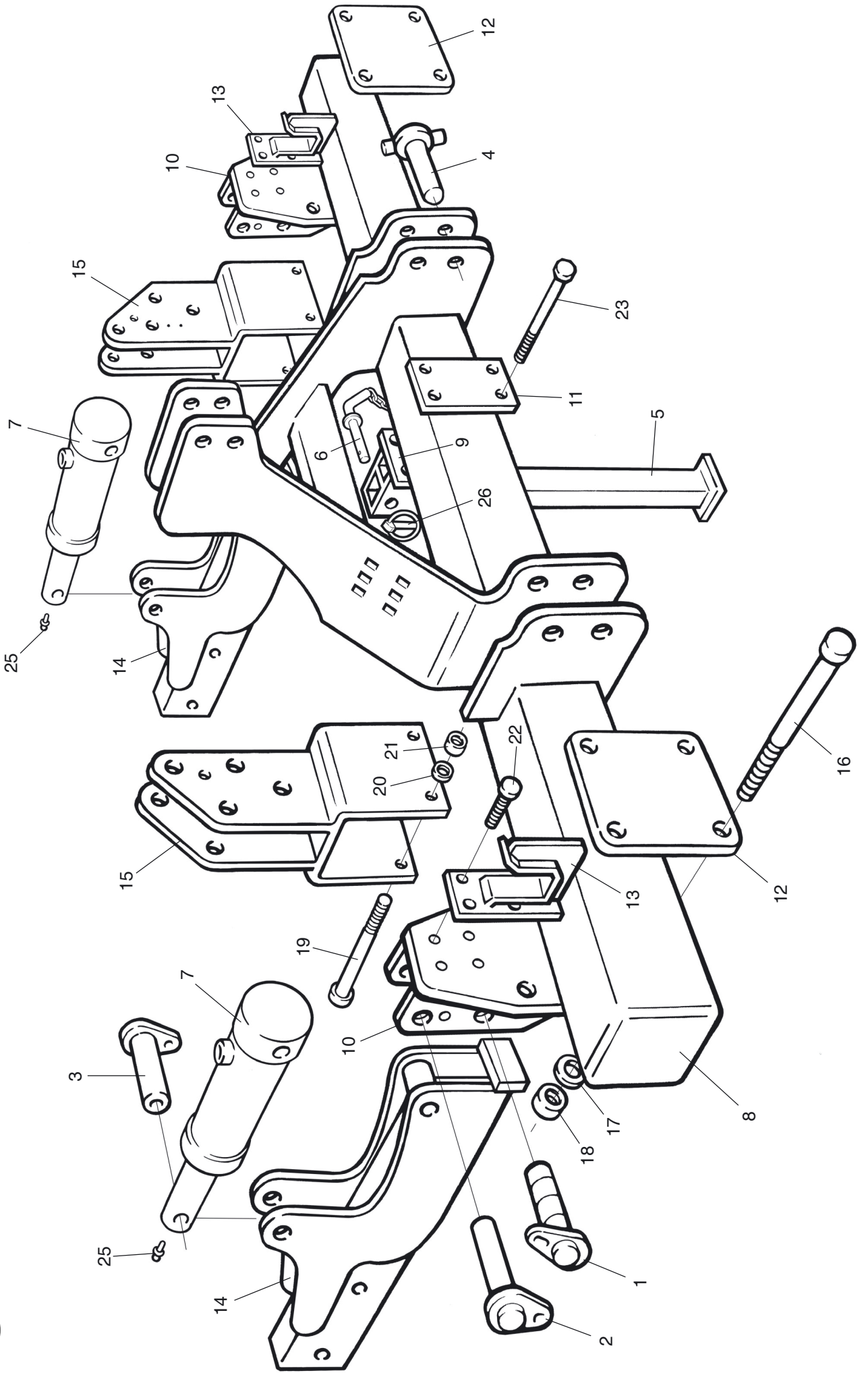
Item	Description	Part No.	Qty.
1	Clamp Plate	UN-15001	2
2	Bush	UN-15022	2
3	Toolbar Frame	UN-15035	1
4	Shearbolt Beam	UN-15044	2
5	Linkage Pin	UN-15103	2
6	Hex Bolt M20 x 180	UN-B1M20X180	8
7	Spring Washer M20	UN-W1M20	8
8	Hex Nut M20	UN-N1M20	8
9	Set Screw M8 x 16	UN-S1M8X16	2
10	Serial Number Plate	UN-01572	1
11	Linch Pin	UN-PLP6mm	2

Item	Description	Part No.	Qty.

3.1



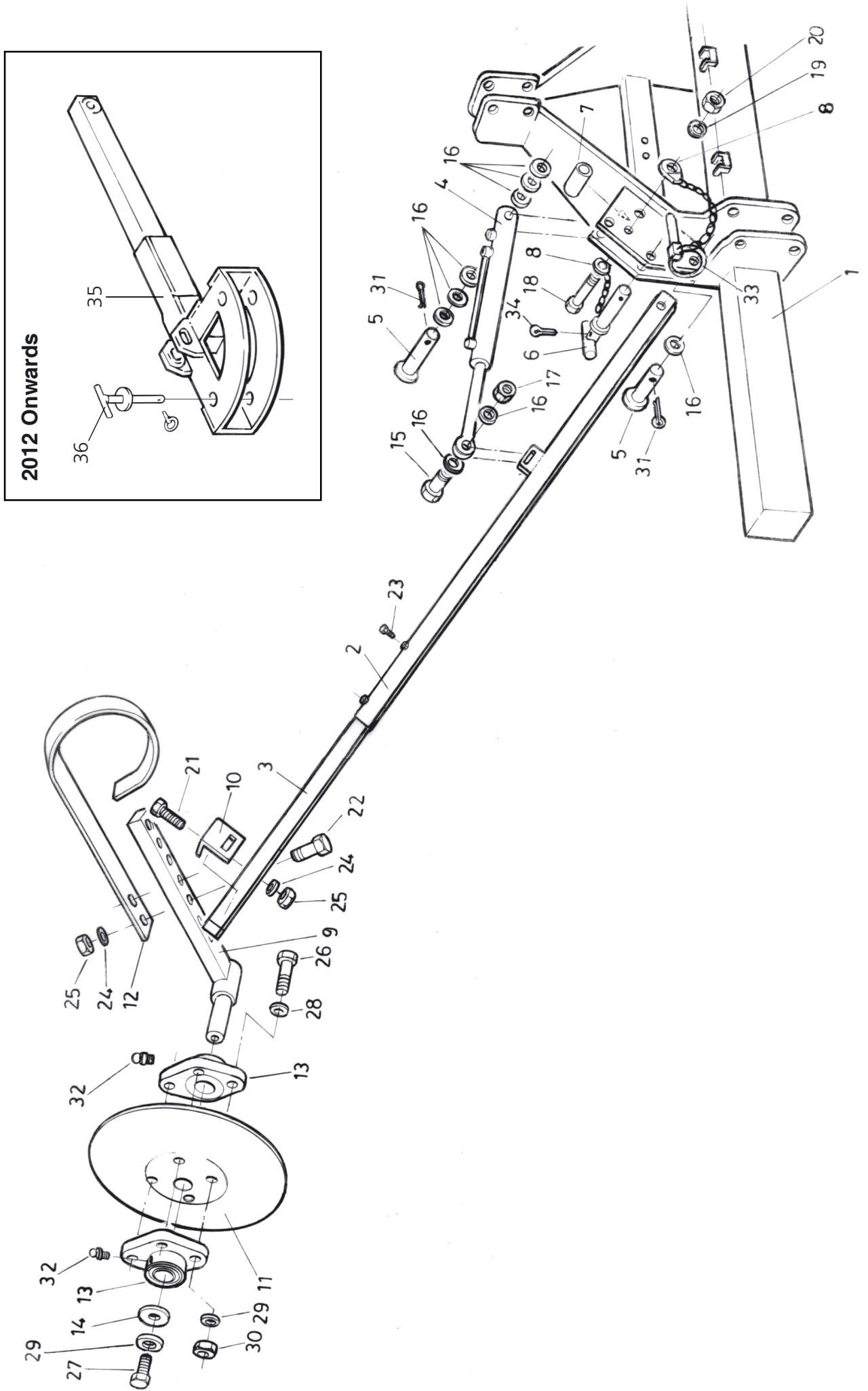
3.2



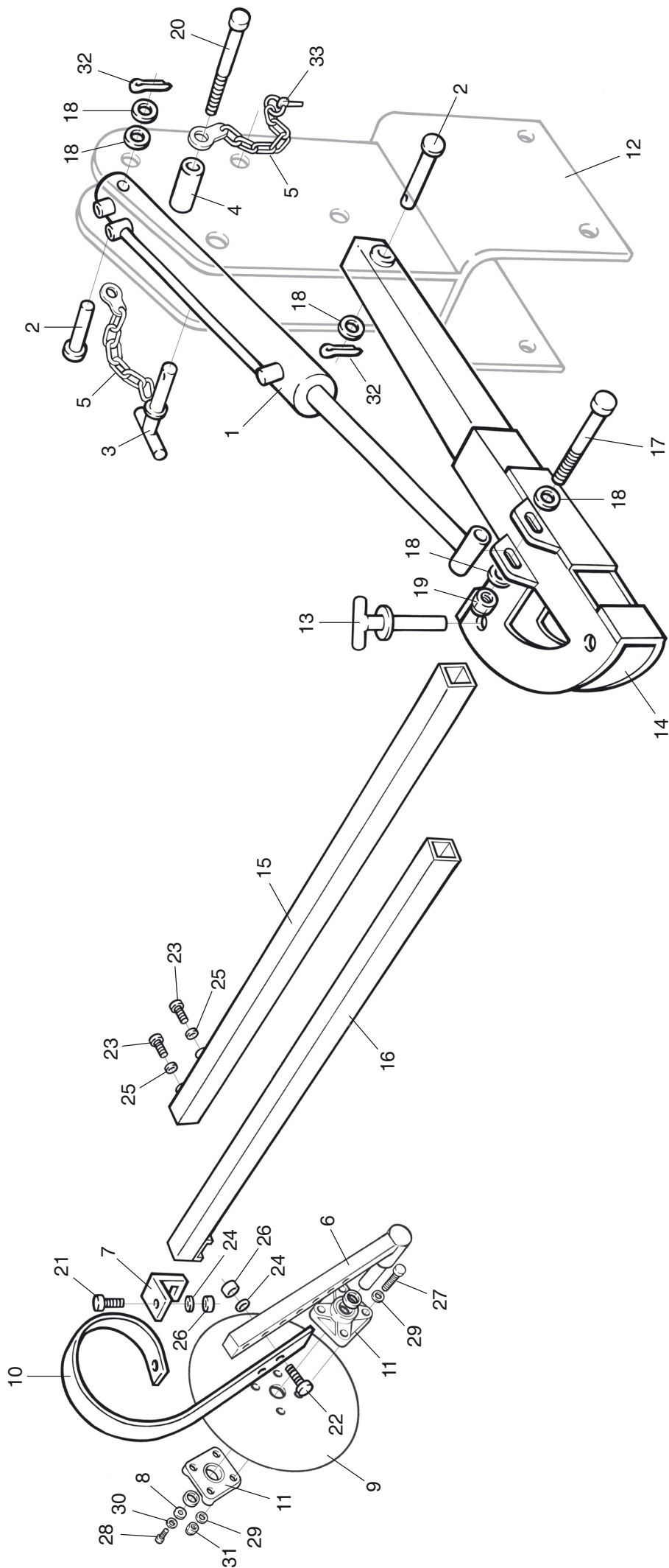
Assembly Group 3.2 - Heavy Duty Toolbar & Auto-Reset Beams

Item	Description	Part No.	Qty.	Item	Description	Part No.	Qty.
1	Pivot Pin	UN-15009	2				
2	Ram Anchor Pin	UN-15011	2				
3	Ram Pin	UN-15012	2				
4	Linkage Pin	UN-15103	2				
5	Stand	UN-15119	1				
6	Stand Pin	UN-15121	1				
7	Auto Reset Beam Ram	UN-15131	2				
7A	Auto Reset Beam Ram Seal Kit	UN-15132					
8	Toolbar Frame	UN-15433	1				
9	Stand Bracket	UN-15443	1				
10	Hinge Bracket	UN-15448	2				
11	Clamp Plate	UN-15455	1				
12	Clamp Plate	UN-15457	2				
13	Marker Support	UN-15480	2				
14	Auto Reset Beam	UN-15485	2				
15	Marker Mount Bracket	UN-15503	2				
16	Hex Bolt M20 x 220		8				
17	Plain Washer M20		8				
18	Nyloc Nut M20		8				
19	Hex Bolt M16 x 200		4				
20	Plain Washer M16		4				
21	Nyloc Nut M16		4				
22	Set Screw M12 x 40		8				
23	Hex Bolt M10 x 200		4				
24	Nyloc Nut M10		4				
25	Grease Nipple M8 x 1.25 - Straight	UN-GNM8	2				
26	Lynch Pin	UN-PLP6mm	1				

4.1



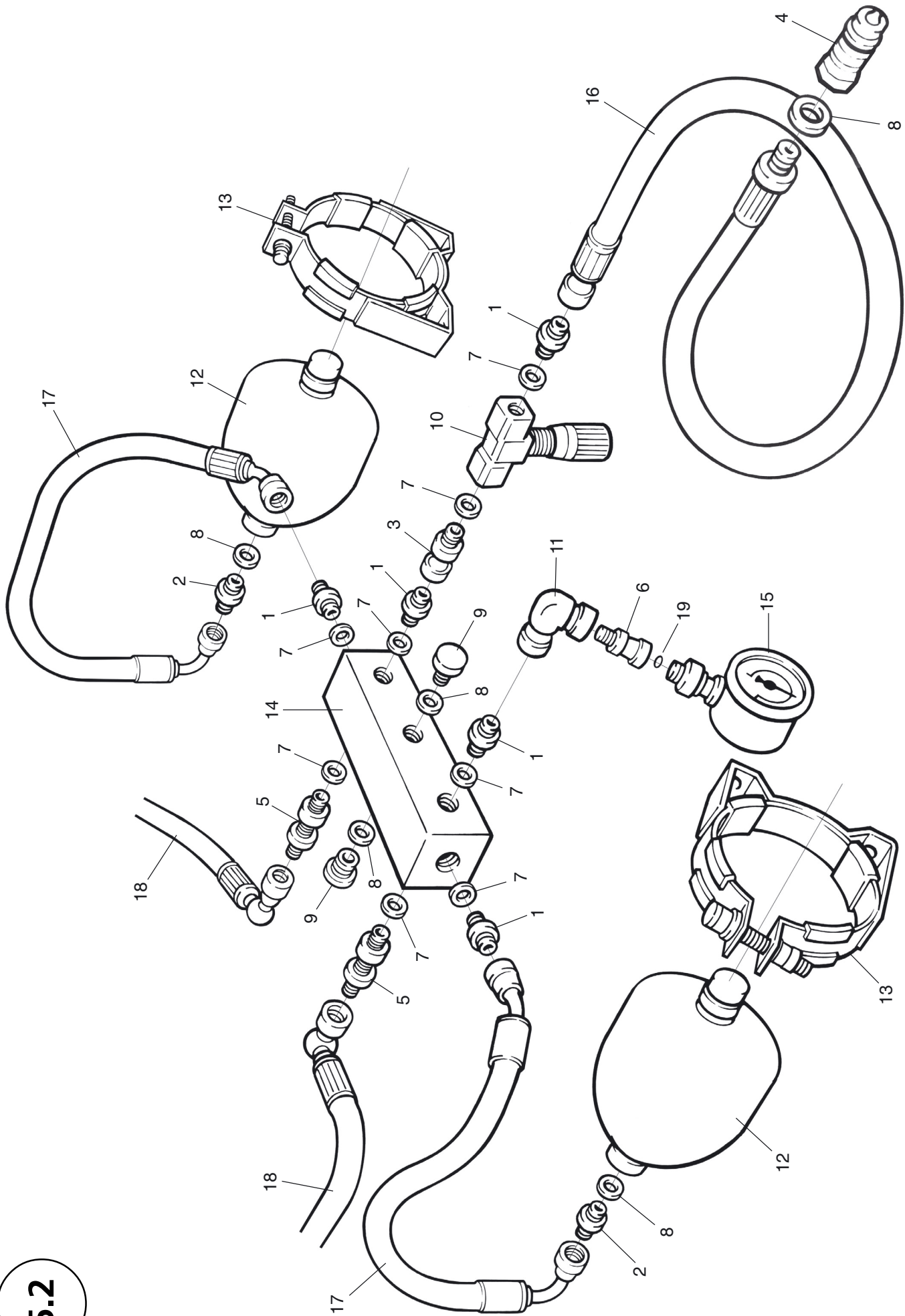
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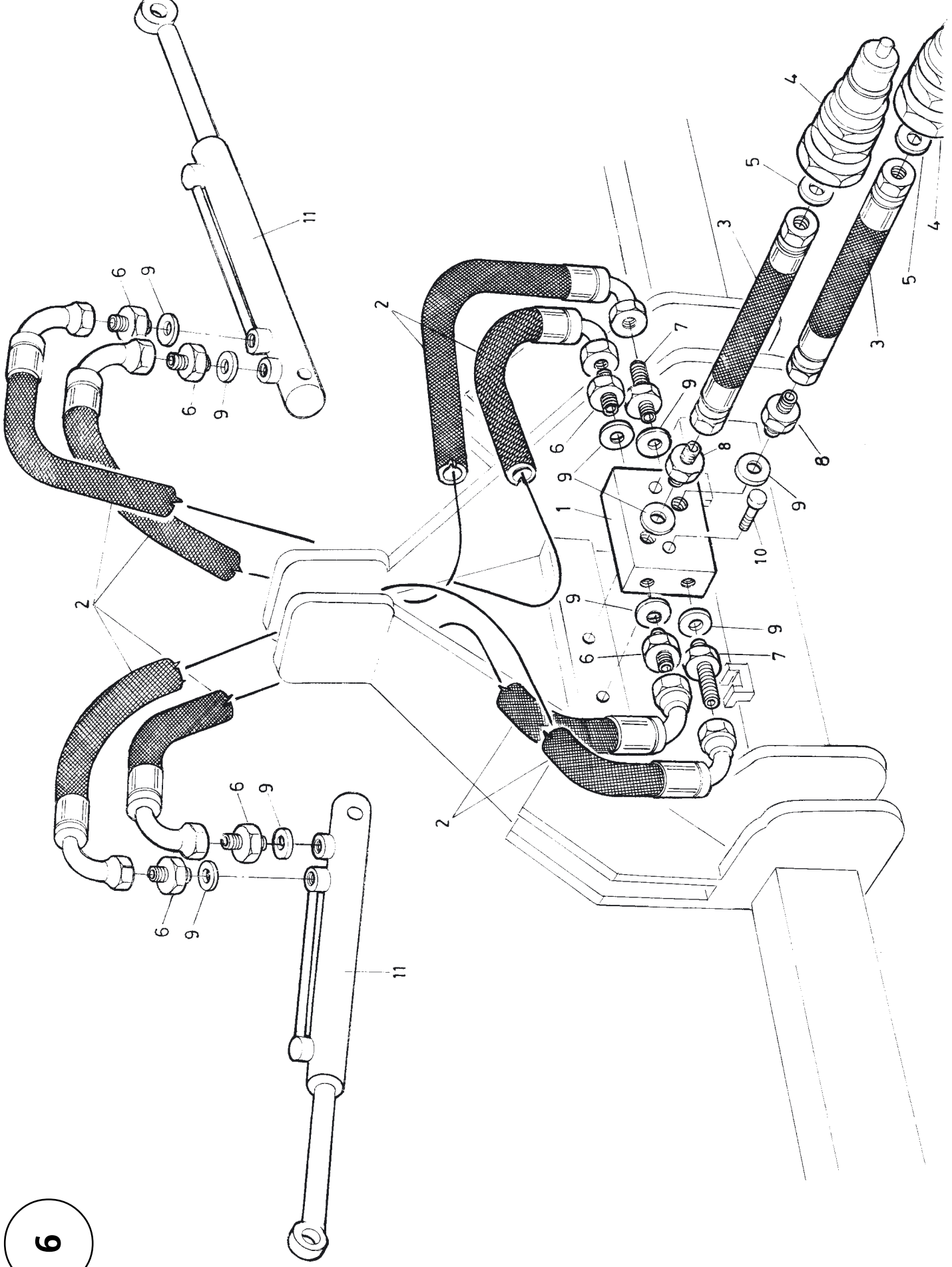


Assembly Group 4.2 - Marker Arms & Discs (2015 onwards)

Item	Description	Part No.	Qty.	Item	Description	Part No.	Qty.
1	Marker Ram	UN-15070	2	33	Linch Pin 8mm	UN-PLP8mm	2
1A	Marker Ram Seal Kit	UN-15071					
2	Marker Pin	UN-15105	4				
3	Marker Safety Pin	UN-15108	2				
4	Spacer	UN-15109	2				
5	Chain Assembly	UN-15111	4				
6	Marker Adjuster Arm	UN-15124	2				
7	Clamp	UN-15125	2				
8	Clamp Washer	UN-15126	2				
9	18" Disc	UN-15150	2				
10	Pig Tail Marker	UN-15152	2				
11	25mm Bearing	UN-15153	4				
12	Marker Mount Bracket	UN-15503	2				
13	Marker Pin	UN-17153	2				
14	Marker Pivot Arm (LH) - NI	UN-17366	1				
14	Marker Pivot Arm (RH)	UN-17377	1				
15	Marker Arm	UN-17210	2				
16	Extension Marker Arm	UN-17383	2				
17	Hex Bolt M20 x 130	UN-B1M20X130	2				
18	Plain Washer M20	UN-W2M20	10				
19	Nyloc Nut M20	UN-N3M20	2				
20	Hex Bolt M16 x 120	UN-B1M16X120	2				
21	Hex Bolt M12 x 100	UN-B1M12X100	2				
22	Hex Bolt M12 x 65	UN-B1M12X65	4				
23	Set Screw M12 x 25	UN-S1M12X25	4				
24	Spring Washer M12	UN-W1M12	6				
25	Half Nut M12	UN-N2M12	4				
26	Hex Nut M12	UN-N1M12	6				
27	Hex Bolt M10 x 50	UN-B1M10X50	8				
28	Set Screw M10 x 30	UN-S1M10X30	2				
29	Plain Washer M10	UN-W2M10	16				
30	Spring Washer M10	UN-W1M10	2				
31	Nyloc Nut M10	UN-N3M10	8				
32	Split Pin 5/16" x 1 1/4"	UN-SCP 5/16 X 1 1/4	4				

5.2





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Item	Assembly	Item	Assembly	Item	Assembly	Item	Assembly	Item	Assembly
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UN-00427	1.1	UN-15022	2 3.1	UN-15152	4.1 4.2	UN-17377	4.1 4.2		
UN-00625	1.1	UN-15031	5.1	UN-15153	4.1 4.2	UN-17380	4.1		
UN-01423	5.1	UN-15035	2 3.1 4.1	UN-15170	5.1	UN-17383	4.1 4.2		
UN-01572	2 3.1	UN-15039	1.1	UN-15433	3.2	UN-17713	1.2		
UN-01778	1.2	UN-15044	2	UN-15443	3.2	UN-17716	1.2		
UN-01816	1.2	UN-15053	3.1	UN-15448	3.2	UN-17718	1.2		
UN-05000	6	UN-15056	1.1	UN-15455	3.2				
UN-05001	5.1 5.2	UN-15059	1.1	UN-15457	3.2				
UN-05002	5.1	UN-15064	4.1	UN-15480	3.2				
UN-05004	5.2	UN-15068	4.1	UN-15485	3.2				
UN-05010	5.1 5.2	UN-15070	4.1 4.2 6	UN-15490	1.2				
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Every effort is made to ensure the data contained in this manual is as accurate and as up to date as possible at time of going to print. ScanStone however reserves the right to make changes or add improvements to its range of products at any time without notice.

Part No. **UN-07058**

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