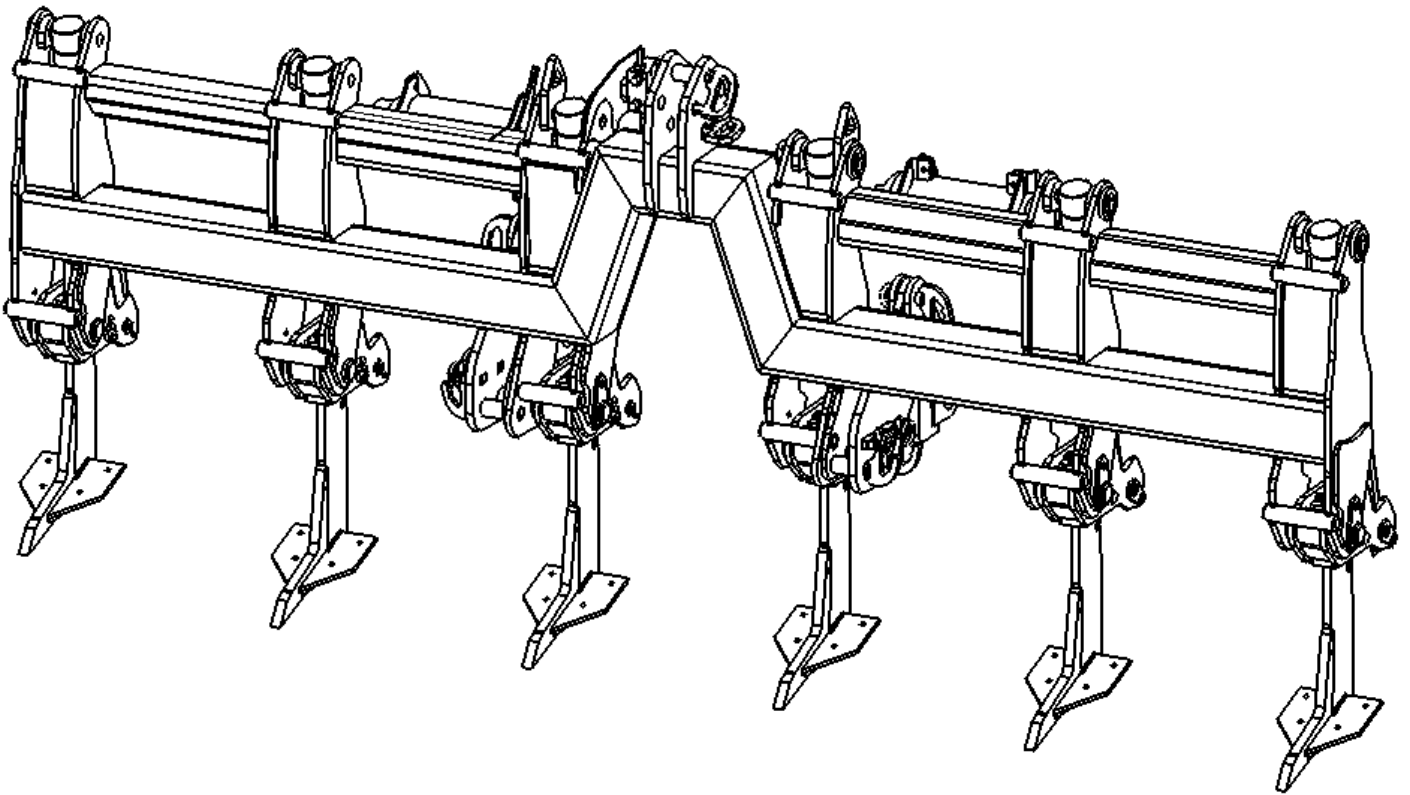


# AGRI WELD

## ASL – Agriweld Soil Loosener



The Workshops  
Main Street  
Garton-on-the-Wolds  
Driffield, YO25 3ET  
Tel: 01377 259140  
Fax: 01377 259141  
Email: sales@agriweld.co.uk

[www.agriweld.co.uk](http://www.agriweld.co.uk)



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### **Technical Information**

Leg Number	Leg Spacing's (mm)	Working width mm (outsides)
6	646	3353

**Total Weight:** 850Kgs

**SHS (Box):**

150 x 150 x 6.3mm (Main Frame)

150 x 150 x 6.3mm (Headstock)

100 x 100 x 6 (Accumulator Frame)

**Linkage to Power Harrow:**

CAT 3 Linkage Points

CAT 3 heavy duty top link to attach to Power Harrow and CAT 3 Waltersfield Hooks to attach to lower linkage points on Power Harrow.

**Linkage to Tractor:**

CAT 3 / 3-point linkage

**Pressure:**

Pre-set to 10 bar. Pressure gauge fitted for auto reset legs. Will require adjustment to your conditions BEFORE first use.

**MAX PRESSURE (RESISTANCE TO TRIP) SHOULD BE SET AT REASONABLE LIMITS** – We recommend that this is kept as low as possible for your working conditions. Better trip too often than not at all and cause damage!

**Legs:**

20mm Hardox (or equivalent grade) c/w 4 x height adjustments

## **USER INFORMATION**

This manual contains basic advice, which should be observed during setting-up, operation and maintenance. It must be read by personnel concerned prior to starting up and using the machine and be available at all times to all operators.

If safety instructions are not complied with, it can lead to the risk of injury to yourself and others as well as damage to the environment or the machine. Non-compliance to the safety instructions can also lead to claims for damages becoming invalid.

### **New equipment - be careful!**

It is very important to be careful when new equipment is to be used for the first time. Incorrect mounting of equipment and operational errors can lead to expensive repair work and operational losses.

Your warranty with Agriweld is not valid if the instructions in this operating manual are not followed correctly.

## **QUALIFICATION AND TRAINING**

- Competent personnel may only perform any work on, or with the machine. Statutory minimum age limits must be observed.
- Only trained or instructed staff should operate, set up and maintain this machine. Individual responsibilities of personnel concerning operation, setting up, maintenance and repair must be clearly established.
- Define the machine operator's responsibilities – also with regard to observing traffic regulations. The operator must have the authority to refuse any instructions issued by third parties, which contravene safety.
- Persons undergoing training or instruction should not be allowed to work on or with the machine unless they are under the constant supervision of an experienced person.
- The use of spare parts, accessories and ancillary equipment not supplied and/or not approved by Agriweld could have detrimental effects to this machine or its functions and hence impair the active and/or passive driving and/or operational safety (accident prevention).
- Agriweld shall not be responsible for any damage caused by the use of spare parts, accessories and ancillary equipment not supplied and/or approved by Agriweld.
- Conversions of, or modifications to the machine may only be carried out after consultation with Agriweld.

## **THINK SAFETY!**

Read the instruction manual and follow the instructions given.

Take care when hitching up or unhitching the machine to and from the tractor.

It is forbidden to allow any persons to sit or ride on the implement at any time.

The tractor should be fitted with enough front-end weights for stability and to maintain secure steering.

Driving, steering and braking characteristics are influenced by mounted machines and ballast weights. The operator must ensure adequate steering and braking ability.

Use the tractor's position control when coupling the implement to the tractor.

Do not stand between tractor and implement while it is being raised.

The tractor's lower link arms should be stabilised before driving on a public road so that the implement and tractor lower link arms do not touch the tyres during transport.

Make sure that all nuts and bolts are always fully tightened.

NEVER stand or work beneath a suspended load unless supported by chocks or stands capable of carrying the implements weight and bulk.

The user is responsible for ensuring the implement complies with the law when driving on public roads and to check the lighting units are in full working order.

Always lower the implement attached to a tractor whilst parked.

## **OPERATION AND ADJUSTMENT**

1. Attach the Toolbar to the tractor using the 3 point linkage.
2. Adjust the lower Tractors lower linkage arms to ensure the Toolbar is running level to allow optimum soil disturbance and to prolong the lifespan of the wearing parts.
3. Please ensure that the implement is mounted correctly and locked into position.
4. Ensure that the relevant tractor spool is disengaged and couple the hydraulic hose to the relevant hydraulic spool on your tractor. Check that the hydraulic hose is free from damage and not in a position to foul when lifting and lowering the Toolbar on the tractors linkage.
5. Check that all nuts and bolts are firmly tightened.
6. Set the toolbars leg height as required.
7. Set the auto reset "trip" pressure to the relevant soil/environmental conditions applicable.

## **RULES OF CONDUCT FOR OPERATION**

The following points must always be observed before the machine is started up and during operation:

- Never leave the machine unattended.
- Check the machine regularly for oil leakage. Replace defective components immediately.
- Do not use if any parts are found defective.
- Check the machine for dirt accumulation and keep the unit clean at all times.
- Perform regular maintenance checks to ensure faults are noticed.
- Perform a regular greasing routine. The machine needs to be well greased at all times. The greasing points are clearly visible and marked on the toolbar.

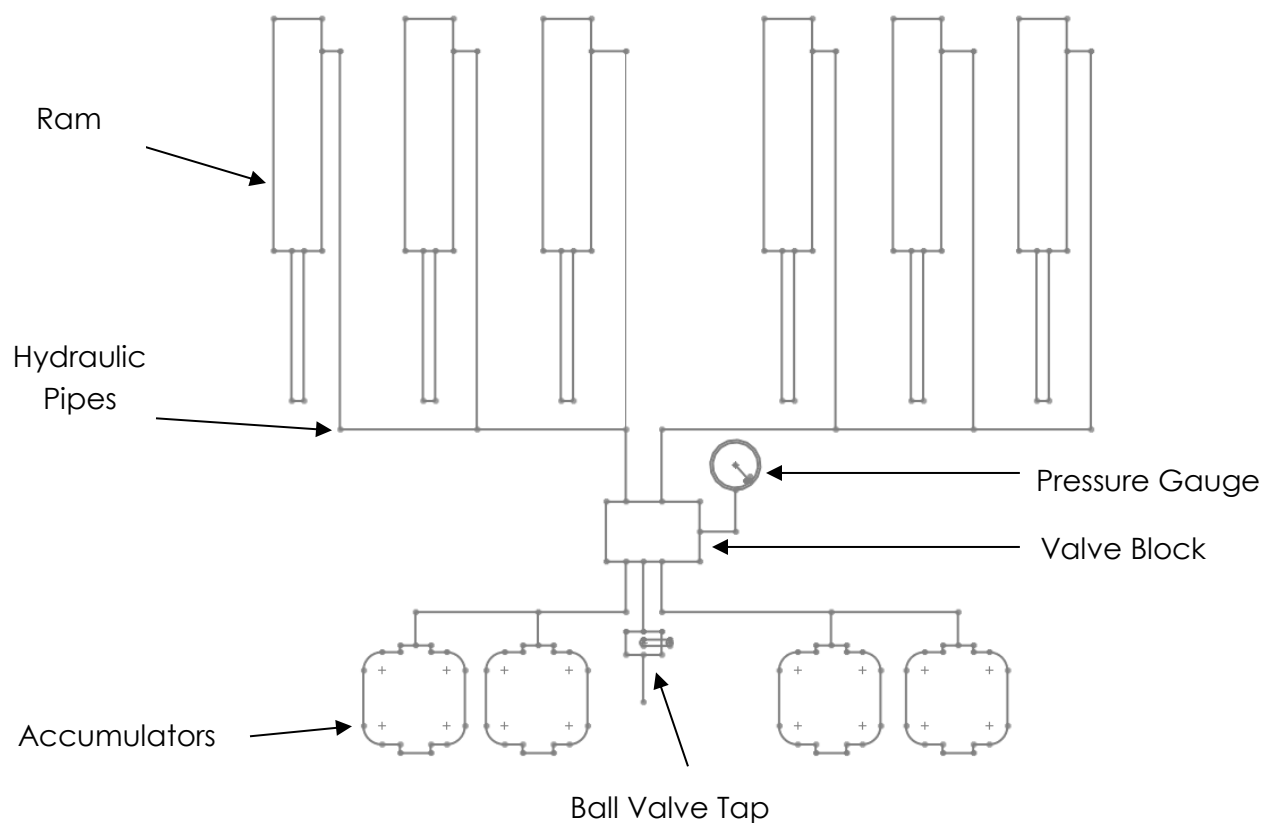
### **AUTO RESET HYDRAULIC CIRCUIT**

The auto reset pressure is set at 30 bar for dispatch. You will need to adjust this setting to your own conditions. In order for the auto reset mechanism to be effective, you will need to set this relative to the types of conditions/weather/working depth /soil type etc. If you find that the legs trip too easily the pressure can be increased. If the legs do not trip the pressure will need decreasing. Please see Charging Oil Pressure below for instructions.

**PLEASE NOTE: The pressure will also need adjusting for different working locations as soil conditions can vary. Agriweld accepts no liability for the incorrect setting of the auto reset pressures and you must take responsibility for this yourself.**

Prior to use, the pressure should be visually checked to ensure that it has not reduced or whether adjustment is required. The pressure gauge is situated on top of the hydraulic block and is clearly visible for your convenience from the tractor cab. If for any reason the pressure has reduced, the machine can still be operated but excessive tripping of the legs may occur and it will need re-charging from the tractor.

## HYDRAULIC SYSTEM



## HYDRAULIC SYSTEM SAFETY

The hydraulic system is working under high pressure and is therefore potentially dangerous. It is very important that all hoses and connections are checked frequently for leakage and external damage.

The hydraulic hoses should not be connected to, or removed from the hydraulic system on the tractor unless the oil pressure in both the tractor and implement has been released.

Porous and defective hoses must always be replaced immediately.

Oil leakage from damaged hoses and connections can cause fatal injury and possible fire risk.

Always seek medical treatment immediately following any injury.

## **RE-CHARGING OIL PRESSURE**

Connect the hydraulic pipe situated on the headstock and attached to the valve block, to the relevant tractor spool. Open the tap on the feed pipe and operate the tractor spool to pump oil into the system until the gauge needle reaches the required pressure (bars). The pressure can be dropped by operating the spool the other way to let the oil back out. Once desired pressure is reached turn tap back to lock the pressure. The feed pipe can stay connected.

## **REPLACING THE POINTS**

Ideally replace the points on solid ground e.g. cement/tarmac, to avoid the risk of sinking and potential injuries whilst changing the points. The implement must be raised on the tractor linkage and the tractor engine turned off. Remember to use the parking brake and/or wheel chocks to ensure that the tractor is held stable. It is important to support the Toolbars weight with stands/chocks in the event of failure of the tractor hydraulics. Remember it is forbidden to work under a suspended load without the adequate support.

Once you are confident that you have met the safety standards required you can proceed;

Unbolt the single fixing (M16 x 60mm long bolt) from the worn point to free the point. A new point can then be replaced into the same position using the same size fixing. Ensure the bolt is fully tightened.

When you have finished replacing the points, remove the supports/chocks in order to proceed.

Please see page 11 for Point Assembly.



## **WEARING PARTS**

The wearing parts used on the Toolbar can vary although as standard we fit a one piece point. Parts can be obtained through Agriweld Ltd directly or through your local dealer.

**Please quote the details on the type plate(s) as well as the machine's serial no. on every order for spare parts or accessories, or for enquiries of a technical nature.**

The use of spare parts not supplied by Agriweld must be of the same type and style as fitted to the machine from new to ensure problem free operation. Original spare parts and accessories authorised by the manufacturer ensure safe and reliable operation. The use of other parts may invalidate the liability of the manufacturer for any consequences arising from such use.

### **Disposing of replaced parts/oil**

The following points should be observed before replacing or disposing of parts.

- Replaced parts, which still function, should be cleaned and stored in an orderly manner.
- Machine parts, which cannot be repaired should only be disposed of at appropriate collecting points or be collected by a scrap metal dealer.
- So-called "valuable" materials should be disposed of in a proper way, i.e. plastics, rubber, scrap metal, etc. should be recycled.
- Collect and dispose of old oil in accordance with the current regulations.

## **TRANSPORT**

Before taking the tractor with the implement attached on to a public road, implements wider than 3m will require folding up into transport position, transporting on a trailer or via escort or restricted speed/mileage.

The Department for Transport requires the maximum width of an agricultural machine to be 2.55m. However, under special circumstances Agricultural machines wider than 2.55m are permitted to use public roads. The Road Vehicles Order 2003 permits the road use of Agricultural vehicles that are up to 4.3 metres in width, subject to terms and conditions. The key ones are as follows:

**Width** – between 2.55m and 3m: speed must not exceed 20mph

**Width** – between 3m and 3.5m: maximum speed 20mph as above, plus if the journey is over 5 miles or the speed limit in the road is 40mph or lower, the operator must notify the Police in advance of the journey.

**Width** – between 3.5m and 4.3m: the Police must be notified, the maximum speed is limited to 12mph and the vehicle(s) must be accompanied by an attendant, who may ride in a different vehicle but must ensure no danger is cause to the vehicle or other road users. The police, following notification, may place restrictions on the use of the vehicle in the interests of road safety or to avoid undue traffic congestion.

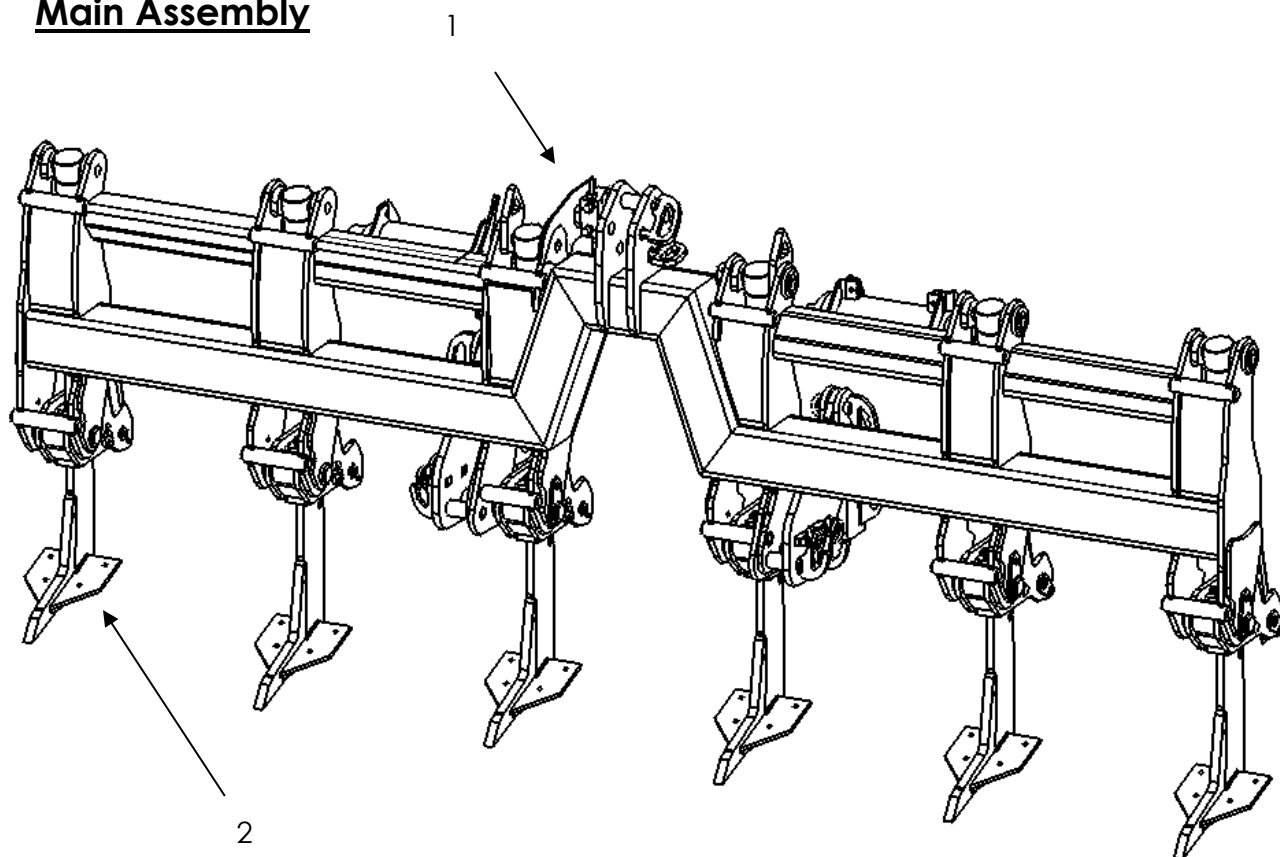
## **MAINTENANCE**

The following areas must be kept greased at all times:

- AUTO RESET LEG PIVOT POINTS x 6 (one on each leg socket)
- AUTO RESET HYDRAULIC RAM POINTS x 12 (2 on each hydraulic ram – top and bottom)

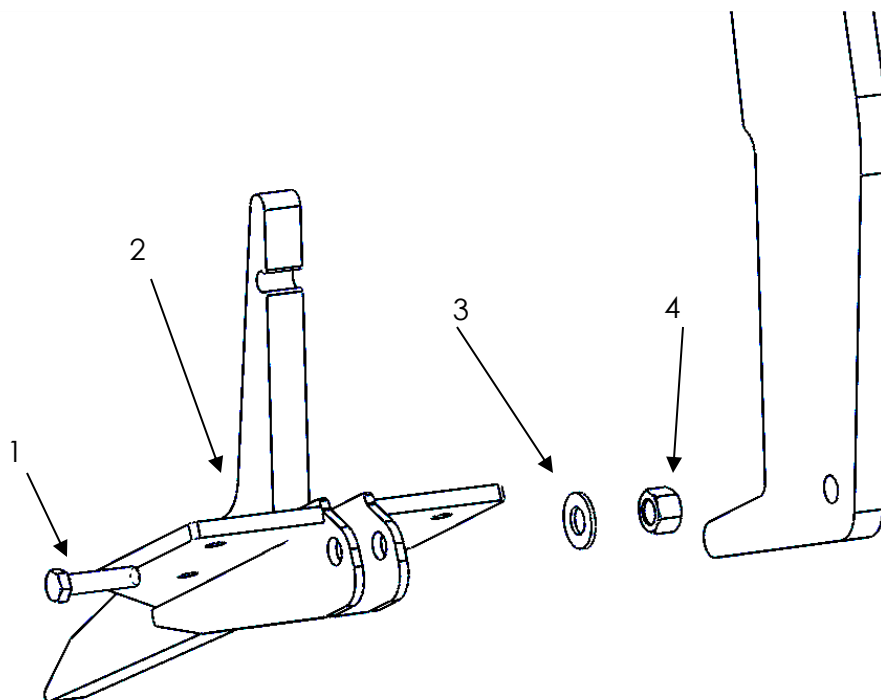
### **ALL GREASING POINTS ARE CLEARLY MARKED AND VISIBLE ON THE TOOLBAR**

- Check all bolts and fastenings prior to use for tightness and to ensure none are missing.
- Replace wearing parts before excessive wear causes poor performance and damage to the leg.
- Replace wearing points before damage occurs to the leg and for best cultivation results
- Periodically check all welds are intact and there is no damage to the steelwork of the machine. Address any damage immediately. Only allow suitably qualified welders/fabricators to perform repairs or contact the manufacturer for advice.

**Main Assembly**

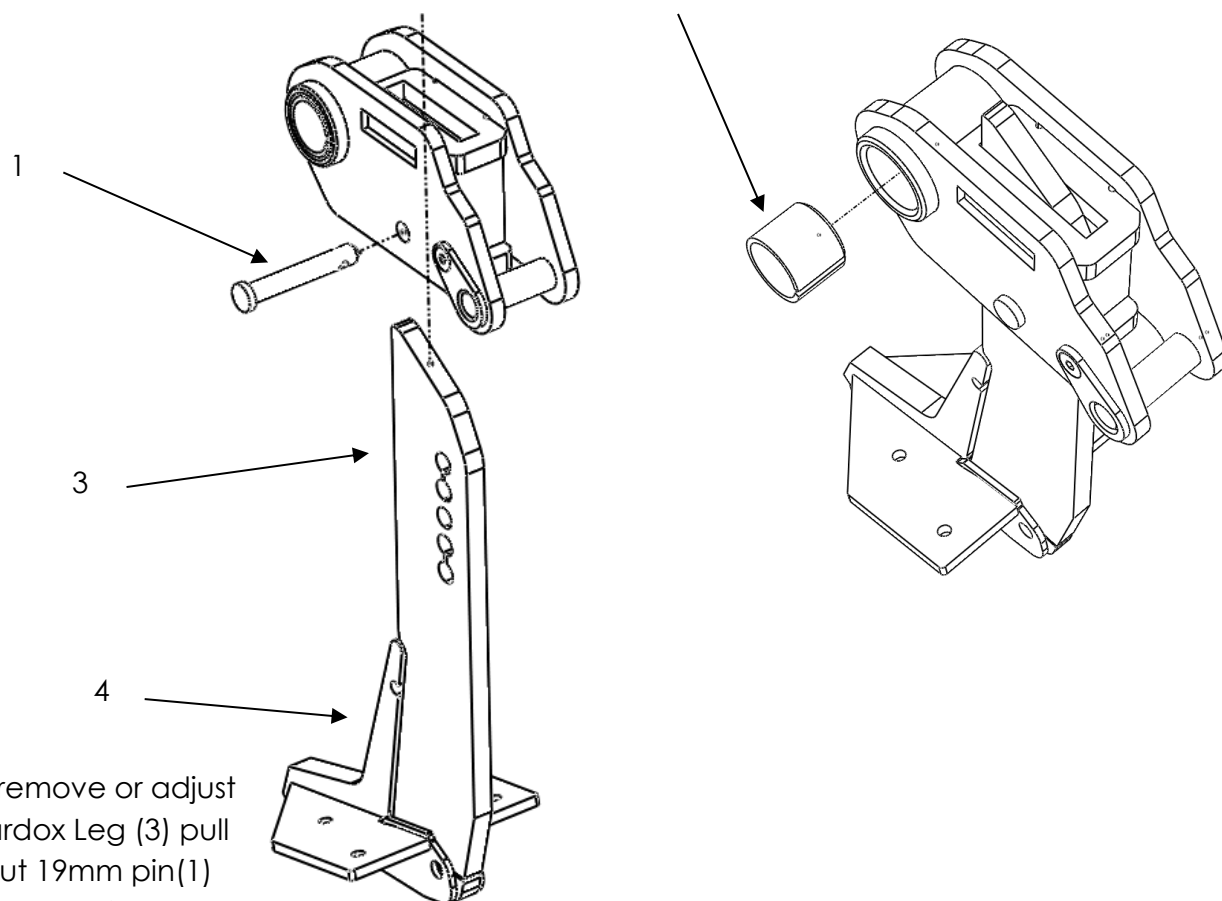
Item Number	Part Number	Description	Quantity per Assembly
1	Toolbar head stock	Headstock	1
2	TB4M_leg_10	Adjustable leg	6

## Point Assembly



Item Number	Part Number	Description	Quantity per point
1	M16 Bolt	M16x60	1
2	SW357	2007 trio point	1
3	16 Washer	Form C	1
4	M16 Nut	Nylon insert	1

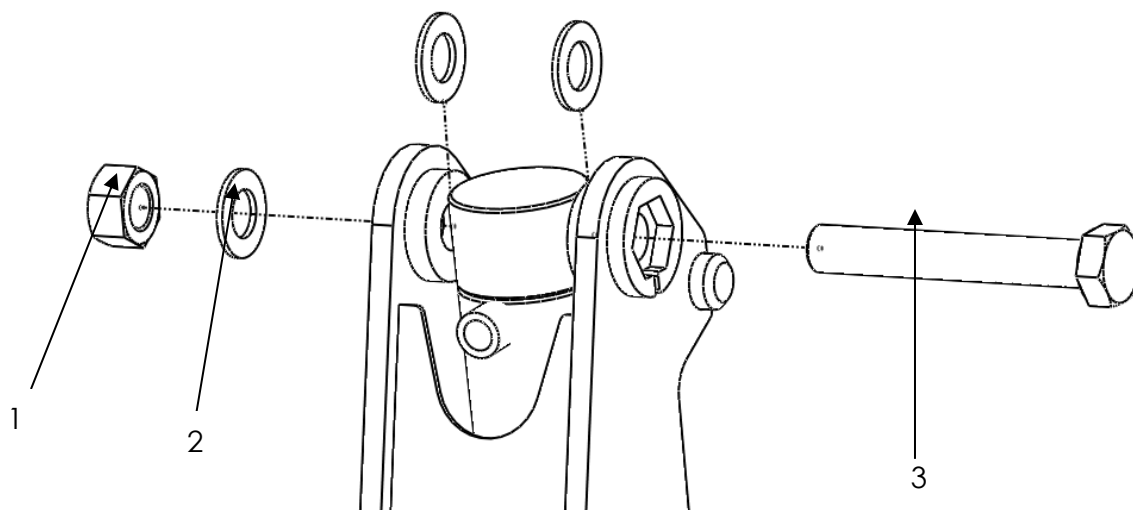
## Leg Assembly



To remove or adjust  
Hardox Leg (3) pull  
out 19mm pin(1)  
and leg slides out

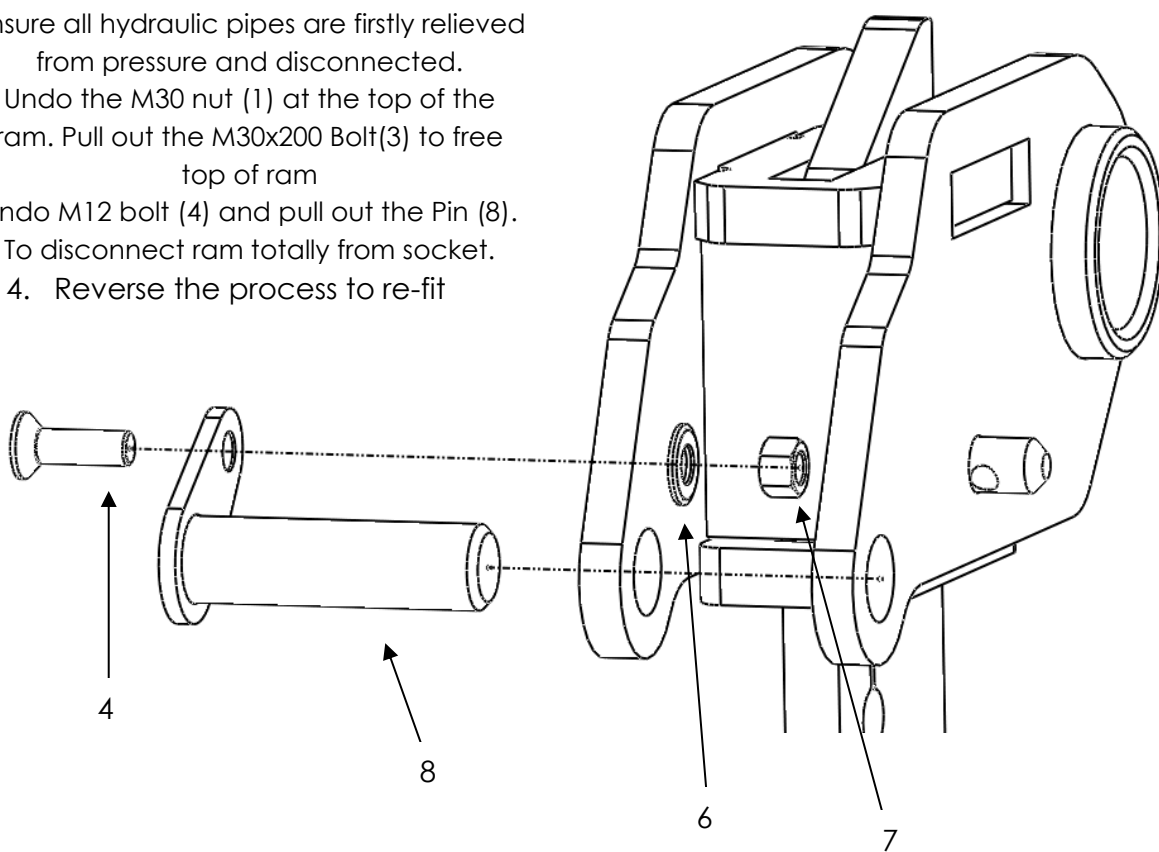
Item Number	Part Number	Description	Quantity per Assembly
1	ZKR31905_KR_01	19mm Kramp Pin	1
2	AW_REV_60	Spring Tension bush 60x50x50	2
3	JR_HAZ_2005	Adjustable Leg	1
4	SW357	2007 One piece Point	1

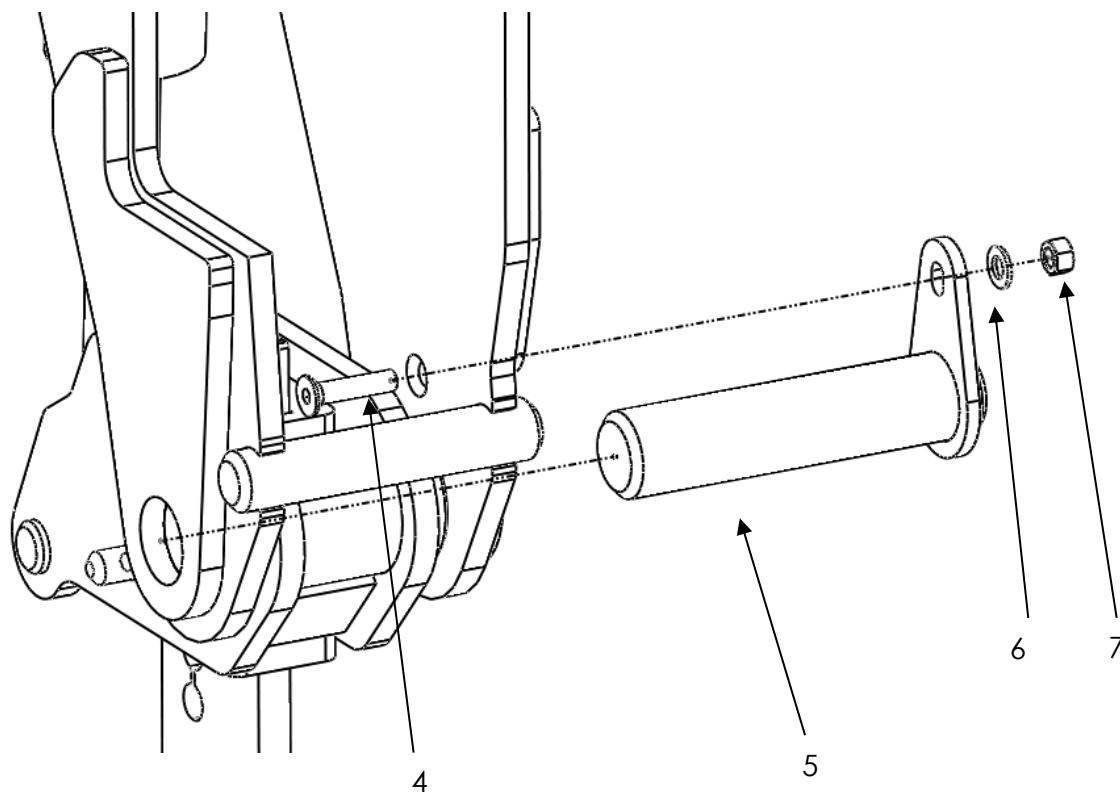
## Leg Pivot Assembly



### **TO REMOVE/REPLACE THE HYDRAULIC RAM**

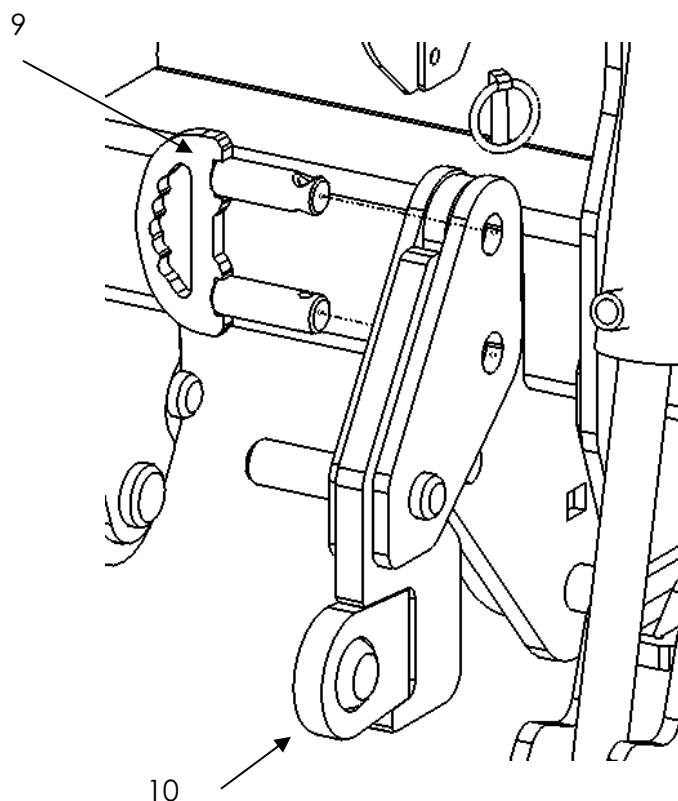
1. Ensure all hydraulic pipes are firstly relieved from pressure and disconnected.
2. Undo the M30 nut (1) at the top of the ram. Pull out the M30x200 Bolt(3) to free top of ram
3. Undo M12 bolt (4) and pull out the Pin (8). To disconnect ram totally from socket.
4. Reverse the process to re-fit





### To Remove the Leg Socket assembly

1. Undo M12 bolt(4) and pull out the Main Pivot Pin(5).
2. The Bottom of the ram also needs to be disconnected so follow step 3 on previous page.

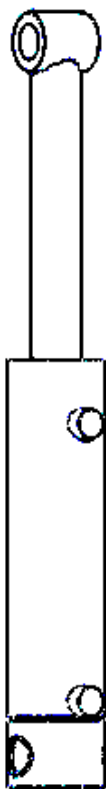


### To remove the CAT 3 lower link






1. Ensure you take the weight of the hook assembly first, pull out the double pin with handle (9). This will free the Link Assembly

Item Number	Part Number	Description	Quantity Per Assembly
1	AW_M30_N	M20 Nylon Nut	1
2	AW_M30_W	M30 Washer	1
3	AW_M30_N	M30 Bolt	1
4	AW_M12_CSB	M12 C/S Bolt	2
5	AW_JR_MPP	50mm Main Pivot Pin	1
6	AW_M12_W	M12 Washer	2
7	AW_M12_N	M12 Nylon Nut	2
8	AW_M12_CSB	M12 C/S Bolt	2
9	TB4M_1570	Lower link adjuster Pin	2
10	LA236601KR_Cat_3	Lower Link.	2



**Ram**

Item Number	Part Number	Description	Quantity Per Machine
1	D40_80_300_CB	Kramp Ram	6

Image	Description	Part No	Quantity Per Machine
	Agriweld ASL Sticker	AW_ASL_17	2
	High Pressure hydraulic system warning		2
	Agriweld		2
	Great Britain		2
	Grease Nipple		18 on 6 leg 12 on 4 leg

## **Warranty**

Your Agriweld Toolbar is covered for a period of 12 months from the date of dispatch (which is recorded on our files) against faulty components and/or bad workmanship.

Our welders are coded to BS EN 287-1:2011 and our welding procedures are approved in accordance with: BS EN ISO 9606-1 to manufacture your equipment and all products are checked for quality prior to delivery/collection.

We cannot be responsible for claims arising from ignorance, occurrences outside our control, such as accidents, and malicious damage.

Damage occurred during transit must be reported on signing for the item from the haulier to enable us to make a claim for damages caused during transport.

### **WARRANTY CLAIMS FOR DAMAGE DURING TRANSIT**



Damage occurred during transit via an external haulier must be reported immediately upon unloading and signing for the item. The limit of our liability to undertake repairs to products damaged during transit is dependent on signing for any damaged product upon delivery as "DAMAGED".

**The contents of this operator manual are correct at the time of print but may be subject to additions and change at any time in the future. Replacement operator manuals must be ordered in relation to the model and the serial number provided.**

## CE DECLARATION OF CONFORMITY

The equipment which accompanies this declaration is in conformity with EU Directive(s):-

**2006/42/EC Machinery Directive**

Manufacturer Name:	Agriweld Ltd
Manufacturer Address:	Main Street Garton-on-the-Wolds Driffield East Yorkshire YO25 3ET
Product:	Agriweld Soil Loosener (ASL)
Product Options:	All
Individual Serial Number:	
Product Description:	Agriweld Soil Loosener (ASL)
Date of Last Load Test Report:	N/A
Supplementary Information:	
Authorised Signatory on Behalf of Manufacturer:	 Dawn Foster
Name of Signatory:	Dawn Foster 
Position in Company:	Director
Date of Issue:	

