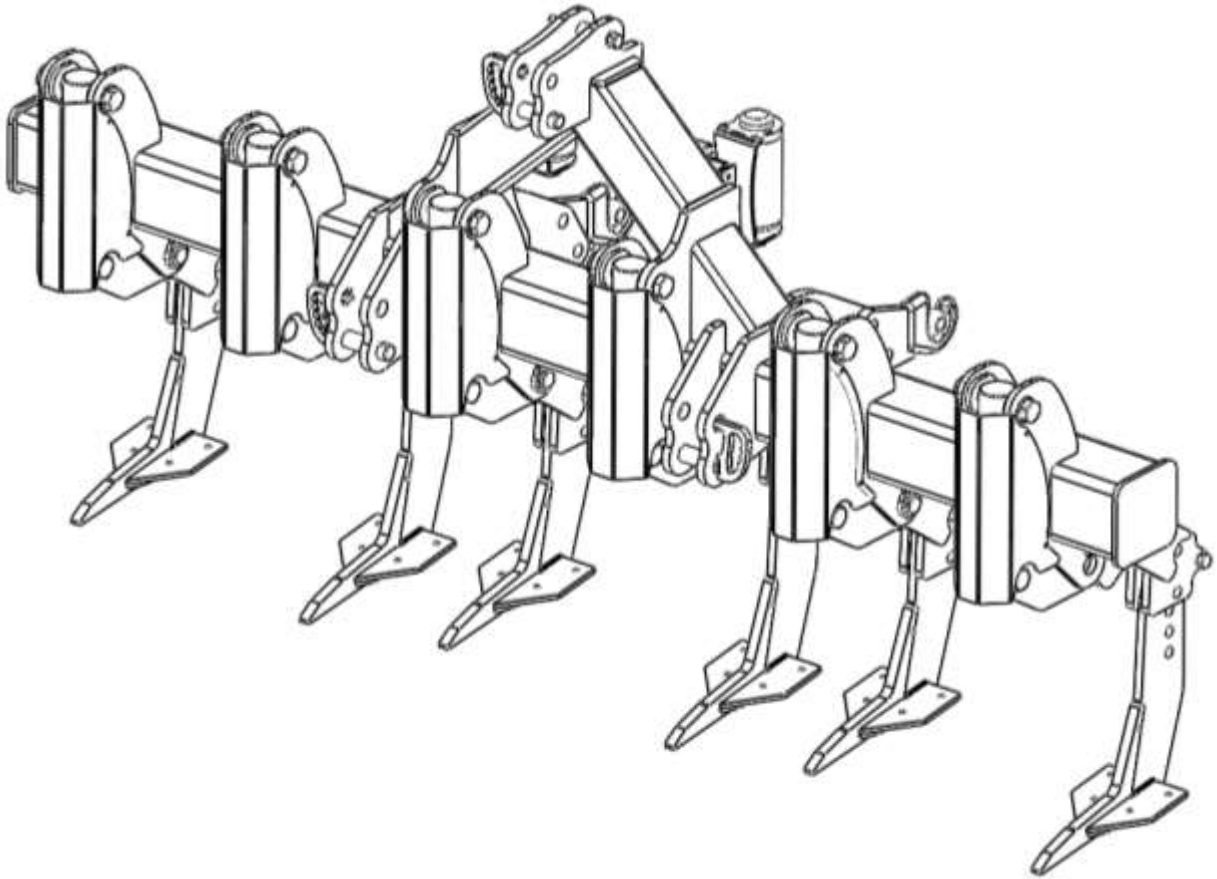


# AGRI WELD

## ADVANTAGE



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## **Technical Info**

<b>Leg Number</b>	<b>Leg Spacing's (mm)</b>	<b>Working width (outsides)</b>
6	480	2520mm
5	580	2420mm

**Total Weight:** 915Kgs

### **Box Section Thickness':**

180 x 180 x 8mm (Main Frame)

150 x 150 x 6.3mm (Headstock)

### **Linkage:**

CAT 2 / 3 Linkage Points

Comes standard with CAT3 heavy duty top link to attach to Catros top linkage and CAT3 Walterscheid Hooks to attach to lower linkage

### **Pressure**

Comes standard with fitted pressure gauge for auto reset legs

### **Legs**

Cut from 20mm Hardox

4 different leg 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 going 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.

The driving characteristics of the forklift/loader/tractor are influenced and altered by the attachment of mounted machines and it is important to ensure adequate steering and braking ability as required

## **OPERATION AND ADJUSTMENT**

Attach the Advantage to the tractor using the 3 point linkage. It is important to the function of the Advantage to ensure the machine is running level to allow optimum level of soil disturbance and to prolong the lifespan of the wearing parts.

Please ensure that the implement is mounted correctly.

Check that the hydraulic hoses are free of damage and not in a position to fowl when lifting and lowering the Advantage on the tractors linkage.

Check that all nuts and bolts are firmly tightened.

Attach all the relevant hydraulics.



### **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.

### **Rules of conduct when handling the hydraulic system**

DANGER

The hydraulic system is under high pressure!

Fluids escaping under high pressure can penetrate the skin and cause serious injuries! If such injuries occur, call a doctor immediately as otherwise there is a risk of serious infection which can lead to death!

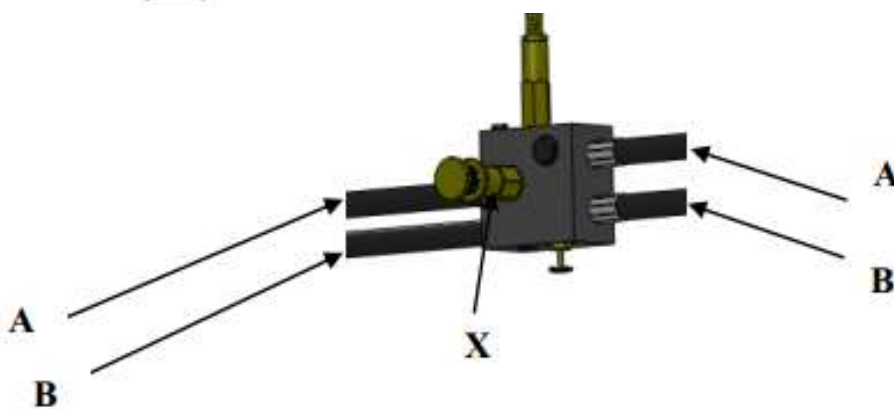
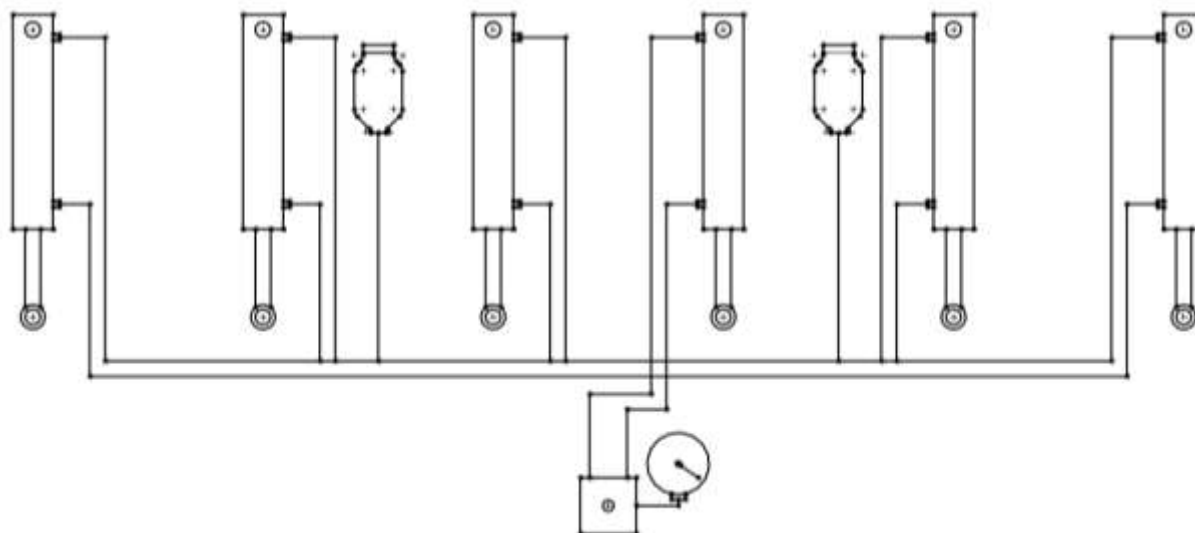
Consequently: Work only on the hydraulic system when the hydraulic system is depressurized and the drive is switched off.

Note

All components of the machine are driven hydraulically. Replace defective hose connections immediately. Do not attempt to repair damaged hoses.

## AUTO RESET HYDRAULIC CIRCUIT

- 1) To lift the legs up and out of the work position; pressurise **line B** (the lower of the two hoses entering the valve block & marked "B" on the valve itself). The legs will lift as oil is returned to the tractor through **line A**.
- 2) To lower the legs back into work position; pressurise **line A**, the legs will lower one by one. Maintain pumping until all the legs come to a stop at the end of their stroke, keep pumping and the two lines will then pressure up. Watch the gauge on the right hand side of the machine as this displays the leg trip resistant pressure. The system needs to then be put into the "float" or pressure less state between the tractor and the valve, so that any back pressure from the tractor does not affect the pre-set valve pressures. Putting the system into "float" means the factory set pressure readings of 65 bar on the full bore side of the ram (gauge on RHS of machine) and 20 bar on the rod side of the ram (gauge on LHS of machine). This is unless they have been adjusted to suit local conditions.
- 3) To increase the trip resistance of the legs – the knob marked **X** should be wound in. The lift and lower the process should be repeated.



## **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 off the pressure gauge to the tractor spool. Open the tap (a couple of turns will suffice) and operate the tractor spool to pump oil into the system until the gauge needle reaches selected pressure bar. The pressure can be dropped by operating the spool the other way to let the oil back out. Once desired pressure is reached turn off tap to lock and remove pipe.



## **REPLACING THE POINTS**

Only carry out replacing the points on solid ground conditions, 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 Advantage's 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 each worn point to free the point. A new point can then be replaced into the same position with the appropriate nut/bolt tightened up to secure it in position.

When you have finished replacing the points, remove the Advantage supports/chocks and lower the machine as in the Think Safety! section on page 5 until you are ready to move off.

Please see page 11 for Point Assembly.

## **WEARING PARTS**

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

### **Acquiring spare parts**

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 enquiries of a technical nature.

The use of spare parts supplied by others shall only be permitted after consultation with the manufacturer. 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

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.

With the machine attached to the tractor and in raised position, fold it up using the tractor hydraulics. Lower the machine to the ground and fit the safety bar onto the left and right ram pin mount. Lock off the ball valves on the left and right hydraulic cylinders (located directly on top of each cylinder). Check all lights are working before setting off on the road.

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:

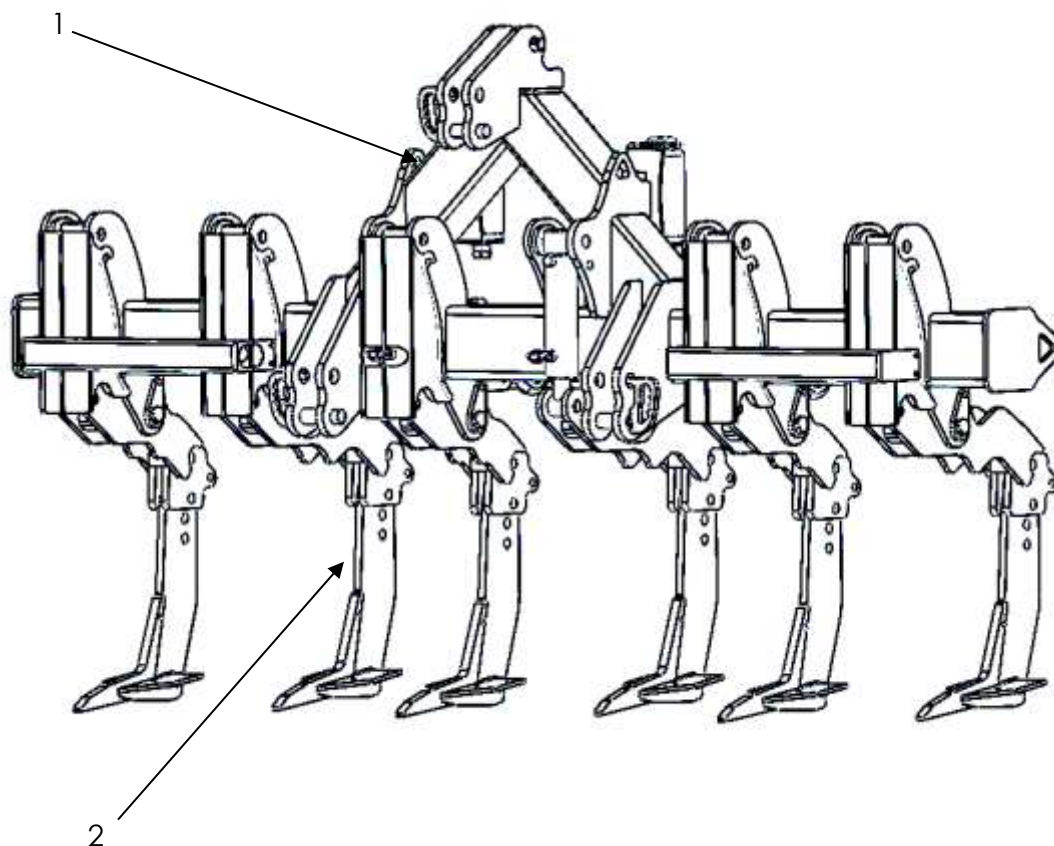
- AUTO RESET LEG PIVOT POINTS
- AUTO RESET HYDRAULIC RAM POINTS

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

- 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.

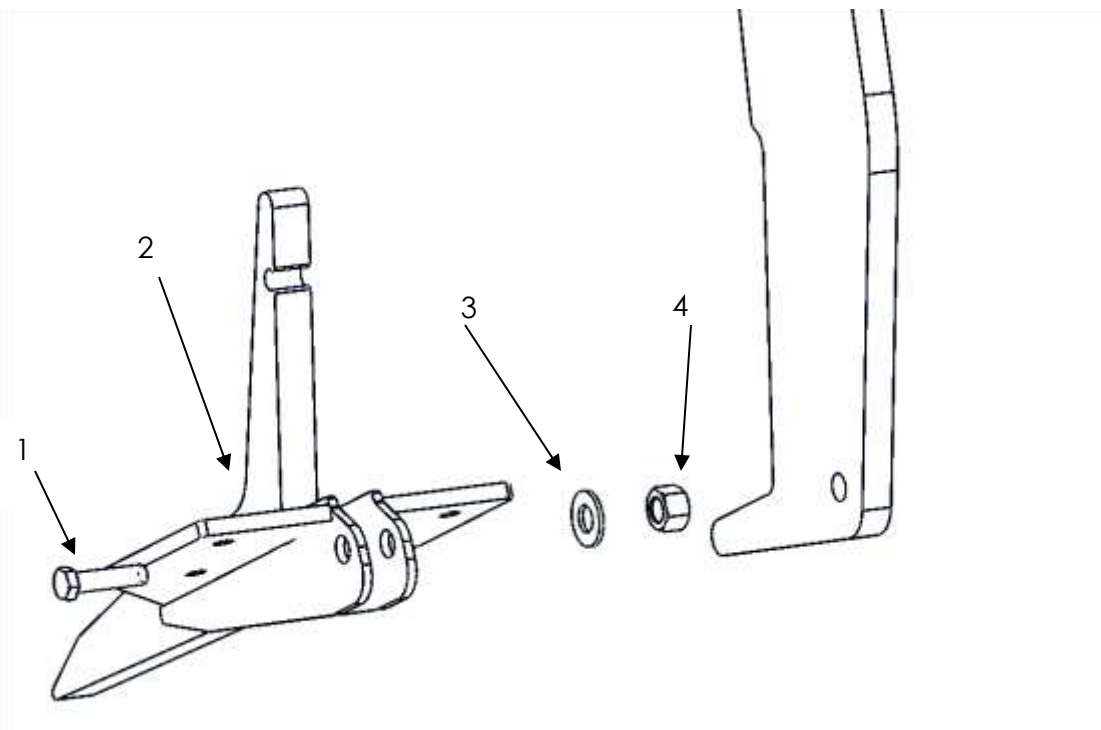


## Main Assembly



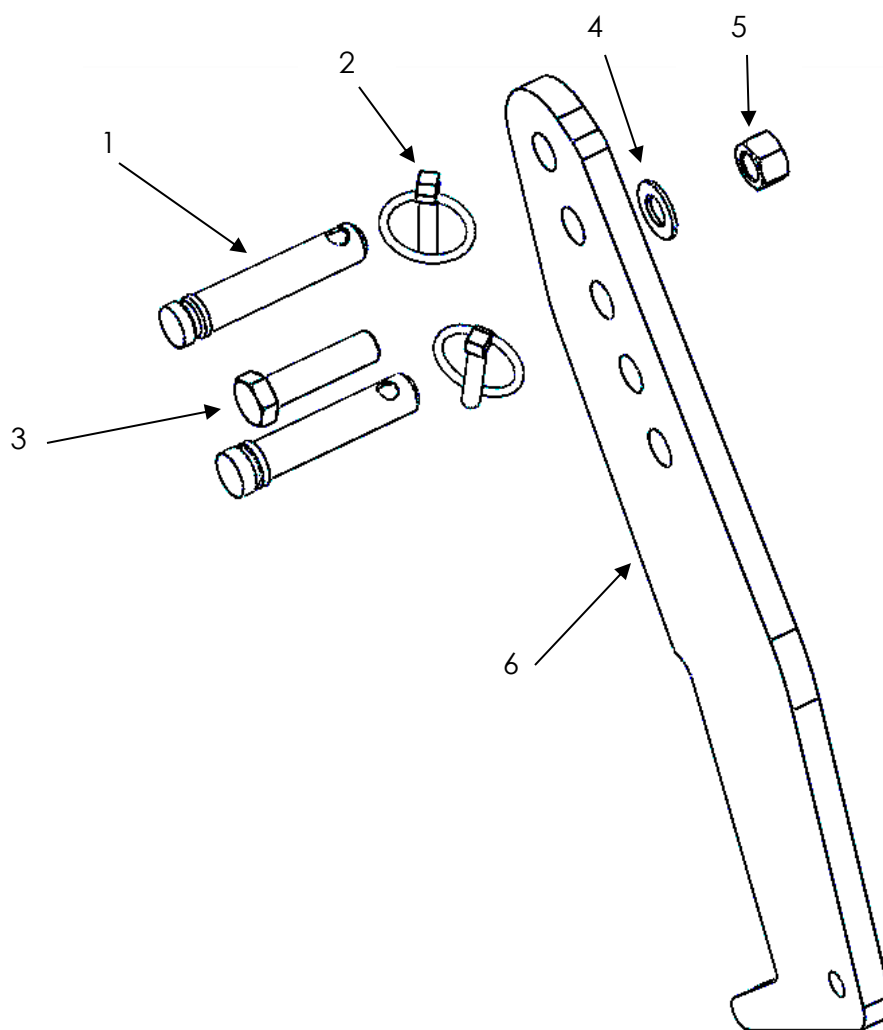
Item Number	Part Number	Description	Quantity per Assembly
1	Advantage head stock	Head stock	1
2	Leg 18 <sup>th</sup> sept	Adjustable leg	5/6 (varies on model)

## Point Assembly



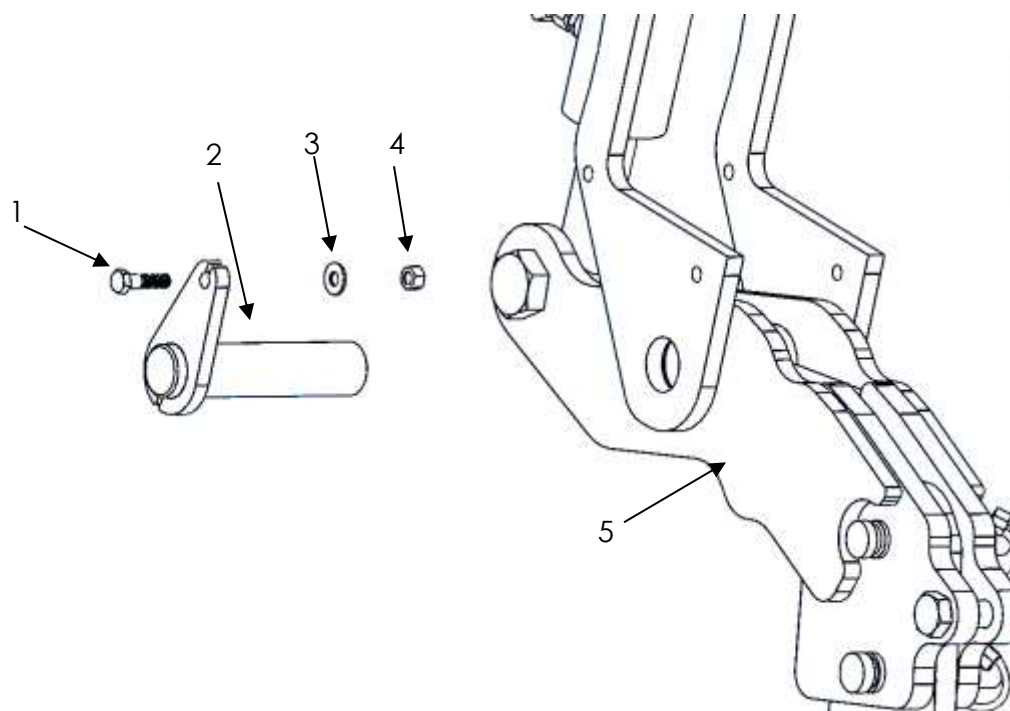
Item Number	Part Number	Description	Quantity per point
1	M16 Bolt	M16x60	1
2	SW357	2007 trio point	1
3	16 Washer	Form C	1
4	M16 Nut	Nylon insert	1

## Leg Assembly



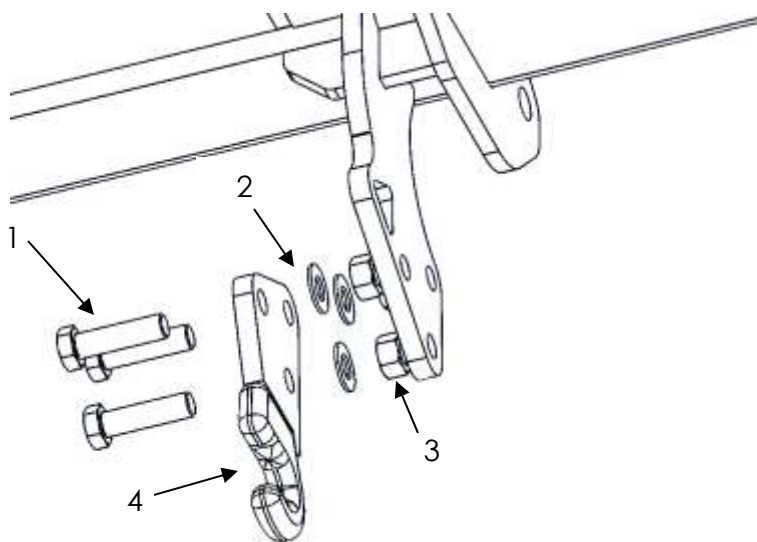
Item Number	Part Number	Description	Quantity per Assembly
1	Z528123	28X123MM PIN	2
2	LP11Z	11 mm Linch pin	2
3	M20 Bolt	M20x80	1
4	M20 Washer	From C	1
5	M20 Nut	Nylon insert	1
6	Leg 18 <sup>th</sup> sept	Leg	1

## Leg Pivot Assembly



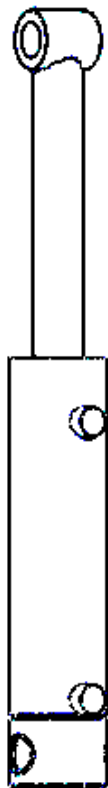
Item Number	Part Number	Description	Quantity Per Assembly
1	M10 Bolt	M10x40mm	1
2	AA_Pivot_pin	Plated pin	1
3	M10 Washer	Form C	1
4	M10 Nut	Nylon insert	1
5	AA_1502	Ram pivot	2

## Low Link Assembly



Item Number	Part Number	Description	Quantity per Machine
1	M30 Bolt	M30x110	6
2	M30 Washer	Form C	6
3	M30 Nut	Nylon insert	6
4	CAT_2_Waltershield	Cat 2 Walter shield hooks	2



Ram

Item Number	Part Number	Description	Quantity Per Machine
1	Ram_704_2(40_70)	704/2 ram	5/6 varies on models

## **Warranty**

Your Agriweld Advantage 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".

## 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:	Advantage
Product Options:	All
Individual Serial Number:	
Product Description:	AGRIWELD Advantage
Date of Last Load Test Report:	N/A
Supplementary Information:	
Authorised Signatory on Behalf of Manufacturer:	
Name of Signatory:	Dawn Foster 
Position in Company:	Director
Date of Issue:	

