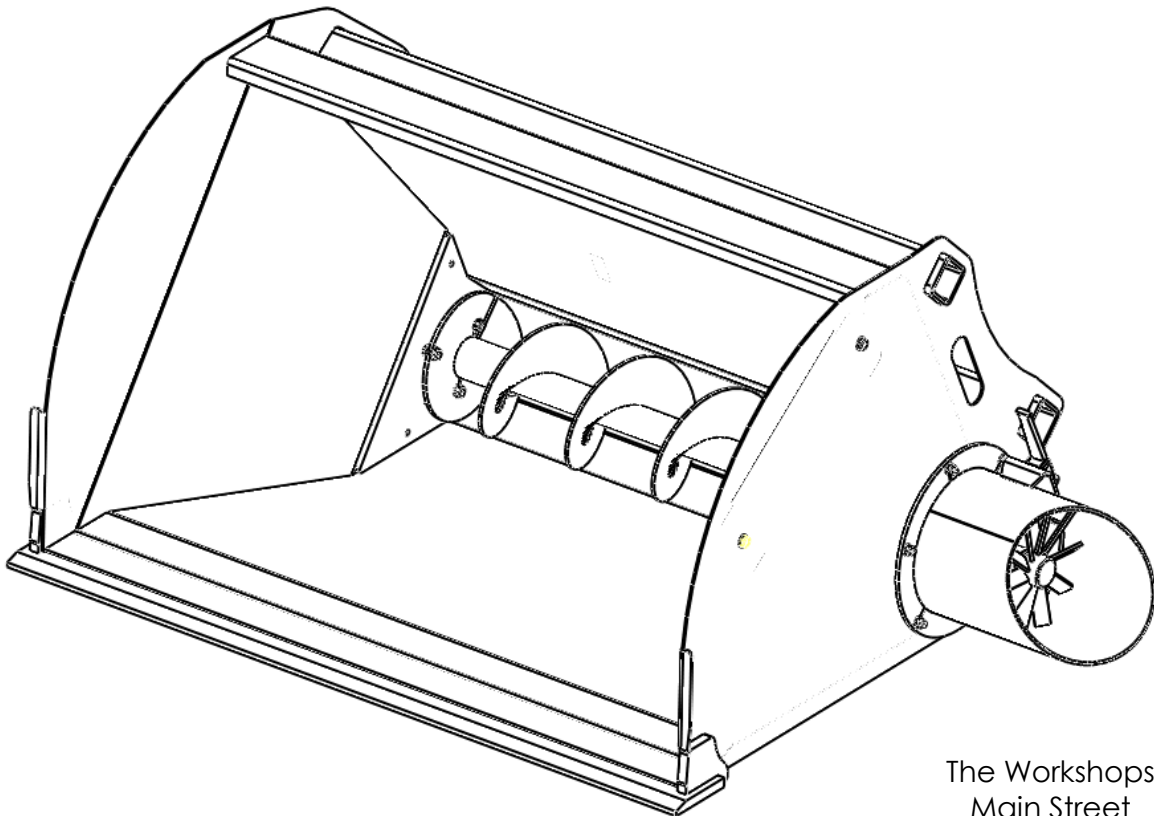


AGRI WELD

OPERATOR MANUAL

DIRECT DRIVE ROOT/CEREAL BUCKET

MINI & 6'6 MODELS



AGRI WELD

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USER INFORMATION

Before using your DIRECT DRIVE Root/Cereal Bucket for the first time it is important that all operators make themselves familiar with the unit and must read this Operator Manual attentively.

GETTING STARTED

Your DIRECT DRIVE Root/Cereal Bucket will be fitted and delivered with the correct brackets to suit the Skid Steer/Telehandler/front loader it is intended to fit. If for any reason the fittings are lost or damaged, or if the bracketing is removed for any reason, please refer back to this information in order to refit the brackets and/or replace any lost fittings with the correct specification.

Your DIRECT DRIVE Root/Cereal Bucket will also be fitted with the correctly swaged hydraulic pipes and fittings applicable to your forklift/loader and as per your request. If these pipes are damaged they must be replaced immediately with new pipes and fittings. **DO NOT ATTEMPT TO REPAIR HYDRAULIC PIPES OR ALLOW ANY ONE ELSE TO REPAIR THEM.**

Any replacements can be ordered from us and sent to you overnight if required.

Your DIRECT DRIVE Root/Cereal Bucket is a low maintenance machine, and requires minimum mechanical attention as such, other than **greasing**.

WEIGHT & CAPACITY

MINI (5') MODEL Maximum 0.75m³ = 405kg excluding brackets

6'6 MODEL Maximum 1.4M³ = 535kgs excluding brackets

Your DIRECT DRIVE Root/Cereal Bucket is not to be used for any other purpose than for which it is intended - that is the collection, discharge and chopping of root feed and discharging cereals. Damage as a result of use for other purposes will not be covered under warranty.

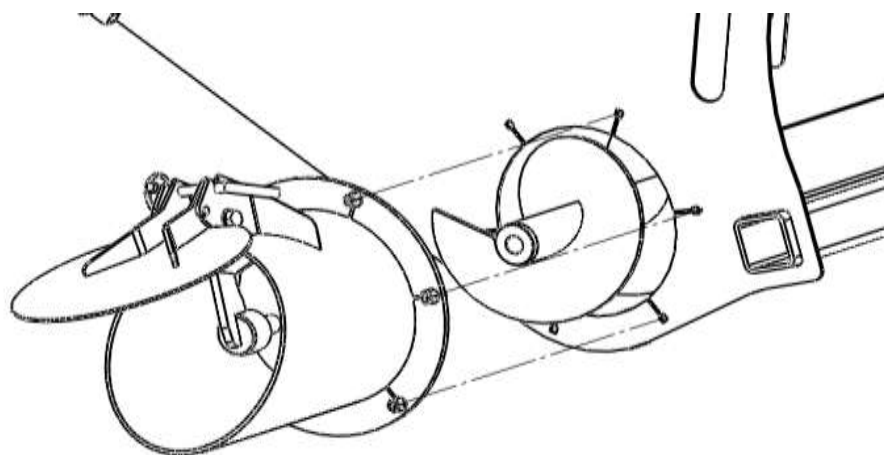
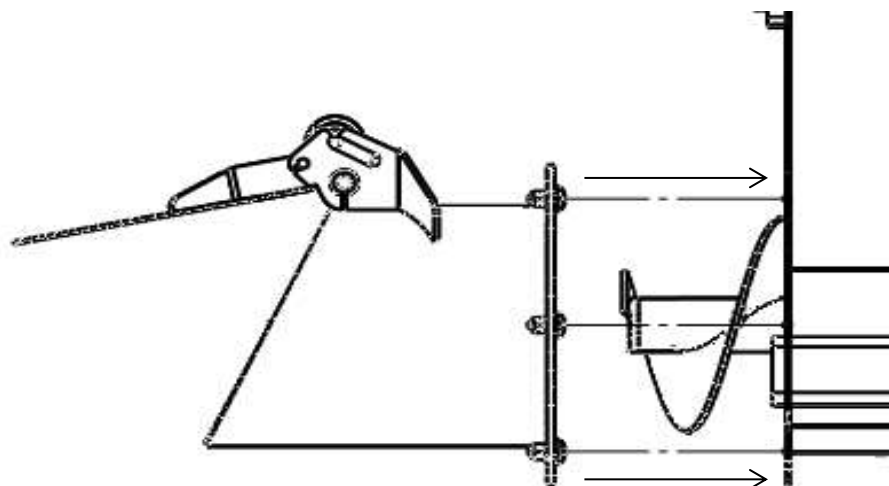
The specifications, descriptions and illustrations in this manual are accurate at the time of publication but may be subject to change.



SPOUT FITTING INSTRUCTIONS

Spout requires fitting to stone trap before operation.

1. Push spout shaft fully in to nylon bush located on end of auger shaft.
2. Spout will turn freely on shaft to enable alignment of yellow markers.
3. Locate fixing bolts (M10 x 30mm cup head square) x 6 into flanges, and ensure flange edges are flush and level and tighten bolts using washers (on nylock side only) and nylock nuts. Ensure these are tight.



SAFETY

All operators of the buckets forklift/loader must hold the appropriate forklift licence or certificate of competence to do so.

All operators must be familiar with the DIRECT DRIVE Root/Cereal Bucket Operators Manual and forklift/loader operations prior to use. If safety instructions are not observed and complied with it can lead to the risk of injury to the operator and others as well as damage to the machine, property and the environment. Non-compliance to the safety instructions can lead to claims for damages/injury becoming invalid.

QUALIFICATION & TRAINING

Only personnel with the appropriate forklift/loader licence are authorised to use this machine.

Statutory minimum age limits must be observed and reliable personnel only should perform maintenance/work on this machine.

Persons undergoing training or instruction or taking part in a general training course should only use this machine under direct supervision of an experienced and trained person.

Agriweld shall not be responsible for any damage/injury caused by the use of parts/repairs not supplied and/or approved by Agriweld.

GENERAL SAFETY

Any warning signs/instructions on the machine provide important information and must be observed.

Ensure that you are familiar with the machine before starting work.

Check round the machine for any noticeable damage, or missing parts before starting work.

It is advisable that the operator does not wear jewellery and baggy clothing to avoid the risk of snagging and trapping.

Ensure that you are working in an area clear of obstructions and watch out for wandering individuals (particularly children!). Ensure that you are working in an area clear of obstructions and watch out for wandering individuals (particularly children!).

IMPORTANT SAFETY INSTRUCTIONS

- Take extra care when attaching the DIRECT DRIVE Root/Cereal Bucket to the forklift/loader to ensure that it is attached correctly via the bracketing and hydraulic fittings. (See page 7 Connection to the forklift/loader).
- Ensure that the forklift/loader and its hydraulic system are in full working order.
- Never allow any person to stand between the forklift/loader and the DIRECT DRIVE Root/Cereal bucket during connection or at any time.
- Ensure that the brackets are connected fully before operation.
- Take into account the protrusions of the DIRECT DRIVE Root/Cereal Bucket from the forklift carriage when manoeuvring around and take particular care when approaching junctions and negotiating corners.
- The driving characteristics of the forklift/loader are influenced and altered by the attachment of mounted machines and it is important to ensure adequate steering and braking ability as required.
- Never allow any person to ride on or in the bucket at any time
- Never perform any adjustments to the bucket whilst mounted, unless the forklift/loader is stopped, turned off and the bucket is resting on the ground where possible.
- Ensure that the forklift/loader cannot roll away by use of a park brake or wheel chocks.
- Never allow any person to stand or work beneath a suspended load.
- It is forbidden to allow persons to ride on the bucket or the forklift/loader it is attached to, at any time.

CONNECTION TO THE FORKLIFT/LOADER

Your DIRECT DRIVE Root/Cereal Bucket will be delivered already fitted with the correct bracketing, hydraulic fittings and hydraulic hose to fit your forklift/loader.

If for any reason the fittings are lost or damaged they must be replaced with the following specification of fitting;

BOLT ON BRACKETS

QUICK-HITCH brackets or LOADER brackets require the following 'U' Bolt fittings;

8 X M16 X 120mm U Bolts

16 X M16 Nylock nuts/washers

For your own safety and the safety of others, always use the correct fittings to attach bolt-on bracketing to the rear of the unit. Always place the unit on the ground and turn off the forklift/loader before attempting any changes.

CREATING OFFSET BOLT ON BRACKETS ONLY (Before Attachment to Forklift)

The bracketing on a DIRECT DRIVE bucket will be offset at the point of manufacture, however if you need to change the offset for any reason the procedure is as follows;

1. Remove all 16 nylock nuts and reposition the bracket.
It is important to maintain the correct spacing between the brackets and that on tightening up the bolts make sure that the brackets remain square to the bracket mounting frame.
Replace the M16 Nylock nuts each time the brackets have been repositioned and ensure they are all thoroughly tightened.

WELD ON BRACKETS ATTACHMENT

Fitted in accordance with customer offset requirements and fixed to forklift.

Stand the DIRECT DRIVE Root/Cereal Bucket in an area free from obstruction to allow you to drive the forklift/loader towards the bracketing.

For Quick Hitch bracketing, connect as you would with any other attachment and the type of bracketing fitted to the rear of the bucket.

Attach the hydraulic hoses via the pipes and fittings supplied to fit your forklift/loader whilst it is TURNED OFF. For eased the hoses are marked FEED and RETURN.

FEED is to drive the auger forwards to discharge. RETURN will reverse the auger.

YOU ARE NOW READY FOR OPERATION.



OPERATION

Once the DIRECT DRIVE Root/Cereal Bucket is attached to the forklift/loader correctly you can begin operation. The following step by step procedure will take you through the basic operation of the machine;

1. Shovel into heap to fill bucket with root feed.
2. Back bucket and drive to desired location.
3. When ready start the flow of hydraulic oil to the bucket by operating the lever inside the forklift cab.
4. Position the forklift/loader so that on discharge, the product will fall as required. As standard the bucket will discharge to the left (from the driver's seat of your forklift/loader).
5. If you decide not to empty the whole bucket fully, stop the flow of hydraulic oil and the auger will stop, enabling you to move to another location.
6. Repeat the process.

The speed is pre-set before delivery and you do not need to worry about "feathering" the controls as the bucket will operate at a steady speed without jarring.

TO REMOVE A BLOCKAGE

MANUAL STONE TRAP

All feed should be as clean and free from foreign bodies such as stones for the health of your animals and the lifespan of your bucket.

However if you experience a blockage due to a stone;

1. Stop flow of oil ASAP.
2. Release pressure or back up auger ½m to free stone, which should drop into the trap.
3. Turn off forklift/handler before leaving cab.
4. Open stone trap.
5. Release foreign object.
6. Close stone trap.
7. Re-start forklift and continue operation.

IMPORTANT

CROSS LINE RELIEF VALVE

The Cross Line Relief Valve is fitted to the top of the hydraulic motor on your feeder bucket as additional protection for the motor and cutting die against damage from excessively high oil pressure and the effect from stones or other foreign bodies causing a blockage

FIRST USE - TO SET THE CROSS LINE RELIEF VALVE

The Valve is pre-set to 150 bar prior to delivery in the event that you do not make any adjustments yourself to give your motor some protection against excessive oil pressure and major blockages.

We recommend that you re-set the Valve in accordance to your own requirements and feed type as follows;

Before beginning, HALF fill your bucket with clean feed. That means NO stones or foreign bodies at all while setting up.

The adjustments are made via an Allen Hex Key that is made visible on the Valve when you remove the 2 x caps.

Follow the steps below to set the sensitivity of your Cross Line Relief Valve; this can be set as keen as you like.

- 1. Start your loader and begin cutting the half bucket of clean feed.**
- 2. Turn the Allen Key adjuster (whilst the bucket is cutting) anti clockwise until the auger stops.**
- 3. You must ensure that you adjust both sides of the Valve to the same sensitivity.**
- 4. Proceed to turn the adjusters clockwise again until the auger re-starts and you are happy with the cut and the bucket is not struggling to cope. This is setting the sensitivity of the Valve and is important that you re-set it for different feedstuffs/forklifts.**
- 5. Depending how sensitive this is set will depend if the valve allows small stones/ obstructions through or stops the flow of oil with any small/minor obstruction. It is better to opt for increased sensitivity rather than the opposite.**
- 6. IMPORTANT: To prevent motor damage caused by high oil pressure, failing to set this valve may cause the motor's shaft seal to be damaged and subsequently leak. This will not be covered under the manufacturer's warranty for the motor.**

If you require any assistance with setting up the Cross Line Relief Valve, please do not hesitate to telephone and we will be pleased to assist you.



WEEKLY MAINTENANCE

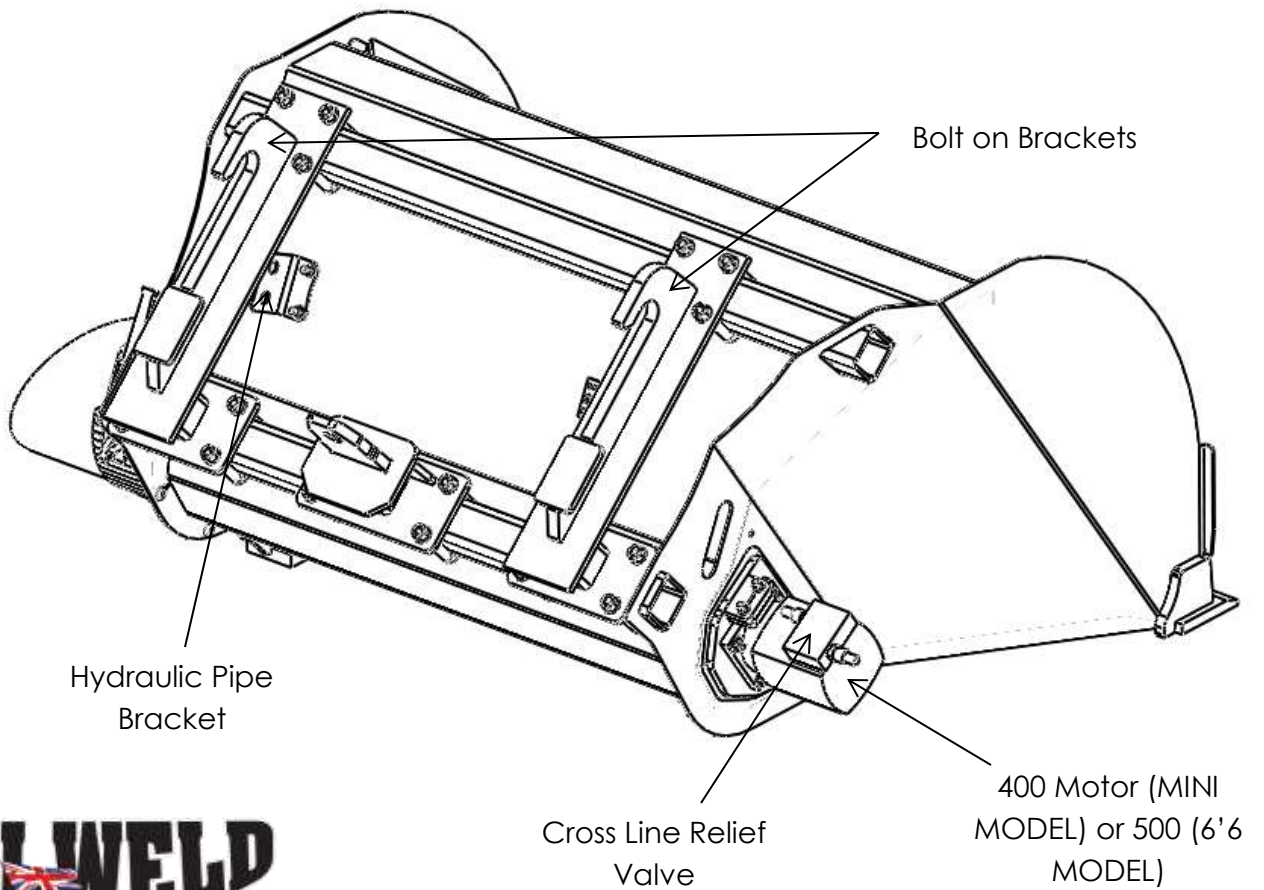
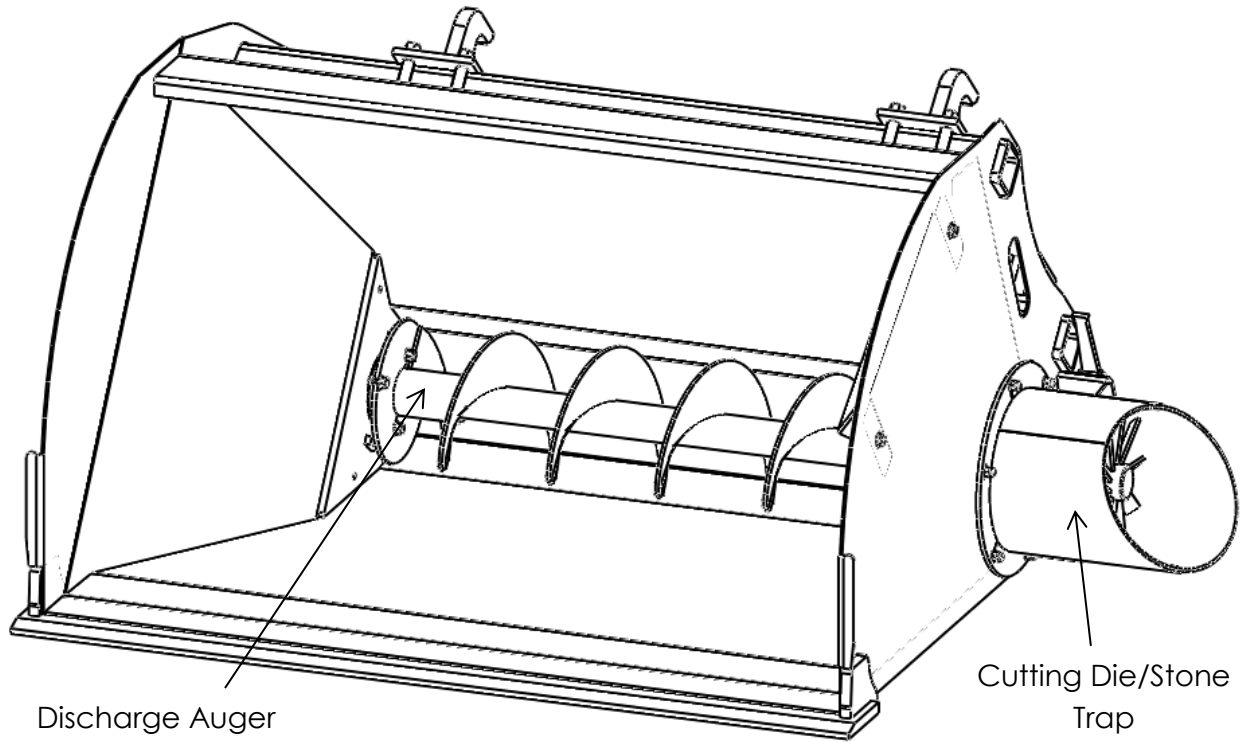
1. Check auger drive and discharge end for wear. You are looking for play on the shaft in both the horizontal/vertical axis. There should be minimum movement. If this is the case, monitor for any additional play. If play reaches significant movement you should contact Agriweld as soon as possible.
2. Non drive end of the auger is fitted with a nylon bush which does not require greasing, but it would prolong the lifespan of the bush if given a squirt of freeing oil like WD40 or similar each week. Drive end is connected directly to the hydraulic motor via keyed boss which requires visual checks for movement.
3. Straw sometimes evident in root feed can clog up the cutting die blades and cause excess pressure to be applied on the motor. It is requested that you keep the cutting dies/blades free of straw at all times to prevent this.

SAFETY

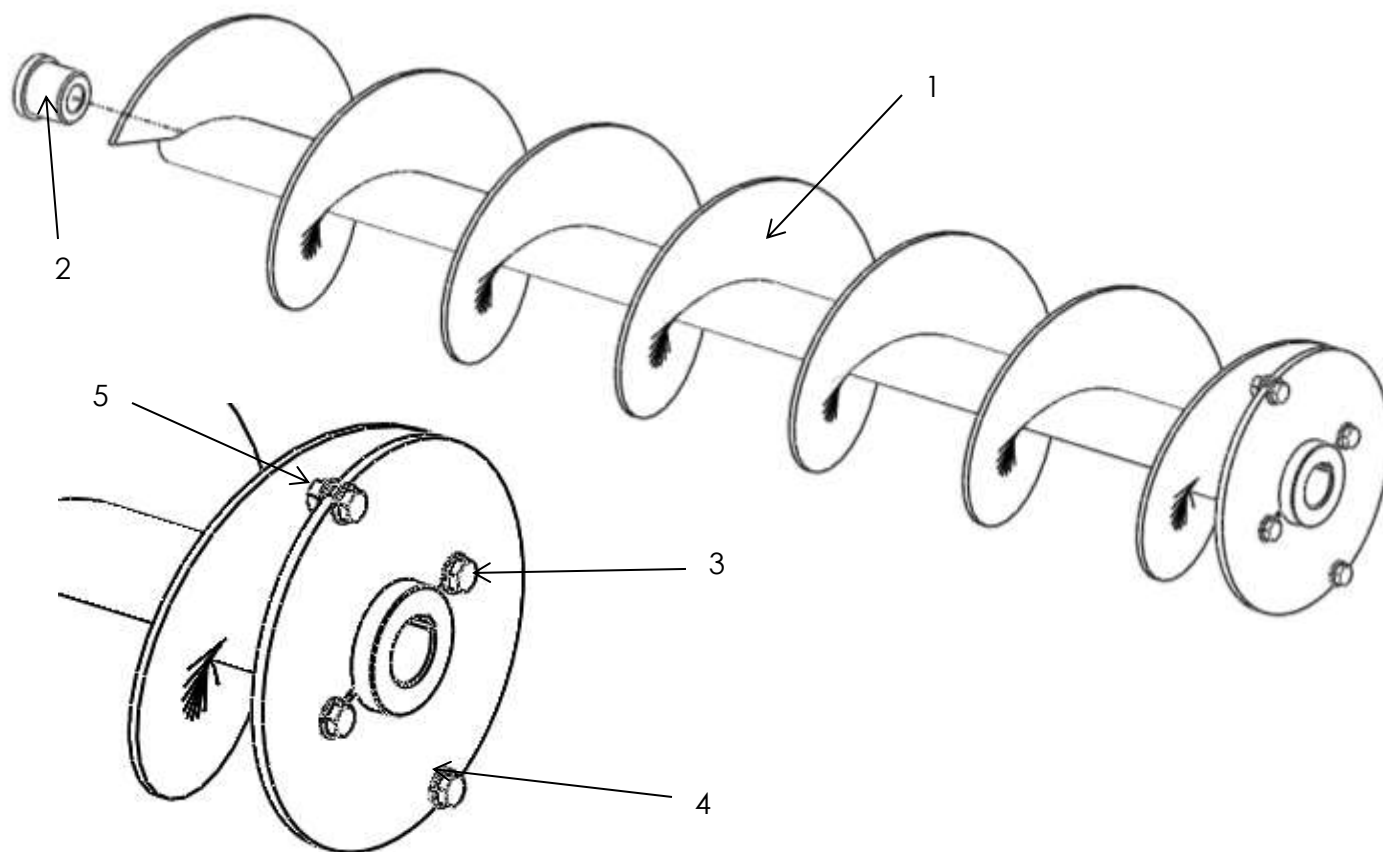
PLEASE NOTE THAT THE CUTTING BLADES ARE SHARP!

PLEASE ENSURE THE FORKLIFT/ LOADER IS SWITCHED OFF PRIOR TO PERFORMING ANY MAINTENANCE.

Full Assembly



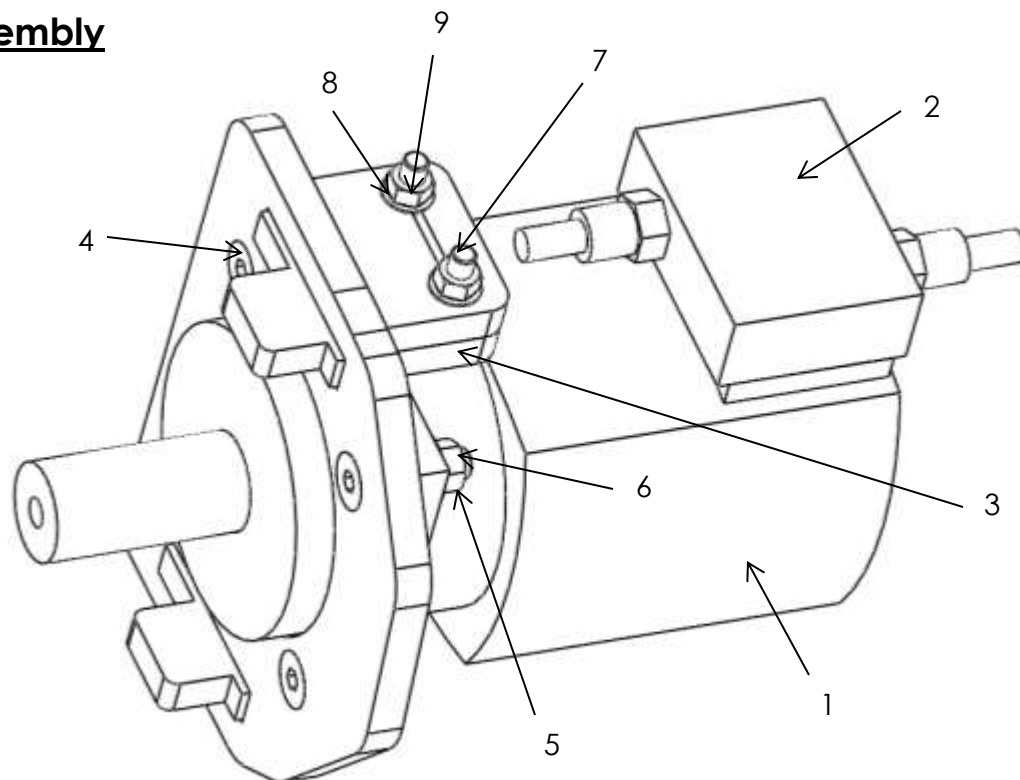
Auger Assembly



Auger Assembly Parts List

Item Number	Part Number	Description	Quantity per Machine
1	AW_DA	Discharge Auger	1
2	AW_CR_NY_Bush	Nylon Auger Bush	1
3	AW_M12_30	Auger Stop Bolt	4
4	AW_M12W	Auger Stop Washer	8
5	AW_M12N	Auger Stop Nut	4

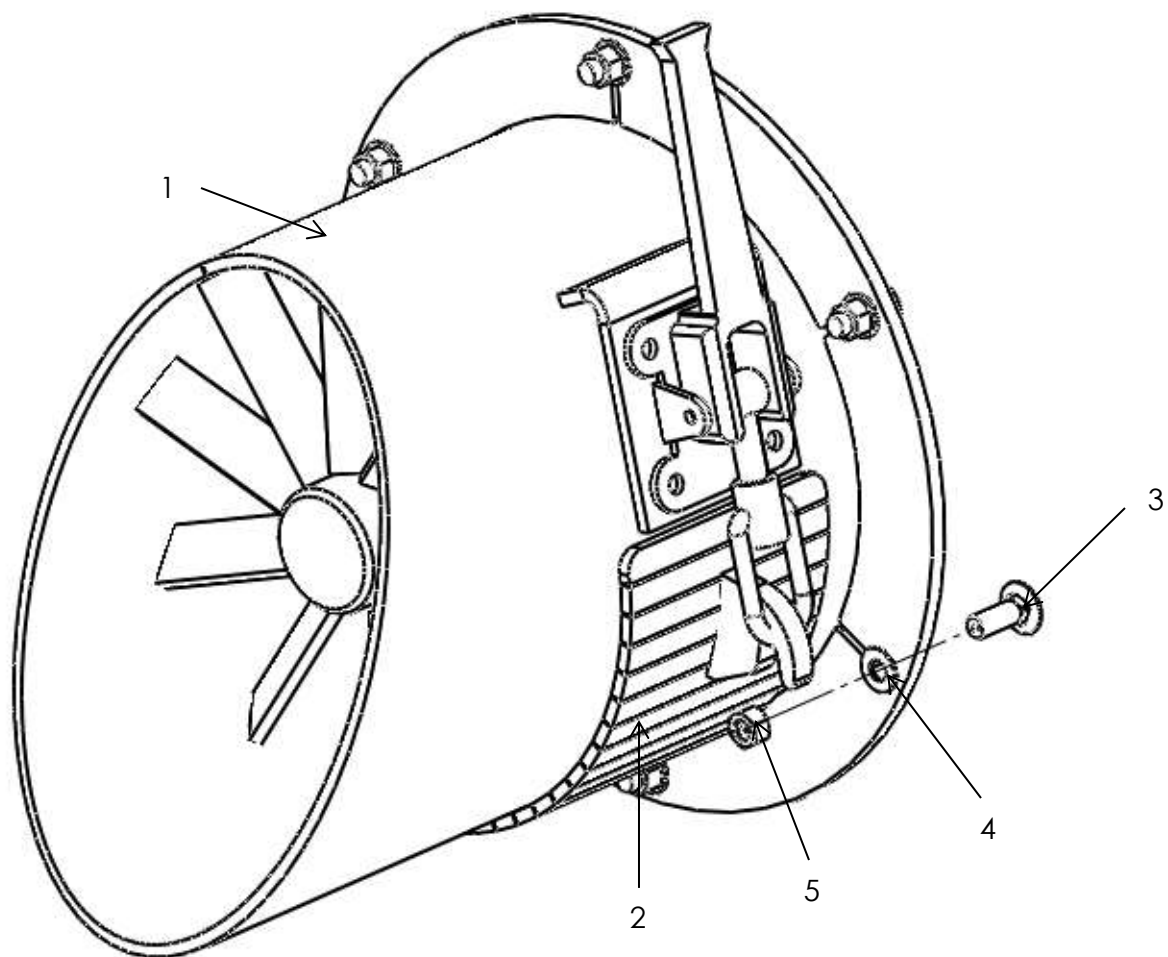
Auger Drive Assembly



Auger Drive Parts List

Item Number	Part Number	Description	Quantity per Machine
1	AW_400M Or AW_500M	Drive Motor	1
2	AW_CLRV	Cross Line Relief Valve	1
3	AW_CR1501	Motor Movement Plate	2
4	AW_M12_50_CS	Motor Mounting Bolt	4
5	AW_M12W	Motor Mounting Washer	4
6	AW_M12N	Motor Mounting Nut	4
7	AW_M10_50	Movement Plate Bolt	4
8	AW_M10W	Movement Plate Washer	8
9	AW_M10N	Movement Plate Nut	4

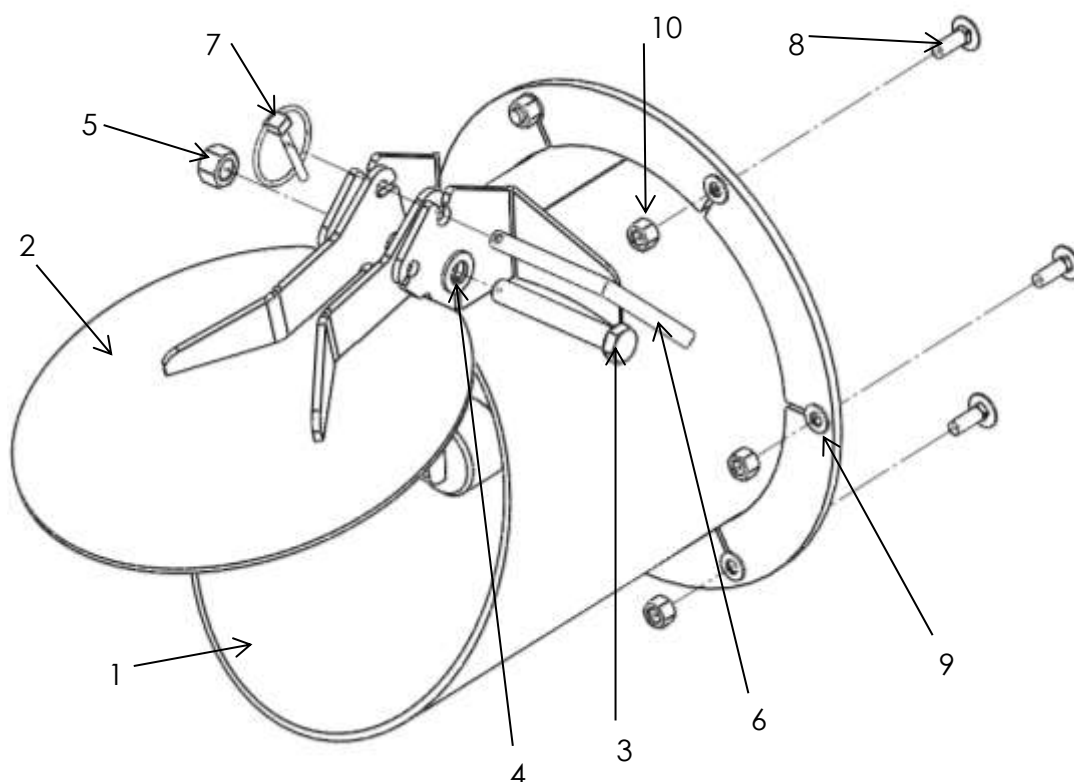
Cutting Die/Stone Trap Assembly



Stone Trap/Cutting Die Parts List

Item Number	Part Number	Description	Quantity per Machine
1	AW_CR_Spout	Cutting Die/Stone Trap	1
2	AW_STD	Stone Trap Door	1
3	AW_M10_30_CHS	Cutting Die Bolt	6
4	AW_M10W	Cutting Die Washer	6
5	AW_M10N	Cutting Die Nut	6

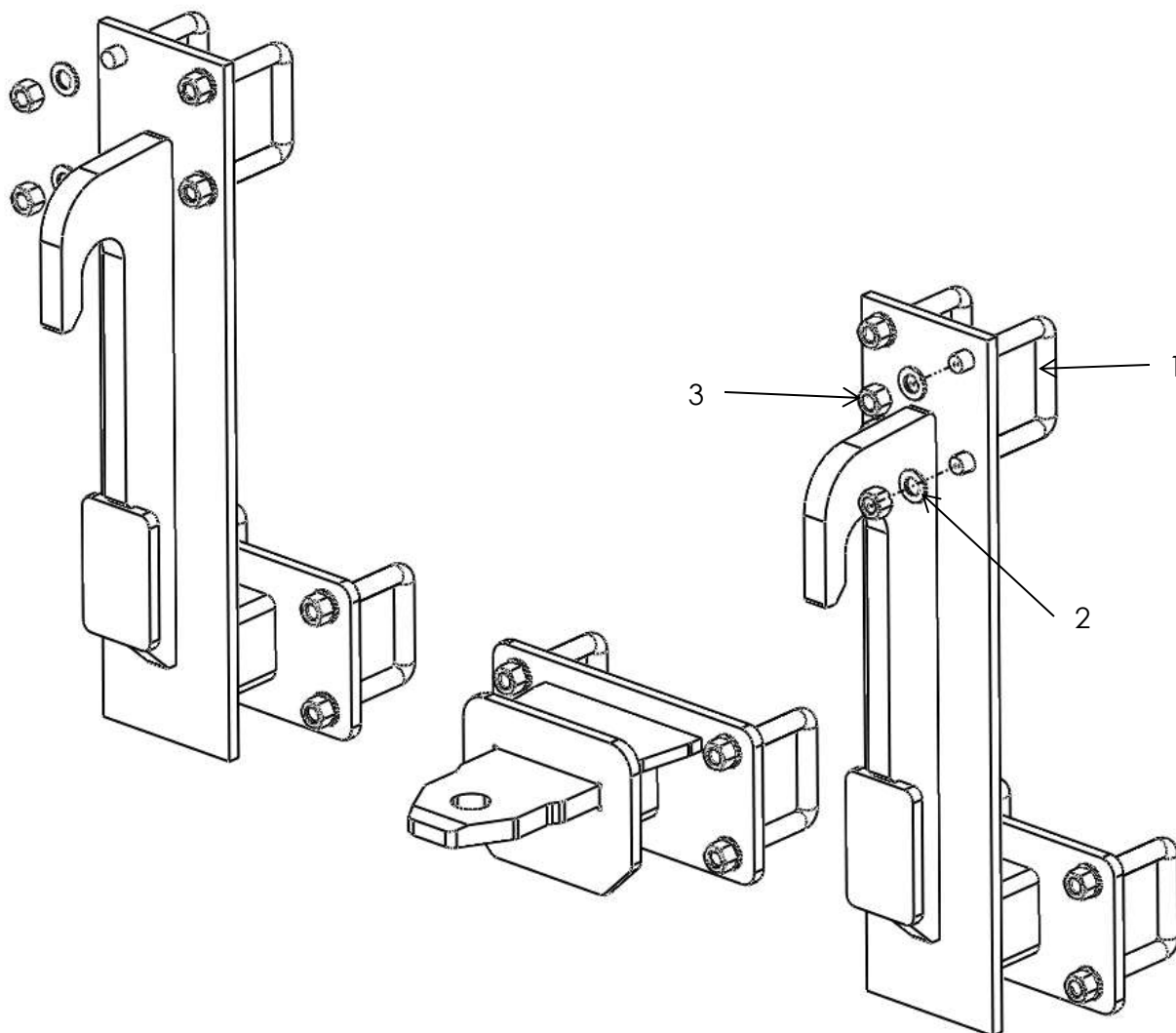
Open Chute Assembly



Open Chute Assembly Parts List

Item Number	Part Number	Description	Quantity per Machine
1	AW_OC	Open Chute	1
2	AW_MF	Manual Flap	1
3	AW_M16_110	Manual Flap Bolt	1
4	AW_M16W	Manual Flap Washer	4
5	AW_M16N	Manual Flap Nut	1
6	AW_MFP	Manual Flap Pin	1
7	AW_LP6Z	Manual Flap Linch Pin	1
8, 9, 10	AW_M10_30CS, AW_M10W, AW_M10N	M10 Cup Square, Washer & Nut	6, 6, 6




Bolt on Forklift Brackets Assembly (Example Only)



Forklift Brackets Parts List

Item Number	Part Number	Description	Quantity per Machine
1	AW_M16_SB	M16 Square Bend	10
2	AW_M16W	M16 Washer	20
3	AW_M16N	M16 Nut	10

Stickers

Sticker	Part number	Description	Quantity per Machine
	AW_MRB_WS	Warning Sticker	2
	AW_MRB_AS	Agriweld Sticker	1
	AW_MRB_GB	Great Britain Sticker	1
	AW_MRB_RC	Root/Cereal Sticker	2
	AW_MRB_OM	Operator Manual Sticker	1
	AW_MRB_OF	Do Not Over Fill Bucket Sticker	1

Warranty

Your DIRECT DRIVE Root/Cereal Bucket is covered for a period of 12 months from the date of delivery (which is recorded on our files) against faulty components and/or bad workmanship. The machine should be checked over at time of delivery for transport damage. All damage claims must be reported to Agriweld upon delivery and noted on the disclaimer. Any claims not reported at this time are invalid.

All our welders are coded to the relevant standard to manufacture your equipment, and all products are checked for quality prior to delivery/collection.

WARRANTY EXCLUSIONS:

Hydraulic hoses, fittings, and wearing parts such as wearing edges and cutting die blades are not covered. Damage as a result of incorrect setting or non-use of the Cross Line Relief Valve is not included.

We cannot be responsible for claims arising from ignorance, occurrences outside our control, such as accidents, malicious damage and non-maintenance. Damage resulting from failure to report a fault may not be covered by warranty.

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".

**IT IS IMPORTANT TO READ THE MAINTENANCE SECTION
OF THIS MANUAL.**

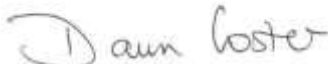
**IT IS VERY IMPORTANT TO USE YOUR BUCKET IN
ACCORDANCE WITH ITS CAPABILITIES.**



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:	DIRECT DRIVE Root/Cereal Bucket
Product Options:	All
Individual Serial Number:	
Product Description:	AGRIWELD DIRECT DRIVE ROOT/CEREAL BUCKET
Date of Last Load Test Report:	N/A
Supplementary Information:	
Authorized Signatory on Behalf of Manufacturer:	 Dawn Foster
Name of Signatory:	Dawn Foster 
Position in Company:	Director
Date of Issue:	

