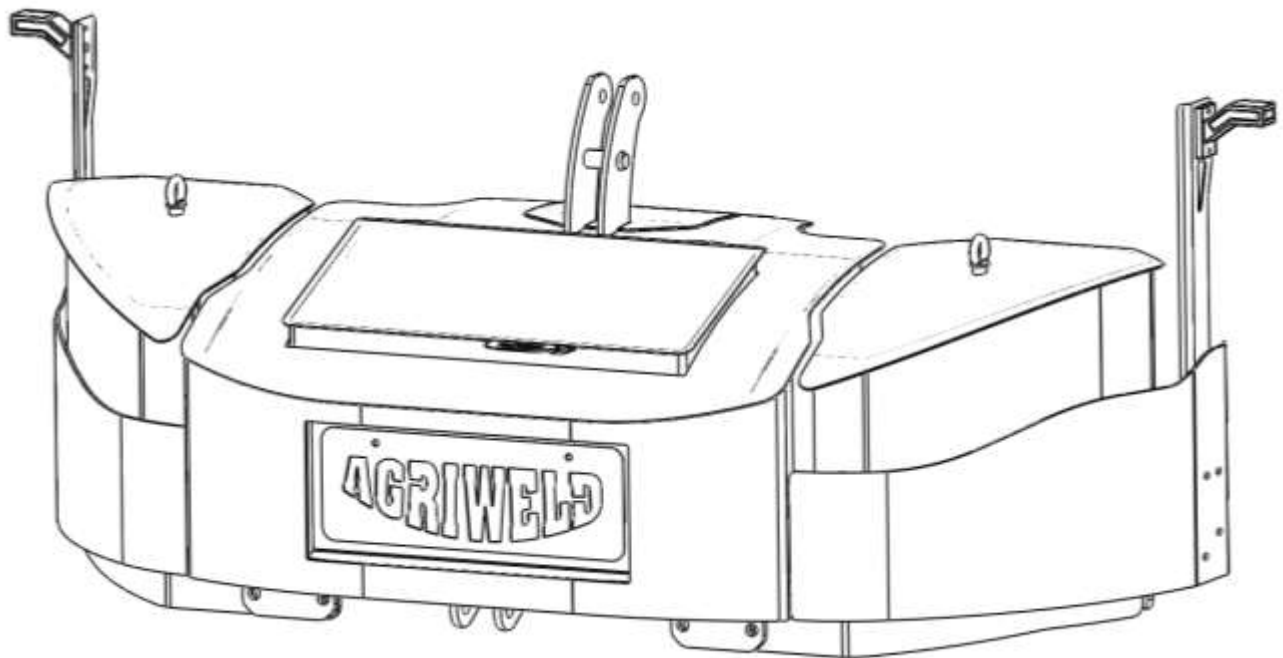


# AGRIWELD

## Operator Manual

### Wheel Guard Vari-Weight

1000kg – 2000kg



**AGRIWELD**

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# **IMPORTANT NOTICE**

## **READ BEFORE FITTING TO TRACTOR**

**Due to differences in tractors and three point linkage arm arrangements you must check for possible collisions on the up/down travel of the linkage when fitting a weight for the first time.**

**If a possible collision is found, care must be taken to avoid lifting the link arms to this point in the field or whilst the weight is in use. Damage to the tractor and/or the weight may occur if care is not taken and will not be covered under warranty.**

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## Summary

The Agriweld Wheel Guard Vari-Weight is a multipurpose implement and is designed to fit any tractor by use of a front linkage. Designed and manufactured by Agriweld in Great Britain, it has several main uses;

As a ballast weight the Agriweld Weight adds 1000kg - 2000kg to the tractor front end and assists in utilising the full power of the tractor whilst in the field and balances the tractor whilst moving heavy loads on the road. This weight can also be varied by adding or removing side pod weights to suit the job at hand.

The lower and wider curved profile, available with the wheel guards in situ guards the tractor wheels to protect smaller vehicles in the event of a collision.

The wider profile is clearly visible to the driver, down both the near and off side front of the tractor from the cab.

The integral toolbox can be used to store tools, wearing parts etc., and aid the safety of the driver in providing a place to store clutter from the cab floor.

## **General Safety**

This manual must be provided to all persons concerned who will be involved with the setting up, operation, maintenance and use of the tractor and Agriweld weight. It must be available at all times.

If important safety instructions are not complied with, it can lead to the risk of injury to you and others as well as damage to property and the environment.

### **NON-COMPLIANCE WITH SAFETY INSTRUCTIONS CAN LEAD TO WARRANTY CLAIMS BECOMING INVALID**

## **Qualifications and Training**

- Only personnel with the appropriate licence is authorised to use this attachment.
- 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.
- The use of spare parts, accessories and ancillary equipment not supplied or approved by Agriweld could have detrimental effects to the construction or functions of the Agriweld Weight.
- Agriweld shall not be responsible for any damage caused by the use of spare parts or accessories and ancillary equipment not supplied or approved by Agriweld.
- The operator must be aware of their responsibilities with regard to observing traffic regulations. The operator must have the authority to refuse instructions issued by third parties which contravene safety.
- Any conversions or modifications to the machine may only be carried out after prior consultation and written confirmation from Agriweld.

## **Further Safety**

- Any warning signs/instructions on the machine provide important information and must be observed.
- Ensure that you are familiar with the equipment, controls and functions before starting work.
- Check around the machine for any noticeable damage or missing parts before starting work.
- It is advisable that the operator wears close fitting clothing to avoid the risk of snagging and trapping.
- Ensure that you watch out for wandering individuals (particularly children!).
- Always match your speed to the conditions and legal speed limits. Observe and respect traffic regulations when using public roads.
- Remember to take into account the size of any attachments to the tractor you may have and be aware of the sideways forces acting on the machine when turning and negotiating corners. Always ensure adequate all round visibility.
- Always ensure that the weight is attached to the tractors front linkage securely and correctly before driving off.

## Special Safety Instructions

- Take extra care when hitching up or un-hitching the weight to/from the tractor. Be aware of what is under the weight (such as your feet) before dropping it off.
- Ensure that the tractor's hydraulic system is in full working order.
- Never allow any person to stand between the tractor and the weight during connection or at any time unless the tractor is secured against rolling away by use of a parking brake and/or wheel chocks.
- It is forbidden to allow any persons to ride or sit on the weight at any time. Observers should maintain a safe distance when machine is in use.
- When performing any adjustments to the machine the tractor engine must be switched off to prevent the hydraulics from operating.
- Ensure that any items stored in the toolboxes are secured by closing the lid.
- 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.
- The towing clevis is intended for light use only. E.g.: for pulling a furrow press out of a corner using a chain. It is more of a chaining point not an actual towing point and is NOT suitable to tow a trailer down a public road when in use on the rear linkage. The towing clevis can be used for towing lighter loads round the yard, however, it is not a load tested item and so cannot be guaranteed safe for use on public highways and is to be used for towing at own risk.
- Take care when attaching weight to tractors 3-point linkage. Potential trapping of hands/fingers is possible when fitting the linch pins. **PLEASE READ THE IMPORTANT NOTICE ON PAGE 2 PRIOR TO CONNECTION TO THE TRACTOR FRONT LINKAGE**

## **Important Maintenance**

It is important to check all pins for wear and ensure that none show significant signs of wear or damage. Keep the weight clean at all times to make performing visual checks easier.

When machines are going to be parked up for the winter months, correct storage methods are an important part of protecting the Agriweld Weight to ensure it has no problems. When you have finished work with the machine, the Weight should be cleaned down and washed off and stored inside to protect the paint work.

For safety, please ensure that the LEDS are in full working order before driving off. Please do not use the WGV (Wheel Guard Variweight) on public highways without the lighting units in full working order. Replace any defective parts immediately and do not use on public highways if the LEDS do not work correctly.

## **RISKS OF OVERLOADING**

It is your responsibility to check the maximum load capacity of your tractor chassis/front linkage, before ordering your ballast weight to ensure that you do not exceed the recommendations advised by the tractor/front linkage manufacturer.

Agriweld will accept no responsibility for damage or injury occurred by attaching a ballast weight that exceeds the maximum capacity advised by the tractor/front linkage manufacturer.

It is important to ensure any additional weight imposed when carrying tools/spares stored within the toolboxes is also accounted for and the additional weight does not exceed the overall maximum capacity of the tractor's linkage/chassis.



# Weight Block Risk Assessment

Date risk assessment completed: Reviewed October 2019 – to review again in 1 year or sooner if required  
 Organisation name: Agriveld Ltd

MACHINERY TYPE: Ballast weights 500kg - 2500kg

Description: An attachment for the front or rear of a tractor as a counterbalance for the tractor when using other attachments. Attaching via a front linkage or bolster fitting with various weights ranging from 500kg – 2500kg.

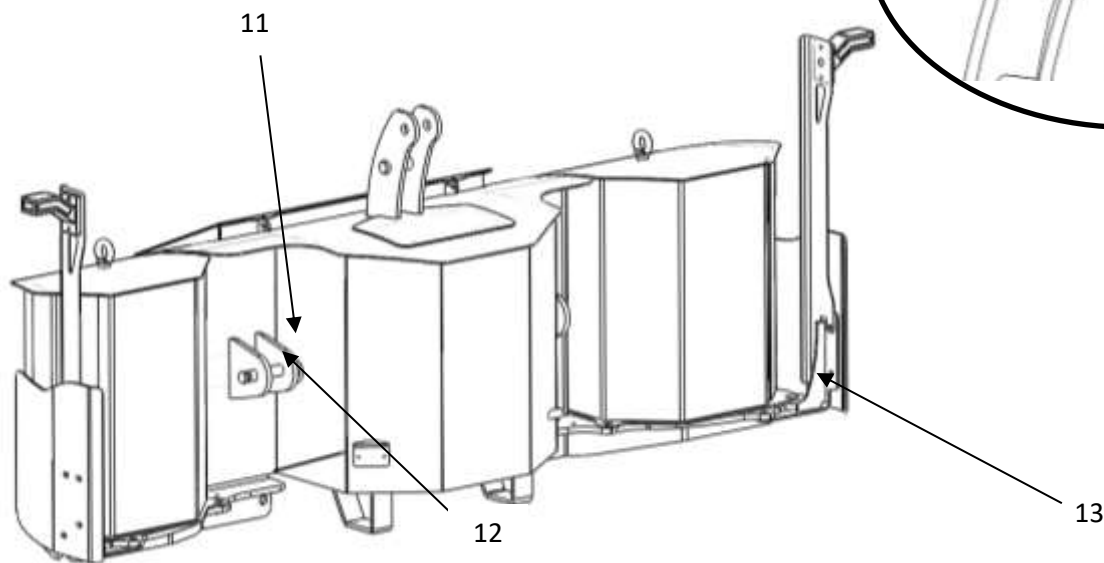
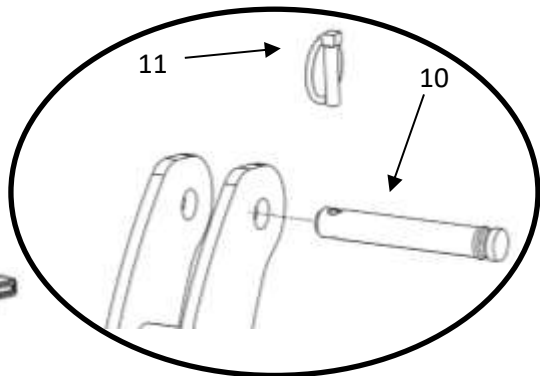
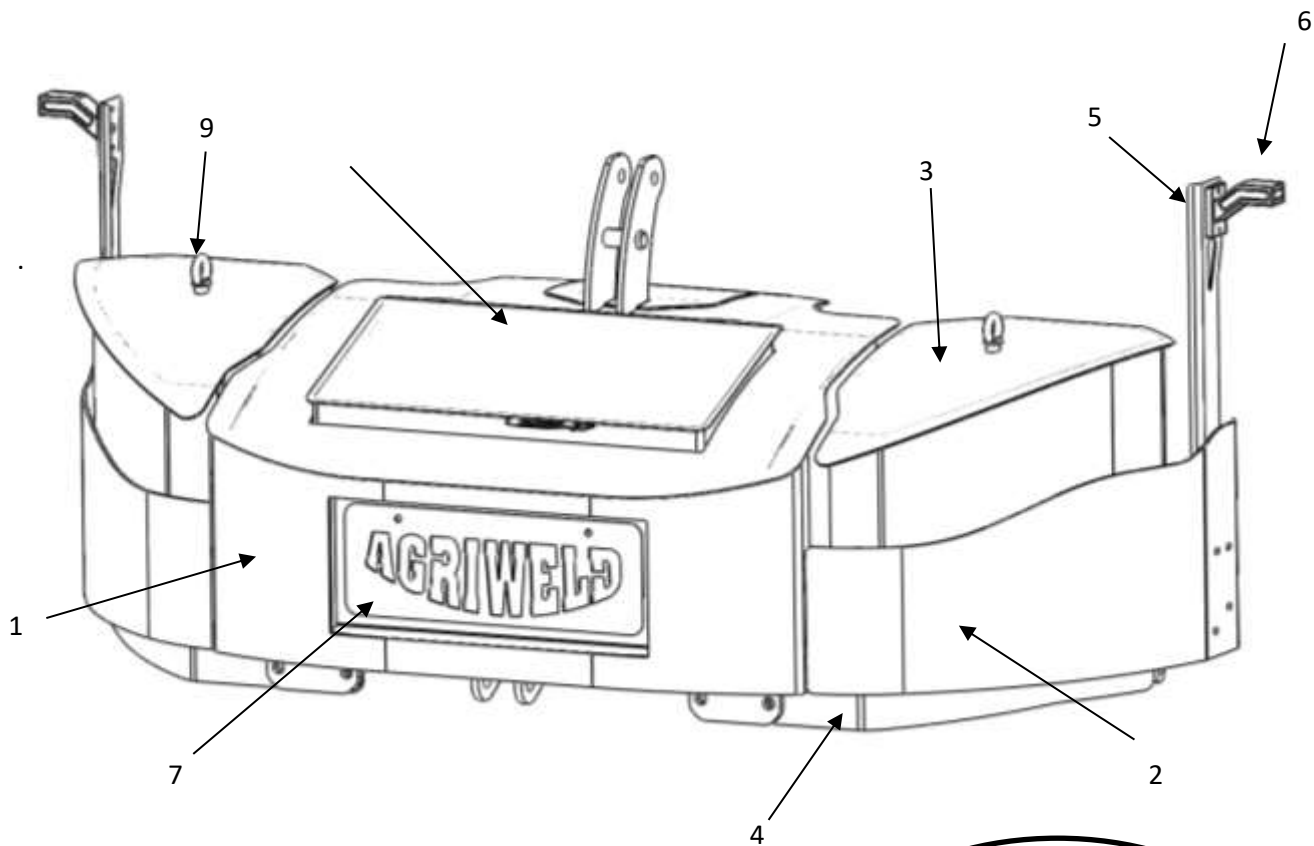


What are the hazards?	Who might be harmed and how?	Risk evaluation Levels 1-5 (1 = Low risk, 5 = High risk)	Precautions in place	Further action required/notes?
Weight block accidentally detaching or dropping during attachment to tractor linkage or chassis	Operator and bystanders if weight falls unexpectedly whilst attaching to tractor causing trapping or crushing	2	Feet fitted to the base of the weight assists preventing crushing/trapping injuries to limbs if weight becomes detached and falls keeping the bulk of the weight off the ground. Operator manual states information on correct use, capacity and to check connection to tractor prior to use each time for signs of damage/missing parts that could cause detachment. Operators advised to regularly check/replace linkage and lynch pins if deemed faulty or missing. Note in manual references not standing in between the tractor linkage and the weight during attachment/detachment and at all times.	Continue to ensure every customer receives an operator manual and review/update all safety measures as required. Online version of manual available on Agriveld website at all times.
Lack of operator training/ignorance causing accidents	Operator and bystanders	3	A bright yellow warning sticker is attached to the weight, to alert operators to read the operator manual. Operator manual states all operators of the tractor must have a valid licence & experience.	Maintain the availability of the operator manual on line as well as paper copy so that it can be available 24 hours a day if required.
Worn parts and non-maintained attachments can become loose on connection	Operator and bystanders. Aged or worn linkage parts causing poor connection on tractor	2	Notes in the operator's manual inform operators to keep the weight clean and inspect prior to each use noting any areas of concern/damage, missing parts and wear. Operator manual states not to use the weight if there are any parts damaged or missing.	Operator manual advises regular maintenance checks
Failing LED lights & damaged wire/cabling – potential collision on highways	Operator & general public/other road users by non-maintenance	2	The LED wiring loom is correctly installed and clipped out of the way of catching/snagging wires and is connected to a junction box. All LEDs tested prior to dispatch. Operators are advised to use the correct tools/PPE to perform any LED repairs/replacements and follow instructions contained in the operator manual.	Note in LED section of operator manual about regular checks to ensure working correctly before use in the dark

## Weight Block Risk Assessment

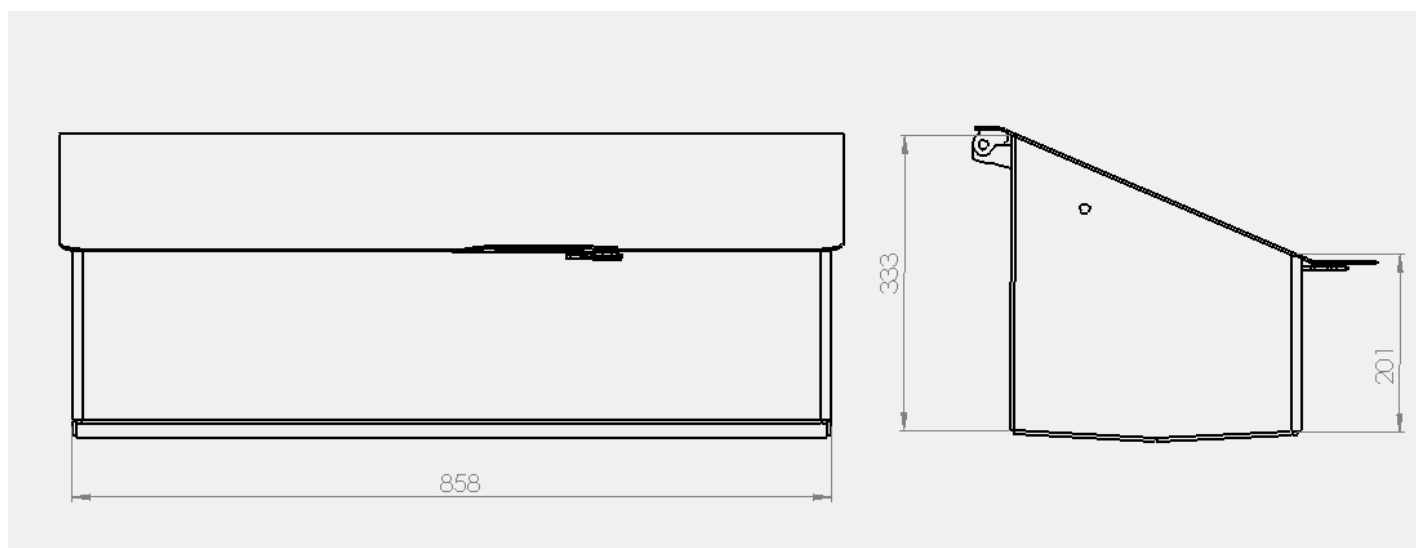
<i>What are the hazards?</i>	<i>Who might be harmed and how?</i>	<i>Risk evaluation Levels 1-5 (1 = Low risk, 5 = High risk)</i>	<i>Precautions in place</i>	<i>Further action required/notes?</i>
Knocks to individuals-wandering into the path of the weight whilst attached to tractor.	Bystanders walking directly into the weight by not paying attention when around the tractor and weight	1	Centre marker rod reminds operator it is attached to front of tractor Operators advised to be aware of wandering individuals	See safety notes in operator's manual
Malicious damage	All	1	It is possible that malicious damage can be caused e.g. removing linch/linkage pins, damage to brackets or cutting wires for the LEDs Operator manual states weight block should be checked over prior to first use which would alert the operator of any missing or damaged parts	See notes in operator's manual
Overloading tractor chassis/front linkage-causing failure of tractor linkage	Operator and general public	2	Initial sales enquiry picks up any unusually heavy requests for front linkage mounted models. For bolster/direct chassis mounted models, sales staff are particularly careful with requested weights. Anything unusual is referred to design for approval or rejection and anything detrimental/unsafe is refused. Operator manual states that riding on the weight whilst connected is prohibited. Risk of overloading section listed in operator's manual particularly advised not to overload toolboxes beyond overall max capacity of tractors linkage/chassis	Risk of overloading section listed in operator's manual
Potential collision when pulling out at junctions due to the protrusion of the weight on tractor front	Other road traffic and road users	3	New 2019 models of ballast weight keeping up to date with improved road safety and standard weights are now 200mm closer coupled to tractor. WGV is designed to protect other vehicles on the road in the event of a collision by protecting the vehicle from the tractor tyres. Centre marker still fitted to all weights to remind driver it is attached to tractor front end. Further safety features include amber LED side marker lights and Hi-vis reflective chevron decals fitted as standard.	Monitor

### Full Assembly

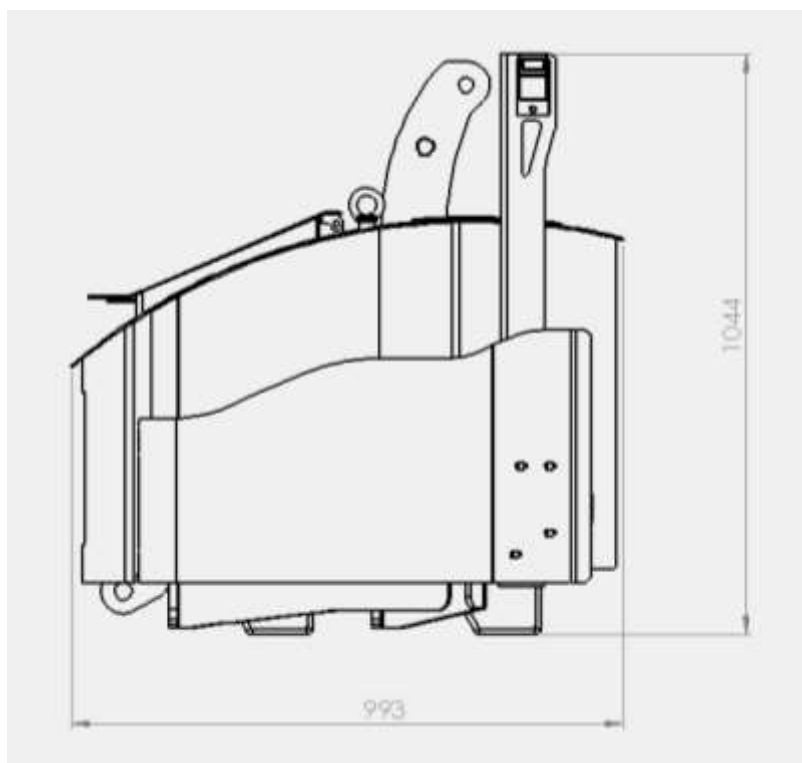
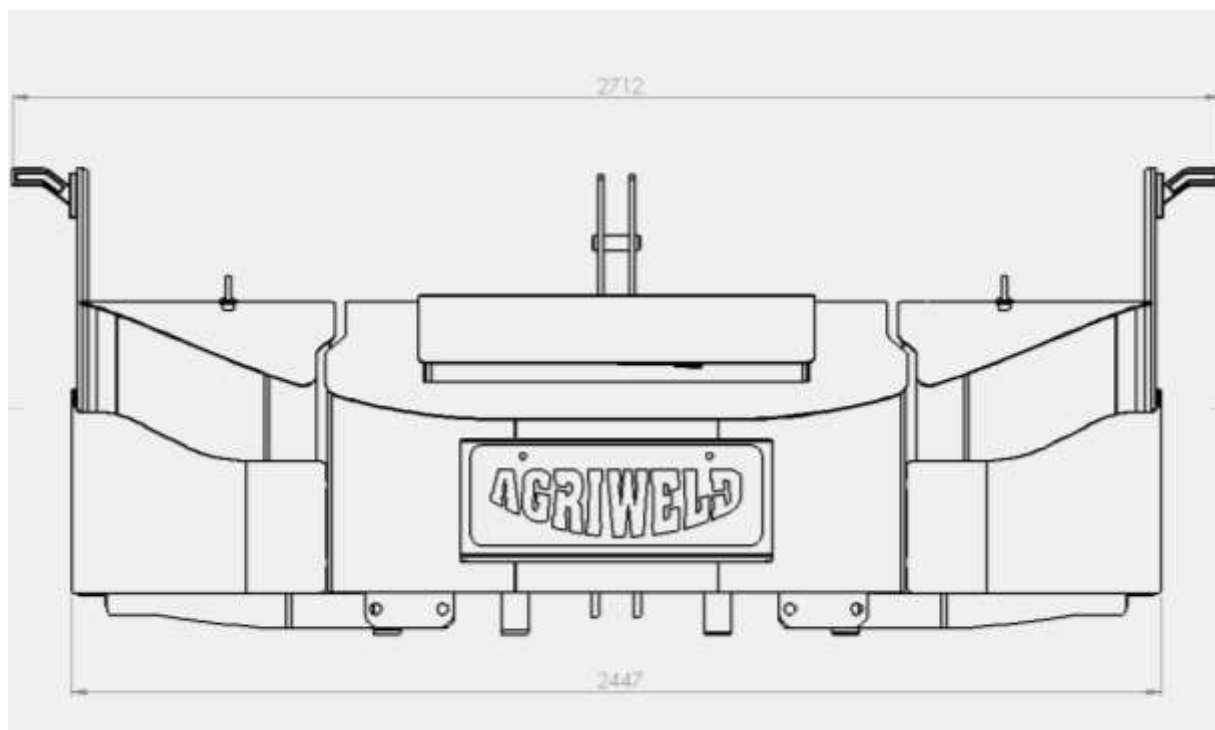


## Storage Box Dimensions

### Large Central Storage Box



## Weight Dimensions



### Parts List

Item Number	Part Number	Description	Quantity per Machine
1	-	Wheel Guard Vari-Weight Main Body	1
2	WGV_SG	Side guard	2
3	WGV_SP	Side pod weight	2
4	WGV_LF	Lower side pod frame	4
5	WGV_SLS	Side light support	2
6	WAS1167L	Side light	2
7	AGR_LOGO	Agriweld logo	1
8	WGV_TBL	Storage box lid	1
9	-	M16 Male lifting eye	2
10	Z325.095	Top Link Pin	1
11	LP11Z	11mm Linch Pin	3
12	WGV_LL	Lower link pin	2
13	WGV_SGS	Side guard support	2

## **Removal of side pod weights**

When additional weight is not needed the outer two pods can be removed from the Agriweld Wheel Guard Vari-Weight, leaving the side guards in place for additional safety.

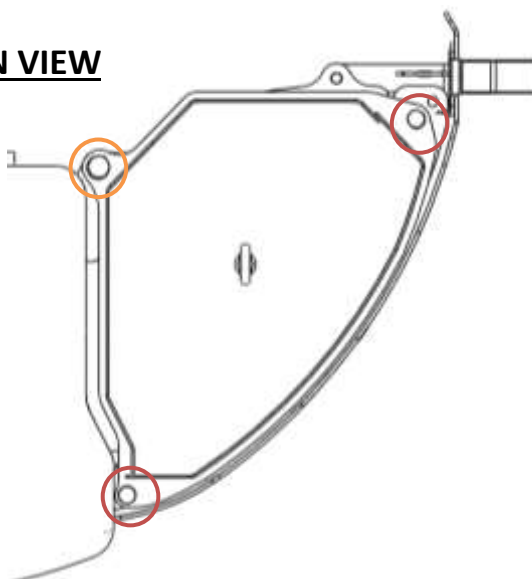
Due to the weight and cumbersome nature is recommended to have at least two people to remove the side weight pods. Rubber bump stops have been used to minimise the possibly of trapped fingers but care must still be taken, protective gloves must be worn.

Before beginning to remove the side pods, ensure the full weight block is both secured to the tractor and is situated on level ground or alternatively, the weight is sat flat on the floor and not attached to the tractor.

Begin by attaching a suitably rated lifting chain and hook or lifting strap with D link to the lifting eye located on the top of the side pod. Using a forklift and forklift tine, take up the slack of the lifting device used but do not lift the side pod at this stage.

Remove the two M16 Bolts (Shown in red below) and the one M20 Bolt (shown in orange below) from the side pod. A ratchet with a long extension is the best way to reach the front bolt.

### **TOP DOWN VIEW**



**Continued on next page...**

To gain additional room around the bolts and to work, the front guard can also be removed. This can be done by removing the four bolts on the outer edge of the guard, the light post is also supported by the bolts so will need to be placed to one side. The far end can then be lifted and unhooked from the main body of the weight.

The side pod can then be lifted away by using the lifting aid and forklift, and stored in a safe place out of the way.

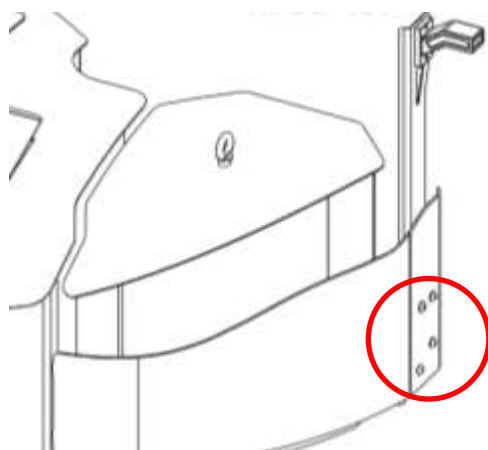
If the side guard has been removed, this is the point that it should be refitted. Re-locate the two hooks where the guards meet the front of the weight, then replace the four side bolts remembering to reattach the light post.

The re-fitting of the side weight pod block is the reverse of removal.

### **Full removal of the side guards**

There may be occasion when the full side guard assembly may need to be removed:

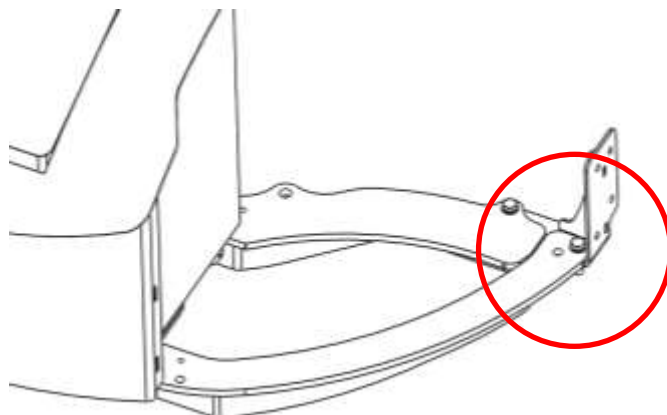
1. Follow the above steps to remove the side pod weights.
2. Remove the four M12 dome bolts and nut holding the side guard in place, the side light post is also attached by the bolts so it will need to be set aside, the guard can then be unhooked and removed from the far end.



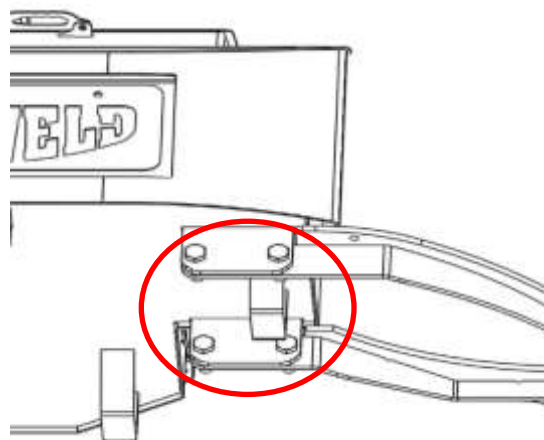
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3. Remove the two M16 bolts that attach the side guard support to both lower frame sections. Store the side guard support to one side.



4. The two lower side frame sections are bolted to the main body of the weight underneath with four M24 bolts per side. If the full WGV (Wheel Guard Variweight) is not attached to the tractor linkage, it will need to be lifted off the ground with a forklift and safely supported at a suitable working height on trestles or by the forklift to do this. When you are sure that the weight is fully and safely supported, one section of frame at a time can be removed by undoing the M24 bolts on each side.



5. A second person may be required to support and lift away the frame sections as they are heavy.

Re-fitting is the reverse of removal, ensuring all bolts are correctly in situ and tightened.

## **CONNECTING YOUR LEDS**

If you have ordered LED side marker lights with your weight block, you will need to supply and fit the relevant 12-24V electrical plug to suit the connection to your tractor.

Please check that your LEDs are working correctly before use in the dark and especially when in use on public roads. Agriweld will accept no responsibility for damage that has occurred due to lack of maintenance checks.

### **FIXED LED SIDE MARKER LIGHTS FITTING INSTRUCTIONS**

To connect your LED side marker lights you will need to wire them up to a relevant 12-24 V electrical plug, suitable for your tractors electrical supply.

**BLUE** WIRE = EARTH (NEGATIVE -)

**BROWN** WIRE = LIVE (POSITIVE +)

## Warranty

Your Agriweld Weight Block 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 ISO 9606-1 and our welding procedures are approved in accordance with ISO 15614-1 to manufacture your equipment. 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 and non-compliance with safety instructions.

Any damage occurred during transit must be reported on signing for the item from the haulier to enable us to enter a claim for damages direct with the haulier.

### 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".**

## Stickers

Sticker	Part number	Description	Quantity per Machine
	AW_WB_AS (185 mm x 85mm)	Agriweld Sticker	3
	AW_WB_GB (85mm x 50mm)	Great Britain Sticker	3
	Serial plate (76mmX51 mm)	Serial plate	1
	AW_WB_CHEV (300mmX300mm)	Chevron	2
	AW_OM_S	Operator manual sticker	1

## 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:	Wheel Guard Vari-Weight Block 1000kg – 2000kg
Product Options:	All
Individual Serial Number:	
Product Description:	Agriweld Wheel Guard Vari-Weight adds 1000kg – 2000kg to the tractor front end and assists in utilising the full power of the tractor whilst in the field and balances the tractor whilst moving heavy loads on the road.
Date of Last Load Test Report:	
Supplementary Information:	
Authorised Signatory on Behalf of Manufacturer:	
Name of Signatory:	Dawn Foster
Position in Company:	Director
Date of Issue:	

