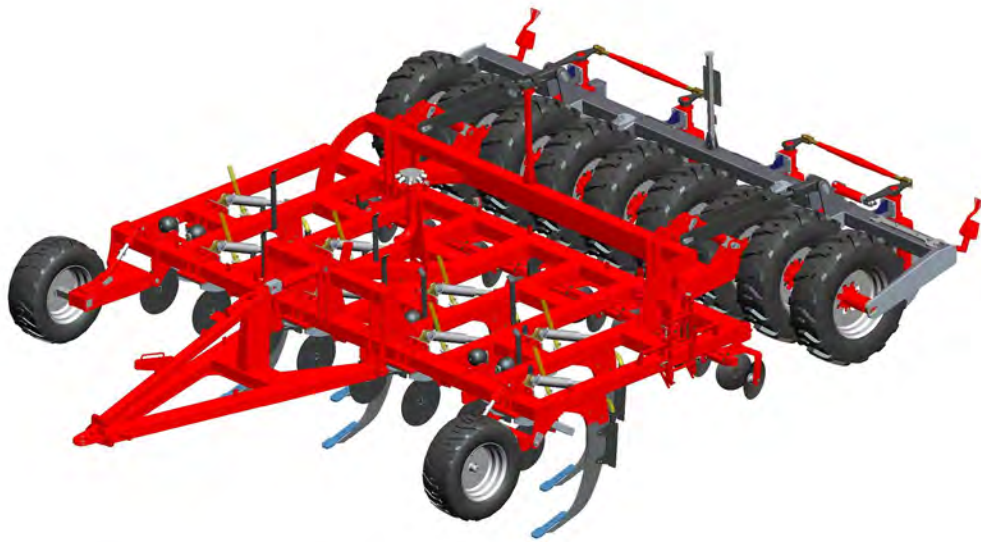


# AgriCAD HR061



# Owners Manual



## **Introduction**

### **1. Foreword**

Before operating the implement, read and strictly comply with the operating instructions. In doing so, you will avoid accidents, reduce repair costs and downtime and increase the reliability and service life of your machine. Pay attention to the safety instructions! AgriCAD will not be liable for any damage or malfunctions resulting from failure to comply with the operating instructions.

These operating instructions will assist you in getting to know your implement and in using it correctly for its intended purposes. The operating instructions must be read and strictly adhered to by all persons working on or with the implement.

e.g. Operation (including preparation, fault rectification during work and servicing)

Maintenance (maintenance and inspection)

Transport

We reserve the right to alter illustrations as well as technical data and weights contained in these operating instructions for the purpose of improving the implement.

### **2. Warranty claims**

One year warranty on all implements

no warranty on wear parts

### **3. Intended use**

The implement was built in accordance with latest technical standards and generally accepted safety regulations. However, risks of injury to the operator or third parties and impairment of the implement or other tangible assets can occur during use.

The implement must only be operated for its intended use if in a technically good condition, whilst being aware of safety and risks and in strict compliance with the operating instructions!

Faults, particularly those which impair safety, must be remedied immediately. The implement must only be operated, serviced and repaired by persons who are familiar with it and have been made aware of the dangers involved.

Genuine spare parts and accessories from AgriCAD are available for this implement. Spare parts and accessories which are not supplied by AgriCAD, have not been tested or approved by AgriCAD. Installation or use of non-original AgriCAD products may have a detrimental effect on specific design features of the implement and impair the safety of implement operators and the implement itself. AgriCAD will not assume liability whatsoever for damage resulting from the use of non-original parts and accessories.

The implement was designed as a ripper and application of fertilizer in a agricultural application. Any other use beyond this limits, e.g. as a means of transport, is deemed improper. AgriCAD will not assume liability whatsoever for damage resulting from unintended use. The risk will be borne solely by the user.

Intended use also includes the strict compliance with the operating instructions specified by the AgriCAD.

#### **3.1 Consequential damage**

The Implement was manufactured by AgriCAD with great care. Nevertheless, even when used properly, malfunctions or complete failure may be caused by e.g.:

Damage on tines resulting from wear failure)

Damage caused by external influences

Incorrect operation of the machine

In appropriate speed and use when in transport between fields.

You should therefore check the correct function of your machine before and during use.

Liability for consequential damages caused by incorrect operation of the implement is excluded.

### **3.2 Authorised operators**

Operators must be at least 16 years of age.

The operator is responsible for third parties in the operating area.

Only those persons who have been authorised and instructed by the owner may operate the implement.

#### **The owner must:**

Make the operating instructions available to the operator.

Ensure that the operator understood the operating instructions.

The operating instructions are an integral part of the implement.

#### **Safety and accident prevention**

The following warnings and safety instructions apply to all sections in these operating instructions.

#### **Example of Safety symbols**



#### **Example of Operational Symbols**



#### **Operational safety**

All protective features and safety equipment, such as detachable protective devices, must be correctly in place and reliably functioning before the machine is put into operation.

Check and tighten nuts and bolts at regular intervals.

Check tyre pressure regularly.

In case of malfunctions immediately stop and secure the machine.

#### **Road traffic safety**

This implement is manufactured as an agricultural implement and must only be used as an implement on the public roads.

Passengers are strictly forbidden to ride on the machine!

#### **Hitching / unhitching**

There is a risk of injury to persons when hitching/un-hitching the machine to the drawbar of the tractor.

Only park the machine on a firm and level surface.

Take special care when reversing the tractor.

Never stand between the tractor and machine without a good sense of safety.

***Service and maintenance***

Ensure that regular inspections are always carried out.

Prior to performing maintenance and servicing work, ensure that the implement is positioned on firm, level ground.

Before cleaning the implement with high pressure cleaning equipment cover all openings, which should stay clear of water, steam or cleaning agents for reasons of safety or operation.

Do not aim the water jet directly at electrical or electronic components.

Re-tighten screwed connections which have been loosened during servicing and maintenance work.

Take extreme caution when washing with steam-jet or high pressure washers implement can be damaged.

***Hydraulic connections***

Do not connect hydraulic lines to the tractor, before both hydraulic systems (Implement and tractor) are de-pressurised.

The hydraulic system is under high pressure. Check all lines, hoses and screwed connections regularly for leaks and any visible external damage.

After cleaning, check all hydraulic lines for leaks and loose connections.

Check hoses for chafing and signs of other damage.

The hydraulic connections between the tractor and implement are colour-coded in order to exclude operating errors.

***In operation***

Check the area around the implement for unauthorised persons before setting off and starting operation of the implement.

Stay clear of the operating range of hydraulically operated parts.

Use access steps and treads only at standstill.

Passengers are not allowed to ride on the machine during operation!

### Technical data

### Dimensions and weights

Width: .....6.77 m

Height:.....3.65 m

Length: .....9.00 m

### Standard design

Tyres:.....400/60R22.5

Tyres:.....15/80-24

Tyre pressure:..... 4 Bar

### Minimum tractor specification

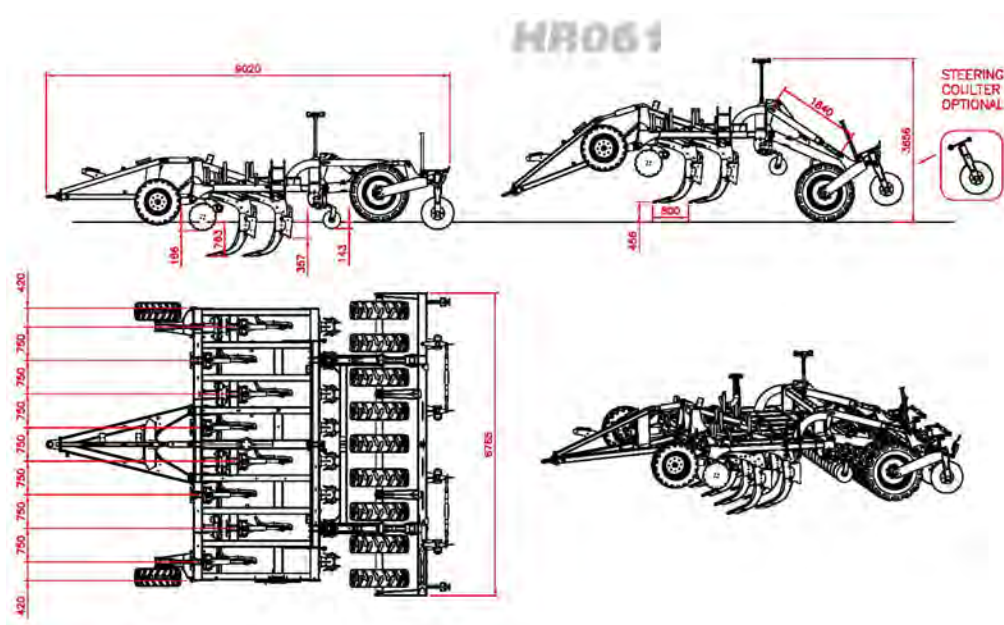
Minimum tractor power required: .....360+ kW

Minimum hydraulic flow rate: .....40 l/min

Hydraulic ports: .....2 Double acting.

1 x double acting: .....Lifting of drawbar

1 x double acting: .....Lifting of packer wheels



## **Operating instructions**

### **Capacity of tyres**

Check the air pressure regularly, preferably every day.  
Under inflating of the tyres may cause damage to the tyres and rims.  
When transporting the cultivator only travel at speeds below 40km/h.

### **Hitching the cultivator**

**Attention!**  
**Refer to Safety and accident prevention**

Hitch the cultivator to the tractor.  
Wind up the landing leg and store it in the landing leg bracket.  
Connect quick coupling hydraulic hoses.

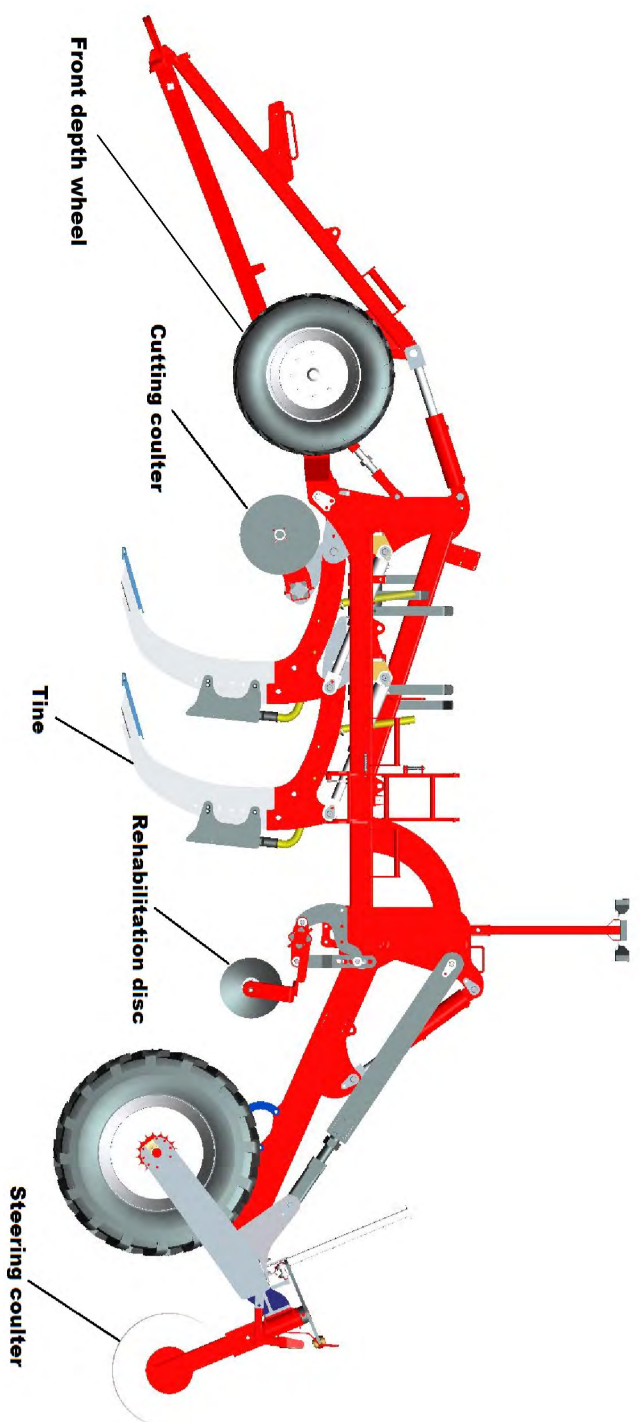
### **Coupling of hydraulic system.**

**Attention!**  
**Refer to Safety and accident prevention**

**Attention!**  
**No persons should be in the operating range of the cultivator**

Connecting hydraulic hoses to the tractor.

1 x double acting: ..... Drawbar  
1 x double acting: ..... Packer wheels



## ***Adjusting the working depth of the ripper.***

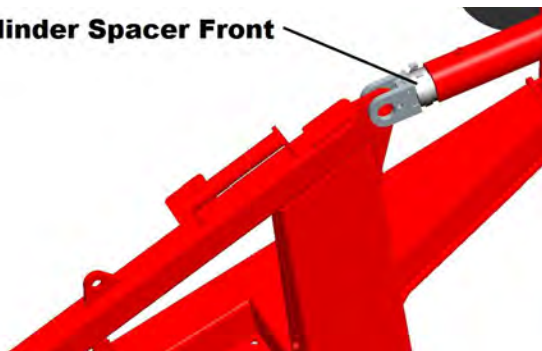
The ripper can be adjusted by means of spacers on the front cylinder or at the rear cylinder of the implement.

**Attention!**  
***Make sure the spacer is well secured onto the shaft***

### ***Front Cylinder Spacer***

Place both halves of the spacer over the cylinder shaft and use the clamp to join the spacers. More than one set of spacers can be used to get the desired working depth of the ripper. Remember to adjust the front depth wheel accordingly to the front cylinder spacer.

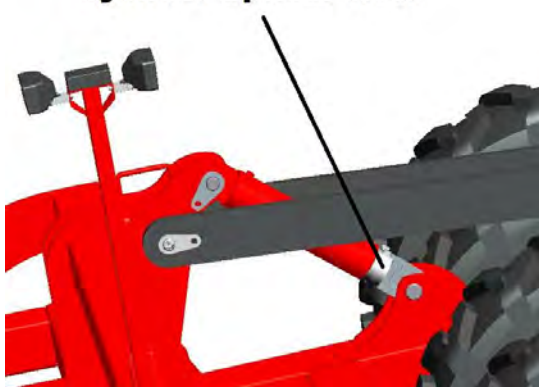
#### **Cylinder Spacer Front**



### ***Rear Cylinder Spacer***

Place both halves of the spacer over the cylinder shaft and use the clamp to join the spacers. More than one set of spacers can be used to get the desired working depth of the ripper.

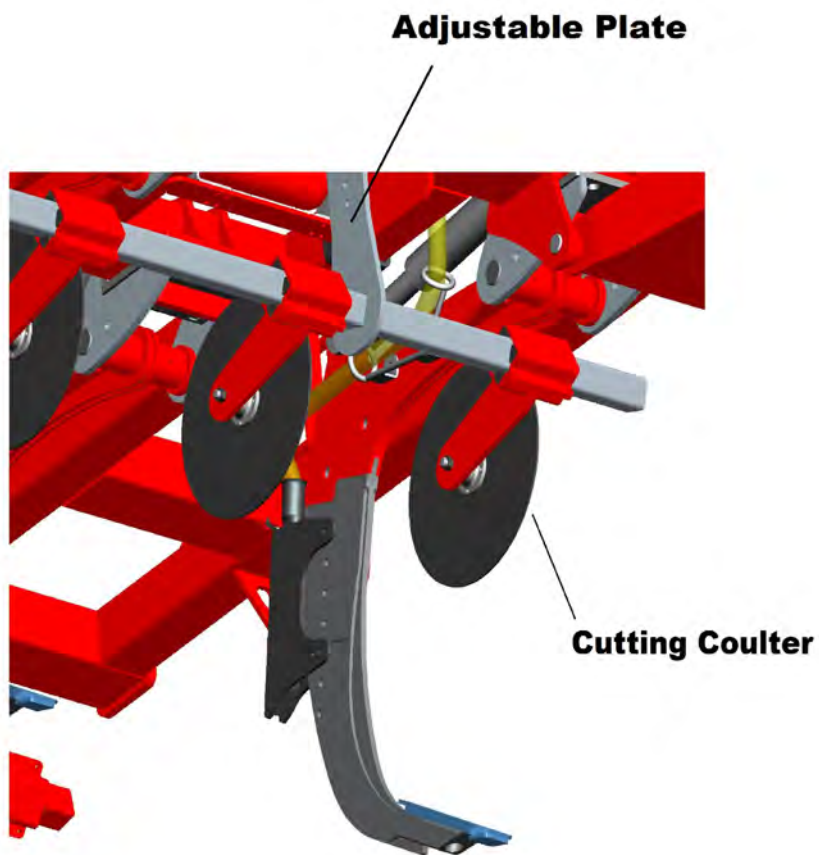
#### **Cylinder Spacer Rear**





### ***Cutting coulter Optional.***

The cutting coulter is located in front of the tine for cutting foreign body's e.g. sticks and stalks on the ground surface.  
The cutting coulters trip mechanism lays in the rubbers that each coulter arm possesses.  
To adjust the cutting coulters to a desired height one must loosen the adjustable plate, set it to the desired position and then fasten the adjustable plate.



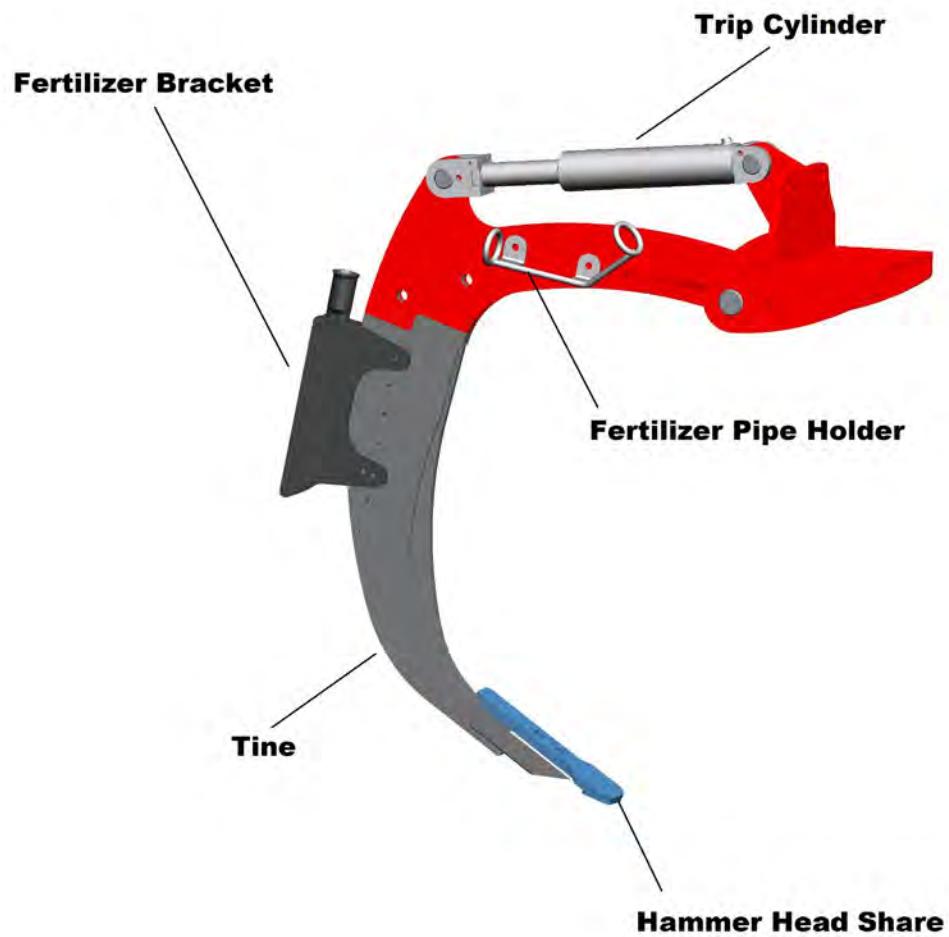
### ***Tine.***

The trip cylinder on the cultivator tine is used as a “hydraulic spring” to take the in packed of foreign body's in the soil like e.g. rocks.

The fertilizer bracket is used to guide fertilizer into the ground when the tine is cultivating.

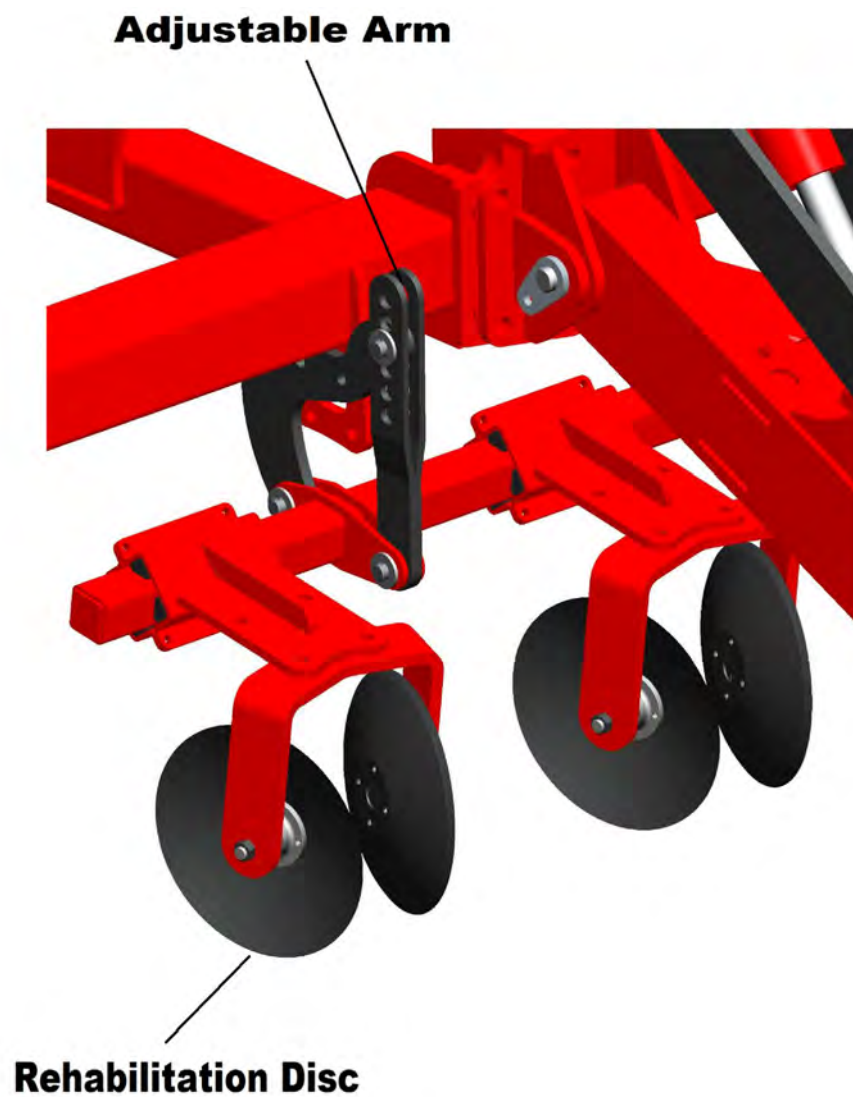
The fertilizer pipe holder is used to guide the pipe along the tine for save keeping.

Remember to do visual inspections of the hammer head share for wear.



### ***Rehabilitation Disc.***

The rehabilitation discs are positioned behind the tines to recover the soil to its original position. The trip mechanism lay's in the rubbers that each arm possesses. For adjustment to the closing discs there is a adjustable arm. This arm can be adjusted by means of moving the lever up or down.

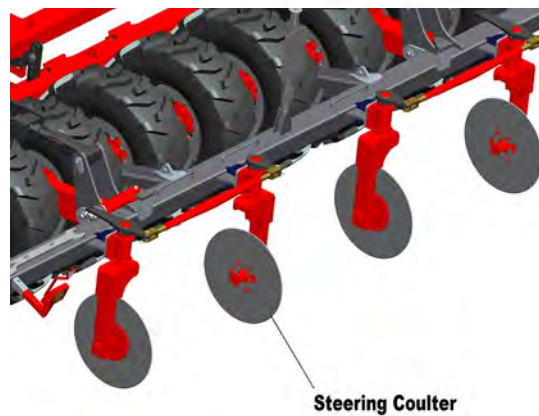
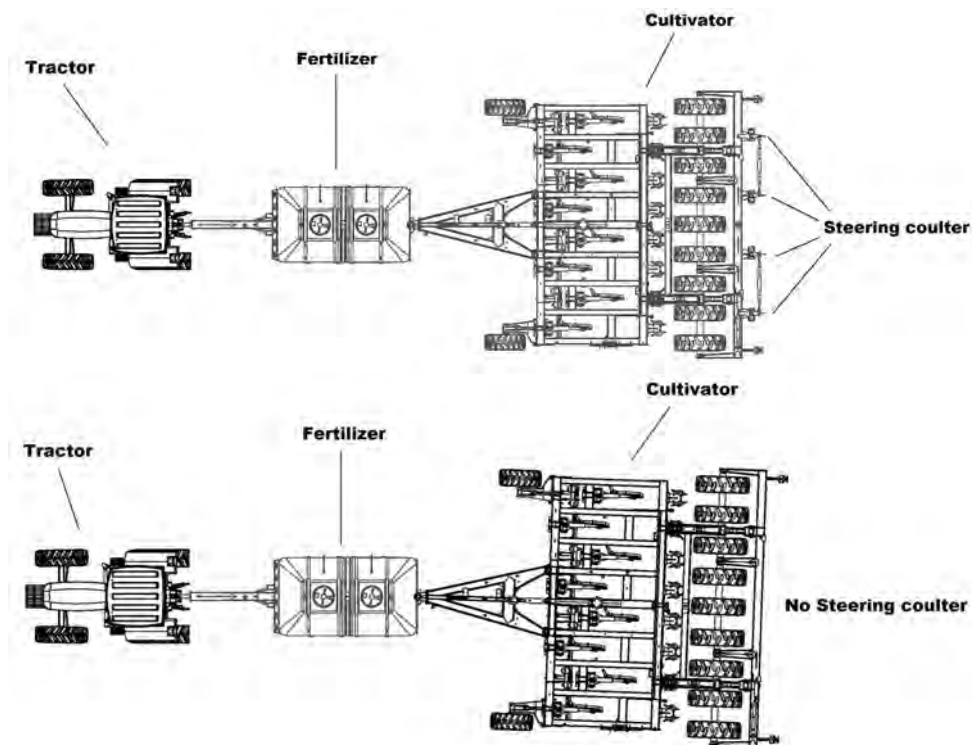


### ***Steering Coulter Optional.***

The steering coulter is positioned at the rear of the cultivator.

The use of the steering coulter is to correct the line of the cultivator, when hitched behind a fertilizer implement by means of a GPS system.

If the cultivator is only hitched on the tractor it is not necessary to use the steering coulters.



### ***Transporting Position.***

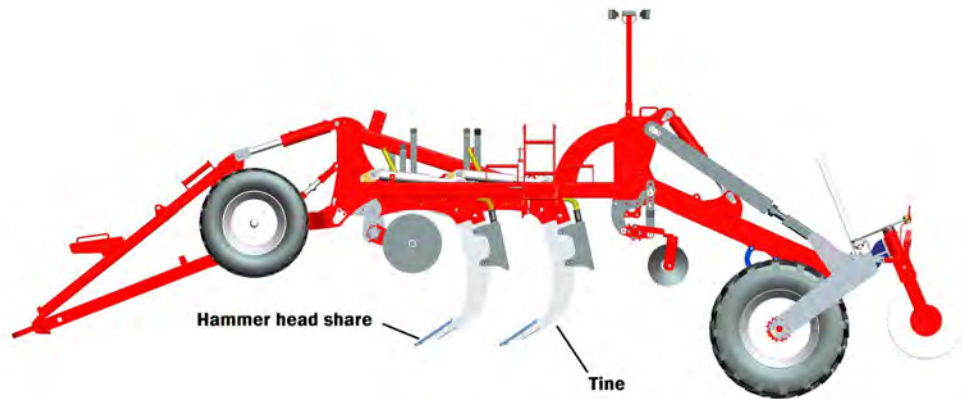
**Attention!**  
*Refer to Safety and accident prevention*

#### **STOP AND THINK SAFTY.**

Passengers are strictly forbidden to ride on the machine!

Make sure the cultivator is lifted to its maximum height when transported.

Transporting position is very important because if the cultivator is **NOT** lifted high enough, damage can occur to the hammer head share or the cultivator tine.



### ***Cultivating Position.***

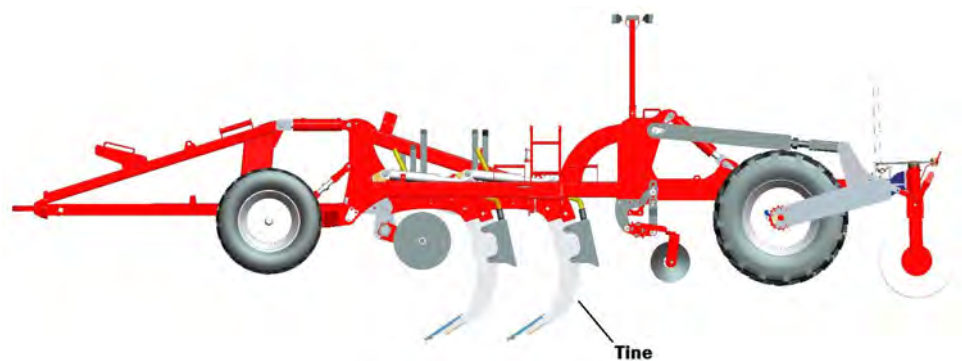
**Attention!**  
*No persons should be in the operating range of the cultivator*

#### **STOP AND THINK SAFTY.**

Passengers are strictly forbidden to ride on the machine!

The HR061 ripper is used to destroy deep compaction layers of the soil.

In order to use the cultivator for its indented use, accelerate to a desired cultivating speed (4-8km/h depending on the soil type) and gradually lower the cultivator tines into the soil. **DO NOT TURN WITH CULTIVATOR WHEN IN WORKING POSITION.**



## **Ladder.**

**Attention!**  
**Refer to Safety and accident prevention**

**DO NOT** unfold ladder when cultivator is in motion. You can injure your self or some one else.

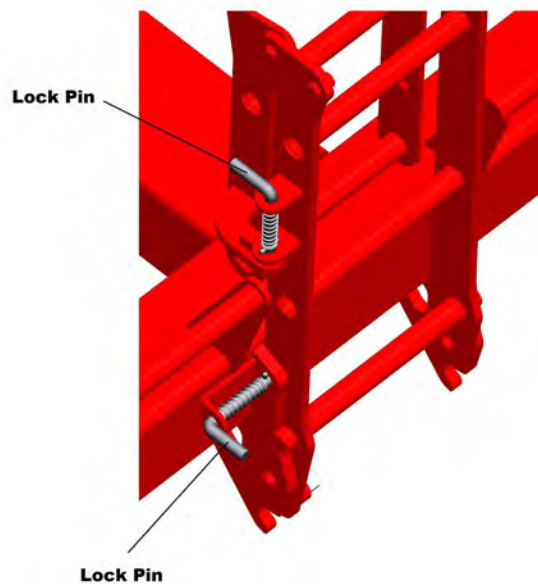
**ONLY** use ladder when cultivator is stationery.

Make sure lock pins is properly locked when ladder is not in use.

**Transporting Position & Stationery**



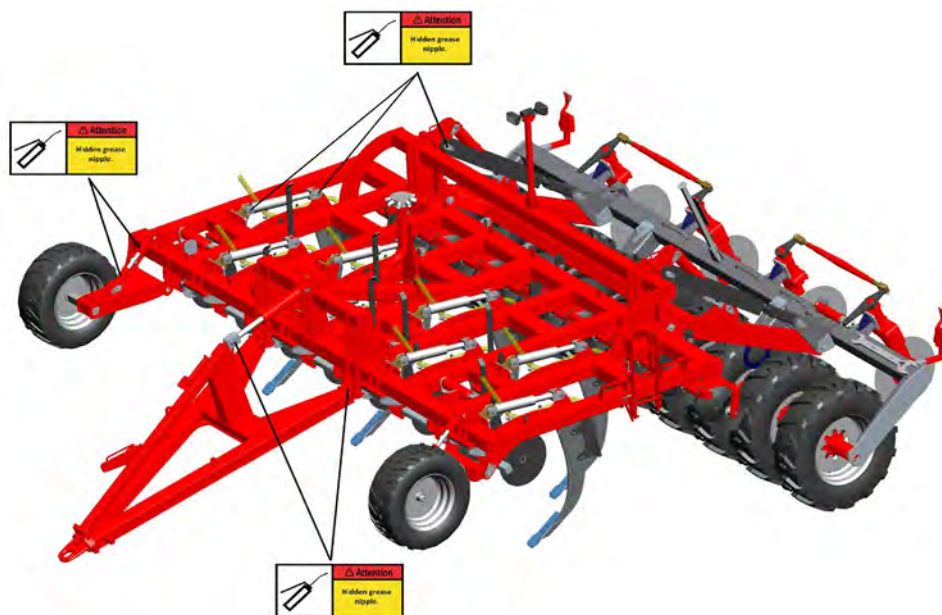
**Cultivating position**





## ***Lubricating the implement***

The implement should be lubricated regularly and after every pressure wash. This ensures operational reliability and reduces the costs of repair work and down times.



## ***Service & Storing.***

### ***Storing & parking the implement***

The implement should be parked under a roof.  
Park the implement on level and solid ground.  
Use landing leg to store implement.  
Disconnect hydraulic connector and hook into provided storage holders.  
Take care to protect the cultivator against pest animals like rodents, mice and rats.

### ***Cleaning***

The recommended cleaning and maintenance work should be carried out at regular intervals in order to maintain operation reliability and guarantee optimum performance. The hydraulic cylinders, bearings and stickers should not be cleaned with a high pressure cleaner or direct water jet. The seals and bearings are not waterproof under high pressure.

### ***Tire Sealant***

Packer tires are fitted with a sealant to prevent deflating.

## ***Serial Number Label.***

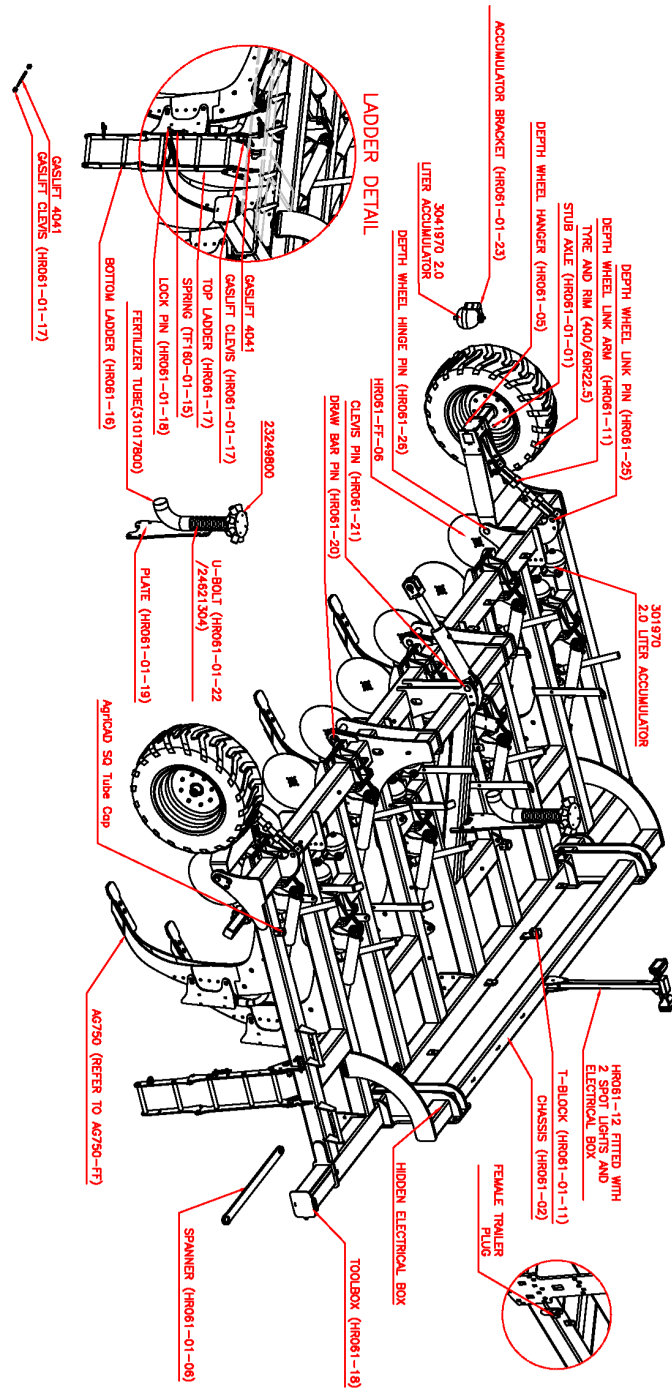
The implement serial number is indicated on the plate( see the example at the bottom).

This information is useful when inquiring implement spare parts.

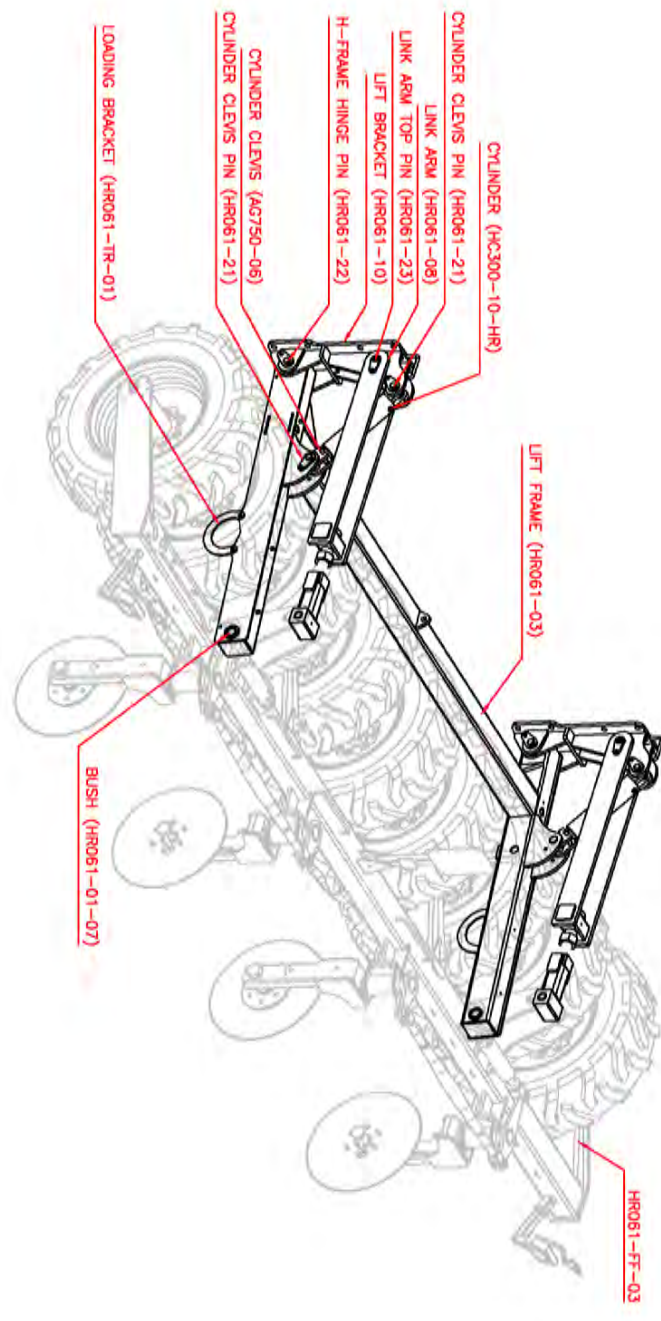




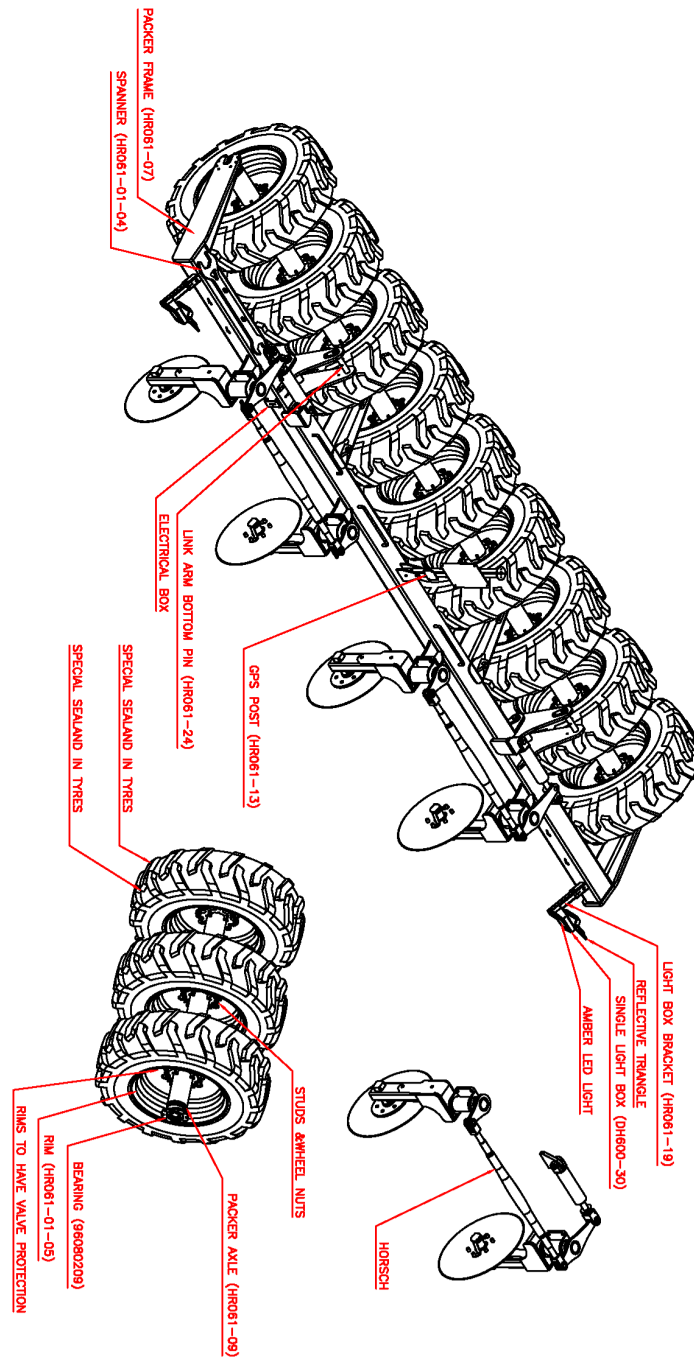
## Main Frame Assembly - HR061-FF-01



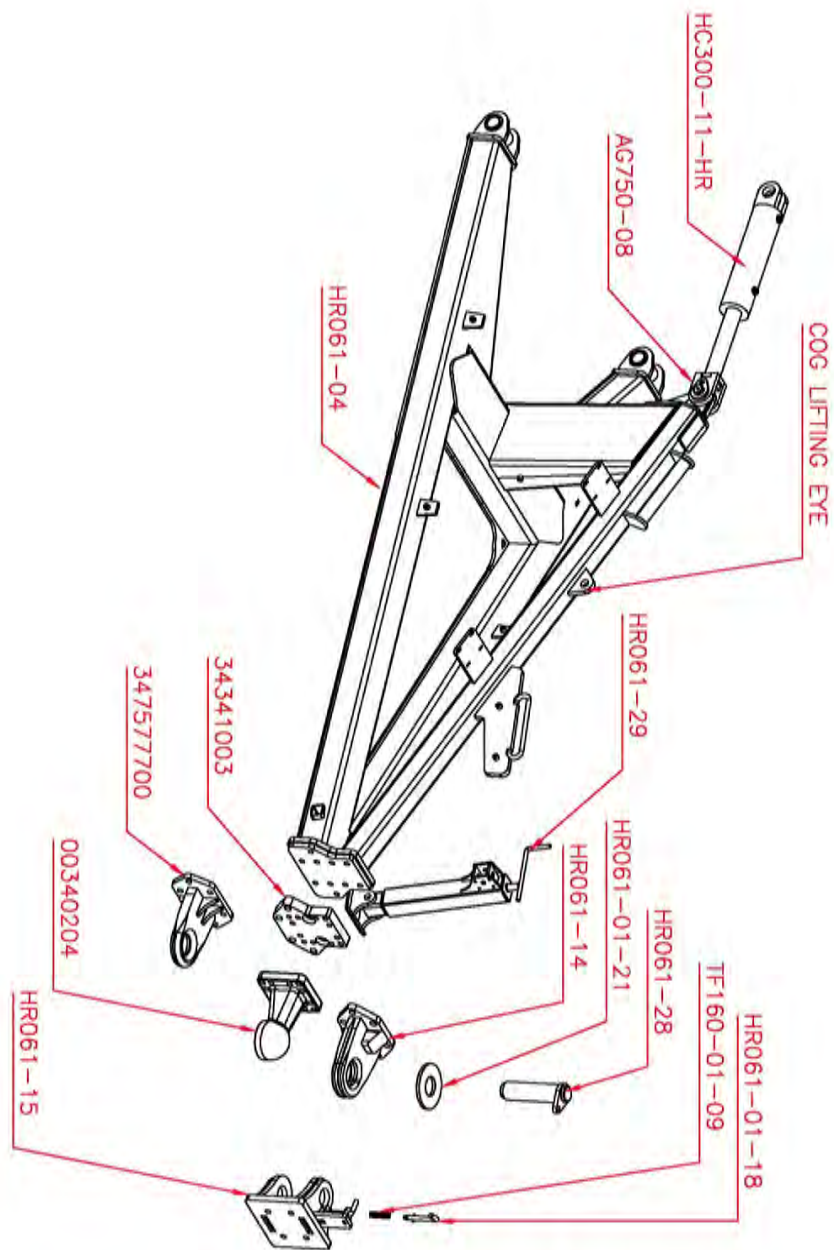
## Packer & Lift Frame Assembly - HR061-FF-02



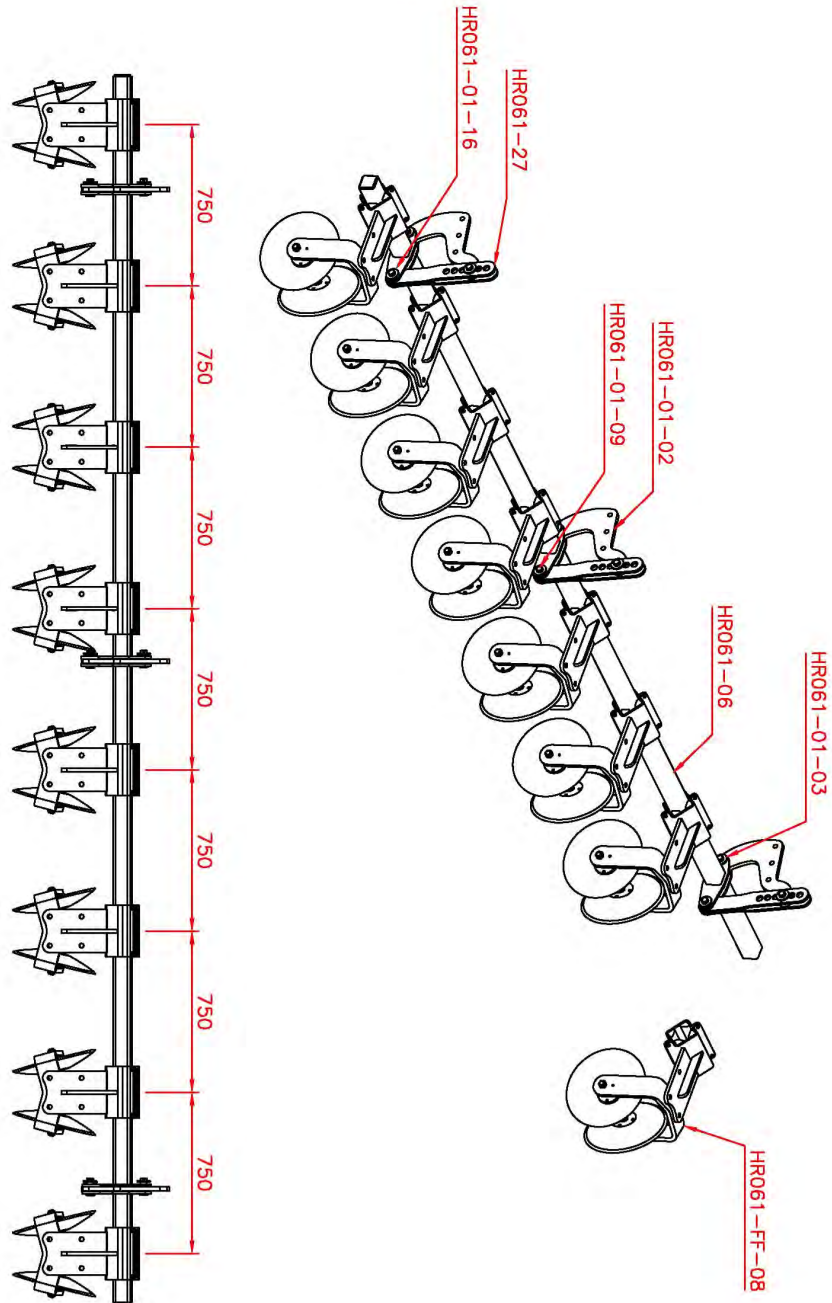
## Packer & Frame Assembly - HR061-FF-03



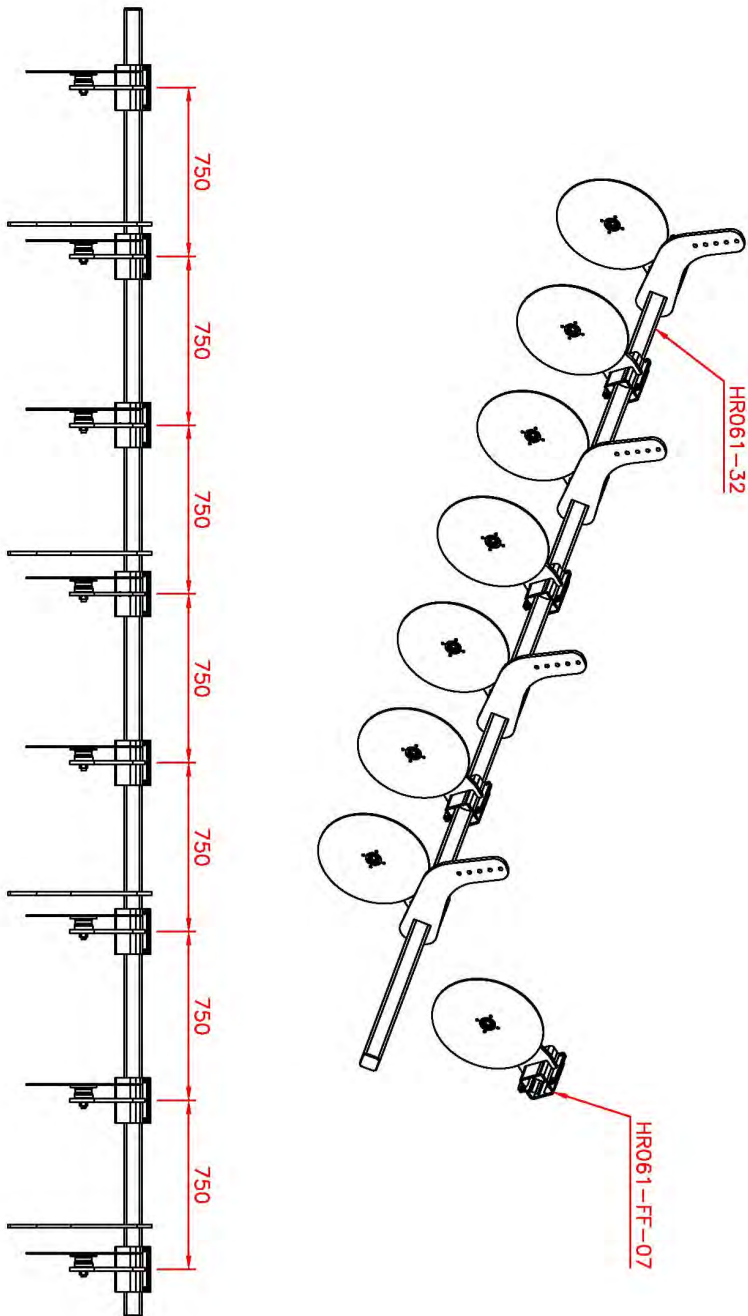
## Draw Bar Assembly - HR061-FF-04



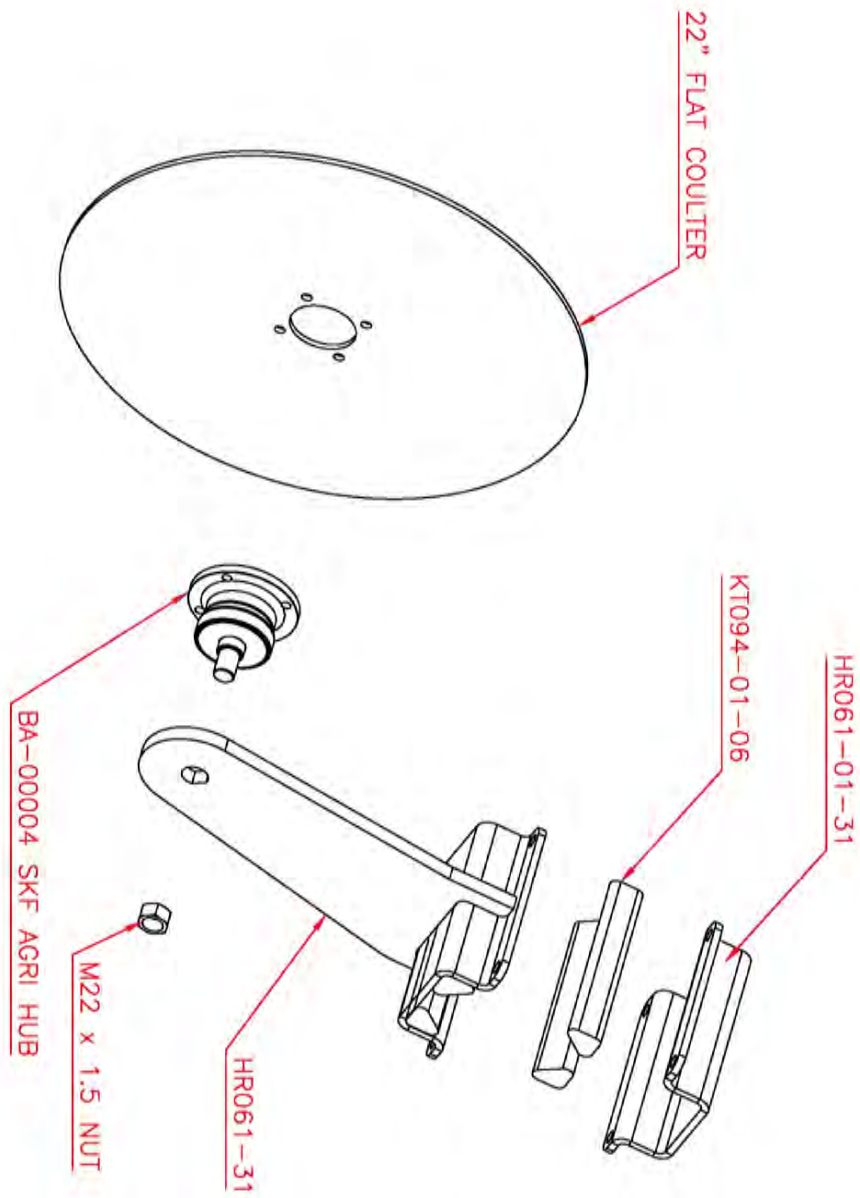
## Rehabilitation Discs Assembly - HR061-FF-05



Cutting Coulter Assembly - HR061-FF-06

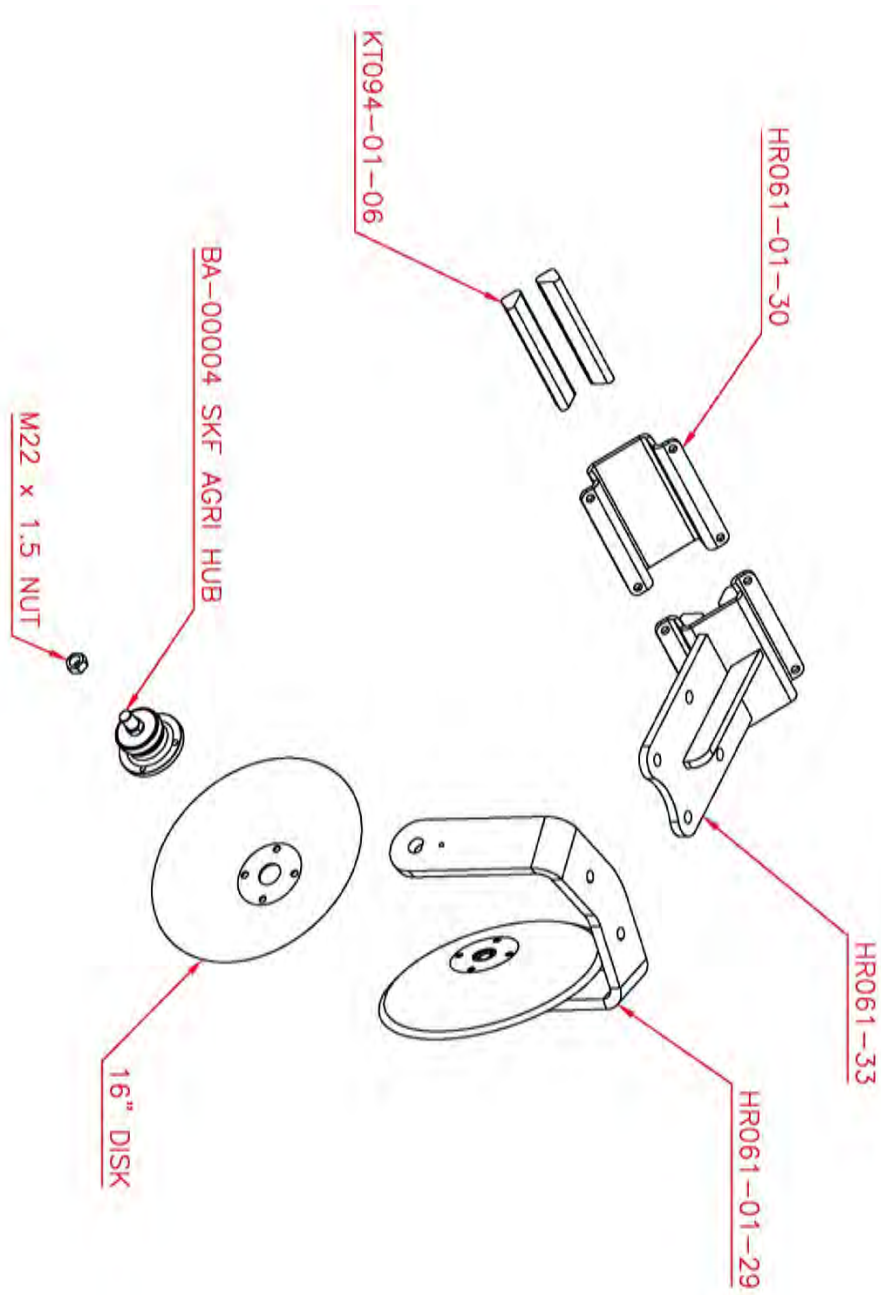


## Cutting Coulter Assembly - HR061-FF-07



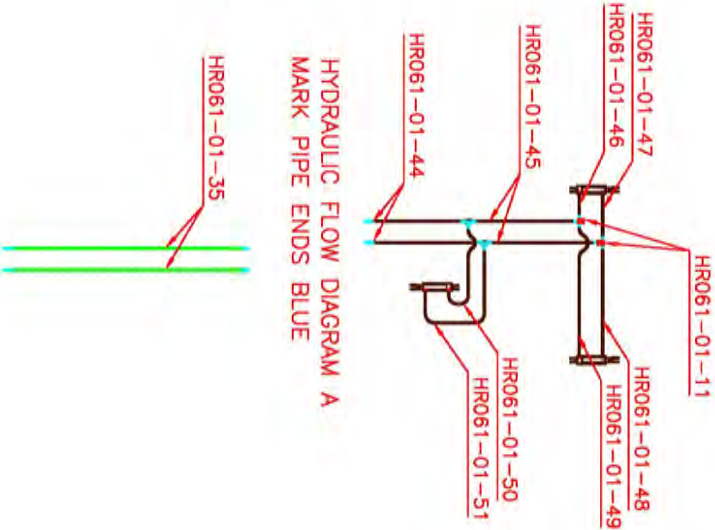
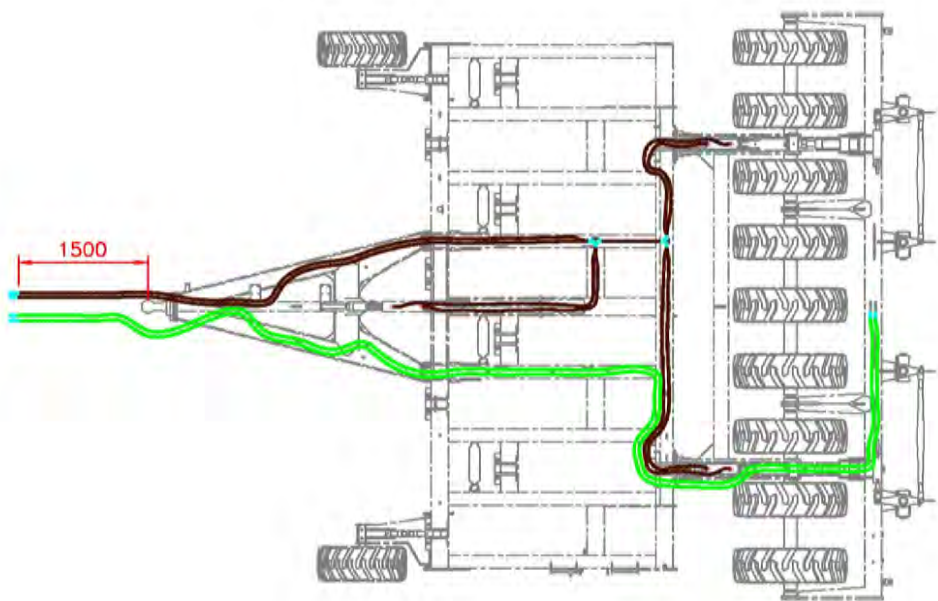


## Rehabilitation Disc Assembly - HR061-FF-08





Hydraulic Layout - HR061-HD-01



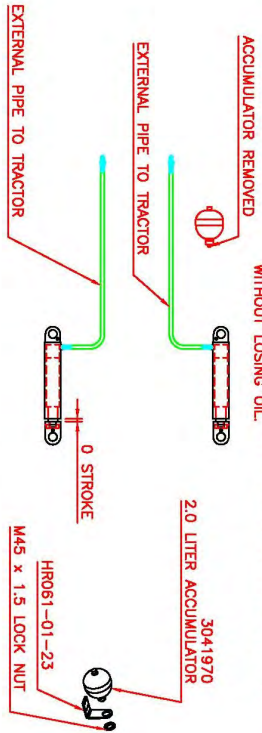
HYDRAULIC FLOW DIAGRAM B  
MARK PIPE ENDS YELLOW

## Bleeding Diagram - HD061-HD-02

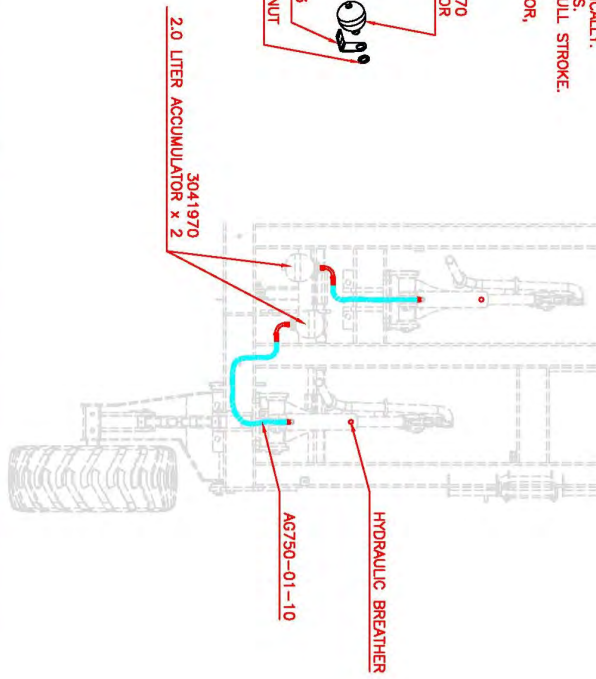
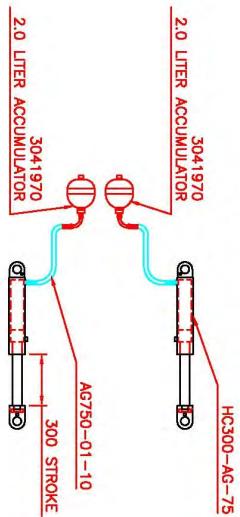
## BLEEDING DIAGRAM

**BLEEDING INSTRUCTIONS**

- \*STEP 1 - ASSEMBLE AS IN SKETCH DOWM. (ACCUMULATOR REMOVED)
- \*STEP 2 - CYLINDERS MUST BE IN DOWN STROKE (FULLY CLOSED)
- \*STEP 3 - CYLINDERS MUST BE FREE, NOT CONNECTED MECHANICALLY.
- \*STEP 4 - COUPLE EXTERNAL PIPE TO TRACTOR WITHOUT LEAKAGES.
- \*STEP 5 - PUSH OIL INTO SYSTEM UNTIL BOTH CYLINDERS AT FULL STROKE.
- \*STEP 6 - RELEASE PRESSURE FROM SYSTEM AT TRACTOR.
- \*STEP 7 - REMOVE EXTERNAL PIPE AND RECONNECT ACCUMULATOR, WITHOUT LOSING OIL.
- \*STEP 8 - REMOVE



## HYDRAULIC FLOW DIAGRAM



## HYDRAULIC ROUTING AND FITMENT TO MAIN FRAME

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## WARRANTY REGISTRATION

Dealer to complete and send to Info@agricad.co.za or fax to 0861001203

Implement: .....

Serial Number: .....

Dealer: .....

Customer Name: .....

Date of Sale: .....

Signature Client: .....

Dealer Stamp:

This implement carries a one year warranty on parts and workmanship under normal and intended use. This warranty is limited to the repair and/or replacement of defective parts.

No wear parts are covered under warranty.

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Manufactured in South Africa

for African conditions by

AgriCAD Pty (Ltd)

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