

**HSAB**

HENRIKSSON SALIX AB

September 2022

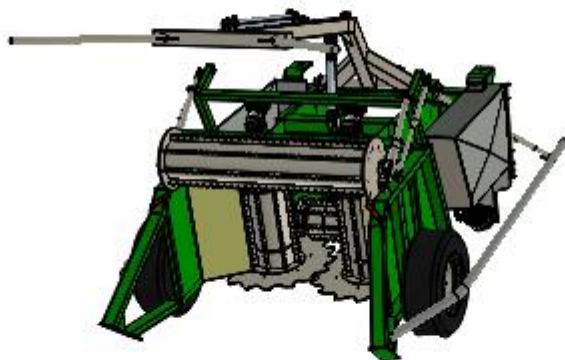
**MK 5**



## NOTES

1

Film, 4 sec., in the digital manual)



2

This Manual is available on [www.salixab.se](http://www.salixab.se)

<b>CONTENTS</b>	<b>PAGE</b>
<b>Welcome</b>	<b>4</b>
<b>Introduction</b>	<b>5</b>
<b>Warnings and Definitions in this Manual</b>	<b>6</b>
<b>Safety</b>	<b>7-9</b>
<b>Intended Use, Warranty, Specifications</b>	<b>10-13</b>
<b>Content of the Freight Package</b>	<b>14</b>
<b>Mounting the HSAB MK V to the John Deere Forage Harvester</b>	<b>15</b>
<b>First start-up</b>	<b>16</b>
<b>Harvesting with the HSAB MK V</b>	<b>17</b>
<b>Service and Maintenance</b>	<b>18</b>
<b>Maintenance Schedule – 10 hours</b>	<b>19</b>
<b>Changing Saw Blades</b>	<b>20</b>
<b>Changing of the Hydraulic Motor for the saw blades/ feed rollers</b>	<b>21</b>
<b>Troubleshooting</b>	<b>22-23</b>
<b>Spare Parts List</b>	<b>24- 42</b>



## WELCOME to Henriksson Salix AB

We would like to welcome you to our family business dedicated to the use of Short Rotation Coppice (SRC) crops as a carbon neutral source of biomass.

As well as the knowledge we have accumulated over three decades working in this field, we have designed and developed a range of machines to enable producers to economically establish SRC plantations and efficiently harvest them.

This Operator's Manual, deals with our SRC Cutting Head - the HSAB MK V. Each Head is hand-made by skilled craftsmen in Sweden and is the result of decades of practical experience harvesting SRC's such as willow and poplar. With the challenge of cutting such a tough crop, we decided early on to make the HSAB MK V a fully hydraulic head in order to deliver a capable & reliable design. Being fully hydraulic, the HSAB MK V has fewer parts, resulting in lower maintenance schedules and greater durability. More importantly, the design has evolved, as our knowledge has, to ensure that the stress to the base machine is minimized by delivering the stems at the right speed and angle to the feed rollers and chopper drum; turning your John Deere into an efficient producer of biomass chips, whilst protecting your investment. With our farming roots, we appreciate the investment already made in equipment by farmers and decided to focus on an attachment that could utilize this investment during the seasonal "down-time". Thus, we are very proud to present the HSAB MK V!

Our burgeoning growth in knowledge and experience, is also applied to our other machines, and combined with our expertise, has helped establish some of Europe's leading energy plantations, contributed to our understanding of SRC biomass crops through scientific research and made us a leading player in the growing SRC market.

4

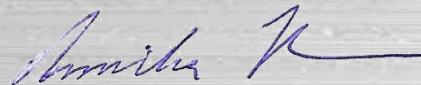
As with any specialist manufacturer, our product knowledge and support service is very personal and efficient, resulting in a fast and friendly customer service.

However, this manual is intended to help you get the most out of your investment and we recommend that you take the time to study it carefully.

We also invite you to visit our website ([www.salixab.se](http://www.salixab.se)) where you will be able to keep up-to-date with the latest advances in our harvesting technology.



GUNNAR HENRIKSSON  
TECHNICAL MANAGER



ANNIKA HENRIKSSON  
GENERAL MANAGER

## INTRODUCTION

This operator manual is designed primarily for supervisors, maintenance personnel and operators. It is essential that all personnel concerned should study this operator manual prior to use of or servicing the machine. Responsible supervisors shall satisfy themselves that operators, maintenance personnel and other interested personnel, are familiar with the HSAB MK V's operation, function and safety. Particular attention should be paid to the safety section on page 7 in the manual.

The HSAB MK V is manufactured in compliance with EC-Council directives on mutual approximation of the laws of the Member States relating to machinery 2006/42/EC. A signed CE certificate in original accompanies the HSAB MK V head at the delivery.

5

### MANUFACTURER:

HENRIKSSON SALIX AB  
Almhög  
241 92 Eslöv  
SWEDEN



YEAR OF MANUFACTURE: .....  
(to be filled in)

### MACHINE TYPE:

HSAB MK V - is a fully hydraulic cutting head to be mounted on a Forage Harvester to cut and feed Short Rotation Coppice (SRC) stems.

### SERIAL NUMBER:

.....  
(to be filled in)

### AREA OF USE:

Designed to be mounted on a John Deere Forage Harvester 8000 series for the task of harvesting SRC's such as willow and poplar.  
For all other uses, the manufacturer does not offer any warranty.

## WARNINGS AND DEFINITIONS IN THIS MANUAL



**Note!**

**Important information for the correct operation of the equipment**



**Warning!**

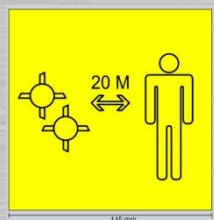
**Warning of the risk of damage to the equipment**



**Danger!**

**Warning of the risk of personal injuries**

### WARNING SIGNS ON THE HSAB MK V



### DEFINITIONS

**SRC**

**Short Rotation Coppice**

**FORAGE HARVESTER** John Deere 8000 series

**HOLDER**

**The person/organization which owns/runs the HSAB MK V**

**OPERATOR**

**One or more persons who are responsible for installing, using, adjusting maintaining, cleaning, repairing, moving or transporting the HSAB MK V**



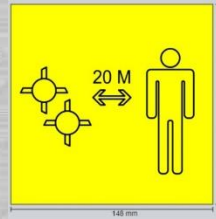
## SAFETY

### DANGER ZONE

The expression 'danger zone' refers not only to areas behind permanent protection devices etc., but also the area around the machine ( $r = 20\text{m}$  from complete machine's outer border). Ensure that nobody is within this area whilst the machine is in operation and/or not secured.



**Never go closer than 20 meters when the machine is in operation.**



Watch out for these warning symbols

### PREVENTION OF ACCIDENTS OR INCIDENTS

Government and local regulations for the prevention of accidents must be followed.

Recommended personal protective equipment should be used.

The Holder must see to that the Operators receive the relevant information concerning the accident risks and how best to protect themselves.



**NOTE!**

### AVOID ACCIDENTS BY

Before maintenance work on the HSAB MK V head, the Forage Harvester has to be stopped and the ignition key removed. If working underneath the HSAB MK VI head, ensure that the Forage Harvester's Lift Cylinder has been blocked.



**NOTE!**

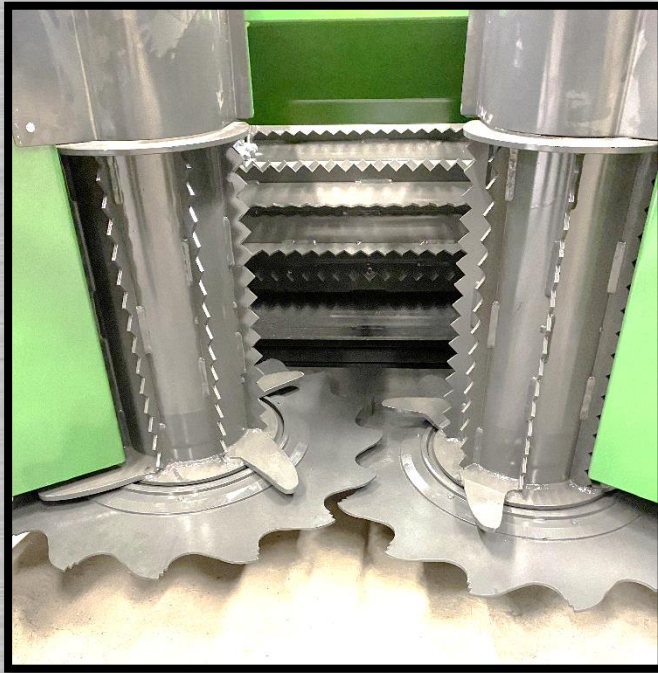
Working equipment that has been stopped shall be secured against accidental movement so that it can only be put into motion by intention.

When performing service work on the equipment, always put a sign with the text "WORK IN PROGRESS - DO NOT START!" to be clearly visible in the Forage Harvester's cabin.

**SAFETY -**  
be ware of  
very fast  
rotating  
parts



**Danger!**



**Cutting Discs**



**Feed Rollers**

8

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# SAFETY - modifications, warranty and scrapping

## Noise

The machine may reach the level 89 dB(A).

The measurement has been done with instrument model YF-20 sound level meter, 2.0 m horizontally from the machine's front and 1.5 m vertically from the floor level.

Use hearing protection during long exposures.

## Modifications

Modifications, changes, replacing with spare parts which do not meet the manufacturer's specification and which may effect the capacity, function or safety are forbidden without the manufacturer's written consent.

## Preventing accidents

The Holder shall see to that the Operator is familiar with the safety risks and preventive actions.

## Warranty

The Manufacturer is liable for defects in the machine resulting from faulty design, specification, materials or workmanship provided that such defects are attributable solely and exclusively to the manufacturer.

The manufacturer is liable only for defects that appear under the intended and proper use of the machine as defined in this Manual and is not liable for any defects due to the installation. The liability does not cover defects caused by faulty maintenance, handling, transport or incorrect storing by the Holder, alterations of the machine or normal wear and tear and deterioration. Defective hydraulic parts must be returned.

## Scrapping

The basic construction does not contain any heavy metals, chemical or other hazardous components which could prevent dismantling of a scarp machine. For hydraulic oils and electronic equipment, follow the local waste management regulations.

9



**NOTE!**



**NOTE!**



## INTENDED USE

This HSAB MK V is designed to be mounted on a John Deere 8000 series Forage Harvester, equipped with the optional auxiliary high flow hydraulic system and PBST transmission, for harvesting Short Rotation Coppice crops, in single or double rows, with a recommended cutting point diameter of 70 mm measured 30 centimeters above ground. It must not be used alone or together with any other type of machine. The HSAB MK V is operated via hydraulic systems which take their power from the Forage Harvester.



10

## WARRANTY

The warranty is valid for the intended use as defined above and covers a period of one year from the date of delivery.

Note that the on-site instructions stipulated in the sales/purchase agreement between HSAB and the buyer of the new HSAB MK V is a prerequisite for the warranty.



# HSAB MK V ON A JOHN DEERE, 8000 SERIES

PUSH BAR

11



BRANCH DEFLECTORS

## SRC Cutting Head - HSAB MKV

The HSAB MKV Head, is a precision engineered fully hydraulic head, with the power to cut tough woody material quickly and efficiently. In order to perform this task reliably, it must be connected correctly to the Forage Harvester's hydraulic systems. Below, are side views of the HSAB MKV to ensure the owner/operator is aware of the correct connections.

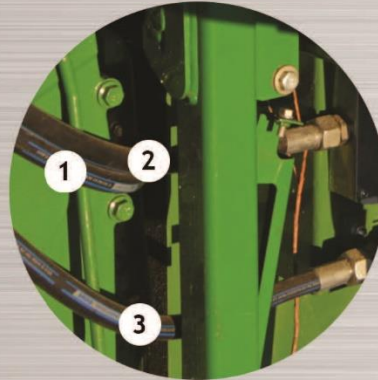
Hydraulic Hoses:

- 1 - Leak Hose
- 2 - Feed Roller
- 3 - Feed Roller

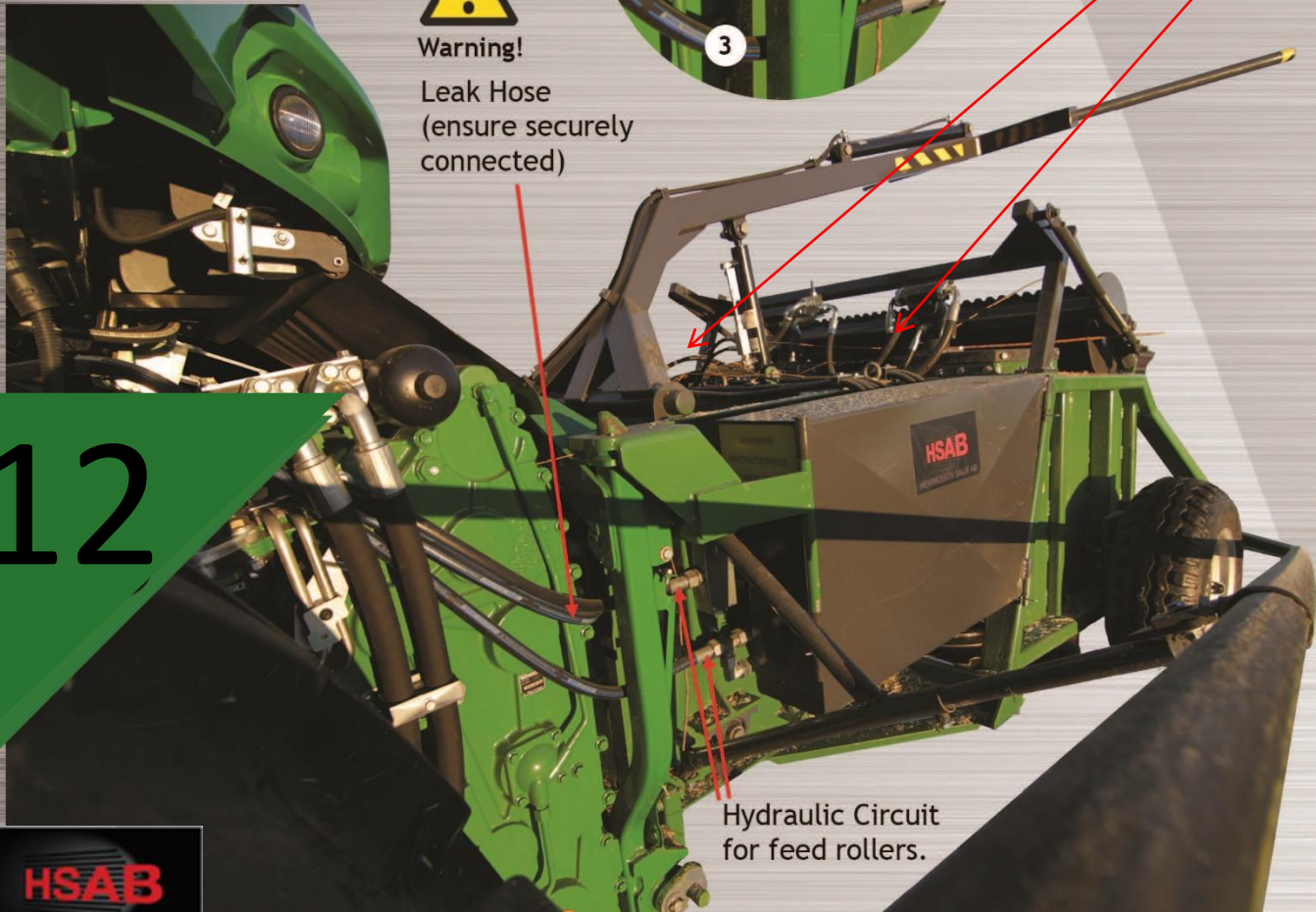


**Warning!**

Leak Hose  
(ensure securely  
connected)



Hinge points, one on each side



12

Hydraulic Circuit  
for feed rollers.

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Never touch a leaking hydraulic hose under pressure, always ensure the hydraulic system is depressurised first.

### Required of the Forage Harvester:

- Primary hydraulic system
  - 115 l/min @350 bar
- Secondary hydraulic system
  - 95 l/min @250 bar
- PBST transmission

# 13

Hinge point, Oil tank

Hydraulic Circuit for push bar.

Safety Valve

Hydraulic Tank for Saw Blade hydraulic circuit.

Check oil level when machine is in horizontal position

NOTE!

### Specifications:

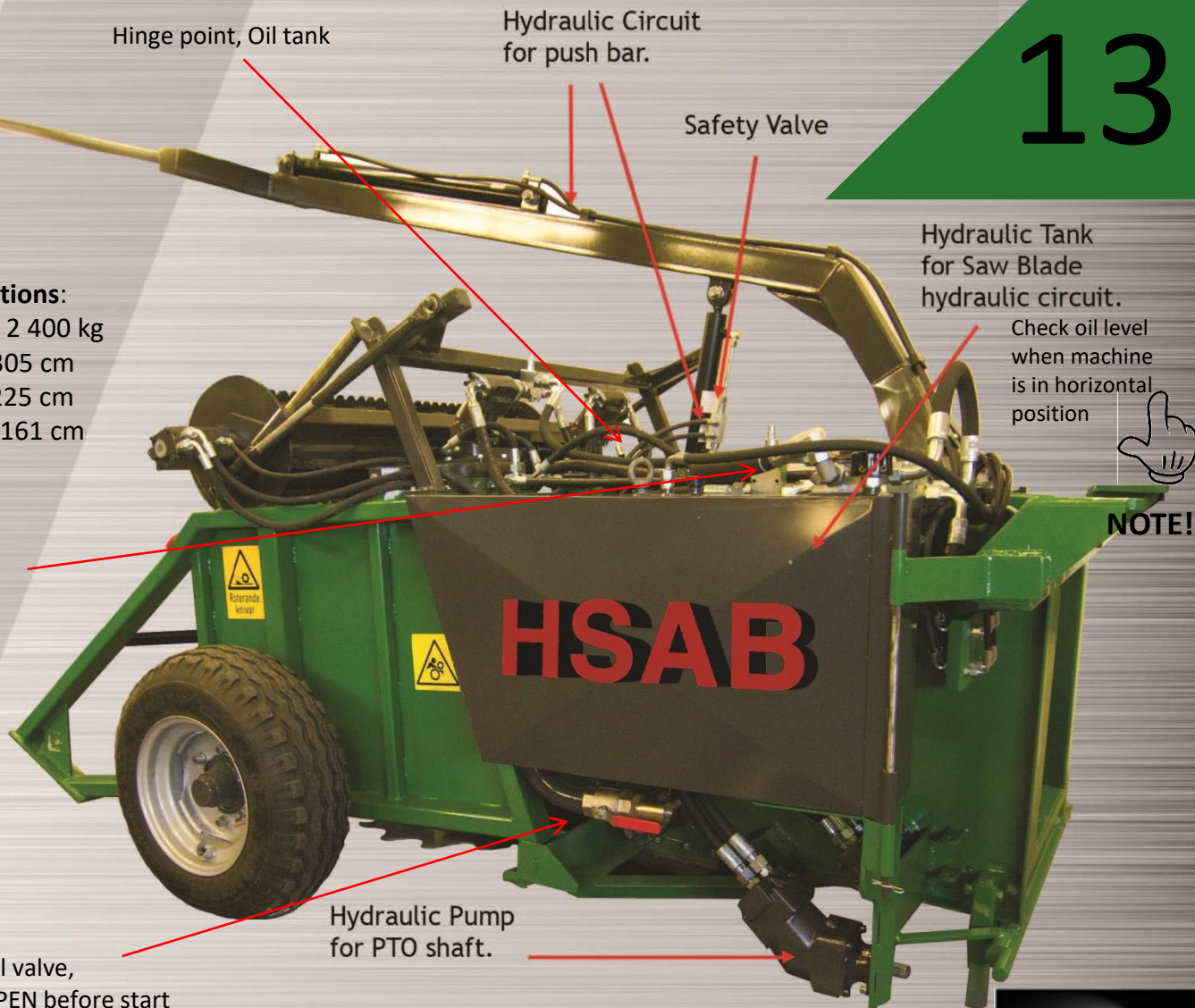
Weight – 2 400 kg  
Length- 305 cm  
Width - 225 cm  
Height – 161 cm



Pressure gauge

Hydraulic Pump for PTO shaft.

Oil valve, OPEN before start



## CONTENT OF THE FREIGHT PACKAGE

**HSAB MK V SRC** cutting head, weight 2 400 kg, length 305 cm, width 225 cm, height 161 cm. With **Hydraulic oil**.

**PUSH BAR**, to be mounted on the head, pushes the stems forward

**BRANCH DEFLECTORS**, to be mounted on the head, deflects the standing stems along the harvested row, prevent that the standing stems are being run over by the Forage Harvester

**SUPPORT WHEELS**, to be mounted on the head

**SPARE PARTS**, optional, ordered spare parts

## ASSEMBLY OF THE HSAB MKV

**LIFTING THE MACHINE**, the machine can be lifted in the two hinge points shown on page 10, DO NOT LIFT WITH A FORK TRUCK, IT MAY DAMAGE THE SAW BLADES!

**WHEELS**, check the tyre pressure and adjust if necessary to 2,5 bar. Mount the wheels and tighten the nuts with a torque to 150 Nm.

**PUSH BAR**, this mounting requires 2 persons, lift the push bar in place and mount the hydraulic cylinder in its holder.

**HYDRAULIC OIL**, the oil tank of the HSAB MK V contains mineral hydraulic oil, viscosity 46, to drive the Saw Blades. The Feed Rollers are driven by the Forage Harvester's auxiliary hydraulic system.

**OIL LEVEL**, check the oil level in the tank with the oil stick, make sure that the tank is horizontal. The oil level should be checked before starting and after the Forage Harvester has reached the working temperature.

**OIL PRESSURE**, DO NOT HARVEST WHEN THE PRESSURE GAUGE SHOWS RED



Warning!

14



Warning!



## MOUNTING THE HSAB MK V TO THE JOHN DEERE FORAGE HARVESTER

Remove the adapter plate (yellow/green) before mounting the HSAB MK V.

Hang the HSAB MK V cutting head onto the John Deere's hang points shown in the figure below.

Lock the HSAB MK V with the lower clamps, shown in the figure below.

Connect hose 1, (oil drain hose from the feed roller motors, see page 12, 13) to the hydraulic tank of the Forage Harvester.

Connect the hoses 2 and 3 (see page 12) to the Forage Harvester's auxiliary hydraulic system.

Connect the Forage Harvester's PTO shaft to the HSAB MK V.

# 15

JOHN DEERE  
8000 SERIES  
CUTTING  
BOARD



Lower clamps

Remove the adapter  
plate before  
mounting the  
HSAB MK V on the  
cutting board



Warning!

## FIRST START UP

**Make sure that nothing has fallen in between the Feed Rollers or Saw Blades during the transport.**

Open the Valve under the oil tank on the HSAB MK V, see page 13.

Start the Forage Harvester and let it idle.

Engage the PTO at the lowest speed, listen for any irregular noise and look for oil leakages.

Stop the PTO.

Engage the feed rollers from the Forage Harvester's hydraulic system, listen for irregular noise and look for oil leakages.

Start the PTO and let the oil reach working temperature.

**VERY IMPORTANT**, check the pressure gauge (see page 13) on the oil filter on the oil tank of the HSAB MK V. If it shows **RED**, the oil is too thick and the filter may explode if further stressed.

The temperature should be at least 20 °C before the HSAB MKV is working.

When the oil has reached working temperature, carefully increase the Forage Harvester's engine to working speed 2000 RPM.

Check the speed of the feed rollers (180-220 RPM) and saw blades (1600-1800 RPM) with a tachometer.



**Warning!**



# 16

Finally check the oil level

Operate the PUSH BAR in/out, up/down

## ROAD TRANSPORT

Before road transport, fold in the DEFLECTORS and the PUSH BAR.

## HARVESTING with the HSAB MK V

The ideal conditions for the HSAB MK V is a SRC crop planted in single or twin rows with a minimum distance between the rows of 1.8 meters.

Adapt the speed to the ground conditions and to the growing character and thickness of the crop.

Ideal stem diameter is 70 mm measured 30 cm above the ground.

Avoid driving the Forage Harvester on the stumps in order to minimize the risk of punctures. OPTIONAL; heavy duty tyres.

17





## SERVICE & MAINTENANCE

The HSAB MK V is built to be as service and maintenance free as possible. However, some servicing must be undertaken on a regular basis, as listed in the following pages. The most important preventative maintenance consists of keeping the HSAB MK V clean of foreign objects. Get into the habit of listening for irregular noises and sensing any irregular movements; these can be the early warning signs that service or maintenance is required. By paying attention, a large repair might stop at a minor adjustment!

During maintenance work on the HSAB MK V, the Forage Harvester must be stopped and the ignition key removed.

Before the HSAB MK V is put back into the field, please check that all protection guards and covers have been mounted.



**NOTE!**



**NOTE!**

## DAILY MAINTENANCE SCHEDULE

The Saw Blades should be checked and sharpened daily. See instruction film on You Tube:

<https://www.youtube.com/watch?v=J5bkmtvVU1w> (search words: HSAB saw blades maintenance)

Verify (daily) that all mounting bolts are present and are properly fastened. Threads must be locked with locking fluid; Loctite or similar.



## WEEKLY/MONTHLY MAINTENANCE SCHEDULE

The monthly maintenance should be carried out by regular service personnel. The service consists mainly of the cleaning of the HSAB MK V's moving parts. Also, make sure that hydraulic hoses are intact and functional. All safety guards must be fitted if the HSAB MK V is connected to a started Forage Harvester.

Verify that there are no leaks in the hydraulic system (WARNING - never touch a leaking hydraulic hose under pressure, always ensure the hydraulic system is depressurized first).



**DANGER**

Correct any faults. If in doubt about the correct function of the HSAB MK V, contact a qualified personnel.

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## MAINTENANCE SCHEDULE - 10 HOURS

# 19



Do not forget to replace the protection cover.

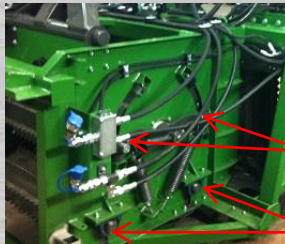


Remove the protection cover to reach the Gearwheel. One on each side of the MK V Head



Clean daily (10hrs) with a screwdriver or similar. Gear wheel free motion margin shall be adjusted annually. It should have a floating gap of 0.2 mm. It may not be lubricated.

Lubricating Points 1/2/3 /4  
Open the righthand side cover to reach the lubricating points on the rollers.



Grease nipples are filled with machine grease\* from a grease gun

Upper rollers

**Important!**

**Rotate the Upper Rollers to locate the grease nipple.**

Lower rollers

Lubricating Points 5/6/7



In addition, lightly grease the feed roller sliding rail.

Grease nipples are filled with machine grease\* from a grease gun.

Lubricating Point 7/8



Grease nipples are filled with machine grease\* from a grease gun.



**Important!**

**\*Only use machine grease of high quality**

## CHANGING SAW BLADES

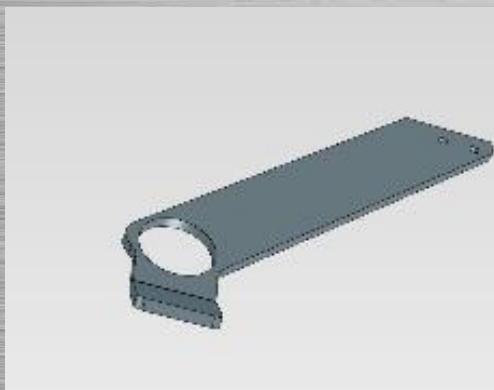
Remove the Bearing Support (ART NO 1510/2510), remove the Bearing, remove the old Saw Blades, mount the new Saw Blades in reverse order.



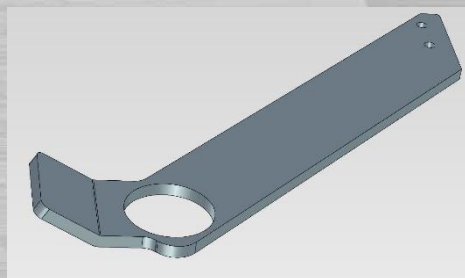
**Warning!**

**OBSERVE!** The Bearing Support must be in line, do **NOT** force the Bearing Support in place.

If the Bearing Support is damaged or cannot be mounted properly, it must be replaced.



**Bearing support, lefthand side**



**BEARING  
SUPPORT  
Lower  
bearing**

**Bearing support, righthand side**

20



**Warning!**

## CHANGING SAW BLADES

If the Bearing Support is mounted wrongly or is forced in place it will wear out the Bearings very rapidly which may cause serious damage to the Blade Shaft and its housing.



**Danger!**

## CHANGING SAW BLADES

Before any repair or maintenance make sure that nobody can start the Forage Harvester. Do **NOT** leave the key in the ignition!

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## CHANGING THE HYDRAULIC MOTOR FOR THE SAW BLADES OR THE FEED ROLLERS

Remove the hydraulic hoses.  
Remove the Hydraulic Motor.  
Clean the mounting surfaces.  
Grease the splines.  
Mount the new Hydraulic Motor.



# 21

Make sure that the hoses are mounted in the right place.  
If not, the Hydraulic Motor will operate in the wrong direction.

Do NOT forget to connect the oil drainage hose.



**NOTE!**



**Danger!**

Before any repair or maintenance make sure that nobody can start the Forage Harvester. Do NOT leave the key in the ignition!



## TROUBLESHOOTING

### PROBLEM

### POSSIBLE CAUSE

### PROPOSED ACTION

The feeding through the HSAB MK V does not work properly

Driving too fast  
The crop is too coarse  
The Saw Blades are blunt  
The Saw Blades are incorrectly sharpened  
The Saw Blades are worn out  
Branches or foreign objects are blocking the feeding channel on the board.  
Branches or foreign objects are blocking the feeding channel on the machine.  
Branches hits the shear bar in the Forage Harvester.  
The Feed Rollers do not rotate.

Reduce the speed.  
See page 10, 17.  
Sharpen the Saw Blades, see page 18.  
Change the Saw Blades, see page 20.  
Clear the feeding channel.  
Check that the feed rollers of the Forage Harvester are working properly.  
The rollers on the machine are worn, change.  
Hydraulic Motor or clutch is broken.

The Feed Rollers rotate in the wrong direction.

The hydraulic hoses are mounted incorrectly, switch places of the hoses.

Stumps are badly cut

Driving too fast.  
The Saw Blades are blunt.  
The Saw Blades are incorrectly sharpened.

Reduce the speed.  
Sharpen the Saw Blades, see page 18.

The oil gets overheated

Driving too fast.  
The Saw Blades are blunt.  
The Saw Blades are incorrectly sharpened.  
The oil cooler of the Forage Harvester is blocked.  
Too little oil in the system.  
Overload due to blocked channel.

Reduce the speed.  
Sharpen the Saw Blades, see page 18.  
Clean the cooler.  
Clean the cooler.  
Stop the Forage Harvester immediately if it gets blocked.

# 22



## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	PROPOSED ACTION
The Saw Blades stop	Driving too fast.	Reduce the speed.
	The Saw Blades are blunt.	Sharpen the Saw Blades, see page 18.
	The Saw Blades are incorrectly sharpened.	
Abnormal vibrations	One of the Hydraulic Motors are broken.	Change the Hydraulic Motor.
	The hydraulic overflow valve is broken.	Replace the over-flow valve.
	Uneven sharpening of the Saw Blades.	Replace the Saw Blades, see page 18.
	The bearing under the Saw Blade is worn out.	Replace the bearing.
Double sawing of stems, dropping stems on the ground	One or several bearings are worn out.	Replace the bearings.
	The crop is too coarse.	See page 10, 17.
	The Saw Blades are blunt.	Sharpen the Saw Blades, see page 18.
	The Saw Blades are incorrectly sharpened.	
Oil leakage	The Knock-down roller is stuck.	Clean the slide surface and grease.
	Overheated oil.	Stop the Forage Harvester and let the oil cool down.
	The clutch is leaking.	Tighten the screws of the clutch.
	One or several Hydraulic Motors are leaking.	Make sure that the oil leakage hose is connected properly, replace the seals.
		Make sure that the oil leakage hose is connected properly and leads to the oil tank on the HSAB MKV so that there is no backpressure.
	One or several Hydraulic Motors are worn out.	Replace the worn Hydraulic

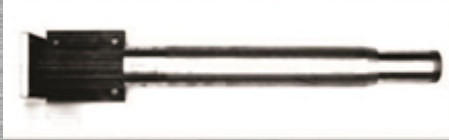
## Spare Parts List

### PART

### DESCRIPTION

### ART NO

(numbers within brackets refer to the drawing)



**LEG**

**left**

**007 (2100)**

**right**

**008 (1100)**



**DRIVE  
FLANGE**

**011 (8100)**



**UPPER BEARING  
SKF 6020-2RS1/C4  
(1pc)**

**012 (8020)**

24

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**PART**

**DESCRIPTION**

**ART NO**



**CIRCLIP  
(upper bearing)**

**022**



**HUB  
(lower  
bearings)**

**025 (8010)**



**HUB BEARING  
SKF 6016-2RS1/C3  
(2pcs)**

**030 (8030)**

**25**



**PART****DESCRIPTION****ART NO****COMPLETE ASSY.****(lower bearings)****042****Nut right or left****Lock ring****Bearing****Spacer****Bearing****Spacer****NUT****Left hand thread****044 (1340)****Right hand thread****045 (2340)****FLANGE HUB****043 (8010)****Upper bearing****(1pc)****FLANGE BEARING****030 (8030)****SKF 6016-2RS1/C3****(1pc)****26****HSAB**

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**PART**

**DESCRIPTION**

**ART NO**



**Discs for blades**

**Left  
right**

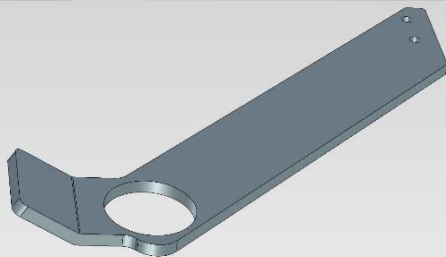
**051 (2400)**

**052 (1400)**



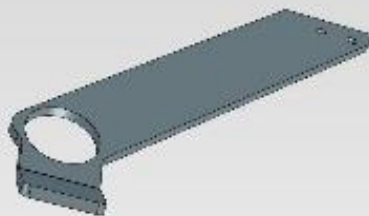
**FLANGE  
(lower  
bearing)**

**053 (8080)**



**BEARING  
SUPPORT  
Lower  
bearing**

**Right:  
1510**



**Left:  
2510**

**27**

28

**PART**

**DESCRIPTION**

**ART NO**



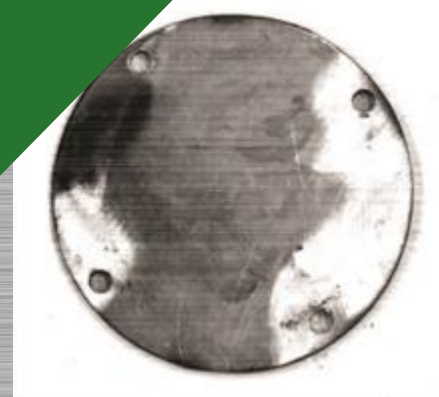
**SUPPORT BEARING**  
Cutting blade  
SKF 22208 E/C3  
(1pc)

**065**



**CLAMPING RING**  
Support bearing

**067**



**COVER**  
Support bearing

**069 (8190)**



**BLADE SHAFT**

**073 (1200)**

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**PART**

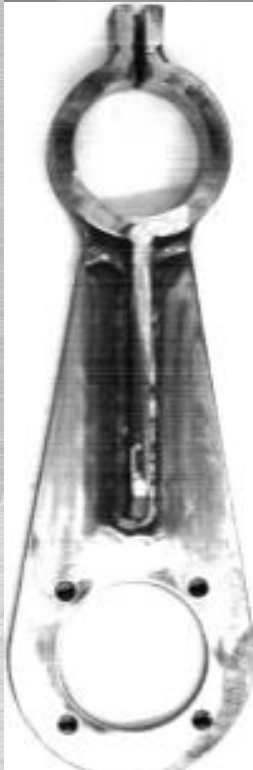
**DESCRIPTION**

**ART NO**



**SAW BLADE**

**055 (8090)**



**ARM**  
**Rear left**

**075 (3110)**



**ARM**  
**Front left**

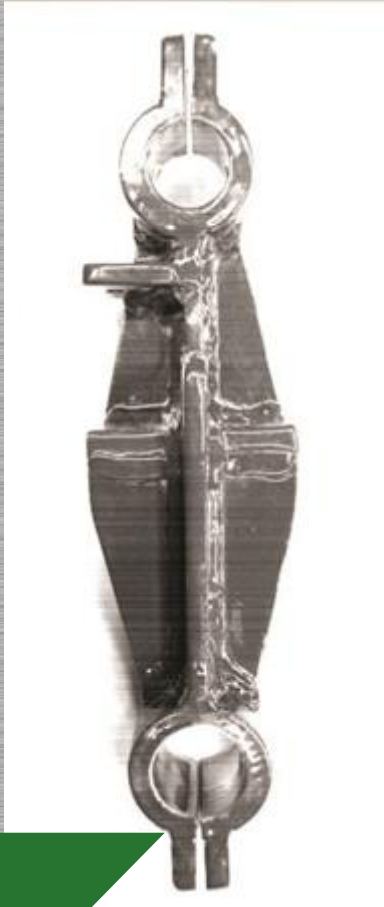
**079 (3210)**

**29**

**PART**

**DESCRIPTION**

**ART NO**



**ARM**  
**Front right**

**084 (3220)**



**ARM**  
**Rear right**

**085 (3120)**

**30**

**PART**

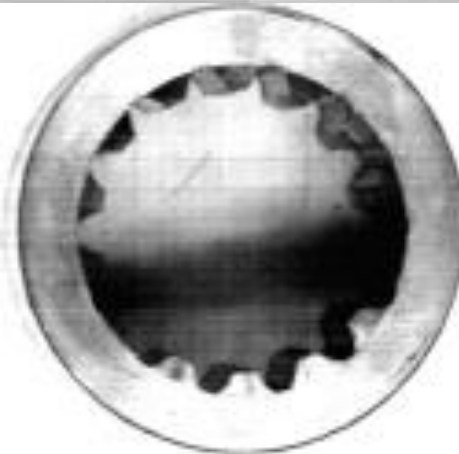
**DESCRIPTION**

**ART NO**



**EXTERNAL  
SPLINED  
COUPLING  
parallelism**

**087**



**INTERNAL  
SPLINED  
COUPLING  
parallelism**

**089 (8070)**



**BUSHING  
internal**

**095**

**31**



**PART**

**DESCRIPTION**

**ART NO**



**BUSHING  
EXTERNAL**

**097**



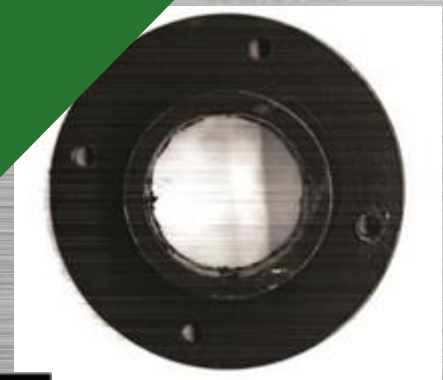
**AXLE HOUSING**

**100 (3420)**



**AXLE**

**101 (3450)**



**FLANGE  
parallelism**

**185 (3411)**

**32**

**HSAB**

HENRIKSSON SALIX AB

**PART**

**DESCRIPTION**

**ART NO**



**COMPLETE  
PARALLELISM  
SLIPPER  
ROLLERS  
ASSEMBLY**

**099**

**33**

**MOUNTING LAYOUT  
FOR  
LEFT PARALLELISM**



**NOTE!**



**MOUNTING LAYOUT  
FOR  
RIGHT PARALLELISM**



**NOTE!**



**HSAB**

HENRIKSSON SALIX AB

**PART**

**DESCRIPTION**

**ART NO**



**UPPER ROLLER  
Complete ASSY..**

**131**



**BEARING  
SKF FYC TF  
upper rollers**

**132 (3320)**

**34**

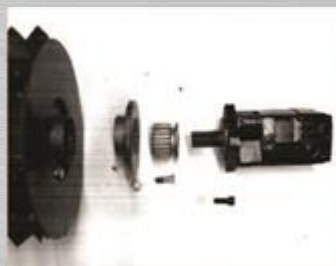




**MOUNTING LAYOUT  
FOR UPPER/LOWER  
ROLLERS & KNOCK  
DOWN ROLLER**

**DESCRIPTION**

**ART NO**



**35**



**DRIVE FLANGE**  
upper/lower  
rollers & knock  
down roller

**134 (3060)**



**DRIVE COUPLING**  
upper/lower  
rollers & knock  
down roller

**135 (3060)**



**BEARING**  
SKF SY 35 TR  
lower rollers &  
knock down roller

**136**

**PART**

**DESCRIPTION**

**ART NO**



**MOTOR 250CC  
roller & vertical  
legs (6pcs)**

**137**



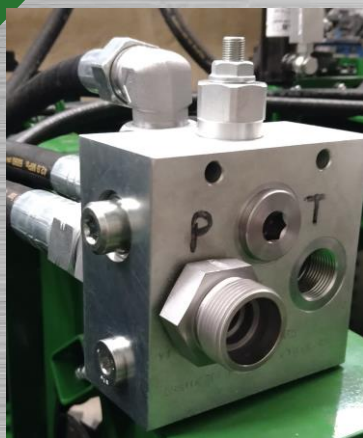
**MOTOR 400CC  
knock-down roller  
(1pc)**

**138**



**MOTOR 64CC  
saw blade (2pcs)**

**139**



**RELIEFE VALVE  
& FREEWHEEL**

**(6100)**

**36**

**PART**

**DESCRIPTION**

**ART NO**



**FLOW DIVIDER**

**141**



**RELIEF VALVE**  
saw blades

**142**



**PUMP**

**(6200)**

saw blades



**SAFETY VALVE**

**144**

**37**



**PART**

**DESCRIPTION**

**ART NO**



**SHOE**

**176**



**SPRING**

**181**

**38**

**HSAB**

HENRIKSSON SALIX AB

**PART**

**DESCRIPTION**

**ART NO**



**GEAR WHEEL  
on vertical drive  
motor**

**183**

**39**



**GEAR WHEEL  
VERTICAL LEGS  
COMPLETE ASSY.**

**189**

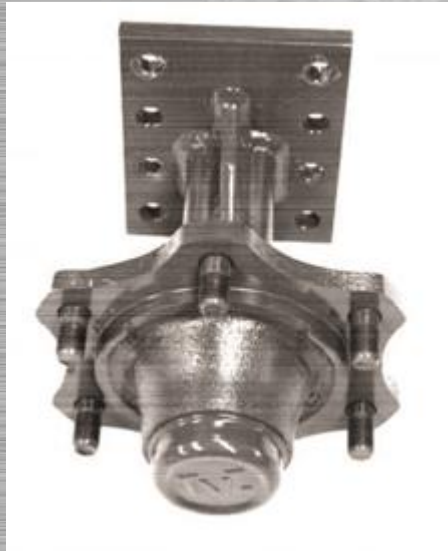


**NOTE!**

**PART**

**DESCRIPTION**

**ART NO**



**SUPPORT WHEEL  
hub assy.**

**192**



**SUPPORT WHEEL**

**197**

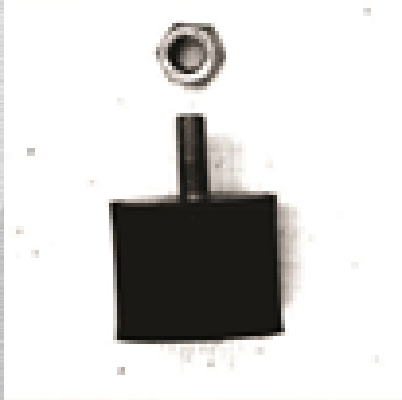
40



**PART**

**DESCRIPTION**

**ART NO**



**BOUNDING  
CUSHION & NUT**

**200**



**VERTICAL LEG**

**112**

**right  
&  
left**

**(1300)**

**(2300)**

**41**

**PART**

**DESCRIPTION**

**ART NO**



**Gear Box**

**(6400)**

**42**

**HSAB**

HENRIKSSON SALIX AB

## NOTES