USER MANUAL

Carefully read these instructions before starting and using your log loader!

- Set-up & installation
- Use - Maintenance
- Accessories

HRZ FIX Euro/Kombi





We manufacture in Germany!



maschinen
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1. GENERAL INFORMATION

Dear customer, thank you very much for your trust and preference in choosing our equipment and joining the number of our best customers in the world. We are confident that our equipment will be up to all your expectations and assure you a long lasting quality and performance.

1.1 About this manual

Please take time to read this manual and learn to how operate and maintain the equipment safely.

For your easier reading this manual is laid out in several sections. The sections are progressively numbered 1 through 14 and listed on the "content" page.

The information, pictures and technical data in this document reflect current or planned product features, functions, and characteristics as of the publication date. Because of on-going product improvement and feature additions, information in this document is subject to change without notice.

If you are experiencing a problem or functional trouble on your equipment, please read the "trouble-shooting" section to identify possible causes and remedies.

When you have checked all the possible causes listed and you are still experiencing the problem, ask your Authorized Service Centre for help.

When you order parts for maintenance or repair services, your Authorized Service Centre, your dealer or eventually the manufacturer need your machine serial number and engine serial number. These are the numbers that you have recorded on the product identification label of the manufacturer on the machine.

1.2 Delivery and transport claims

Upon delivery of the machine please check for visual machine damages such as broken packing or scratched buckled parts. If so, make a remark on **all** copies of the delivery bill (including the one for your own use) before signing for acceptance.

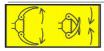
Should your shipper or the truck driver refuse to accept your claim and countersign the delivery bill, fully reject delivery and make sure to inform us (the manufacturer) immediately. No claims shall be taken into account by the shipper or by the insurance company, if a reservation note is not made on the delivery bill.

All transport damages must be notified within latest 2 days from delivery. Therefore delivery must be collected and inspected within this term. Later claims shall be disregarded. In case of assumed but not visually clear transport damages make sure to mark the following sentence on the delivery bill: "Reserved delivery due to assumed transportation damages".

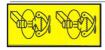
Insurance and shipping companies act with extreme caution in case of transport damages and sometimes refuse to accept responsibility. Please make sure to provide clear and exhaustive evidence (photos) of the claimed damages.

Thank you in advance for your help and understanding in this matter.

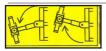
2. SAFETY PICTOGRAMS AND WARNING



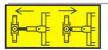
1. Pictogram: "Grapple Release/Grasp"



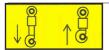
2. Pictogram "Hydr. Motor"



3. Pictogram "Swivel Arm to the right/left"



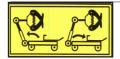
4. Pictogram "Extendible Arm, Retract/Extend"



5. Pictogram "Retract/Extend Upper Pin"



6. Pictogram "Pivotal Hanger UP/DOWN"



8. Pictogram "Boom Lift UP/DOWN"



8. Machine safety label "Read the instructions before start-up"

Read, understand, and follow all instructions in this manual and on the machine before starting!



9. Identification label "Product identification"

This label shows the company details of the manufacturer and the main machine technical data.



10. "BGU-Maschinen" Manufacturer's Logo



11. Safety pictogram

"Do not infringe the dangerous zone"

Avoid standing in the dangerous zone between the tractor and the log loader.



12. Safety pictogram "Danger Pinch Point"

Keep hands away from this danger zone till all moving parts have come to a complete stop.



13. Safety pictogram "Caution: operating zone"

Stand clear: do not allow by standers in the dangerous operation area while the machine is at work.

3. SAFETY



Strictly perform installation, set-up, maintenance, cleaning and transportation with the engine switched off and all moving parts firmly secured against accidental operation. Immediately disconnect power off the machine in case of any eventual fault or trouble.

The user shall strictly comply with these operation, set-up, maintenance, repair and trouble-shooting instructions in order to assure safe operation and no damages to the equipment. Moreover we recommend to let the machine be run and maintained strictly by trained and skilled staff who must be familiar with the applicable occupational safety and health administration rules as well as applicable transportation rules. Incorrect use of the saw can cause serious injury or death.

No person under school leaving age should operate a log loader. Those who have reached school leaving age but are below the age of 18 may operate a log loader if supervised by a competent person of 18 years or over. The machine shall be installed and kept in a suitable location selected by the customer for safest operation.

Make sure that the equipment stands on a safe stable foundation.

Do not allow within the hazardous zone any unauthorized third or persons who are not familiar with the dangers related to use and operation of the machine. Allow no bystanders, especially children and pets in the working area.

- Log loaders are not designed for passangers transportation.
- Strictly control/operate the log grapples from the driver's seat on the tractor.
- Do not allow any thirds in the dangerous zone. The dangerous zone includes the swivel/rotation area as well as the bucket and grapples operation (grasp/release) area. Provide due clearance around the log/timber handling zone.
- Make sure to firmly close the clamp and park it across travel direction when at rest.
- Make sure that the grapple is hanging free so that slewing to both sides is possible during travel on uneven ground/terrain.
- When you pull/hand timber always keep in mind that lurching or other sudden, flicking movements of a suspended/pulled load may occur due to timber flexibility and bounciness. Mind for the safety of your fellow workers and take due measures to keep the work area free from other thirds and obstacles. Maintain safe distances from other ground workers and equipment units.

- Perform logs piling and general rolling operations with extreme care and at very low tractor speed. DANGER: watch for timber/branches that may fall on or enter the operator's compartment.
- Changing the length setting of the extendible arm may be strictly performed with the butt plate lowered on ground, the grapple clamped and the tractor engine switched off. Also make sure to disconnect the hydraulic system and protect it against accidental restart.
- When travelling across a slope or turning around a bend with a suspended load, always maintain a low gear to avoid any danger to the tractor in the event of possible skidding, jamming or canting of a log and consequent dangerous rollover.
- Immediately repair or replace eventual faulty hydraulic components.
- Do not let hydraulic pressure hoses lay unprotected in the driver's cabine after installing and connecting the control valve unit (control slide valve / electric valve).
- Always wear suitable protective gloves when doing works on the hydraulic system. AVOID HAND CONTACT with hydraulic oil.
- BEWARE: a log grapple attached to a U-joint cannot be firmly laid down on ground. To avoid the grapple from rolling over or getting tangled, make sure to secure it before laying down.
- Before replacing or servicing the grapple hanger, secure the clamp against fallover and make sure to strictly grasp the clamp from the sides. DANGER of legs/feet injuries.
- Pinch points will occur any time when converting from fixed to mobile grapple attachment. BEWARE: injured fingers danger.
- If you are using a winch, account for a dangerous area same as at least the length of the rope. Keep this area free from bystanders and unauthorized thirds.
- A rescue/emergency kit for drivers and team safety are mandatory and must be always available in the driver's cabin.

3.1 General safety rules and occupational safety

- Before each new use, check for your tractor operational and road travel safety!
- Mind for all safety pictograms and operation labels on your grapple loader. They are all-important for safe operation and travel!
- Before starting with loading operations, familiarize with all safeties and controls on your equipment and with their functions. Do not expect to learn as you practice. Grapple loaders are heavy-duty equipment requiring preliminary training!
- Operators must wear steel toe safety shoes and snug-fitting, tear-resistant work doths.
- Keep the equipment as free as possible of accumulated limbs and debris, to avoid any fire danger!
- Know where crew members are at all times. Be alert to unexpected workers or operations in the immediate skidding area. Before starting the tractor and beginning to work, make sure that there are no bystanders (especially children) in the surroundings. Be cautious of blind spots around the loader where the operator's visibility is limited!

- Do not allow anybody on the loader during loading or travel operations!
- Connect the equipment in compliance to these instructions and the applicable provisions!
- Work defensively. Think ahead and anticipate hazards. Take special care in connecting/disconnecting eventual attachments to/from the tractor!
- Always have the unit firmly stand on the special outriggers when performing mounting/dismounting works on the machine! (safety and stability)
- Never overload a machine. Carry a load that is safe, within the capacity
 of the machine, and suitably secured in the special fixation points on the
 machine!
- Always comply with the admissible axis loads and transport dimensions/clearance!
- Provide and check the functionality of all transport facilities as for instance illumination, warning tools and devices, safeties and protections!
- The disconnectors of the quick-action couplings must hang loose. Avoid self-disconnection in the lower section!
- Never leave the operator's stand during travel!
- Travel, steering and braking performance are affected by the use of hanging ballast on the machine. Always keep at safe distance for steering and braking!
- When taking turns please mind for both the outreach and/or rotating mass of the equipment!
- Make sure that all safeties and protections are duly in place and operating before starting to use your equipment!
- Strictly start log loading operations when all workers are clear of the area!
- Keep the turning/slewing area of the equipment clear from any obstacle!
- Make sure that no persons and no obstacles are within the slew range before operating any of the hydraulic folding frames.
- BEWARE of pinch hands danger on all moving parts (for instance hydraulic attachments)!
- Always keep at safe distance from any manually folding/flapping attachments!
- Before leaving the tractor, make sure to lower the grapple down on ground, switch the engine off and remove the keys from the ignition!
- Make sure that no persons stand in the dangerous zone between the tractor and the trailer unless due measures were taken to prevent the vehicle from rolling away (for example engaging the parking brakes and using additional wheel chocks for increased safe)!
- Folded frames and telescoping hoisting devices must be duly secured in the transport position!

4. OPERATION

4.1 Mandatory application field

Grapple loaders are strictly designed for woodlot owners to pull, handle and manipulate timber logs. They are purposely designed with attachment lungs to allow for very practical pulling operations by means of logging chains. The maximum working pressure of the grapple is 180 bar.

The rotator motor is equipped with standard built-in pressure relief valve set by manufacturer at 170 bar so that no further adjustments are required by operators on site.

This loader is available in the following versions: HRZ FIX-EZ, HRZ FIX, HRZ FIX-AS, HRZ 180, HRZ LADER, HRK, HRZ FIX EURO

Suitable for tractor power up to: 80 (90) PS

DO NOT ATTACH THE LOADER to more powerful tractors. DANGERS of even permanent loader damages.

Make sure that a suitable forestry/rescue kit is available in the driver's cabin at all times and take due measures to ensure safety of the tractor driver during all operations. If you are attaching a winch to your equipment, mind for user instructions of the winch manufacturer too.



Any other application (i.e. handling loads off any higher level than the surface on which the tractor stands whenever the load exceeds the capacity of the tractor inbuilt hydraulics) will be considered as misuse and is therefore strictly prohibited!

4.2 Preliminary controls before use

4.2.1 Mounting the loader to the tractor

- Attach the equipment to the three-point linkage of your tractor using the 25 mm pins and cotters supplied by the manufacturer with the loader.
- Connect the hydraulic hoses of the loader to your tractor hydraulics.
- Provide for best linkage to your tractor making use of the most convenient hitching points out of the ones available on the loader.
- Use your tractor hydraulics to pull and then gradually lift the loader up. When lifting from the front the lift boom will go so far down that the cab might get damaged. Risk of getting jammed! Work with extreme caution.
- Install the extendible arm acting in strict compliance to A (see safety tips)



Südharzer Maschinenbau GmbH will accept no liability for the state and conditions of your tractor three-point linkage. Make sure to install the loader so that no damage can occur to the driver's cab during offroad travel or with lifted hydraulics.

4.2.2 Assembling an additional control valve unit

As soon as a hydraulic function is no longer required, you can use it to control operation of the hydraulic upper link.

Hand control valve

- Install on a convenient mount inside the tractor cab
- Properly connect all hoses. WARNING: an inverted flow direction will lead to control valve failure
- Never remove the check valve from the drain line
- · Impress all operating symbols

Hand control valve - symbols

A symbol is impressed/labelled in the back/front of each joystick to show the respective corresponding loader functions. (see point 2 of the safety instructions)

4.3 Start-up

Operating instructions

- Perform hydraulic operations while seated in the machine: never from the ground.
- Always set the top grapples and the rotator on the float position of the control valve before starting to winch heavy trunks.
- Know where crew members are at all times. Be alert to unexpected workers or operations in the immediate dangerous/loading area.
- Do not use the grapple to handle trunks that are smaller than 8 cm in diameter unless you can bundle and lift them together.
- To assure trouble-free braking and steering of the loader travelling with a suspended load, at least 20% of the vehicle own weight shall still be arranged on the on the front axle. The exact amount of ballast weight that one can use, must be obtained from your tractor supplier.
- Travel performance much depends on the ground/road conditions and the attachments to our equipment. Always drive cautiously and defensively minding for your route at all times.
- When not in operation, always lower the boom and rest the grapple on the ground or on the special carrier designed for accomodating the grapple.

- Check the fixation bolts and the respective cotter pins before start-up.
- Close the grapple and set it across travel direction before operating the unit without a load (unloaded state).



Close the grapple and position it across the travel direction when travelling without a load. DANGER! Travelling with open grapples may induce even permanent damages to your grapples.

Use rigid or movable grapple suspensions depending on the type of timber to be handled.

 Rigid suspensions are not recommendable for hardwood that may damage the loader or the tractor during travel under certain severe conditions.

Eventually use a top slewing arrangement if required by the working conditions on your site.

- Top slewing arrangements should be used every time when handling of huge timber or entire trees comes into question. In this special operation mode, the weight of the transported load is a crucial feature and should be given extremely accurate consideration.
- If you are winching heavy trunks, be sure that the floating mode is selected on the control valve block for the rotator and the slewing system.

4.4 Attachments

- Before mounting and dismounting any attachment to/off the threepoint hitch, adjust the related operating controls so to avoid any accidental raising/lowering.
- Make sure to attach the loader to a tractor of required power and hitching specifications!
- Typical injuries resulting from getting caught in a three-point-hitch are amputations, lacerations and pinch hands. Account the 3-point hitch as a dangerous area and move cautiously around it!
- Never stand between the tractor and the loader when using threepoint linkage external operation!!
- While setting the equipment in its transport position always provide for sufficient side detent of the three point hitch!
- While travelling on road with the raised loader, always secure the control levers against accidental shifting down!

5. HYDRAULIC SYSTEM

- DANGER: the hydraulic system operates at very high pressure!
- Mind the correct connection of all hydraulic hoses, as you perform branching of the hydraulic cylinders and of the motors!
- For due connection of the hydraulic hoses to your tractor hydraulics make sure that no pressure is available on both the tractor and the attachment side!
- For connection of hydraulic loader functions to the tractor make sure to mark both the coupling sleeve and the relevant connector so that no accidental faulty controls can occur! Hydraulic misconnections may lead to dangerously inverted functions (i.e. lifting instead of lowering) and consequent risk of very severe accidents!
- Perform regular inspection of all hydraulic lines and immediately replace any defect or old tube/hose! Replacement hydraulic components must comply with the technical specifications of the original parts supplied by the manufacturer!
- Check the state of all hydraulic hoses, fittings and connectors and seal eventual leaks, if required. Do not check for leaks with your hand. Leaks can be located by passing a piece of cardboard or wood around the suspected leak and looking for discoloration.
- High-pressure fluid (oil) escaping from a very small hole can be almost invisible. Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious injury or even death! In this case seek immediate doctor help! (danger of infections)
- Make sure that the machine is fully disconnected and all moving parts are secured before performing any maintenance/repair work on the machine.
- Worn-out and slacked safety chains will hang out! (the cylinder must be filled with oil)

PTO-POWERED OPERATION



- Strictly use certified and approved drive shafts and assure strict compliance to the manufacturer's instructions for use and assembly! Never switch drivelines among different machines.
- The entire drive shaft is a wrapping point hazard if it is completely unshielded. Make sure that all guards and shields of both your drive shaft and the PTO-stub (master shield) are in good state and duly assembled in their place before starting to work!
- Ensure that the closed and extended length of the guard and the drive shaft are right for the tractor and machine in both its transport and operating asset!
- Stop the engine (pull the keys out), securely park the tractor, set the brakes, disengage the PTO and shut off the tractor before mounting/dismounting the drive shaft!
- Periodically check that your drive shaft is securely mounted and connected!
- Ensure that a restraining device, eg a rope or chain, is in place to prevent the guard rotating with the shaft!
- Before engaging the PTO ensure that the tractor PTO speed matches with the admissible rpm of the loader!



- While PTO-powering your loader, ensure that the number of PTOshaft rpm matches the travel speed and that the direction of the revolution changes while performing backward travel!
- Do not engage the PTO without priory switching the engine on!
- Never step across a rotating PTO driveline. Keep the area around a rotating PTO/driveline always clear from bystanders!
- Don't turn too sharply as this could cause the lower links or tractor tyre to foul the PTO drive shaft. Always disengage the PTO drive when making wide-angle turns.
- Beware of the residual centrifugal mass when you disengage the PTO shaft!
- Wait for all movement to cease before approaching the dangerous area of the PTO drive or attempting to clear any blockage!
- Disengage the PTO, shut off the tractor and remove the keys before dismounting to clean, repair, service, or adjust machinery!
- Ensure that there are no persons standing between the tractor and the implement before engaging a PTO drive.
- For your own safety and the one of your co-workers always keep unauthorized people away from the dangerous area around the machine.
- Always hang an uncoupled drive shaft to the special bracket!
- Protect the tractor PTO with a shield covering the top and both sides
 of the PTO so that it stops anyone making contact with it after uncoupling the drive shaft!
- Broken, damaged or badly fitting guards can be just as dangerous as no quard at all! Eventual anomalies must be fixed before starting to work!

7. REPAIRS AND MAINTENANCE

Make sure that the machine is fully disconnected and all moving parts are secured before performing any maintenance/repair work on the machine. In the event of any malfunctioning, switch the machine off before trouble-shooting.

Completely open the grapples tines and lower the grapple on ground. Disconnect the tractor (or other towing vehicle) before starting any repair or maintenance work.



Beware: a loader with the grapple pivotally connected to a universal joint (pivot) will stand at tilt-over risk unless it is firmly supported and secured against collapsing.

- Provide immediate replacement of defective hydraulic lines and couplings or other hydraulic components.
- Rust, dirt and crop debris must be cleaned frequently to allow the piston rod of both the grapple cylinder and the slewing cylinder to operate trouble-free.
- Keep the log fork and the grapples tines clean.
- Periodically ensure best state and functionality of the electric system.
- Remove and replace worn-out or unreadable pictograms and labels.

7.1 Ordinary maintenance

The following services must be provided at 10 hour operation intervals:

- Lubricating all moving parts by means of the respective nipple head
- Recommended lubricant: universal lub grease
- Lubricating the extendible load lifting arm using a grease brush
- Check the conditions of all hydraulic couplings and hoses
- Tightening all screwed/bolted joints, checking and replacing eventual missing hardware.

8. TRANSPORT AND HANDLING

A switched-off loader stands at instability risk as the grapple keeps hanging pivotally on the universal joint.

Always secure the loader against tipping over, folding up and/or collapsing.



Make sure to close the grapple and set it across travel direction prior to rolling without a load.

DANGER: failure to comply with this instruction may lead to grapple damages!

9. DISMOUNTING AND DISCARDING AN OBSOLETE MACHINE

When the machine is fully obsolete and cannot be of any longer use, it should be duly dismounted ahead of discarding. Certain components need deactivation and dismantling in order to assure that no further use is made by other parties and that no worn out parts are recycled for other applications.

During dismantle be alert for possible recyclable materials and components that belong to differentiated waste collection procedures applicable in your country.

The manufacturer is not liable and undertakes no responsibility for personal injuries or damages that may result from the recycling of worn out machine parts and eventual reuse in other applications different than originally stated in this manual.

Dismantling procedure:

Take good note please: each and every dismantling task must be performed by authorized service centres or trained skilled staff only!

- Pull the machine down into single components
- Lock and clamp all moving machine parts
- Deliver each single component only to authorized waste management facilities
- Drain oil and fuel out of respective tanks and lines before disposal of the machine
- Remove rubber and plastic parts from the machine that must be separately disposed of

Deactivated, clamped moving/driving parts and components are of no further risk and danger.

10. TECHNICAL SPECIFICATIONS

Technical specification	Unit of measurement	
Attaches to any front-mount or to a rear, Category II three-point hitch		
Tractor power requirement	KW	40 - 90
Grapple model HG 1300 Max gripping width Clamping force	mm t	90-1280 9,5
Grapple model HG 1700 (optional) Max gripping width Clamping force	mm t	90-1680 9,5
Weight without optional accessories	kg	248
Optional rotator Weight	Nm t kg	850 4,5 at 195 bar 25
Length w. hoses	mm	1600
Width	mm	1100
Width w. bucket (optional)	mm	1550
Height w. grapple	mm	1200
Transport height	mm	1000

11. OTHER AREAS OF POSSIBLE HAZARD

11.1 Mechanical dangers

Possible dangers related to machine moving parts are minimized by means of suitable safeties and protections that cannot be removed unless special tools and equipment are used. Do not attempt to remove or by-pass any of the machine inbuilt safeties.

DANGER: removing or by-passing inbuilt machine safeties may result into serious operator's personal injuries.

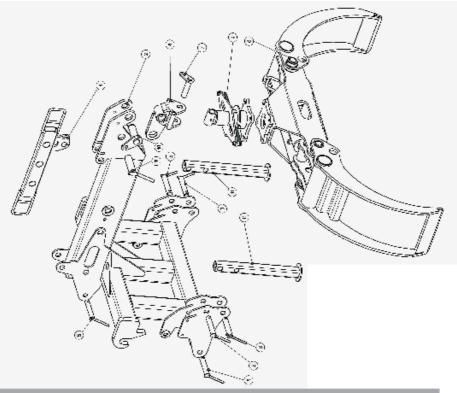
12. WARRANTY

All our machines are covered with warranty terms in accordance with the law. Customers should promptly notify the manufacturer eventual material or production claims on their detection. While asking for warranty service, customer should show copy of their purchase invoice or receipt. The warranty does not cover for faults due to natural wear, temperature or weather agents as well as misuse, faulty installation or set-up, improper operation and lubrication or acts of vandalism.

No warranty will be given on parts damaged by improper handling, use and application. The manufacturer is further not responsible for warranty service on machines used for other applications than mentioned in this manual, altered or modified by the customer or other thirds, or overloaded. Never attempt to use an incomplete machine or one fitted with unauthorized modifications. Any modifications to your machine can cause personal injuries, and will void your warranty.

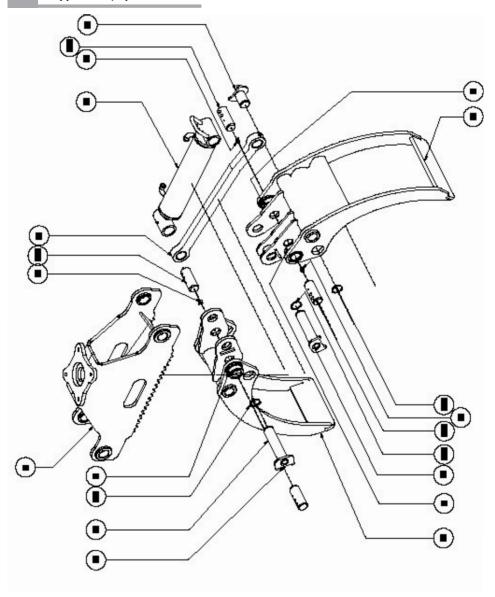
Consumable parts with a prescribed life (i.e. pulleys, tools, blades and various auxiliary materials) are excluded from the warranty as well as adjustment, optimization and fine-setting or retrofitting works.

13. HRZ FIX-EURO/KOMBI, SPARE PARTS LIST



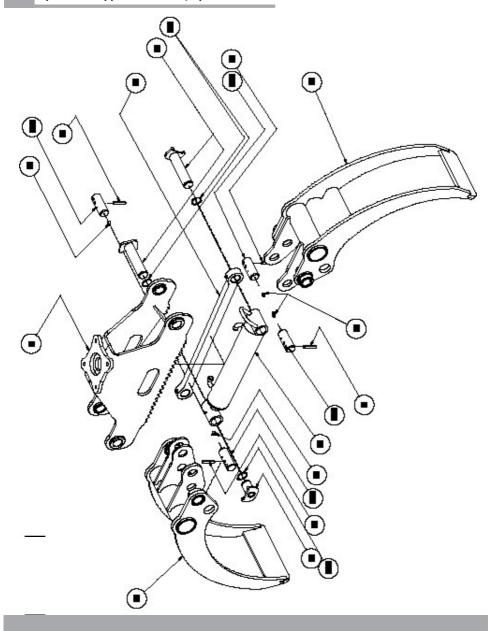
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Pos.	Description	Number of pcs.	Art. Nr.
1	BG hose, fairlead	1	22820
2	BG frame Euro Kombi	1	22256
3	Category 1, lower link pins	6	55994
4	Clamp hanger	1	22387
5	Upper link pins	1	55991
6	Grapple HG 1300	1	23842
7	BG standard pin 30-123	1	22829
8	BG Joint	1	22335
9	BG Fastening bolt	1	22833
10	BG standard pin 40-120	1	22835
11	BG Outrigger	2	23890

13.1 Grapple 1300, Spare Parts List



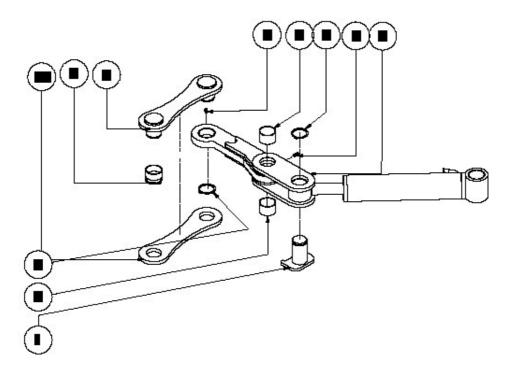
Pos.	Description	Quantity	Nr.	DIN	Dimensions
1	Grapple housing 1300, (complete assembly)	1	20034		
2	Custom bolts 40-178	2	22355		
3	Custom bolts 40-60	1	22356		
4	Hydraulic cylinder	1	55878		80/40-305
5	Small claw	1	22354		
6	Large claw	1	22353		
7	Parallel guide (complete assembly)	1	23899		
8	Ball nipple (on the cylinder)	2	51163	DIN 71412	AM 6x1
9	Dowel pin	4	55936	DIN 7346	
10	Ball nipple	4	55937	DIN 71412	
11	Locking ring (for shafts)	3	51676	DIN 471	40
12	Shaft 40-125	4			

13.2 Optional Grapple mod. 1700, Spare Parts List



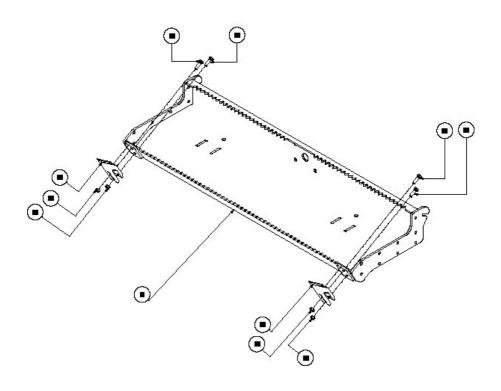
Pos.	Description	Number of pcs.	Nr.	DIN	Size
1	Grapple housing mod. 1700, (Complete assembly)	1	24033		
2	Parallel guide (complete assembly)	1	23899		
3	Custom bolts 40-60	1	22356		
4	Large claw	1	22535		
5	Small claw	1	22354		
6	Hydraulic cylinder	1	55878		80/40-305
7	Standard bolts 40-178	2	22355		
8	Dowel pin	4	55936	DIN 7346	
9	Ball nipple	4	55937	DIN 71412	
10	Lock ring, shaft	3	516756	DIN 471	40
11	Ball nipple (on the cylinder)	2	51163	DIN 71412	
12	Shaft 40-125	4	22351		

13.3 Optional top slewing arrangement, Spare Parts List



Pos.	Description	Number of pcs.	Nr.	DIN	Size
1	Pin	1	22822		
2	Choke	1	22343		
3	Connecting link	1	22341		
4	Hydraulic cylinder	1	55939		60/30-195
5	Collar-less Sleeve	4	55909		40x30
7	Lock ring for shafts	3	51676	DIN 471	40
8	Ball nipple	2	51163	DIN 71412	AM 6x1
10	Side link	1	22340		

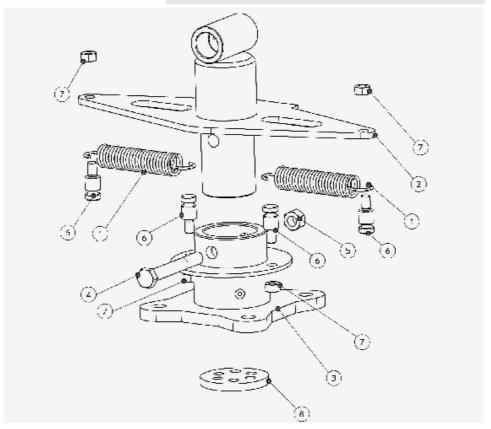
13.4 Optional bucket assembly mod. 1500, Spare Parts List



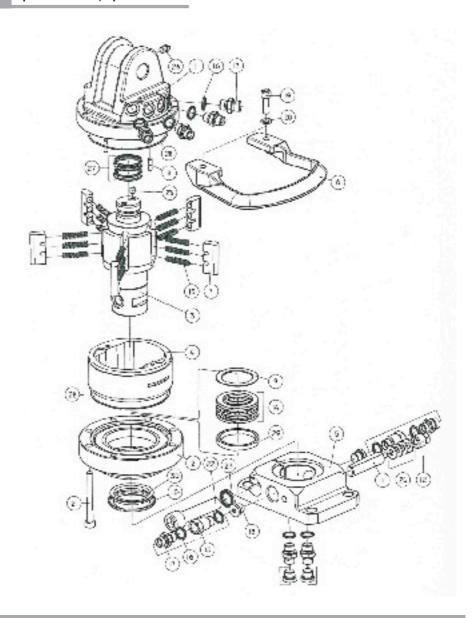
Pos.	Description	Number of pcs.	Nr.	DIN	Size
1	Bucket assembly	1	22201		
2	Hex nut	4	51595	DIN 934	M12
3	Hex screw	4	51480	DIN 933	M12x40

13.5 Pivotal hanger for claws rotation, Spare Parts List

Pos. Nr.	Number of pcs.	Description
1	2	BG Tension spring, Mounting length
2	1	BG shaft
3	1	BG Grapple link
4	1	Hex nut DIN 934 - M 16
5	1	Hex screw DIN 931-M16x120
6	4	T-grooved bolt 2
7	4	Hex nut DIN 934 - M 12
8	1	T-perforated plate



13.6 Optional rotator, Spare Parts List



Pos.	Description	Number of pcs.	Nr.	DIN	Size
1	Head	1	MTR 46.01 LA		
2	Lid	1	MTR 46.02 B		
3	Rotor shaft	1	MTR 46.006-01		
4	Stator	1	MTR 46.007		
5	Flange	1	MTR 46.012 LA		
6	Guard	1	MTR 46.03 LA		
7	Lug	5	MTR 46.008		
8	Pin	2	MTR 30.015-02		
9	Spacer	1	MTR 45.011		
10	Washer	1	MTR 45.010		
11	Shim	1	MTR 45.014-01		
12	Lock screw	1	MTR 45.015-01		
13	Nipple	2	MT 0210		
14	Thrust bearing	1	51112		
15	Spring	15	MTR 100.009		
16	Sealing washer	8			GB-6 Tredo
17	Nipple	6	0101-6		
18	Seal	2			
19	Screw	2			M10x30
20	Washer	2		DIN 127 B	
21	Screw	8			M10x90
22	Screw	1			M20x100
23	Washer	1			Ø20 Schnorr
24	Spring washer	4			SB-M8(4672)
25	Plug	1	835-02		
26	Lub nipple	1			
27	Face seal	2			GHH/R 40/47.5x3.2
28	O-ring	2			OR 126.00x2.50
29	Gasket	1			TS 60/70x8
30	V-Seal	1			VA - 60

14. EC - STATEMENT OF COMPLIANCE

In accordance with the EC Machine Directive No. 42/2006 and EMV (Low Voltage) Directive 108/2004

We hereby declare that the equipment described in this manual responds in full to the actual version brought on the market. We, the manufacturer further declare that this equipment was duly designed and manufactured in accordance with the actual European Safety and Health Standards settled by the relevant EEC directives as well as the latest electromagnetic standards issued by the European Council of 3.5.89 and later enforced by all member states.

This statement of compliance does not apply to customer modifications of the equipment without manufacturer's written approval.

Machine type:: Grapple loader

Types: HRZ Fix Euro / Kombi

Production Nr.: see model label

Applicable

European Standards:: EC Machine Directive 42/2006

Other harmonised Standards

especially:

In order to assure full compliance to these European Standards, the following national codes , standard practices, and Technical Specifications have been implemented: EN 292-1/EN292-2

prEN 1553-1 May 1997 for farming attachments

EN ISO 3767-4 for equipment controlled and operated by a

control valve.

Date 17.02.2009

Jörg Kernstock (Managing Director)

Official language in the country of use: English (Copy for customer's use)



Subject to changes

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