

Order-No. 9900.00.57GB01

Operating Instructions

Cultivators blue bird GH (F)



Read and follow safety instructions



For Your Own Safety

In this enclosure to the operating instructions you will find some general rules of conduct explaining how to operate the implement correctly - and some safety advice which we advise you to observe for your own safety!

The list is very extensive, and some of the advice does not specifically relate to the implement supplied. However, the summary of advice is to remind you of safety guidelines which are often unconsciously ignored when operating the machines and implements on a daily basis.

1. Authorized Use

The implement has been specifically built to perform standard operations pertaining to agricultural work (authorized use).

Any type of usage outside of these parameters is deemed to be improper usage. The manufacturer accepts no responsibility for damage resulting from such usage, and the risks are to be borne solely by the user.

Within the bounds of authorized usage it is also necessary to adhere to the manufacturer's prescribed operational, maintenance and service conditions.

The implement may only be used, maintained or serviced by people who are familiar with such an implement and aware of the risks involved. Please also ensure that all safety instructions are passed on to other users.

It is important that any and all relevant accident prevention regulations and any other generally recognized safety, industrial hygiene and road traffic regulations be observed.

Modifications to the implement made by the user will void any liability on the part of the manufacturer for any resulting damage.

2. General Safety Advice and Accident Prevention Regulations

- Before starting up your implement and tractor, please check that it is roadworthy and operatively safe.
- Please observe all generally valid safety and accident prevention regulations.
- The warnings and signs found on the implement are there to provide essential data needed to operate the unit safely. Please observe these for your own safety.
- When using public roads always follow the relevant traffic regulations.
- Before commencing work, ensure that you are familiar with all devices and operating controls as well as with the functions these perform. It is too late to do so once the implement is in operation!
- Operators should wear tight-fitting clothing. Try to avoid wearing loose clothing wherever possible!
- The machine should be kept clean to prevent the risk of fire!
- Check the immediate surroundings before driving off and putting the machine into operation! (Beware of children!) Ensure that you have sufficient visibility!
- Riding on the equipment during work or transportation is not allowed!
- Implements should be correctly coupled and only secured to the specified appliances.
- Special care is to be taken when coupling and uncoupling implements to or from the tractor.
- When coupling and uncoupling supports, always position them correctly. (Stability)
- Always ensure that weights are only added correctly to the specified mounting points.
- Observe all permissible axle loads, total weights and transportation dimensions.
- Check and mount transportation equipment such as lighting, warning devices, and guards, if necessary.
- Ensure that the release ropes used for rapid coupling and uncoupling hang loose and do not automatically release when in a low position.
- Never leave the operating platform when in transit.

- Road, steering and braking performance will be influenced by mounted or attached implements and ballast. Therefore make sure that you have sufficient steering and brake capability.
- Account for the width of the implement and its working load when taking corners.
- Only operate implements once all the safety devices/guards have been mounted and are in protection mode.
- Keep clear of working areas at all times.
- Keep clear of rotating and swinging parts on the implement.
- Ensure the swinging parts are clear of bystanders before operating any hydraulic folding frames.
- Power-steered parts (e.g. hydraulics) can cause crushing or amputation!
- On high-speed implements with ground-driven implements beware of after-running swinging parts! Only approach once the implement is at a complete standstill!
- Before leaving the tractor, lower the implement to the ground, switch off the engine and remove the ignition key!
- Do not allow anyone to stand between the tractor and the implement without first having secured the vehicle against running away by putting on the handbrake and/or using wheel chocks.
- Ensure that the folded-in frames and lifting equipment are securely in transportation position.
- Fold in and lock the packer catching arms before transporting on roads.
- Lock the marker arms to transportation position.

2.1 Coupled Implements

- Before coupling or uncoupling an implement to the three-point linkage, position the operating device in such a way as to prevent unintentional lifting or lowering.
- When using the three-point linkage it is vital that the coupling configurations of the tractor and implement correspond or are co-ordinated.
- There is a risk of injury through crushing or amputation near the three-point linkage.

- When using the external controls to operate the three-point linkage, keep clear of the area between the tractor and the implement.
- When the implement is in transportation position, always ensure that the tractor's three-point linkage is sufficiently locked at the side.
- When transporting a raised implement on public roads ensure the control lever is locked in place to prevent accidental lowering.

2.2 Mounted Implements

- Secure the implement to prevent it from running away.
- Observe the max. permissible bearing loads for the trailer coupling, swinging drawbar or hitch.
- If a drawbar trailer is used, ensure that there is sufficient manoeuvrability at the towing point.

2.3 PTO Drive (applies only to PTO-driven implements)

- Only use the drive shafts specified by the manufacturer.
- A pipe shield and protective bell must be mounted on the drive shaft as well as a PTO guard – also possible on the implement - and must be in perfect working order.
- Ensure the specified pipe covers are used on the drive shafts when in transportation and working position.
- Only couple and uncouple the drive shaft once the PTO has been disengaged, the engine switched off and the ignition key removed.
- Ensure that the drive shaft is mounted and secured correctly at all times.
- Secure the drive shaft guard by locking the chains in place to prevent them from turning.
- Before engaging the PTO make sure that the PTO speed chosen on the tractor complies with the permissible speed of the implement.
- When using ground speed power take-off ensure that the speed is regulated by the travel speed and that the direction of rotation changes when reversing.

- Before engaging the PTO make sure that the area of danger around the implement is free of bystanders.
- Never engage the PTO when the engine is switched off.
- When working with the PTO, keep the area around the rotating PTO and drive shaft clear of any bystanders.
- Always disengage the PTO where the bends are too big and it is not needed.
- Caution! Beware of after-running gyrating loads after disengaging the PTO! Do not stand too close to the implement during this time. Only begin working on it once it has come to a complete standstill. It is essential that you switch off the engine and remove the ignition key.
- Before cleaning, greasing or adjusting a PTO-driven implement or its drive shaft, always disengage the PTO, switch off the engine and remove the ignition key.
- Place the uncoupled drive shaft on the specified support.
- Cover the stump of the PTO with a protective cover after dismounting the drive shaft.
- Any damage which may arise should be repaired immediately. Never work with a damaged implement.

2.4 Hydraulic Equipment

- Hydraulic equipment is under very high pressure.
- When connecting hydraulic cylinders and motors ensure that the hydraulic hoses are connected as specified.
- When connecting hydraulic hoses to the tractor's hydraulics ensure that the hydraulics are depressurized on the tractor and the implement.
- Where it is necessary to connect hydraulic functions between the tractor and the implement, the coupling sockets and plugs should be marked to prevent faulty operation. Mixing up the connections will reverse the functions (e.g. lift/lower) - **Risk of injury!**
- Check the hydraulic hose connections at regular intervals and replace if damaged or aged. The replacement hydraulic hoses must comply with the technical requirements stipulated by the implement manufacturer.
- When looking for leaks, use suitable aids and resources to prevent injury.

- Liquids that leak at high pressure (hydraulic oil) can penetrate the skin and cause serious injury! In the event of injury, consult a doctor immediately. Risk of infection!
- Before working on hydraulic units, lower the implement, depressurize the system, switch off the engine and remove the ignition key.

2.5 Brakes and Tyres

- Check that the brakes are functional before every journey.
- Thorough checks are to be performed on the brake systems at regular intervals.
- Adjustments or repairs to the brake system may only be performed by qualified staff or recognized brake service centres. Only use the prescribed brake fluid and replace as specified.
- When working on the tyres please ensure that the implement has been securely parked and cannot run away (wheel chocks).
- Fitting tyres requires having sufficient training and the correct fitting tools.
- Wheel and tyre repairs may only be performed by qualified staff using the correct fitting tools.
- Check the air pressure at regular intervals observing the prescribed air pressures given.

2.6 Maintenance

- Service, maintenance and cleaning work as well as the elimination of malfunctions should only be carried out once the drive unit has been switched off and the engine has come to a standstill. Remove the ignition key.
- Check that the nuts and bolts are snug, and tighten as necessary.
- When carrying out maintenance work on a raised implement always secure using suitable support elements.
- When replacing bladed working tools use the appropriate tools and gloves.
- Dispose of all oils, grease and filters in a due and proper manner.
- Always disconnect the power supply before working on electrical equipment.

- When performing electrical welding work on a tractor with a mounted implement disconnect any cables connected to the generator and the battery.
- Gas tanks must only be filled using nitrogen to avoid risk of explosion.!
- Spare parts must at a minimum comply with the technical requirements given by the manufacturer of the implement. We therefore recommend that for your own safety you **use original parts only!**

2.7 Additional Hints and Tips: Mechanical Seed Drills

- Danger! Beware of rotating and oscillating machine parts when performing a calibration test.
- Only use the tread plates for filling purposes. Riding on the machine during operation is prohibited.
- When transporting on public roads protect or remove the thrust collars on the pre-emergence marking.
- When filling the seed hopper, observe the information provided by the implement manufacturer.
- Lock row markers in transportation position.
- Do not place any foreign parts in the seed hopper – the agitating shaft also rotates during manoeuvring.
- Observe the permissible filling quantities.



Operating Instructions

Cultivator blue bird GH (F)

Before operating the implement for the first time, please read carefully through this operating manual and the safety precautions ("For your own safety") and ensure that they are observed at all times.

Ensure that the operators are properly qualified, trained in its use and everyday maintenance, and familiar with the potential hazards and accident-prevention regulations involved. Make sure that other operators are supplied with a complete copy of the safety precautions.

Ensure that all applicable accident-prevention regulations are observed, along with other generally recognized safety procedures and any legislation that may apply with respect to health and safety in the workplace.

Observe the warning labels at all times!

Instructions in this manual accompanied by this symbol and a warning label indicate DANGER. (For further details, see the section entitled "Key to pictograms".)



Loss of warranty

This cultivator is designed and built exclusively for standard agricultural use.

Use for any other purpose will be regarded as unauthorized operation and no liability whatsoever will be accepted for any damage or injury that may occur as a result.

The term "unauthorized operation" also covers the full observance of all operating, maintenance and servicing specifications: including, for example, the kW/PS limits and the exclusive use of original spare parts.

The use of non-original accessories, spares and/or consumables that do not carry specific approval from Rabe Agrarsysteme GmbH+Co.KG shall void all warranty liabilities.

We accept no liability for damage, loss or injury resulting from the carrying out of unauthorized repairs and/or modifications to the device.

Claims resulting from missing or damaged items detected at the moment of delivery (transit damage, missing parts) should be made immediately and in writing.

Warranty claims, warranty conditions and our liability exclusions are based on our general terms of delivery.

Technical specifications

(subject to change)

Type	No. of prongs	Working width in cm	Height of frame in cm	Approx. wt. in kg					For tractors up to kW (PS)
				Culti-vator	Number of skimmers	Leaf-spring skimmers	Hollow disc skimmers	Roller harrow	
GH 3000 GHF 3000	7	300	75 80	547 799	6* 8**	438 463	459 503	442	110 (150)
GH 4000 *** GHF 4000 ***	9	400	75 80	865 1189	8* 10*	559 574	580 624	568	130 (180)
GH 4000 K GHF 4000 K	9	400	75 80	1197 1521	8* 10*	579 594	600 644	632	130 (180)
GH 5000 K GHF 5000 K	11	500	75 80	1350 1746	10* 12*	642 657	683 727	757	155 (210)
GH 6000 K GHF 6000 K	13	600	75 80	1510 1978	12* 14**	797 812	838 882		175 (240)

* Number of leaf springs or discs for adjustable centre-share with side blades and edging.

** Number of leaf springs or discs for twin-core shares with side blades.

*** Rigid frame, transport-width over 3 m.

Transportation length in front-mounted position: approx. 240 cm

Noise level: < "70 dB(A)"

Equipment

GH: Prongs with blade protector.

GHF: With spring-loaded stone guard.

3-part share: Twin-core share with side blades or adjustable centre-share with side blades and edging.

GH/F 4000 K - 6000 K can be hydraulically folded to width of less than 3 m (twin-action) – hydraulic locking mechanism.

GH/F 6000 K for "K 700", with front land wheels (185 R 14 C).

Three-point linkage cat.II (3 m), cat.II or III (4 & 5 m), cat.III or for "K 700" (6 m).

Additional equipment: Leaf-spring or hollow-disc skimmer with crumbler roller 540 mm Ø, roller harrow with edge leaf springs, front-mounted components, land wheels 185 R 14 C (3 & 4 m), 10.0/80-12 (5 & 6 m), limit plates, lighting gear.

Key to illustrations: (13/1) refers to Fig. 13, item 1.

Safety precautions



DO NOT allow anyone to stand between the tractor and the implement during coupling or uncoupling. Note that this includes stepping between the tractor and implement to operate the external hydraulic controls (risk of injury).

Set the tractor's hydraulic lifting system to "position control" before coupling and uncoupling.

Before operating the tractor and the cultivator, ensure that they are both in safe operating condition.

Ensure that the tractor can be steered safely by attaching an adequate counterweight to the front of the tractor if necessary.



Note that there is a danger of crushing and cutting injuries occurring in the area of the three-point linkage, the collapsible side sections and the roller linkage attachment.

Beware of after-running packer rollers when the implement is lifted at the end of a fast run; do not approach until the rollers have come to a complete stop.

Before moving or operating the implement (folding in / out), always check to ensure that no one is standing within its turning circle or operating area.



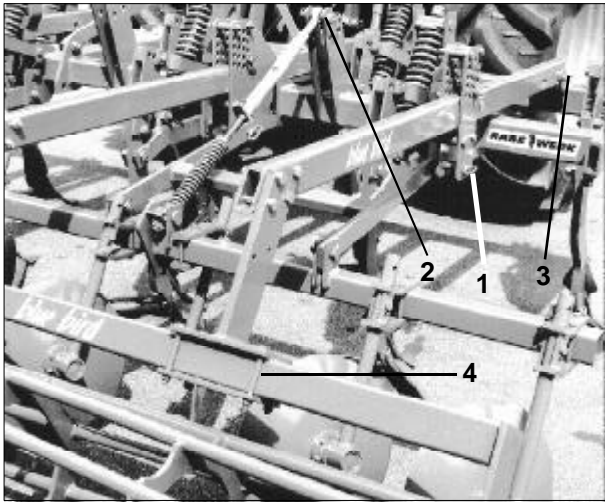
DO NOT stand or ride on the implement or remain within its turning circle or operating area.

Disable the tractor's hydraulic control system to prevent accidental operation while the implement is being towed.

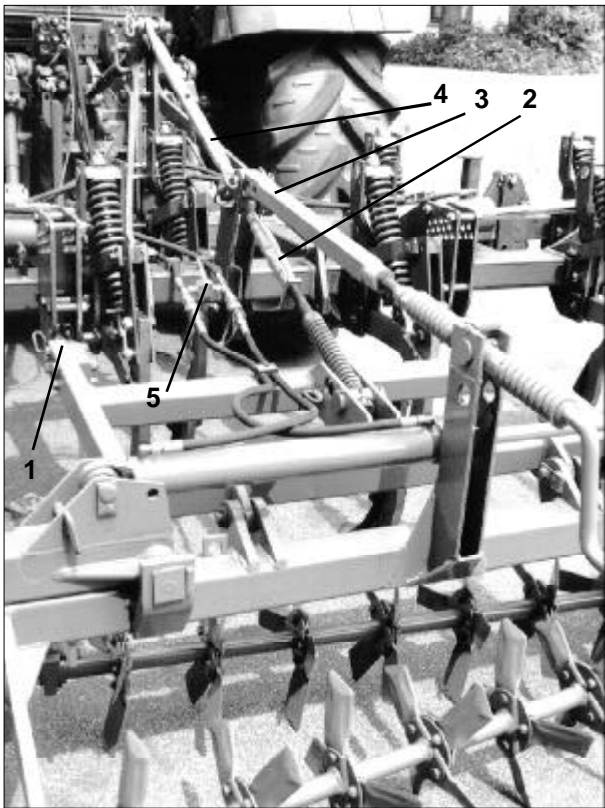
Before leaving the tractor unattended, lower the implement, switch off the engine and remove the ignition key.

Always lower the implement before carrying out any adjustments or maintenance work.

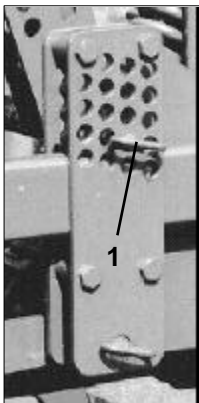
Before operating for the first time – or after long downtimes – check all screws and bolts for tightness, ensure that all bearings are adequately greased (and examine the hydraulic system for leaks and check tyre pressures).



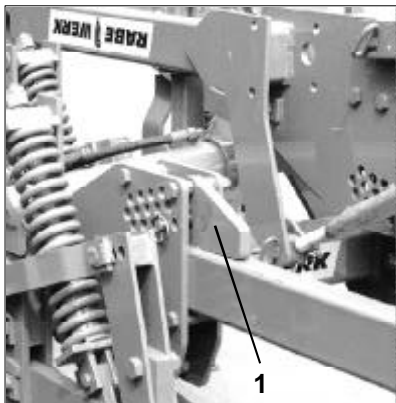
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2



3



4

Set-up

Check both parts of the coupling for compatibility (cat.: tractor/ cultivator).

Check the tractor's tyre pressures.

The tractor's lower link(s) should be:

- adjusted to the same height
- free to move from side to side, with limited lateral movement if used on slopes.

Attach the upper link in such a way that it is positioned at a slight incline from the tractor to the cultivator.

Correctly secure the coupling assembly (three-point linkage).

GH/F 4000 K - 6000 K: Attach the hydraulic hoses, taking care to ensure that they are connected correctly (and including the hydraulic folding roller harrow).

Function:	"Lift"	- Fold
	"Lower"	- Extend

Coupling/uncoupling combination implements

Leaf-spring or hollow-disc skimmer with crumbler roller:

attach skimmer at (1/1) and (1/2), roller arms at (1/3); in the case of multiple-section rollers, maintain a **distance of** about **3 cm** between the roller frames - adjust at clamp brackets (1/4).

Roller harrow:

Fix subframe (2/1) in position, attach turnbuckle (2/2) and spindle (2/3); fit turnbuckle (2/4) securely for working width in excess of 4 m.

When coupling and uncoupling the hydraulic hoses (applies to GH/F 5000 K) open the shutoff valve (2/5) briefly (and then close it again) to release the pressure in the supply lines – switch tractor-mounted control device to "float".

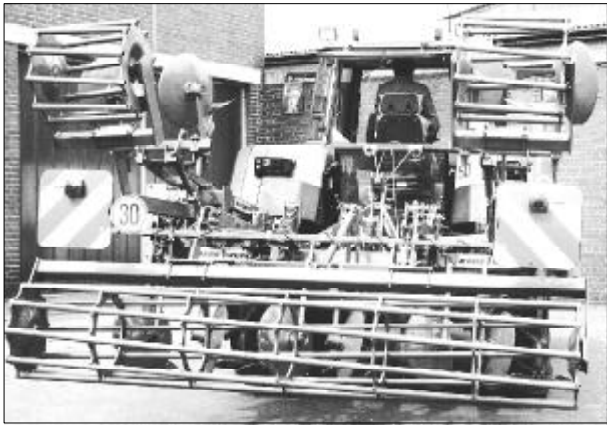
Parking the implement

GH/F 3000 & 4000: If fitted with crumbler roller, secure the roller arms with safety pins (3/1) before removing, lower roller harrow (if fitted) to ground level.

A folding cultivator can be parked in either folded or extended position; when doing so, displace the support members on the central roller arms (4/1), lower one roller harrow to ground level. (Always park one of the roller harrows removed from the cultivator in its extended position.)

Protect the plug-in hydraulic couplings from dirt.

Ensure the implement is parked on solid ground.



5

Before transporting by road

GH/F 3000: Fold in width extensions on both sides on the leaf-spring or hollow-disc skimmers (10/1),
 - Reattach the lateral leaf springs farther inwards on the roller harrow (12/1),
 - Swivel the land wheels inwards (7/1).

GH/F 4000: over 3 m wide – not allowed on public roads!

Folding cultivator: before folding in
 - on GH/F 6000 K, fold in width extensions on leaf-spring or hollow-disc skimmers, right-hand side to front (11/1), left-hand side to back,

- on GH/F 5000 K, secure land wheel height adjuster to prevent it turning - with handle pointing towards rear (8/1).

Secure the folded-in roller harrow with safety pins and reposition the struts (4 m cultivator not illustrated); with hydraulic folding mechanism, secure the side-sections with safety pins (6/1).

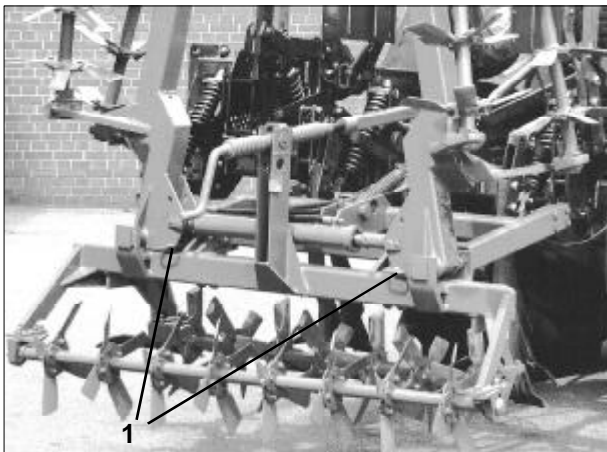
Beware of possible collisions with the open rear panel of the tractor cab when folding or raising the cultivator.

Attach the lighting gear and warning signs (conforming to German StVZO [highway code] or your local equivalent; see Fig. 5).

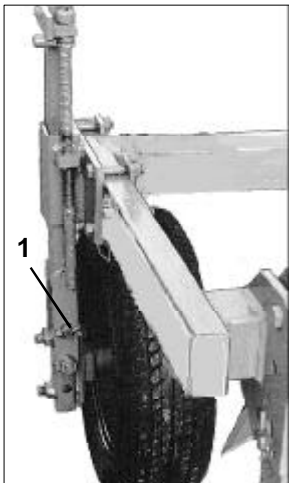
Secure the tractor's draft arm to the side.

Secure the tractor-mounted control devices.

See page 10 for further details of road-transport procedures.



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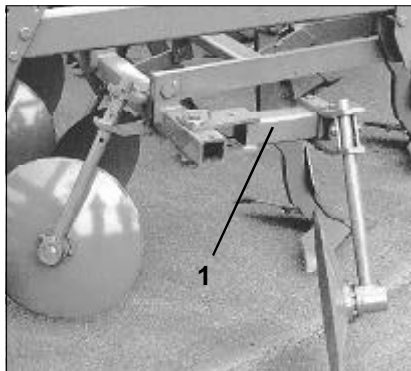
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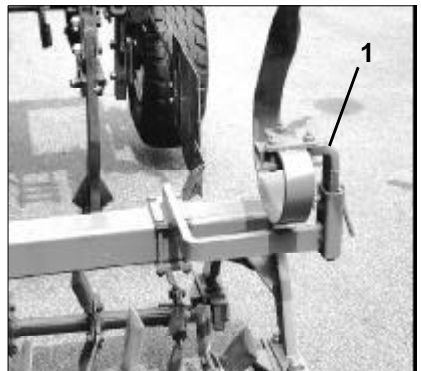
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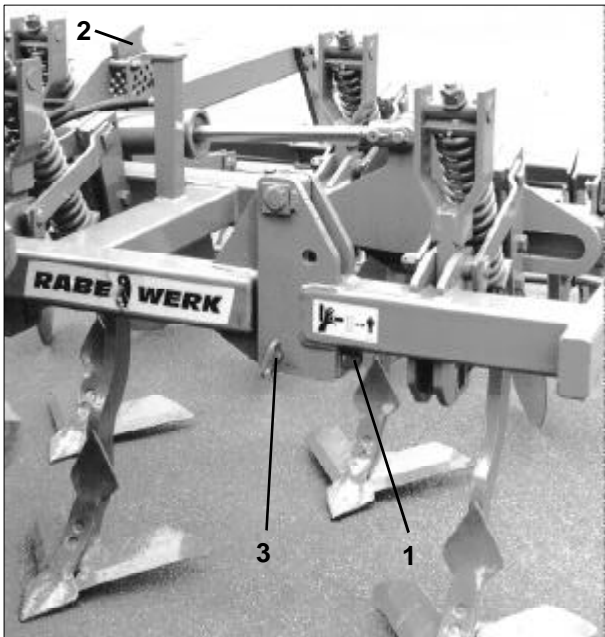
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12



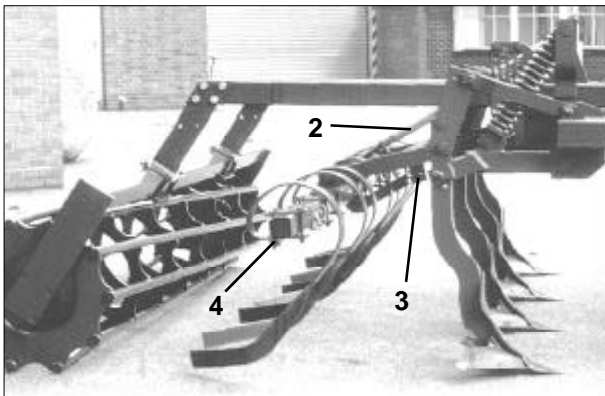
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Before operation

Extend the folding cultivator (use stop-screws 13/1 to align horizontally),
 - move support members (4/1) upwards (13/2),
 - on "6 m for K 700" and
 - on combinations with roller harrow (with land wheels), lock the cultivator's side-sections in position on the front transverse frame with slide-in pin (13/3);



Also, on "6 m for K 700", adjust the turret strut so that it can move - Withdraw slide-in pin (15a/1). Adjust the length of the upper link so that the turret has a certain amount of "play" in both directions during operation. (The turret strut should remain rigid on the "control hydraulics" version).

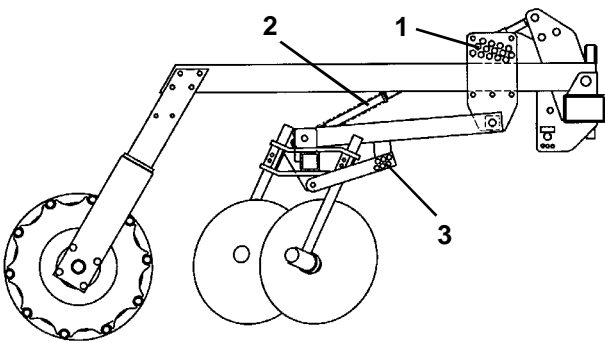


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Extend the width extensions on leaf-spring or hollow-disc skimmers.
 Move land wheels into operating position:
 - on 3 m cultivator, swivel the wheels in the strut fork outwards (7/1 = transport position).
 On the folding roller harrow (4 m cultivator), unpin the side-sections and stabilize with the adjustable struts (not illustrated).

Operation

Avoid taking sharp curves during operation and always raise the implement before reversing.
 Do not load the cultivator down with the pressurized three-point hydraulic system.
 Align the cultivator frame parallel to the ground at the upper link.

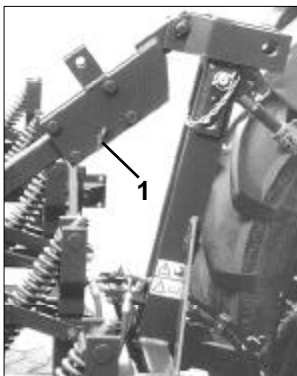


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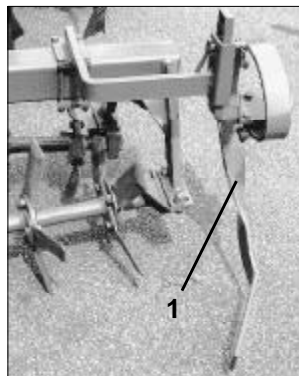
... with leaf-spring or hollow-disc skimmer

Operate the cultivator in "mixed and/or pull" mode; "float" setting is also possible on very flat ground with low pulling-force requirement.
 Adjust the working depth to "over" the crumbler roller – secure in the hole strip (15/1) using safety pins.
 Adjust the skimmer for maximum levelling effect:

- Depth adjustment - with turnbuckle (14/2, 15/2)
- Adjustment angle - hole adjustment (14/3, 15/3)



15a



16

For best levelling results depending on how the soil is tilled (this will depend on the type of soil, depth, share etc.), the skimmer elements are also equipped with individual lateral adjustment - Clamping bracket (14/4).

The attached skimmer unit is spring-loaded, allowing it to lift to avoid large stones.



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... with roller harrow

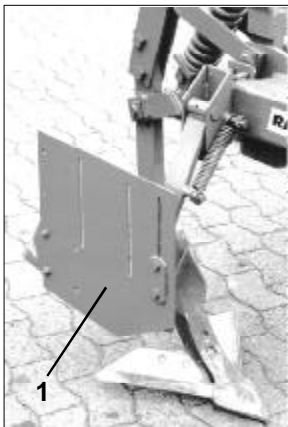
(Fit the cultivator with twin-core share/side blades and land wheels; not with adjustable centre-shares)

Operate the cultivator in "mixed and/or pull" mode.

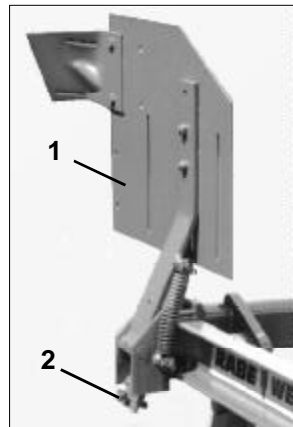
Adjust the working depth by means of the land wheels (optional extra).

Adjust the roller harrow to the correct depth (turnbuckle 17/1) and operating angle (spindle 17/2). It is normally advisable to adjust the front row of blades to a flatter/higher position.

Adjust the edge leaf springs (16/1) for maximum skimming effect.



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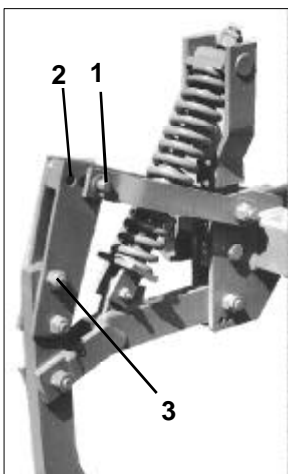
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Guard plates (18/1)

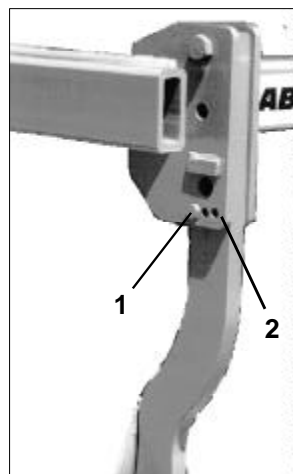
These prevent earth from being thrown out sideways and are especially recommended for front-mounting.

Adjust accordingly to operating direction;
 - maintain sufficient ground clearance during operation,
 - adjust lateral clearance with stop screw (19/2).

Fold up the guard plate concerned (and the two guard plates for transport) with the implement parked at the edge of the field (GH/F 3000) (19/1).



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21

Prong/share adjustment

The prongs (share) can be adjusted to one of three positions,

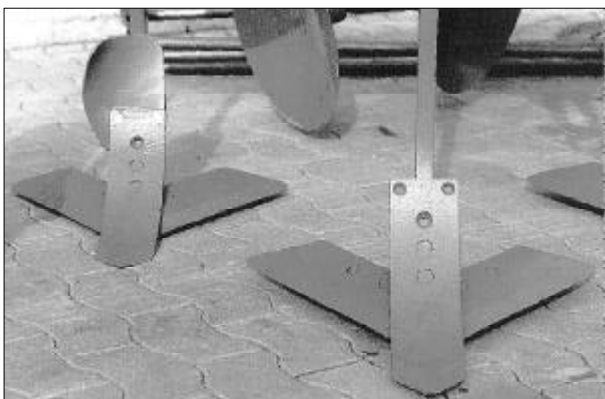
- Flat (20/1, 21/1) - for better throughput
- Steep (20/2, 21/2) - for better pull

Share

a) Twin-core share with side blades (Fig. 13), (hard-welded),

b) Adjustable centre-share with side blades and edging (Fig. 22).

Share cutting-width: approx. 45 cm (GH/F 3000)
 approx. 50 cm (from GH/F 4000)

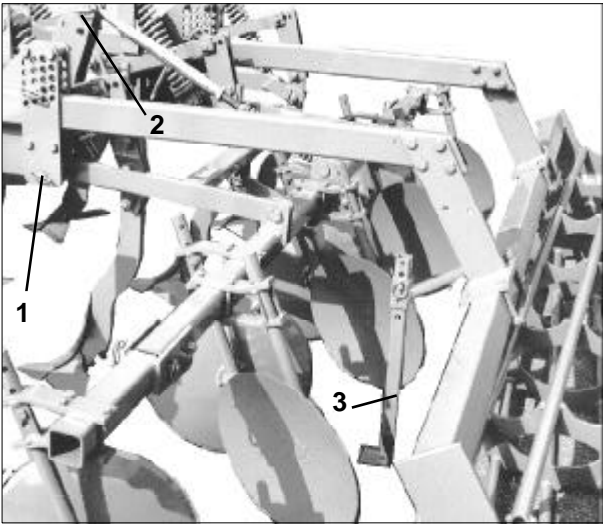


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Overload protection

Both rigid and spring-mounted prongs are protected against overloading by a shear-bolt:

- Rigid: - shear-bolt (21/1) M12x75 / 8.8
- Spring-mounted: - shear-bolt (20/3) M20x70 / 8.8



23

Front-mounting (refit rear/front)

Remove crumbler roller and skimmer unit:

Packer roller - Pin (1/3);

- Use the support (23/3) to provide assistance when removing and fitting the "2 & 3 m rollers". (DO NOT place the roller on the support after removal, as there is a danger of it tipping over!)

Skimmer unit - Pins (23/1) and (23/2).

For roller harrow - Pins (2/1) and (2/2, 2/3).

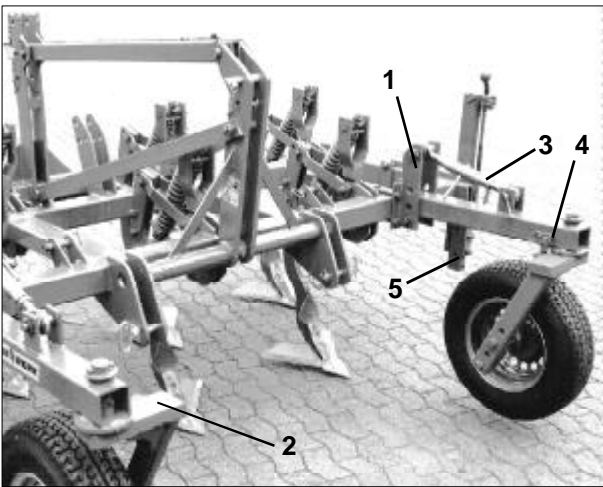
Fit front attachments:

Wheel extender

Retainers/wheel extenders (24/1),

Land wheels - Move each wheel handle (24/2) "inwards".

(If front land wheels are used in rear configuration as side-land wheels for roller harrows, readjust the wheel axles as shown in 24/5.)

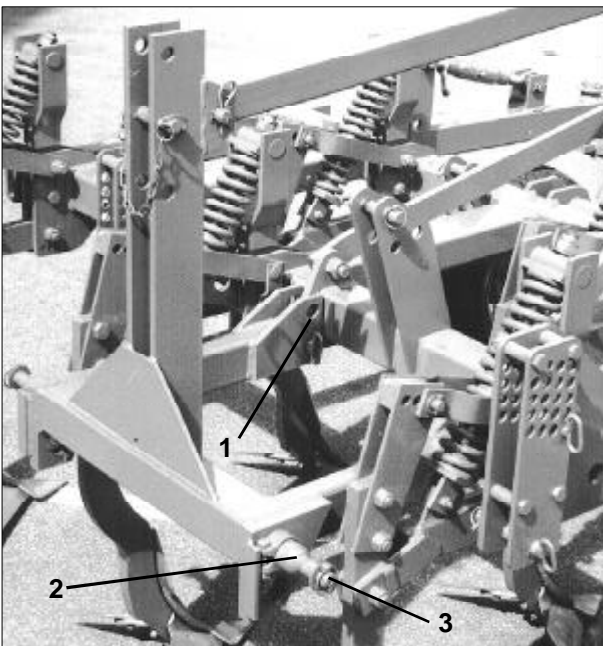


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Three-point turret

Fit the turret at (25/1) or the axle (25/2) in such a way that the lower link of the tractor is raised as much as possible relative to the cultivator during operation.

Secure the lower link axle cat.II with a disc and linchpin (25/3).



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Align the cultivator frame parallel to the ground with the upper link.

Regulate the working depth by means of the front wheels – at the turnbuckle (24/3).

Move the wheels into free-swivelling position - withdraw pins (24/4). (Secure for transporting.)

Operate the front cultivator in "float" setting or with "cylinder pressure control".

Limit the working depth to about 12 - 15 cm in front position.

Maintenance

Before working on the attached implement, switch off the engine and remove the ignition key.



DO NOT work under a raised implement.

If the implement needs to be raised, take adequate precautions to prevent the implement from dropping by accident.

Before working on the hydraulic system, lower the extended cultivator completely and release any hydraulic pressure.

Dispose of used oil correctly (hydraulic oil is mineral-based).

After about eight hours of initial use, retighten all screws and bolts and then re-check their tightness at regular intervals. (Do not overtighten the shear-bolts on the rigid prongs).

Also check the skimmer disc bearings after a brief initial period and at regular intervals thereafter, adjusting the tapered roller bearings (and those of the land wheels) as required.

Lubricate the bearings with greasing nipples at regular intervals – e.g. on the folding section, Every 25 h: skimmer discs, spring-mounted prongs (rod guides 26/1, lower connecting rod 26/2, 26/3), blade shafts and wheels.

Grease the prongs daily if used on very stony ground and/or in heavily dusty areas.

Adjust the pivot points on the lower connecting rods to eliminate any "play". Secure the nuts (26/2 & 26/3); on the upper connecting rods/front with castellated nuts (26/4).

Oil all linkages, ensure free movement of spindles.

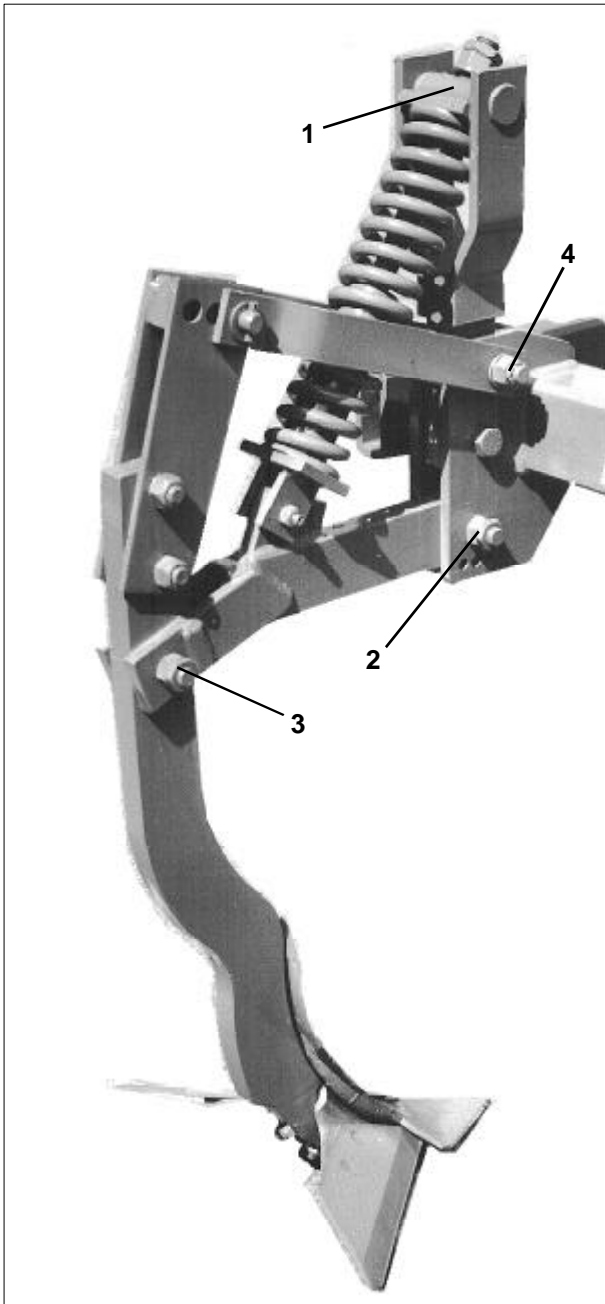
Avoid directing the hose "at the bearings" for any length of time when cleaning the implement with high-pressure water.

Check the hydraulic hose regularly for signs of damage or brittleness and replace as required (see list of spare parts). These hoses are subject to a natural ageing process and should in any case be replaced after 5-6 years, regardless of their apparent condition.

With the implement parked, apply a corrosion-prevention agent to the shares and leaf-springs and/or disc skimmers, and conserve the piston rods with acid-free grease. Touch up any chipped or damaged paintwork.

Replace worn shares immediately, or turn twin-core shares around;

Use only original RABE Agrarsysteme GmbH+Co.KG shares – they are designed to provide an accurate fit, function better and have a longer service life.



26

Tyre pressure: 2.5 bar.

Precautions / Road transport

Set the implement to transportation position and check that it is roadworthy.



DO NOT allow anyone to stand or ride on the implement, or remain within its turning circle or operating area.

Observe the relevant speed limits and traffic regulations when transporting the implement by road. Take care when negotiating curves, as towed implements tend to swing out.

Observe your local road traffic regulations (Highway Code). These regulations normally hold the user responsible for the secure hitching and safe operation on public roads of the tractor and the implements being towed.

The attachment of towed implements must not lead to any excess with respect to the permissible axle load, permissible total weight or tyre load (depending on speed and pressure) of the tractor. To ensure safe steering, the front axle load of the tractor must not be less than 20 % of the empty weight of the vehicle. The maximum permitted transportation width is three metres. A special permit is normally required for moving oversized loads.



In the case of front attachment, the distance between the front end/cultivator and the centre of the steering wheel /tractor must not exceed 3.5 m. If this "front-end limit" is exceeded, the user must take appropriate measures to ensure that there is adequate driver visibility at the farmyard exit, road junctions and crossings. This can be carried out, for example, by use of a second person (on foot or in another vehicle) to give the tractor driver appropriate instructions.

No avoidably overhanging item must endanger other traffic or road users (sect. 32 StVZO [German highway code] or your local equivalent). Overhanging items that cannot be avoided must be covered and fitted with warning signs.

Safety devices include appropriate lighting and signs around all sides and the rear of the vehicle and towed implement, e.g. red/white striped warning labels (423 x 423 mm).

Lighting is required if the towed implement blocks those already fitted to the tractor, or weather conditions make it advisable: e.g. to front and rear, if the towed implement exceeds the width of the tractor's lights by more than 40 cm, or overhangs by more than 1 metre with respect to the existing rear lights.



If an additional pair of headlamps is required for the front-mounted configuration (with only one set of headlamps switched on at once), a special permit is normally required.

A lighting system – with warning panels – can also be obtained from RABE Agrarsysteme GmbH+Co.KG as an optional extra.











Key to warning labels (pictograms)

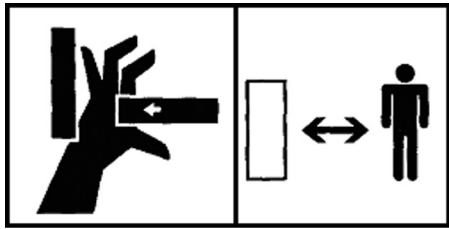
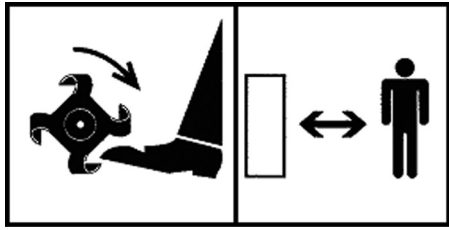
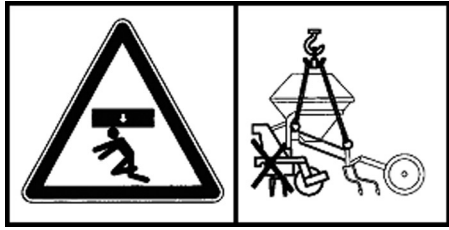
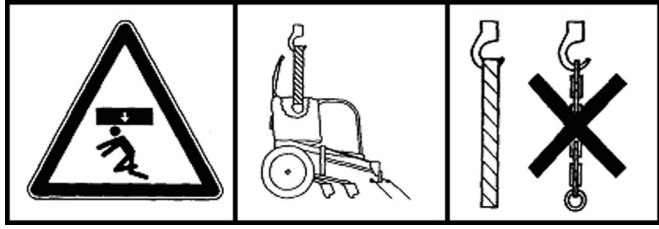


Warning labels are used to indicate possible danger areas; they provide information on how to operate the implement safely.

The pictograms are an integral part of the implement.

Warning labels should be visible (dirt-free) at all times, and replaced if damaged – they can be ordered from Rabe under the relevant pictogram number (Pict. No.).

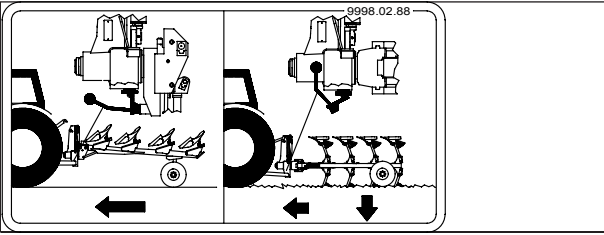
Pict. No.

	Position-No.		
9998.02.59	1	 	<p>Read operators instruction book before operation and ensure you understand the safety advices and the informations contains in it.</p>
9998.02.73	2	 	<p>Retighten all screws and bolts after the initial hours of work, and check regularly for tightness thereafter. For torque settings refer to manual or parts list. Use torque limiting spanner.</p>
9998.02.56	3	 	<p>Never allow people to stand or sit on the machine during work or in transport. Enter filling platform only when the machine is not in motion.</p>
9998.02.53	4	 	<p>Folding wings. Keep away! Keep clear and do not enter danger area. When extending take care of sufficient space.</p>
9998.02.52	5	 	<p>Plough may turn or swing in. Keep away. Do not enter danger area.</p>

<p>6</p> <p>9998.02.61</p>		<p>Danger of squeezing. Keep away!</p>
<p>7</p> <p>9998.02.55</p>		<p>Rotating tools. Keep away! Do not grasp behind safety devices or covers. Never carry out work unless PTO-drive is disengaged and the engine is stopped.</p>
<p>8</p> <p>9998.02.57</p>		<p>Danger of Life by load from top! Lift Turbodrill only with empty hopper and never together with rotary harrow. Use safe lifting gear and fit straps only on hooks provided.</p>
<p>9</p> <p>9998.02.12</p>		<p>Danger of Life by load from top! For lifting seed drills use only straps. No chains. Fit straps on divider plate inside the hopper.</p>
<p>10</p> <p>9998.02.11</p>		<p>Danger of Life by load from top! Lift with empty hopper only and never with rotary harrow or any other implement attached. Use safe lifting gear and fit straps only on hooks provided.</p>
<p>11</p> <p>9998.02.63</p>		<p>Use suitable and safe lifting gear and fasten here. Keep a safe distance from the machine being lifted.</p>

<p>12</p> <p>9998.02.60</p>		<p>Danger of leg injuries when elements may suddenly swing out. Keep away!</p>
<p>13</p> <p>9998.02.58</p>		<p>Grease all marked grease nipples regularly. The reset force can be increased by adjusting the bolt (kN) to the left (!). Reduce by turning to the right. There must be always a minimum clearance a of 1 mm. Caution! Spring is pre-loaded. Do not dismantle or remove spring system without the use of special tools and without being familiar with the dismantling instructions provided by the manufacturer. Danger of Life!</p>
<p>14</p> <p>9998.02.64</p>		<p>Never open or remove any safety guards when the unit is running. Keep away!</p>
<p>15</p> <p>9998.02.10</p>		<p>Danger of Life by load from top! Lift with empty hopper only and never with rotary harrow or any other implement attached. Fit straps on divider plate inside the hopper and only on hooks provided. Use no chains.</p>
<p>16</p> <p>9998.02.81</p>		<p>Risk of crushing in and around the tractor and the implement! When coupling the implement combination to the tractor, ensure that no one is standing within the operating areas of the tractor or implement! Do not step between the tractor and implement to operate the external three-point hydraulic controls.</p>
<p>17</p> <p>9998.02.84</p>		<p>Caution! Hurling foreign objects! Keep danger areas clear of people!</p>

18 9998.02.85		Hydraulic accumulator is pressurized. Repair and replace only as prescribed in the Technical Manual provided.
19 9998.06.01		Oil flow path: Forward: "Lift"
20 9998.06.02		Oil flow path: Return "Lower" or "Tank"
21 9998.02.80		The maximum operating pressure for the hydraulic system must not exceed 200 bar! The maximum rotational frequency of the PTO shaft must not exceed 1000/min!
22 9998.02.83		Before uncoupling or parking an implement, secure with wheel chocks to prevent rolling.
23 9998.02.86		Stop-cock to throughput and closed.
24 9998.02.87		Before transporting on roads, set to lock position with the shut-off valve open.

<p>25</p> <p>9998.02.88</p>	 <p>9998.02.88</p>	<p>Safety catch for road transportation on combi-wheel.</p> <p>Disengage safety catch before working in the field.</p>
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