



Order-No. 9900.01.44GB01

## Operating Instructions Subsoiler

### ***Combi-Digger***





# Operating Instructions

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## ***Combi-Digger***

Read carefully through these operating instructions and safety precautions ("For your safety") before operating the device for the first time, and ensure that they are observed at all times.

The person operating the machine must be properly qualified to do so, trained in its use and everyday maintenance, and familiar with the potential hazards and accident-prevention regulations involved. You should also pass on all work safety instructions to other users.

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

Observe all warning notices.

Instructions in this manual accompanied by this symbol and a warning notice indicate DANGER.

(For a key to warning symbols, see the appendix).



### **Voiding of warranty**

The Combi-Digger is designed exclusively for normal agricultural use. Use for any other purpose counts as unauthorised operation, and no liability whatsoever will be accepted for any loss, damage or injury so caused.

This concept of intended use 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.

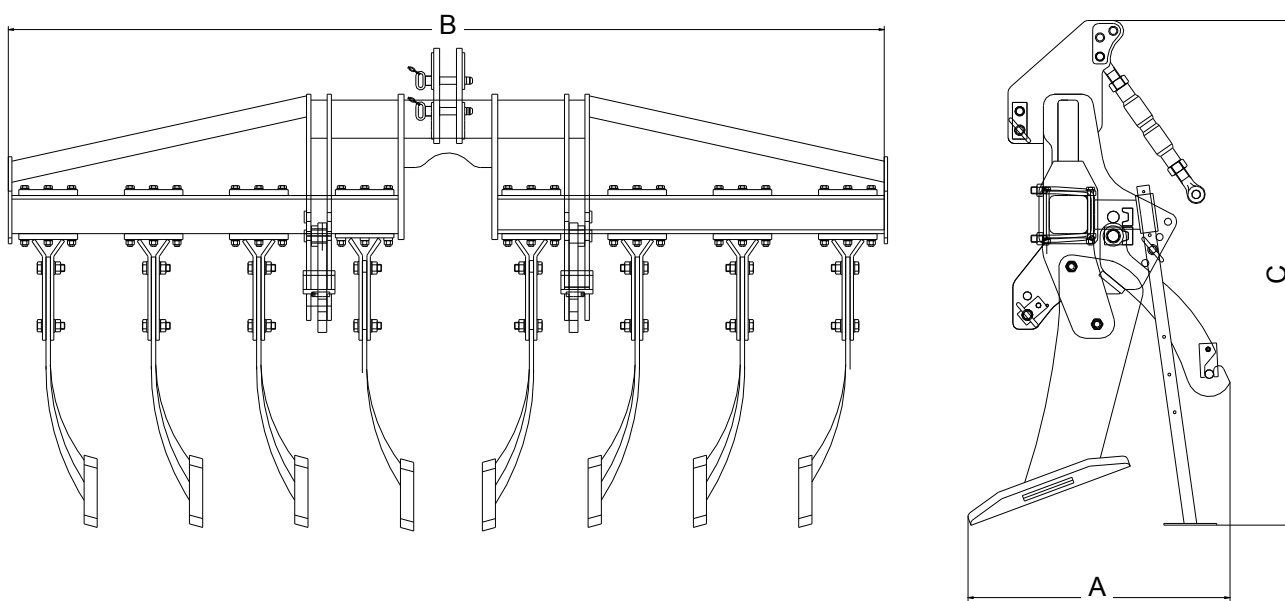
The use of non-original accessories, spares and/or consumables that do not carry specific approval from Rabe shall void all warranty liabilities.

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

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

Guarantee claim conditions and our liability exclusions are based on our general terms and conditions.

## Machine data



Combi-Digger						
Basic type	Loosening tines	Working depth approx.	Weight in kg (approx.)	Lengths in mm (approx.)		
				A	B	C
Combi-Digger 3004	4	200-450 mm	800	900	3000/ 4000	1700
Combi-Digger 3006	6		950			
Combi-Digger 3008	8		1100			
Combi-Digger 4006	6		900			
Combi-Digger 4008	8		1050			
Combi-Digger 4010	10		1230			

The use of additional equipment may increase the weight.

## Safety precautions



Do not allow anyone to stand between the tractor and the device during coupling or uncoupling, even if this is to allow operation of the external hydraulic controls. Danger of injury:

The operator should run the machine from the tractor driver's seat at all times. Always set the tractor's hydraulic lifting mechanism to "attitude control" before coupling or uncoupling. Check the tractor and ground loosener before each startup to ensure that they are in perfect working order for driving and operation.



Take secure steering into account, 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 attachment and folding side sections, and also around the roller-attachment linkage.

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 (or 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 along public roads. Before leaving the tractor unattended, lower the implement, switch off the engine and remove the ignition key.



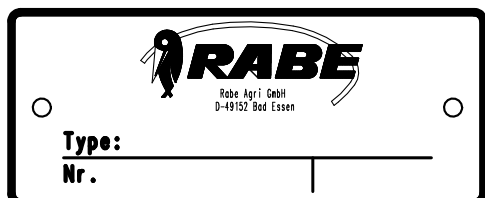
Carry out all adjustment and maintenance operations with the implement lowered.

Before operating for the first time – or after a long period out of use – check all screws and bolts for tightness, make sure that all bearings are sufficiently greased, examine the hydraulic system for leaks and check tyre pressures.

The operating pressure of the hydraulic system must not exceed 200 bar.

- Sound level: < 70 dB(A)
- Maximum length of combination (tractor + device) 12m
- Width 2.55m, maximum 3m
- Maximum height 4m
- Maximum total weight of combination 16t, of which 20% on front axle.

The machine identification plate (3.1) contains certification details, and must not be altered or made illegible.



3.1

### Attachment / Removal

Check for matching connection ratings (category II or III).

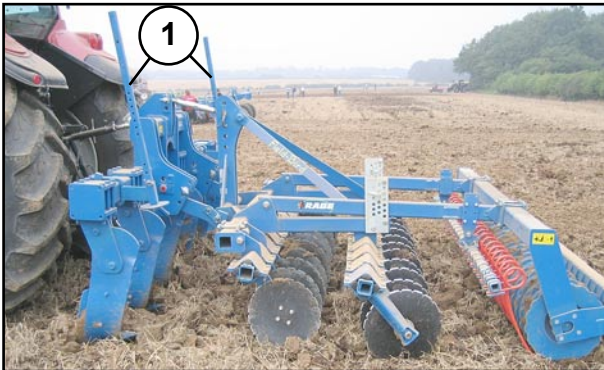
Adjust both lower arms to the same height. Start by hitching the lower arms to the device. Then attach the upper arms.

You can now retract the support stands (4.1/1).

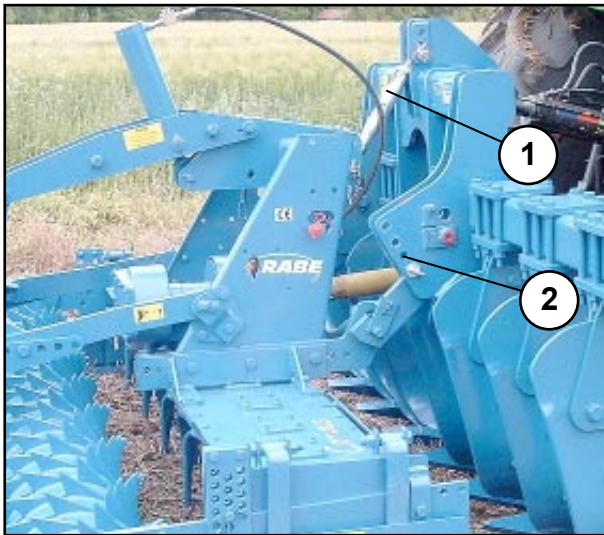
Correctly secure the coupling assembly (three-point linkage).

Remove in reverse order (extend support (4.1/1) and secure, detach upper arms, release lower arms).

Set the hydraulic system to "attitude control" before carrying out the coupling operation. Do not stand between the tractor and device when carrying out the coupling operation, not even to allow use of the rear-mounted hydraulic controls. Danger of injury:



4.1



4.2

### Three-point linkage for add-on attachments

Adjust the position of the attached implement at the turnbuckle (4.2/1, upper arm).

### Working-depth adjustment

Select a length for the upper arm that ensures the horizontal alignment of the device during operation.

To maintain the depth adjustment, the ground loosener can be operated in pulling-power or attitude-control mode.



4.3

Adjust the operating depth to "above" the towed implements – secure in perforated strips (4.2/2)(4.3/1) using pins.

### Operating speed

Driving speed should not exceed 4.5 km/h.

### Working width, tine position

The tines can be infinitely laterally adjusted on the frame by further limits.

When doing so, ensure that the tines are distributed symmetrically overall.



5

### Shearing-pin safety device

The lower one of the two screws (5/1) used to secure the tines to the tine holder is configured as a shearing pin to protect against overloading. If it breaks, a new original screw (M24x1.5x X, strength rating 8.8) must be fitted. The upper screw should also be checked for damage, and replaced if necessary.

### Servicing

Switch off the engine and remove the ignition key before working on the attached implement. Do not work under a non-secured raised implement. Provide the raised device with additional support to prevent accidental dropping. Before working on the hydraulic system, lower the device and release the hydraulic pressure.

After approximately eight hours of operation from initial startup, retighten all screws and bolts, then check for tightness at regular intervals. Lubricate all bearings regularly with a grease gun applied to the greasing nipples. Hose conduits are subject to a natural ageing process and should in any case be replaced after 5-6 years, regardless of their apparent condition.

Residual risks	
Danger zone	Note
Shut down the entire device	Operating Instructions: Attachment and removal
Connection of the complete device	Operating Instructions: Safety precautions



## Precautions / Road transport

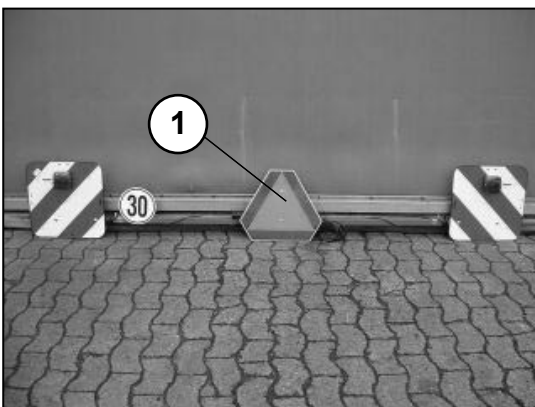


Prepare and check the implement for transport by road. DO NOT stand or ride on the implement or remain within its turning circle operating area. Observe the relevant speed limits and traffic regulations when transporting the outfit by road. Take care when negotiating curves, as towed implements tend to swing out. Observe the road traffic regulations (StVZO or your local equivalent). These regulations normally make 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 permitted axle load, laden weight or tyre load (depending on speed and pressure) of the tractor. For safe steering, the front axle of the tractor must bear at least 20 % of the vehicle's unladen weight.



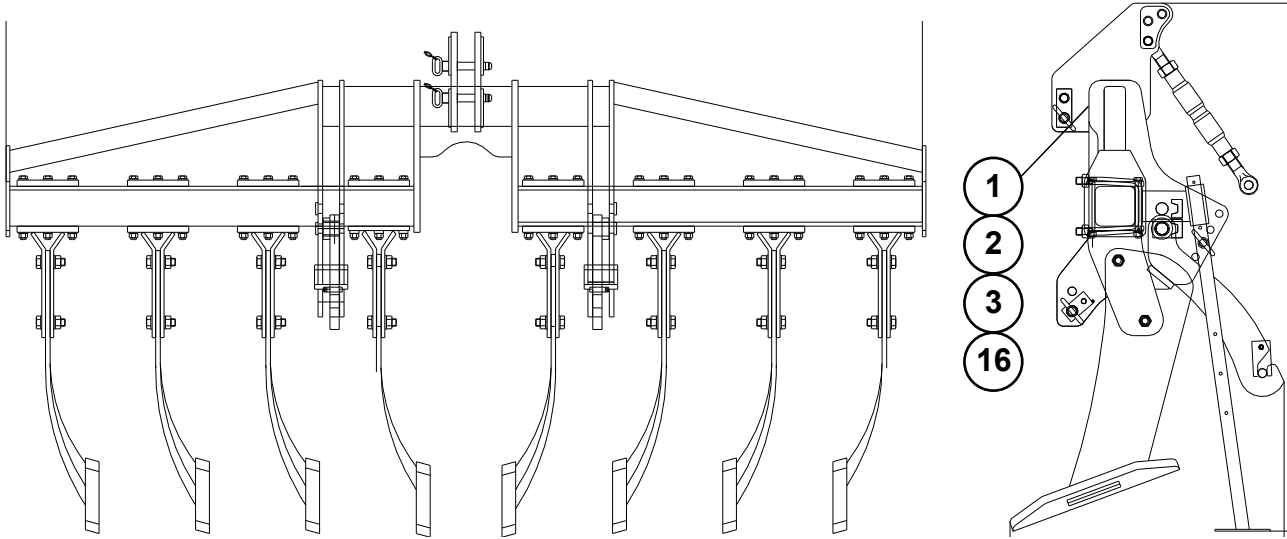
The maximum permitted width of the load is three metres. A special permit is normally required for moving oversized loads. In the case of front attachment, the distance between the front end/ground loosener and centre of steering wheel /tractor must not exceed 3.5 m. If this "front-end limit" is exceeded, 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 avoidable overhanging item must endanger other traffic or road users (sect. 32 StVZO or your local equivalent). Overhanging items that cannot be avoided must be covered and fitted with warning notices. 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 signs measuring 423 x 423 mm. Additional 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 is wider than 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 as an optional extra. When transporting on public roads in Poland, the warning triangle (7.1/1) must be fixed to the centre of the machine.



7.1

## Arrangement of warning signs on the device



For key to symbols, see following warning signs.