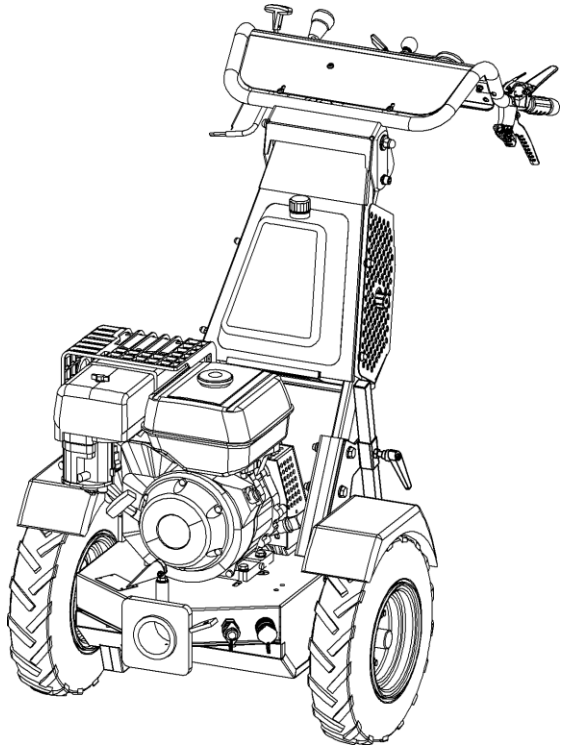
Original operating instructions

Hydrostatic Two Wheel Tractor

UBS Easy Models 9 G - 13 GE



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1 Introduction

Dear Customer,

Thank you for choosing a quality product from Kersten.

This product has been manufactured according to the most up-to-date production methods and extensive quality assurance measures, because only when you are satisfied with your device, our goal is reached.

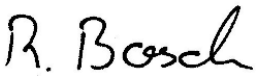
Before using this machine or implement for the first time, please read this manual thoroughly and thoroughly.

If you do not understand any of the information contained in this safety data sheet or the product-specific installation or operating instructions, please contact your sales representative or the machine manufacturer directly.

Keep this manual handy. If necessary, you can read important information and handling instructions.

Have fun with your Kersten device wishes you

Dipl.- Ing. (FH) Robert Bosch



Managing Director

2 About this manual

The machine or implement is subject to technical progress. All information, illustrations and technical data are up-to-date at the time of publication. Changes in the sense of technical progress are reserved to the manufacturer at any time.

Therefore, no claims can be derived from the information and illustrations in this booklet.

2.1 Before commissioning

Since self-propelled implements and attachments can cause serious accidents or hazards if used improperly, the first time the Kersten implement is commissioned, it must be instructed by competent and authorized persons absolutely necessary. The best way to familiarize yourself with its basic functions and its handling is to choose a free and level terrain for your first trip.

- **You reduce the risk of accidents on your part or third parties!**

For further information and difficulties of any kind, please contact the dealer, importer or directly to the manufacturer.

- **Be sure to read the safety instructions on the following pages!**
- **Read the operating instructions before commissioning!**
- **Pass on all safety instructions to other users!**

2.2 Notes on this operating manual

- Enumerations are marked with eye-catching points.
  Example:
    - Text
    - Text
- Instructions are marked according to the order in which they are to be executed.
  Example:
    1. Text
    2. Text

3 Safety instructions for hydrostatic towed tractors

The most important safety instructions in this manual cannot cover all possibilities. It goes without saying that common sense and caution are factors that are not built into a machine but must be brought by the person who uses and maintains the machine.

In order to keep the accident risk as low as possible, please observe the following subchapters.

3.1 Intended use

- The towing vehicle as well as the devices approved by the manufacturer are suitable for the respective usual or common use and work in the agriculture and forestry, as for example.
- Green area and plant maintenance and built for winter service.
- Any other use is considered improper use. The manufacturer is not liable for damage resulting from this, the risk being solely borne by the operator.
- Proper use also includes compliance with the operating, maintenance and service conditions specified by the manufacturer.
- The towing vehicle may only be used, maintained and repaired by persons familiar with it and aware of the dangers.
- The relevant accident prevention regulations as well as the other generally recognized safety and occupational health rules must be observed.
- Unauthorized modifications to the machine lead to the exclusion of liability of the manufacturer for the resulting damage.

3.2 General safety and accident prevention regulations

3.2.1 Basic Rules

- In addition to the instructions in this operating manual, observe the general valid safety and accident prevention regulations!
- The towing vehicle may not be operated by persons under the age of 16, not even under the supervision of a
- Adults, be served! Children and adolescents should be instructed not to play with the device.
- Only trained personnel or persons may use this machine!
- When using public traffic routes, observe the relevant regulations!
- The tiller is not approved for public transport.
- The clothing of the user should be tight. Avoid loose-fitting clothing and wear sturdy shoes or safety shoes!
- Only work in good visibility and light conditions!
- The attached warning and information signs provide important information for safe operation; the attention serves your safety!
- For transport on motor vehicles or trailers outside the area to be machined, the motor must be switched off!
- Be careful with rotating tools - safety distance!
- Be careful with trailing tools. Wait for work on these until they stop completely!

- There are crushing and shearing points on driven parts!
- The transportation of persons and objects is prohibited!
- Driving behavior, steering and possibly braking capability as well as tilting behavior are influenced by mounted or attached devices and load. For this reason, only implements approved by the manufacturer may be used. The working speed must be adapted to the respective conditions.

- Do not make any changes to the engine's upper idle speed. Too high a speed increases the risk of accidents.
- Unauthorized conversions that endanger the operational safety of the machine are prohibited!
- Check the machine for operational safety before each use!

3.2.2 Work and danger area

- The user is responsible to third parties in the work area!
- Staying in the danger area of the machine is prohibited!
- Check the near range before starting up. Pay special attention to children and animals. Ensure sufficient visibility!
- Before starting work, remove foreign objects from the surface to be worked. Pay attention to other foreign objects during work and eliminate them in good time.
- When working in enclosed areas, the safety distance to the border must be maintained so as not to damage the tool.
- When working in the immediate vicinity of public roads and paths, these should not be approached if possible, as there is a risk of injury to third parties due to flying objects.
- When working on public roads and squares or in the immediate vicinity, warning and danger signs should be set up in order to attract the attention of third parties.

3.2.3 Before starting work

- Before starting work, please familiarize yourself with all the devices and actuators as well as their function and make sure that all safety devices are properly installed and in the protective position! It's too late during the assignment!
- Above all, learn how to stop the engine quickly and safely in an emergency.

3.2.4 Starting the machine

- When starting the engine, all drives must be switched off!
- Do not run the engine indoors!
- Do not step in front of the single-axle tractor or the implement to start the engine.
- Do not use jumper fluids when using electric jump start (jumper cable). There is a danger of explosion!

3.2.5 During operation

- Never leave the operating position on the guide rail while driving!
- Never adjust the operating handle while driving - risk of accident!
- The transport of persons and objects is prohibited!

- If, for example, the attachment has caught a foreign object and blocked it, stop the engine and clean the attachment with a suitable tool! Always switch off the engine when handling or cleaning the implement!
- Do not leave the operating station until all tools of the attachment have come to a standstill!
- In the event of damage to the self-propelled implement or attachment, stop the engine immediately and have the damage repaired.
- If the steering fails, stop the self-propelled implement immediately and stop the engine. Have the fault rectified immediately.
- If there is a risk of slipping on sloping ground, the implement carrier must be secured by an escort with a pole or a rope. The escort must be located above the vehicle at a sufficient distance from the work tools! For the helper, it is recommended to wear crampons.
- If possible, always drive across (horizontally) to the slope!
- Only drive on rough and dry ground on steep slopes! Moisture and rain increase the risk of slipping out and slipping.
- On steep slopes, lattice wheels or sprockets must be used to prevent the tractors from slipping off.
- In emergency situations, if, for example, the machine slips sideways in the slope, always release the handles! You as an operator do not manage with their physical strength to prevent the Never move the operating handle while driving - accident risk!
- The transport of persons and objects is prohibited!
- If, for example, the attachment has caught a foreign object and blocked it, stop the engine and clean the attachment with a suitable tool! Always switch off the engine when handling or cleaning the implement!
- Do not leave the operating station until all tools of the attachment have come to a standstill!
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- Only drive on rough and dry ground on steep slopes! Moisture and rain increase the risk of slipping out and slipping.
- On steep slopes, lattice wheels or sprockets must be used to prevent the tractors from slipping off.
- In emergency situations, if, for example, the machine slips sideways in the slope, always release the handles! You as an operator do not manage with their physical strength to prevent the Einachsschlepper on slipping and are otherwise carried away

3.2.6 Leaving the machine

- When stopping the machine, close the fuel cock (if present)!
- By using wheel chocks or, if necessary, by applying the parking brake, secure the machine from rolling away when leaving the vehicle.
- Secure the device against unauthorized use!
- Switch off the engine and, if present, remove the ignition key or the spark plug connector!
- Never leave the machine unattended while the engine is still in operation!

3.2.7 Screw connections and tires

- When working on the wheels, make sure that the device is safely parked and secured against rolling away!
- Regularly check nuts and bolts for tightness and retighten if necessary.
- Repair work on the tires must only be carried out by qualified personnel and with suitable mounting tools!
- If the tire pressure is too high, there is a risk of explosion!
- Check the air pressure regularly!

3.2.8 Coupling and uncoupling attachments

- Attach and remove attachments only when the engine is off, and the PTO is off.
- When replacing attachments and their parts, use suitable tools and
- Wear gloves.
- When mounting and dismounting, bring the required support equipment into the respective position and ensure sufficient stability.
- Secure the rear-mounted tow tractor with an attachment to prevent it from rolling (parking brake, wheel chocks).
- When attaching attachments, there is a risk of injury (crushing). Special care is necessary.
- Attach implements according to regulations and fix in the prescribed places

3.2.9 Maintenance, cleaning and repair work

- Do not carry out maintenance and cleaning work on the running engine!
- Always remove the spark plug connector when working on the engine.
- If guards and working tools are subject to wear, they must be checked regularly and replaced if necessary.
- Damaged cutting tools must be replaced.
- When replacing cutting tools, use suitable tools and wear protective gloves.

- Only use original spare parts from the manufacturer, as these comply with the technical requirements and thus the risk of accidents is minimized!

- Cleaning with the high-pressure cleaner should be carried out so that the water jet is not held directly in bearings, turned parts, grease nipples, shaft seals, wheel hubs, etc. After each cleaning with the high-pressure device, the lubrication points must be re-greased. In the case of infringement, the right to guarantee expires!
- Check the moving parts for ease of movement and regrease if necessary!
- After maintenance and cleaning work, be sure to replace the guards and put them in the protective position!
- To avoid the risk of fire, keep the machine clean!
- Regularly check nuts and bolts for tightness and retighten if necessary.
- When carrying out maintenance, cleaning and repair work on the lifted device, always make sure that it is protected by suitable support elements!
- Before carrying out any repairs, make sure that the hydraulic system is depressurised, because fluids under pressure can penetrate the skin and cause serious injuries! There fore See a doctor immediately - danger of infection!
- Repairs may only be carried out by qualified personnel.
- When working on the electrical system, always remove the earth strap from the battery!
- Check the hydraulic hose lines for damage and aging at regular intervals and replace if necessary.
- When welding the tractor or mounted equipment, disconnect the battery.
- Repair work such as welding, grinding, drilling etc. must not be carried out on load-bearing and other safety-related parts such as frames, axles, etc.!

3.2.10 Engine, fuel and oil

- Before refueling, switch off the engine and remove the ignition key (if available)!
- Do not top up with fuel and do not spill fuel (use a suitable refilling aid). If necessary, take up spilled fuel immediately.
- Dispose of oils, fuels and filters separately and properly!
- When handling fuel, caution is required, increased risk of fire. Never refuel near open flames, hot engine parts, and sparks when flying. Do not smoke when refueling!

3.2.11 Electrical system and battery

- When working on the electrical system, always disconnect the battery (negative pole) (if present).
- Make sure the connection is correct - first positive pole and then negative pole!
- Be careful with battery gases - Explosive!
- Avoid sparks and open flame near batteries.
- Take care when handling battery acid - corrosive!
- Always provide the positive pole with the intended cover or terminal protection cap.
- Caregivers of pacemakers must not touch the live parts of the ignition system while the engine is running!

3.3 Pictograms used

Explanation of the pictograms used:

Before commissioning read and observe the operating instructions and safety instructions.

Switch off the engine and remove the spark plug connector before carrying out any repair, maintenance or cleaning work.

Never open or remove protective devices while the engine is running!

Touch machine parts only when they have come to a complete stop.

Danger from passing parts while the engine is running - keep safety distance.

Follow the instructions in the technical manual. Smudge!

3.4 Warnings and safety instructions for filled lead - acid batteries

- Follow the instructions on the battery and in the operating instructions.

- Use eye protection.

- Keep children away from acid and battery.

Explosion hazard:

- When charging batteries, a highly explosive bang mixture is produced, so please note the following:

- Fire, sparks, open light and smoking prohibited.
- Avoid sparking when handling cables and electronic devices, as well as through electronic charging.
- Avoid short circuits

Burn Hazards:

- Battery acid is highly corrosive, therefore:
- Wear protective gloves and eye protection.
- Do not tip the battery, acid can escape from the degassing openings.

First aid:

- Acid splash in the eye; immediately rinse with clear water for several minutes. Then seek medical attention immediately.
- Acid splashes on the skin or clothing; Immediately neutralize with an acid converter or soapy water and rinse with plenty of clear water.
- In case of drunk acid, consult a doctor immediately.

Warnings:

- Do not expose batteries to direct daylight unprotected.
- Discharged batteries can freeze, therefore store frost-free.

Disposal:

- Hand over used batteries at a collection point.
- During transport, the following instructions for use must be observed.
- Never dispose of old batteries in the household waste.

3.5 Instructions for Use for Starter Batteries

1. Removal and installation of the battery

- Before removing the battery, switch off the engine and all power consumers.
- Avoid short circuits due to tools.
- When removing, first disconnect the negative pole (-), then the positive pole (+).
- Clean battery terminals and pole terminals and treat with acid-free grease.
- Clean the footprint / support before installing the battery.
- Tighten the battery firmly.
- When installing, first connect positive pole (+), then negative pole (-).
- Make sure that the pole terminals are secure.
- Leave at least one gas outlet unlocked.
- This also applies to the return transport of used batteries.

2. External loading

- Read and follow the operating instructions of the charger manufacturer!
- Check electrolyte level before charging and level if necessary.
- Disconnect the battery cable and remove the battery from the vehicle.
- Ensure good room ventilation.
- Use only suitable DC chargers.
- Connect the positive pole (+) of the battery to the plus output of the charger. Connect negative pole (-) accordingly.
- Only switch on the charger after the battery has been connected and switch off the charger after charging.
- Charging current should be 1/10 Ah of battery capacity.
- Interrupt the charge if the acid temperature exceeds 55 ˚C.
- Battery is fully charged if charging voltage does not increase within 2 hours.

3. Maintenance

- Keep the battery clean and dry.
- Do not use any improvers.
- Do not open the battery.
- If the starting power is insufficient, recharge the battery.

4. Start Help

- Use only standardized jump leads and observe their instructions for use.
- Use only batteries of the same nominal voltage.
- Switch off the engine from the helping vehicle.
- First connect both positive terminals (+) with the red jumper cable. Then connect a pole tongs to the negative pole (-) of the dispenser battery. Then clamp the second pole on one of the bare spots of the needy single-axle tractor.
- Start the helping vehicle, then max. The engine of the auxiliary towing vehicle max. Start 15 seconds.
- Disconnect the cable in reverse order.

5. Decommissioning

- Store the battery in a cool place.
- When decommissioning, disconnect the negative pole (-).
- Regularly check the charge status of the battery and recharge if necessary.

4 Disposal

The equipment must be disposed of in accordance with local, state, or local regulations.

Depending on the material, you can dispose of the parts as residual waste, special waste or recycling. The company Kersten Arealmaschinen GmbH assumes no disposal.

5 Warranty

The device is accompanied by a sales message, which among other things determines the time for the start of the warranty period. When selling the device, please complete the sales message completely and send it back to us within 14 days. If warranty claims are asserted without us having a sales message, no warranty service will be provided.

Warranty claims should be submitted promptly, but no later than six weeks after the occurrence of the damage, giving details of the purchase data, otherwise no warranty service will be provided. Complaints must be confirmed by the company Kersten Arealmaschinen GmbH. Wear parts are excluded from the warranty. Furthermore, the warranty expires due to improper operation, when performing no or incorrect maintenance work, when using inadmissible equipment and when using non-original spare parts.

6 Recommendations

6.1 Lubricants

For engine and gearbox, use the specified lubricants (see under "Technical data").

For "open" lubrication points or nipple points we recommend to use biolubricant oil or biolubricant grease. With the use of biolubricants you act ecologically correct, protect the environment and promote the health of people, animals and plants.

6.2 Fuels

The built-up B & S or Honda engine can be easily operated with commercial unleaded normal and premium gasoline and leaded premium gasoline.

Do not add oil to the gasoline.

If unleaded petrol is used for the environment, engines that are to be decommissioned for more than 30 days should have their fuel drained completely to avoid resin residues in the carburettor, fuel filter and tank, or to add a fuel stabilizer to the fuel.

6.3 Maintenance and repair

Your dealer has trained mechanics who perform proper maintenance and repair. You should only carry out major maintenance work and repairs yourself if you have the appropriate tools and knowledge of machines and internal combustion engines.

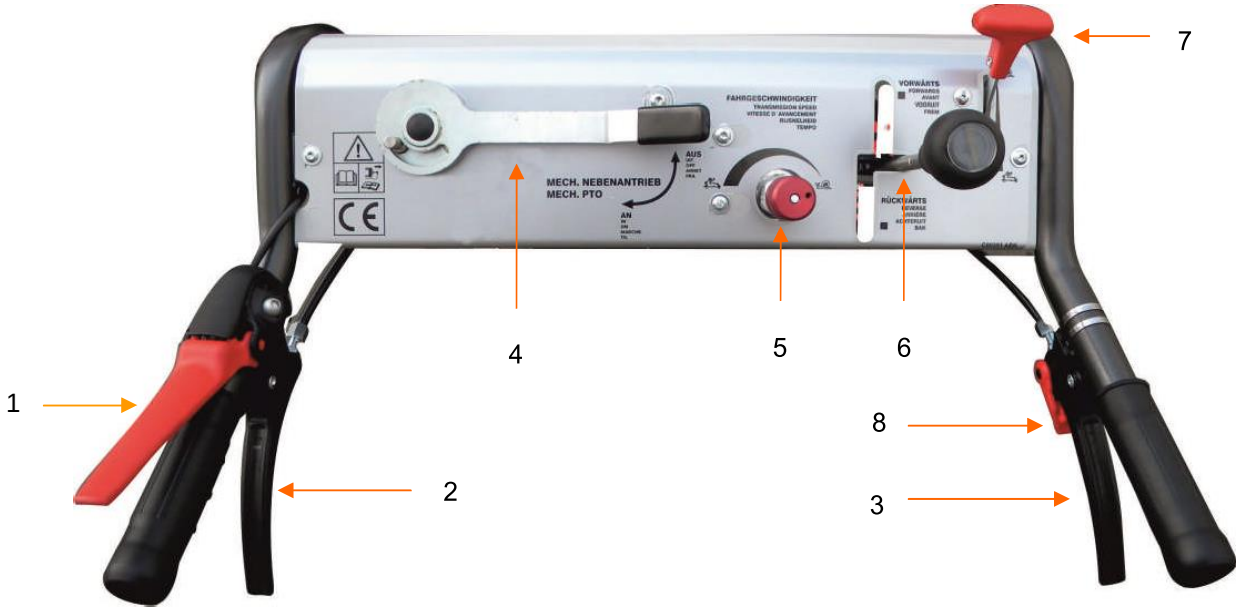


Illustration 7.1

7 Operation of the hydrostatic tow tractor

7.1 Start the engine

- To start the engine, the drive lever (Fig. 7.1, Pos. 6) in the recess of the shift gate and the mechanical auxiliary drive lever (Fig. 7.1, Pos. 4) must be in the "Off" position. In addition, the lower lever for the hydraulic drive (Fig. 7.1, Pos. 3), which is located below the right-hand handle, must not be actuated.

If the levers are not in the position described above, the ignition of the engine is interrupted, and the engine does not start.

- During the starting process it is **forbidden** to operate the deadman switch (Fig. 7.1, item 1)!
- To start the engine, the respective operating instructions of the engine manufacturer must be observed.

7.2 Starting and switching on the auxiliary drive

You are best acquainted with the basic functions of the single-axle tractor by choosing a free and level terrain for your first trip.

- Press the throttle lever (Fig. 7.1, Pos. 7) approx. 1/3.
- Press down the deadman switch (Fig. 7.1, item 1) and keep it pressed. Likewise, the lower lever (Fig. 7.1, Pos. 2), which is located below the left handgrip and whose function resembles a conventional "drive clutch", pull and hold.
- Select the direction of travel using the lever (Fig. 7.1, Pos. 6).
- Make sure that nobody is in front of and behind the machine!
- After selecting the direction of travel, slowly release the lever (Fig. 7.1, item 2). The faster the lever is released, the faster the machine starts to move. To spare the components, a jerky start should be avoided.
- To stop the machine, first pull the lever (Fig. 7.1, Pos. 2) and then the lever for the direction of travel (Fig. 7.1, Pos. 6) back into the recess. Afterwards the levers (Fig. 7.1, Pos. 1 and 2) can be released.

- The required travel speed is set on the rotary knob (Fig. 7.1, item 5).

The setting of the driving speed and the preselection of the direction of travel may only be carried out when the single-axle tractor is at a standstill!

- Use the throttle lever (Fig. 7.1, Pos. 7) to regulate the engine speed and thus also the driving speed. Always try to drive with the lowest speed required, this protects material and the environment.
- The hydraulically driven attachment machine is switched on with the lever (Fig. 7.1, Pos. 3), which is located below the right-hand grip. Jerky switch-on is prohibited, so u.a. Uncontrolled reactions of the implement are avoided. The lever has a self-holding feature (Fig 7.1, Pos. 8), which can be inserted at a longer duty cycle. The latching automatically disappears when the lever (Fig. 7.1, Pos. 3) is pulled again.
- The mechanically driven attachment machine is switched on with the lever (Fig.7.1, item 4) by a gentle clockwise movement. Jerky switch-on is prohibited, so u.a. Uncontrolled reactions of the implement are avoided.
- Switching on the implement is only permitted on a free or already worked area!
- It is not permitted to switch on the implement outside the working area!
- Never operate the attachment when children or animals are in the work area.
- If, when turning on the attachment, you notice that the tool is not turning up and you hear a noise from slipping V-belts, you must switch off the attachment immediately. If the tool is engaged, the initial torque is too high. If possible, switch on the machine without load. If necessary, check the tension of the tension spring on the Bowden cable.

7.3 Switching off the internal combustion engine

- Before switching off the internal combustion engine, make sure that the drive lever (Fig. 7.1, item 6) is in the recess and the lever for the mechanical drive (Fig. 7.1, item 4) is in the "off" position, In addition, the lever (Fig. 7.1, Pos. 3) for the hydraulic power take-off may not be pulled by the self-holding.
- Place the throttle lever (Fig. 7.1, item 7) in the neutral position and allow the engine to idle for approximately one ½ minute.
- Turn the engine off switch located on the internal combustion engine to the "0" position.
- Close the fuel tap
- Secure the towing vehicle against unauthorized use and, if necessary, remove the ignition key.
- When leaving, secure the device against rolling away, by using wheel chocks or, if necessary, by applying the parking brake.

Tip:
In case of prolonged downtime, do not stop the engine with the "Engine off switch", but close the fuel cock and let the engine run until it comes to a standstill by itself. Thus, the carburettor is empty and no gumming can occur. This procedure must not be carried out in confined spaces, otherwise there is danger of **suffocation**. Basically, pay attention to adequate ventilation!

8 Montage

8.1 Mounting attachment

- To mount an attachment, the attachment and attachment tube on the drive unit must be clean and well-lubricated (see Figure 8.1).
- The coupling of the attachment and the receiving tube of the drive unit must be at the same height to allow them to be pushed together. For this purpose, parking supports are available on some attachments, where the appropriate height can be adjusted.
- When assembling, it is important to note that the coupling driver (red plastic star) is located in one of the two coupling halves.
- Pull up the locking lever (Fig.8.1) and fold the locking lever upwards.
- If the attachment of the attachment can not be pushed completely into the pick-up tube, then the teeth of the two coupling halves may be opposite each other. By switching on the power take-off and by slowly pulling on the starter cable of the engine, the drive shaft continues to rotate, allowing the further drive in.
- Lower the locking lever again and check that the locking pin is fully engaged.

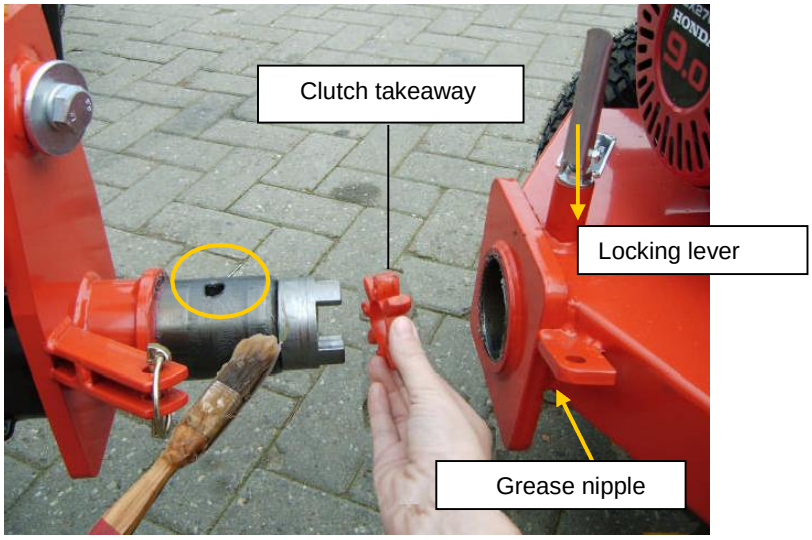


Illustration 8.1

8.2 Assembly of the hand guard

The installation of the handguard is described in more detail below and illustrated in Figure 8.2.

1. To install the left-hand guard, place the supplied drilling template (Fig. 8.2, item 1) on the hand spar (Fig. 8.2, item 2) and drill two 6.5 mm holes.
2. Screw on the left mounting bracket (Fig. 8.2, Pos. 3) with 2 M 6 x 20 screws, 2 body washers and 2 lock nuts.
3. Fasten the hand guard with 2 M6 x 20 screws, 2 large washers and 2 lock nuts.
4. Perform the same steps for mounting the right-hand guard.

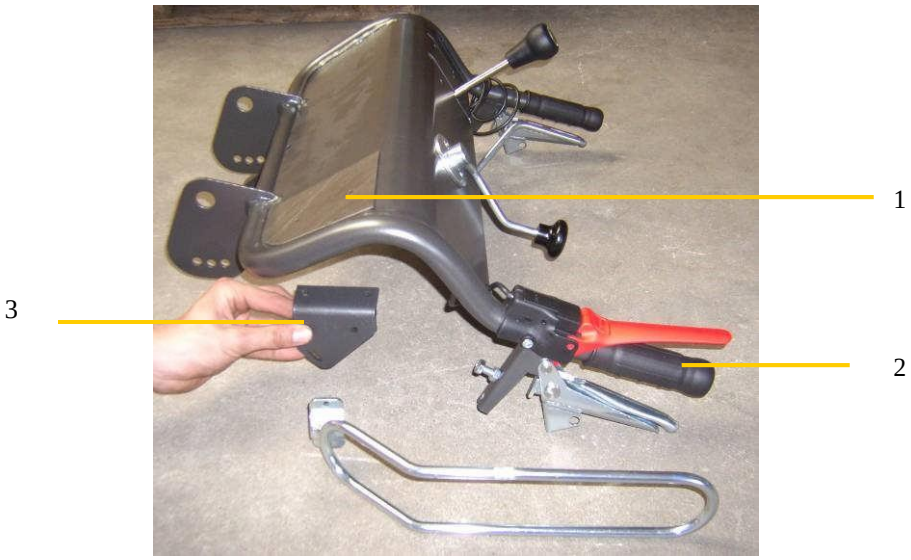


Illustration 8.2

9 General instructions for load securing and transport

- Pay attention to the trailer load of the towing vehicle and the permissible total weight of the trailer!
- Suitable loading ramps with sufficient load-bearing capacity must be used for loading the machine.
- The ramps must be secured against slipping.
- The machine must be secured against rolling during transport.
- There are ring eyes on the handlebar pockets of the single-axle tractor (Fig. 9.1, item 1) and on various attachments (Fig. 9.2, item 1), which can be used for lashing.

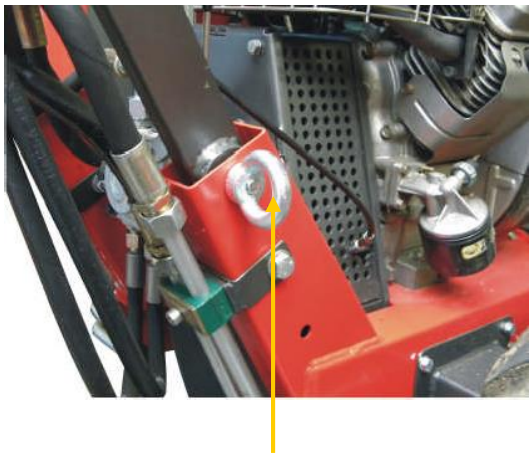


Illustration 9.1 1

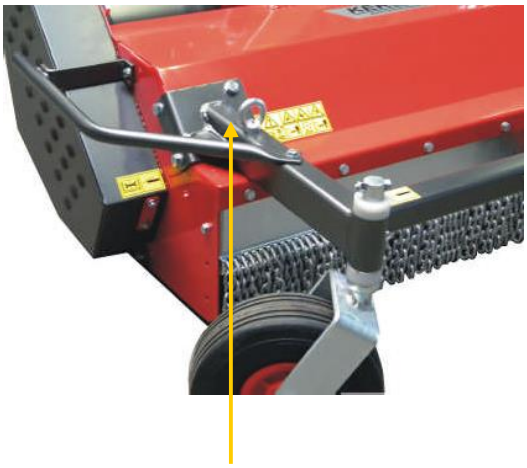


Illustration 9.2 1

- If present, apply the parking brake so that the drive wheels are locked.
- Switch off the engine and close the fuel tap.
- Before unloading the machine, make sure there is no obstacle immediately before the ramps on the ground, otherwise there is a **risk of collision**. When unloading several machines, these are far enough to drive out of the loading zone.

10 Maintenance

10.1 General maintenance instructions

- Personal injury or damage to the machine may occur.
- Check all safety-related parts before every use of the machine.
- Oil change intervals must be carried out according to the recommendations of the respective engine manufacturer.
- Check the hydraulic connections for leaks before each use.
- **High pressure leaking fluids (such as hydraulic oil and diesel fuel) can penetrate the skin and cause serious injury! Therefore, seek medical attention immediately - risk of infection!**
- The hydrostatic tiller is operated with biodegradable oil.
- The machine must be regularly serviced.
- Dispose of oils, fuels and filters separately and properly!
- When working on the electrical system, disconnect the earth connection from the battery!
- Repairs, maintenance and cleaning work as well as the elimination of malfunctions must always be carried out with the drive switched off and the engine stationary. Remove ignition key or spark plug connector! After carrying out this work, replace all protective devices!
- If the machine is transported in a different way than with its own drive, this must be done with the motor switched off!
- Regularly check nuts and bolts for tightness and retighten if necessary.
- When carrying out electrical welding work on the tractor and attached equipment, disconnect the cables at the generator and at the battery!
- Only use original spare parts from the manufacturer!
- After the first 5 hours of operation, check all screw and bolt connections.
- Lubricate or lubricate all moving parts regularly.
- Check hydraulic connections for the first time after 5 operating hours, retighten if necessary.

Only tightening has no success!
Release a leaking hydraulic fitting first, then move the hose or fitting, and then retighten the fitting.

10.2 Daily maintenance

- Before each use, the safety elements and moving parts must be checked for wear.
- Check the hydraulic oil level before each use. To do this, unscrew the cap from the tank and visually check whether the oil in the tank easily covers the horizontally arranged plate.
- Check the engine oil level before each use.
- Inspect the air pre-filter (if present) and air filter cartridge for dirt if it is very dirty or damaged.
- Check hydraulic connections and lines for leaks and damage.
- Check the air pressure of the drive wheels.
- Carry out a test run before each use.
- Clean the unit after each use.

10.3 Maintenance after 20 operating hours or longer downtime

- At regular intervals and at the beginning and end of the season, the moving parts of the unit must be greased or oiled.
- There is a grease nipple underneath the device holder on the single-axle tractor and lubricate it regularly.
- Regularly grease the attachment of the attachment or the intake pipe of the single-axle tractor.
- Lubricate or lubricate Bowden cables as required
- Hydraulic oil and filter change for the first time after 20 operating hours, then every 100 operating hours. Change the hydraulic oil filter at the same time interval as the oil change. (used oil type see chapter for technical data)
- Clean the air pre-filter (if present) at the latest after 25 operating hours and in very dusty conditions after a few hours
- Replace the air pre-filter (if present) and the air filter cartridge if they are very dirty or damaged.

10.4 Maintenance after 100 operating hours

- Fan housing after every 100 operating hours or min. Take off once a year - preferably before the season - and clean the cooling fins on the cylinder and cylinder head as well as the baffles, cooling air strainer and oil cooler necessary for air circulation.
- Hydraulic oil and filter change for the first time after 20 operating hours, then every 100 operating hours. Change the hydraulic oil filter at the same time interval as the oil change. (used oil type see chapter for technical data)
- Cleaning the spark plug of soot deposits with a wire brush followed by checking the distance between the electrodes. The electrode distance should be approx. 1 mm. Renew spark plugs after 200 operating hours.
- Clean the air filter cartridge at the latest after 100 hours of operation and in very dusty conditions after a few hours

10.5 Storage

If the machine is not used for a long time, the following measures are recommended:

1.) Perform cleaning

2.) Preserve the motor (observe the instructions of the motor manufacturer)!

Completely drain fuel or top up fuel tank, add fuel stabilizer to fuel.

- Run the engine for approx. 1 minute
- Add one teaspoonful (approx. 0.03 ltr.) Of engine oil to the spark plug opening and then slowly crank the engine.
- Reinstall the spark plug and do not attach the spark plug connector. Pull on the starter handle until the compression resistance is felt, thus the valves are closed.
- Every two to three weeks, crank the engine slowly and pull it again until the compression resistance is felt.

3.) Jack drive wheels

- Using wooden blocks, jack up the machine so that the drive wheels are not resting on the ground. Pay attention to stability!

4.) Subordinate machine

- To prevent corrosion, protect the machine from weathering. Do not store the machine in damp rooms, fertilizer storage or stables.

5.) Cover the machine with a cloth or similar

11 Technical data

Technical data - General	
PTO speed	1,200 rpm at 3,000 rpm engine speed seen clockwise on PTO shaft
Direction of rotation PTO	seen clockwise from the front on PTO
hydraulic	0 – 100 % infinitely variable
PTO	about 10 l
Hydraulic oil tank	Synthetic Ester Bio-hydraulic oil Avia Syntofluid N68 (recommended)
hydraulic oil	VG 68
Viscosity grade according to ISO	180 bar
Max. operating pressure	ca. 10 – 12 l/min
Driving speed forward / forward	0 - 6 km / h infinitely variable
This column	height adjustable and vibration damped
This is a lot	Differential axle
Tire pressure at: **4.00-8 Block** **4.00-8 AS** **5.00-10 AS** **16x6.5-8 Block** **16x6.5-8 AS** **18x7.00-8 AS** **18x9.50-8 AS** **21x11.00-8 AS**	Standard values (maxi. tire pressure 2.5 bar-risk of explosion) 1,4 bar 2,2 bar 2,2 bar 1,9 bar 1,9 bar 2,0 bar 1,7 bar 1,5 bar
Dead man's switch	electrical
Weights: **UBS 9 Easy** **UBS 13 Easy**	 119 kg 125 kg
Handlebar	vibration-damped
Hand arm vibrations According to EN 12733:2009 Handle left Handle righht	 2,3 m/s² 2,7 m/s²
Sound power level L_{WA} According to DIN 12733:2009-11-18	96 dB(A)
Sound pressure level on the ear Accirding to DIN 12733:2009	82 db(A)

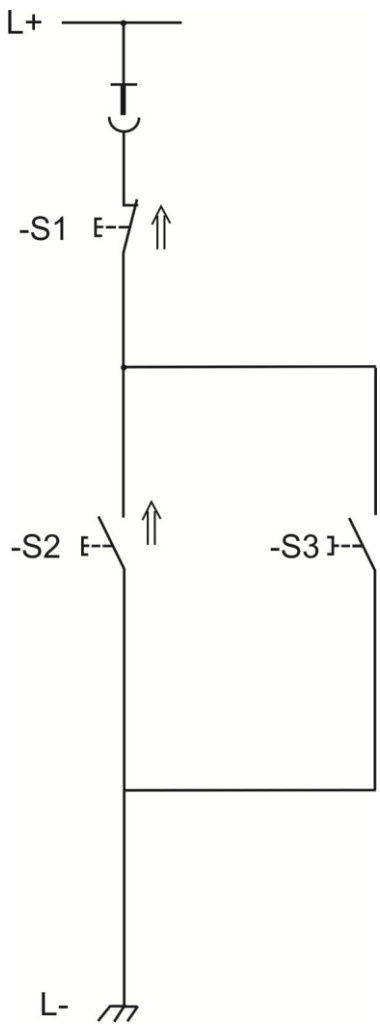
- Reserve technical changes! -

Technische Daten – 9 PS Benzinmotor	
engine	Honda Top-controlled four-stroke single-cylinder engine
power	6,6 kW (9 hp)
Max. torque	19,1 Nm / 2.500 rmp
capacity	270 cc
upper idle speed	3.000 min^{-1}
spark plug	z.B. NGK BPR 6 ES
Engine oil	approx. 1.1 l multi-grade oil SAE 10W-30 API SJ (or higher) is recommended for general use
fuel	see chapter "Recommendations"
Fuel tank	approx. 5.3 l
fuel consumption	313 g/kWh
air filter	Trocken – Filterelement
starting device	Revesierstarter
E-starter battery	optional (12V) 12V - 90 Ah

Technische Daten – 13 PS Benzinmotor	
Motor	Honda Obengesteuerter Viertakt-Einzylindermotor
Leistung	9,6 kW (13 PS)
max. Drehmoment	19,1 Nm / 2.500 min^{-1}
Hubraum	389 ccm
obere Leerlaufdrehzahl	3.000 min^{-1}
Zündkerze	z.B. NGK BPR 6 ES
Motoröl	ca. 1,1 l Mehrbereichsöl SAE 10W-30 API SJ (oder höher) wird für den allgemeinen Gebrauch empfohlen
Kraftstoff	siehe unter Kapitel "Empfehlungen"
Kraftstofftank	ca. 6,1 l
Kraftstoffverbrauch	313 g/kWh
Luftfilter	Trocken – Filterelement
Starteinrichtung	Revesierstarter
E-Starteinrichtung Batterie	optional (12V) 12V - 90 Ah

- Reserve technical changes! -

12 Wiring diagram – Safety device



Reserve technical changes!

Name	Use
- S1	Deadman
- S2	Lever
- S3	Hydraulic auxiliary drive
- L+	Ignition coil, engine
- L-	Dimensions

13 Fault cause and remedy

This chapter describes in more detail the most important faults that can occur during operation on the hydrostatic single-axle unit. Faults which require major intervention must always be rectified by your specialist workshop.

Observe safety instructions!

Disorder:	Possible causes:	Remedy:
Gasoline engine:		
Gasoline engine does not start	- Spark plug connector not plugged in	Plug in the plug
		- Move choke lever to choke position position
		- Switch motor off switch to position "I"
	- Safety circuit not in starting position	Bring safety circuit into starting position
	- Fuel talk empty or Bad fuel	Fill the fuel tank with fresh fuel
	- Clogged fuel line	Clean fuel line
	- Spark plug defective	Clean, adjust or replace the spark plug
	- Engine too much fuel (flooded)	Dry, clean and start the spark plug with FULL GAS
	- Motor off line defective	Check cable and plug connections
	- False air due to loose carburettor and intake pipe	Tighten fastening screws
Gasoline engine Has dropouts	- Engine is running in the CHOKE area	Move the choke lever to the operating position
	- Ignition cable loose	Plug the spark plug connector firmly onto the ignition cable. Secure the ignition cable fastening Fit the spark plug plug firmly onto the spark plug
	- Clogged fuel line or bad fuel	Change fuel filter or refuel with fresh fuel Replace fuel tank cover
	- Ventilation in the fuel tank cover congested	
	- Water or dirt in the fuel system	Drain fuel and clean, refuel with fresh fuel
	- Air filter dirty	Clean or replace the air filter
	- Carburetor adjusted	Adjust carburetor
Gasoline engine Gets too hot	- Too little engine oil	immediately refill engine oil
	- Cooling air system restricted	Clean fan grille, clean internal cooling fins
	- Air filter dirty	Clean or replace the air filter
	- Carburettor not set correctly	Adjust carburetor
Gasoline engine Has dropouts At high speeds	- Ignition distance too low	Adjust spark plug
	- Idle mixture not set correctly correctly	Adjust carburetor
Gasoline engine often idles out	- Ignition distance too high, spark plug defective	Set or replace spark plug
	- Carburettor not set correctly	Adjust carburetor
	- Air filter dirty	Clean or replace the air filter

Malfunction:	Possible causes:	Remedy:
Gasoline engine:		
Gasoline engine works irregularty	- Controller linkage dirty, jammed	Clean governor linkage
Gasoline engine Does not stop in The stop position	- Engine stop line defective, - missing sizes	Check wiring and connectors Check earth contact
Gasoline engine has zu too little power	- Air filter dirty - Cylinder head gasket loose or seal damage - too little compression	Clean or replace the air filter Tighten the cylinder head gasket Renew gasket Have engine checked
E-Start equipment:		
E-Starter it does not work	- Battery emply - Fuse defective - Defect on the wiring harness, electric starter	Charge or replace the battery Replace fuse Check wiring harness and electric starter

Malfunction:	Possible causes:	Remedy:
Drive:		
Machine moves on one side to the left Or to the right	- Different tire pressures - Clamp the wheel fork (s) of the attachment	Check tire pressures and inflate if necessary Lubricate all wheel forks, so this to turn smoothly
Machine loses at driving performance	- Pump builds up too little pressure - Oil temperature too hot - Oil filter dirty - Oil Leak	Pumpe erneuern Check oil quantity in hydraulic oil tank and top up if necessary Renew oil filter in hydraulic oil tank (pay attention to cleanliness) Check hydraulic connections for leaks
Powertrain:		
V-bests slip through	- V-belt tension too weak due to insufficient tension by the Tension spring - Flanks of the V-belts are and - Attachment is blocked and remove if necessary - External flail knife has become between flail shaft and side Sheet metal clamped by the flail casing (applies only to flail mower and rough cutter	Determine length change of tension spring (see chapter “Manintenance”) and adjust the stroke of the Bowden cable. Replace the V-best because burned Check attachments for foreign bodies Relieve knife from predicament

14 EG – Konformitätserklärung
CE Déclaration de conformité
EC Declaration Conformity
EG conformiteitsverklaring

D	F	GB	NL
Wir	Nous	We	Wij

Kersten Arealmaschinen GmbH
Empeler Straße 95
D- 46459 Rees

erklären, dass das Produkt	déclarons que le	herewith declare produit	verklaren dat het that the productprodukt
Einachsschlepper	**Porte-Outils**	**Tool Carrier**	**Werktuigdrager**

UBS Easy 9 G – 9 GE – 13 G – 13 GE

mit allen einschlägigen Bestimmungen der EG-Maschinenrichtlinie 2006/42/EG in Übereinstimmung ist.	satisfait à l'ensemble de la directive machines 2006/42/CE.	fulfiles all relevant provisions of Directive 2006/42/EC.	voldoet aan alle toepasselijke bepalingen van EG-Machinerichtlijn 2006/42/EG.
Die Maschine ist auch in Übereinstimmung mit allen einschlägigen Bestimmungen der folgenden EG-Richtlinien:	Cette machine satisfait également à toutes les dispositions pertinentes des directives CE suivantes:	The machinery is also in compliance with all relevant provisions of the following EC directives:	De machine is ook in overeenstemming met alle toepasselijke bepaligen van de volgende EG-richtlijnen:

—

Weiterhin wurden folgende Normen angewendet:	En outre, les normes et spécifications techniques suivantes ont été utilisées:	The following harmonised standards apply:	Volgende geharmoniseerde normen warden gehanteerd:

EN ISO 12100:2010

Herr	Monsieur	Mr.	De heer

Dipl. Ing. (FH) Robert Bosch
Empeler Straße 95

ist bevollmächtigt die technischen Unterlagen zusammenzustellen.	est autorisé à constituer la documentation Technique conformément à l'annexe VII A.	is authorised to compile the technical file according to Annex VII A.	is gemachtigd het technische dossier samen te stellen.

Rees, 28.04.2014

R. Bosch

Geschäftsführer	Directeur	Managing Director	Bedrijfsleider

Kersten

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