



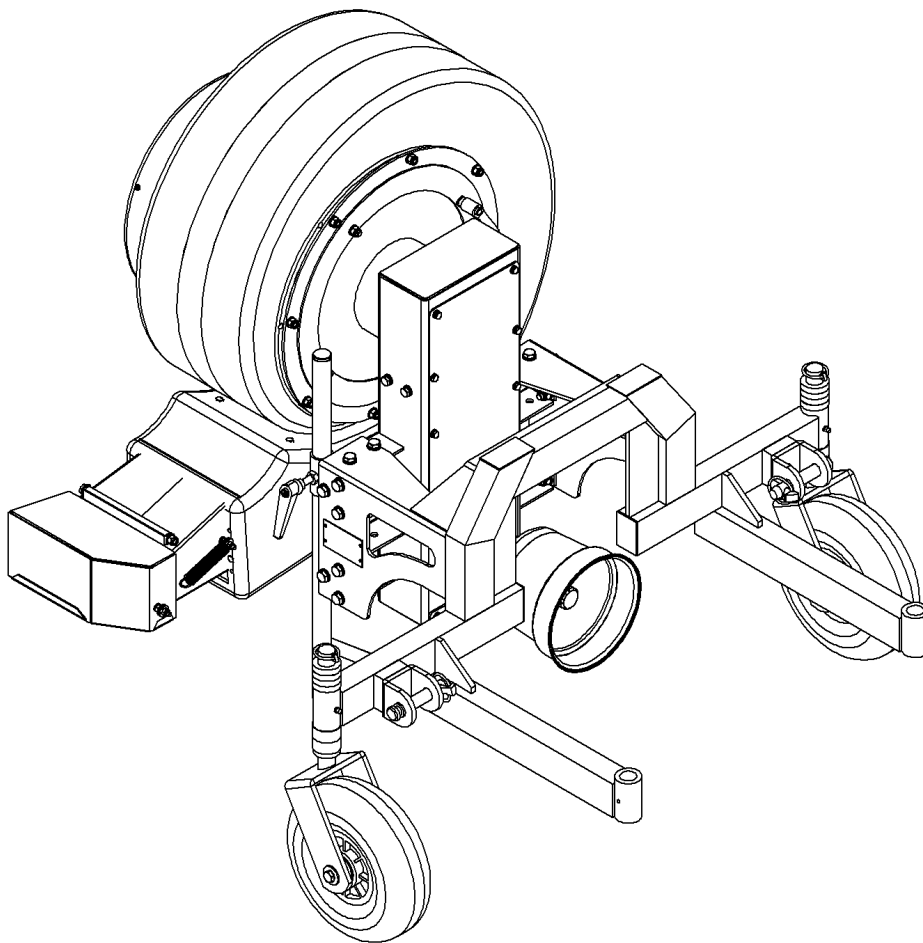
## Operators instruction Manual

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**LBV 3300**

**LBV 4300**

Mounted Blowers. PTO and Hydraulic drive



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**1.0 Forward**

Dear Sir, Madam,

Thank you for purchasing a quality product the from Kersten.

This product is designed and produced using the most modern manufacturing techniques and extensive quality assurance measures.

It is only when you are satisfied with your product that our goal is achieved.

Before the first use of this machine or attachment, please read this manual fully and conscientiously.

Please ensure all operators of this machine and any suitable attachments read this information.

In the event of any information being missing from this manual or you do not understand anything then please contact the supplier or the manufacturer of the equipment

Keep this document handy for future reference. By referring to this manual you can then operate this machine safely and effectively.

We wish you every success with your Kersten Machine.

Dipl-ing (FH) Robert Bosch

A handwritten signature in black ink that reads "R. Bosch". The signature is written in a cursive style with a large, prominent 'R'.

Geschäftsführung

## About this manual

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### 2.0 About this manual

#### 2.1 Product Identification

Always quote model number and serial number when ordering spare parts. The identification plate may be found on the main chassis of all machines.

#### 2.2 Before operating

Before you start the engine or attempt to attach or operate any machine, we ask that you make yourself familiar with the manual and the operation of the machine.

If you are in any doubt over any operation or require further details, you should contact the supplier, importer or manufacturer of this product. It is mandatory that all users of this product are familiar with this manual and the product.

You should first make yourself familiar with the machine at a slow speed and on a flat, even surface.



- **This symbol indicates important safety information!**
- **Read all safety references on the following pages!**
- **Read the operating instructions before attaching or start-up!**
- **Use this manual in conjunction with the power unit manual if applicable!**
- **Pass all safety instructions onto other users!**

### **2.3 Notes on using this manual**

All points to be considered are indicated as follows:

- Text
- Text
- Text

Procedural instructions are indicated as follows:

1. Text
2. Text
3. Text

The machines described in this manual are subject to continual to technical progress. All information/pictures and technical data in this manual correspond to the latest specifications at the time of publication. The manufacturers reserve the right to make alterations at any time.

## Health and Safety

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### 3.0 Health and safety

It is important to note that not all possibilities can be covered within this manual. The manual assumes that the operator has a general awareness for Health and Safety to have been appointed an operator in the first place.

This machine has been designed, so far as is reasonably practical, so that it will not endanger the safety of the operator or anyone else if the machine is used and maintained according to the instructions stated in this manual which have been compiled following research and experience of the manufacturers. In order to minimise the risk of accidents please consider the following information.

#### 3.1 Intended use



- The machine is exclusively intended for professional employment in the management of land, forestry, amenity and landscape conservation and for sole use with designated attachments. (Also see individual attachment instructions.)
- Use going beyond that described is not considered as intended. Therefore the manufacturer is not responsible for any resulting damage or harm and the operator alone is responsible for the risk.
- Compliance with and adherence to the operating, maintenance and repair as prescribed by the manufacturer in this manual must be considered essential elements of intended use.
- The machine may only be operated, repaired and serviced by persons familiar with the machine, this manual and all relevant safety features and dangers.
- The relevant rules for the prevention of accidents as well as other safety relevant rules according to the health and safety at work act must be considered as part of the operating procedure.
- The manufacturer is not liable for any accidents or damage resulting from modifications or alterations carried out on the machine without the express written permission of the manufacturer.

#### 3.2 General health and safety and accident prevention advice

##### 3.2.1 General Principles



- Follow general operating instructions and all additional health and safety regulations!
- This machine should not be operated by any person under the age of 16, not even under adult supervision. Minors must not be allowed to play with the machine.
- This machine may be subject to regulations when used on the public highway.

- Before starting operating this machine you should be familiar with all controls and their functions. Familiarization should not be carried out during operation. It is too late!
- Beware of rotating parts—keep safe distance.
- Beware of trailing machines and machines with inertia. Ensure they stop completely before making any adjustments.
- Standing in the danger area of the machine is forbidden!
- Operators are advised to wear suitable clothing that is close fitting with stout footwear (safety boots). Loose fitted clothes or casual footwear increase risk of accident.
- Do not leave the engine running in an enclosed area.
- Keep machine clean to reduce the risk of fire
- Be aware that the handling, steering and braking ability of power units/machines may be affected by different attachments, when loading/unloading and when using on gradients.
- Do not change manufacturers fast idle speed. Too high speed increases the risk of accidents.
- Unauthorized alterations, which compromise the reliability of the machine are prohibited!
- Always inspect the machine prior to use.

### 3.2.2 Safe working area and hazard area



- The operator is responsible for operating the unit in the work area.
- The operator is responsible for third parties in the work area.
- Third parties must not be in the working area.
- Look out for any children or animals close to the work area. Ensure you have adequate visibility.
- Prior to starting work survey the area for objects that could cause a hazard and remove them.
- When operating in confined areas always allow sufficient safety margin against border to avoid damage to the machine.
- Avoid crossing public thoroughfares with implement engaged to prevent the possibility of erroneous debris being ejected from the machine.
- When operating machinery in public areas or in the immediate vicinity, use suitable, prominent signage to draw the public's attention to the hazards of the working area.

### 3.2.3 Prior to commencing work



- Before attempting to operate the machine, please familiarise yourself with all the equipment, controls and their function. Ensure all safety devices are properly fitted and in the protective position.
- Learn how to stop and park the machine quickly and safely in the event of an emergency.

### 3.2.4 Starting the machine



- When starting the machine all drives must be in the disengaged/off position.
- Do not run engines indoors.
- Be aware of flammable fluids if jump starting cables are used. Avoid explosion!

### 3.2.5 Whilst operating the machine



- Never leave the operator console/position while driving.
- Never adjust the handlebar while engine is running
- Never leave the equipment unsupervised, when the engine is running.
- Never leave the machine whilst engine is running.
- Do not transport goods or passengers on the machine.
- Always switch off machine, let it come to rest and disable a machine before attempting to clear any type of blockage or making any adjustment.
- Only leave the operating position once the machines has come to a complete rest and is safely parked.
- If a fault with the machine is detected, stop immediately and rectify before further use.
- Consider carefully before attempting to operate any machine on any inclined slope.
- Where possible always traverse a slope, not up and down.
- Wet and icy weather can increase the hazard of operating any machine on a slope.
- Always equip the machines fully with any attachments the manufacturer may have designed to allow the machine to be operated in sloping, slippery, unusual or extreme conditions, e.g. dual wheels, cage wheels, snow chains.
- The machines designed for operation on slopes will to come to a rest if you release the handlebars. In an emergency situation do not attempt to prevent slipping using your physical strength otherwise you may be carried away.

### 3.2.6 Leaving the machine unattended



- Close the fuel valve when machine is not in use (if present)
- Always choc the wheels or apply parking brake (where fitted), when leaving a machine.
- Always disable a machine when not in use by removing the ignition key or removing the spark plug lead.
- Try to minimise the possibility of unauthorised use.
- Never leave a machine before it has been switched off and come to a complete rest.



### 3.2.7 Wheels and tyres



- Before working on the wheels ensure the machine has been fully disabled.
- Always chock the wheels to prevent the machine from rolling.
- Regularly check wheel nuts for tightness and retighten if necessary.
- Repair work on tyres must be carried out by trained personnel using suitable assembly tools.
- Check tyre pressure regularly. With too much air pressure the tyres may explode!

### 3.2.8 Attaching and detaching implements and accessories



- Before attempting to attach or detach any implement, ensure the power unit and any PTO is disabled.
- Always use appropriate tools, gloves and other suitable safety clothing.
- When attaching and detaching implements always ensure that all parts of the equipment are stable and suitably supported at all times.
- Always apply the parking brake (where fitted) or use chocks to prevent machines from rolling away.
- Attachments are often heavy. Always plan in advance how to change the attachments using the easiest and safest method. This will reduce the possibility of injury.
- After attaching implements, ensure all pins are secured and safety devices are enabled and operational.
- After attaching implements, visually inspect the complete unit for any possible fouling areas in and out of work conditions.

### 3.2.9 Cleaning, maintenance and repair work



- The machine should be maintained according to the instructions contained within the manual.
- All controls, engine and functions must be cleaned regularly.
- Before attempting to clean or maintain any part of a machine, ensure the machine is stopped and has come to a rest and the power unit and any PTO is disabled.
- Always use appropriate tools, gloves and other suitable safety clothing.
- Damaged and worn parts must be replaced.
- Always use original spare parts from the manufacturer to be certain the technical requirements match the design of the machine thereby minimising the risk of accidents.
- The machines must be kept clean. It is advisable to use a high pressure washer to do so, however be careful to avoid direct water jets on bearings, seals, grease points, hubs, engine air intake, radiator and electrical items.
- After cleaning and maintenance ensure all safety devices are connected, adjusted and working.
- Always keep engine free from dust and debris to prevent a potential fire hazard.
- Regularly check all fixings such as nuts and bolts. Tighten where required.
- Repairs should be carried out by a specialist engineer
- If it is necessary to raise the machine to facilitate cleaning or maintenance, ensure that it is supported and secured.
- Hydraulic transmission systems are often found on these machines. The system can reach very high pressures and temperatures. Before working on the hydraulic system of any machine, ensure the system has been depressurised and left to cool. Pressurised liquids can penetrate the skin and cause serious injury. Wear suitable safety clothing. In case of accident, always seek medical advice.
- Inspect hydraulic hose lines at regular intervals for damage and ageing and replace if necessary.
- When working on electrical systems with a battery always disconnect the earth terminal from the battery.
- If welding on a machine that has a battery, always disconnect the battery first.
- It is not acceptable to carry out welding, drilling or cutting on structural items of the machine, axles or safety devices etc.

### 3.2.10 Engine, fuel and oil



- Before re-fuelling, turn the engine off, allow to cool down and take ignition keys out (if available).
- Always use appropriate tools, gloves and other suitable safety clothing.

- Whenever handling fuel there is an increased risk of fire. Never refill near a naked flame or sparks. Do not smoke!
- Oils, fuels and filters should be disposed of separately using a compliant method.
- Do not refuel in confined spaces.
- Always use the appropriate tools to refuel to avoid spillages. If a spillage occurs by accident, clean it up immediately.

### 3.2.11 Electrical system and battery



- When working on an electrical system with a battery, always disconnect the earth terminal from the battery.
- When connecting a battery always connect positive terminal before the negative terminal.
- Beware of battery gasses. They are explosive.
- Never allow sparks or open flames near a battery.
- Caution when handling battery and/or acid. Very Caustic! Wear eye protection and gloves in addition to any other suitable safety clothing.
- The positive terminal must always be protected by a complete battery cover or terminal cover to prevent accidental contact with negative or ground.
- Persons with cardiac pacemakers should be especially cautious whilst touching the electrical or engine ignition system. Serious injury could occur! Do not touch.

## Health and safety

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### 3.3 Safety Decals

- This machine is equipped with warning symbols (safety decals).
- These decals indicate types and areas of endangerment and in particular the safety measure which should be taken.
- Always remain alert and conscious of the dangers the decals indicate on the machine, you are operating, presents to you and others.
- The decals must be maintained in good condition, they are important safety devices.

The following decals may be present on this machine:



Attention!

Before starting the operating instructions and read and follow safety instructions.

Attention!

Before repair, maintenance and cleaning work, always stop the engine and remove spark plug and or key.



There is a risk of injury.

Do not open or remove guards if machine is running.

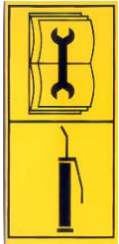
There is a risk of injury.

Ensure all machine parts have been stopped and come to a complete rest before attempting to carry out inspection or maintenance.



There is a risk of injury from flying objects being ejected from the machine.

Always keep a safe distance from machine when it is in operation.



Refer to instruction manual for maintenance information.

Lubrication point

### 3.4 Special Instructions for lead-acid filled batteries



- Information is on the battery and in the instruction manual.



- Always wear eye protection.



- Keep the battery out of reach of children.



- Danger of Explosion - Charging batteries gives off explosive fumes.



- Avoid smoking, fire, sparks.
- Avoid short circuit.
- Sparks can occur when handling cables and electronic devices.



Burns

- Battery acid is highly corrosive.
- Always wear hand and eye protection.
- Do not tilt the battery as acid can leak out of the vents.



First Aid

- In the event of acid being splashed in your eyes, immediately rinse with clean water for several minutes and then immediately seek medical attention.
- In the event of acid being splashed on skin or clothing immediately rinse with clean water for several minutes.
- In the event of acid being swallow seek professional medical attention immediately.



Warnings

- Keep unprotected batteries out of direct sun light.
- Keep discharged batteries in a frost free place.



Disposal

- Take waste materials to a recycling point .
- During transport always observe all instructions.
- Never dispose of batteries in the household waste stream.



## Health and Safety

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### 3.5 Instructions for starter batteries

#### 3.51 Removal and replacement of the battery

- Turn off all devices powered by the battery
- Avoid the possibility of short circuit caused by tools
- Always remove the negative terminal (-) first followed by the positive terminal (+).
- Battery terminals and battery terminal clamps should be cleaned and treated with acid-free grease.
- Before re-installing the battery, clean battery compartment and securing device.
- When installing ensure battery is secured in its compartment. Attach battery leads, positive (+) first and then negative (-).
- Check terminals for tightness.

#### 3.52 External charging

- Read and follow battery charger manufacturers instructions.
- Before charging, check the electrolyte level and compensate if required.
- Disconnect battery as above and remove from vehicle.
- Provide adequate ventilation.
- Use suitable DC charger.
- Connect charger correctly. Positive contact on the charger (+) should be connected to positive terminal on the battery. The negative contact of the charger should be connected to the negative terminal .
- Only switch on the charger when all the above instructions have been completed.
- Charging current should be at 1/10Ah of the battery capacity.
- If, during charging, the temperature of the electrolyte exceeds 55 degrees centigrade interrupt the charging.
- Battery is fully charged when charging voltage does not increase for 2 hours.

#### 3.53 Maintenance

- Keep the battery clean and dry
- Do not use flammable agents
- Do not open battery
- In the case of insufficient starting power, charge the battery.

### 3.54 Jump Starting

- Only use standard jumper cables and follow their instructions.
- Only use batteries or power supply of the same voltage.
- Ensure everything is switched off.
- Connect both positive terminals (+) of the vehicle and donor battery first with the red jumper cable followed by both negative terminals (-) with the black cable. Cables should be clamped on to the shiny surface of the terminals.
- When jump starting allow engine to turn for 15 seconds maximum.
- Disconnect cables in reverse order.

### 3.55 Storage

- Keep battery in a cool place
- When not in use disconnect the negative (-) battery connection.
- Check the battery regularly and recharge if necessary.

## 4 Disposal

This device must be disposed of according to the regulation of the municipality or the country. All possible parts should be recycled and the remainder disposed of in a satisfactory manner.

The company Kersten Arealmaschinen GmbH or Kersten (UK) Ltd does not take responsibility of disposal.

## Disposal and warranty

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### 5 Warranty

The manufacturer guarantees its products for 12 months from the date of delivery.

Parts characterised by faults in materials, mechanical and production processes will be replaced free of charge by the manufacturer through its sales and technical servicing network.

The fault found must be reported to manufacturer and, should the circumstances require, be appropriately documented with a written technical report and/or photographic material.

The faulty part must be returned to the manufacturer who, after inspecting it and verifying that the warranty is applicable, will repair or replace it, taking the necessary time to do so, without charging for either material or labour.

The cost of transport of the parts covered by warranty shall be borne by the customer, who may organise it personally or authorise the manufacturer to take care of transport and charge all expenses to the customer.

The warranty shall be voided in the following cases:

- Obvious absence of maintenance
- Improper use of equipment or interference
- Use of non-original spare parts or unsuitable lubricants
- Operations carried out by unauthorised personnel
- The manufacturer excludes consumable materials and parts subject to normal wear and tear from the warranty.
- Any damages caused during transport must be reported immediately to the transporter; otherwise the warranty shall be voided.
- The warranty does not cover direct or indirect damages caused to persons or objects by failure of equipment or due to enforced prolonged suspension of its use.
- When applying for repairs under warranty, please indicate:
  - 1-serial and model number of the equipment
  - 2-registration number
  - 3-date of purchase
  - 4-dealer name

**IMPORTANT!** Please complete the warranty registration form enclosed and send it to address below within 14 days.

**Kersten (UK) Ltd,  
Progress House  
39 Boulton Road  
Reading  
RG2 0NH or [info@kersten-machines.com](mailto:info@kersten-machines.com)**



### **6 Recommendations**

#### **6.1 Lubricants**

For engine and transmission lubricants please see "technical specification section" of this manual and separate engine manufacturers instruction manual.

For "open" or nipple lubrication points, we recommend a bio-degradable manufactured from organic compounds. We recommend the use of bio-lubricants where possible.

By using bio-lubricants you act properly to protect the environment, promote the health of humans, animals and plants.

#### **6.2 Fuels**

Engines manufactured by Honda and Briggs and Stratton are able to run on unleaded or premium unleaded petrol. Do not mix oil with the petrol.

Do not store unleaded fuel for more than 30 days. If a machine is going to be unused for more than 30 days, it should be drained of fuel to prevent a build up of resinous residue in the tank, fuel lines, filter and carburetor or a fuel stabilizer may be added to the fuel—see manufacturers instructions.

#### **6.3 Maintenance and repair**

Your dealer has trained mechanics who have the necessary training, skills and tools to perform maintenance and repairs on this equipment.

Only personnel with similar appropriate training and equipment should be allowed to carry out repairs and maintenance of this product.

## Assembly and Attachment

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### 7 Assembly

This product is supplied fully assembled

#### 7.1 Connecting Attachments to Kersten Power Units

The Kersten versatile power unit is designed to operate several different attachments. These may usually be changed quickly without the use of tools.

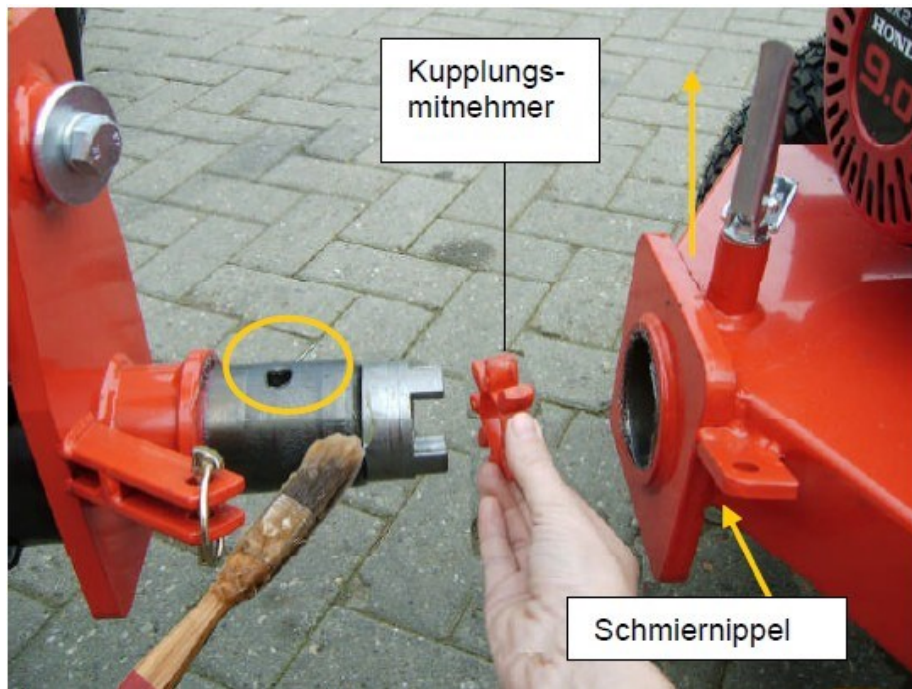


Fig. 1

Ensure the steel parts of the connection on the power unit and implement are free from dirt and rust.

Lightly lubricate the connections with grease.

Lift and rotate the locking pin backwards on the power unit (A fig.1) until it locks in the disengaged position.

Ensure the flexible drive coupling B (fig.1) is located in the implement coupling jaw.

Slide the attachment in to the power unit. Sometimes the PTO drive teeth are stubborn to engage. Manual rotating adjustment may be required to line up the flexible coupling as the two parts are pushed together.

When the two parts are fully engaged it will be possible to release the locking pin (A fig.1) which will locate in to slot B.

There is a grease lubrication point A under the chassis (fig.1)

Some attachments have a secondary locking device to prevent the unit from rotating which is secured by a spring locking pin.

Remove the attachment by reversing the above directions.

### 7.2 Connecting Attachments to Front or Rear Linkage with PTO Drive



#### Note!

Damage to the tractor and the attachment may occur if the PTO is not adapted correctly to the application. Use only the provided drive shaft and carefully follow instructions listed in this section.



#### Attention!

Always consult the power unit/tractor manufacturers information regarding the suitability of the attachment prior to mounting attachments to their machines.

Consult the PTO drive shaft manufacturers guidance and information when assembling the drive shaft.

Debris Blowers may be mounted on the front or rear of a tractor or dedicated power unit. They may be mounted using a quick attach triangle, 3 point linkage pins or in the case of many front mowers a dedicated 2 point linkage. The attachments may be powered by either hydraulic or mechanical power take off.

Caution must be taken when initial mounting of the attachment is made to ensure the PTO shaft is the correct length to prevent serious damage to the attachment or power unit. This should only be carried out by qualified personnel.



19 Fig. 2

## Assembly and Attachment

### Guidance for shortening and assembly of the drive shaft

Depending upon type of tractor the provided drive shaft can be too long. In this case this must be shortened according to the following steps.

#### Shortening the drive shaft

1. Pull apart the drive shaft halves.
2. Install end of the drive shaft at the tractor.
3. Install the other end of the drive shaft to the attachment.
4. Mark, in the shortest working position, on a half that Drive shaft the piece which can be sawed off. (Fig. 4.1)
5. Cut the powershaft shield off up to the marking. (Fig. 4.2)

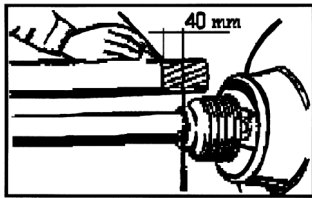


FIG 4.1

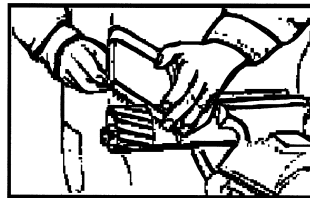


FIG 4.2

6. Saw off the drive tube. Note: the drive tube must 10 mm longer than the protection its. (Fig. 4.3)
7. Repeat step 4. – 6. for the second drive shaft half.
8. Clean up any burred edges. (Fig. .44)

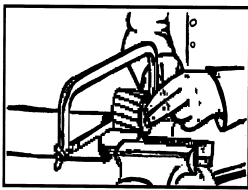


FIG 4.3

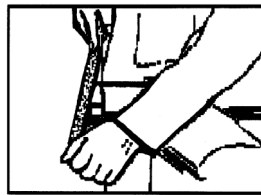


FIG 4.4

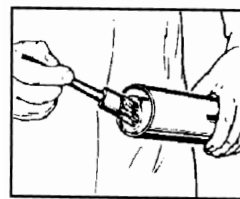


FIG 4.5

9. Grease the drive tubes. (fig 4.5)
10. Push the drive tubes together.

#### Drive shaft install

1. Press the lock pin/collar present on the external yoke and keep pressed.
2. Push the external yoke onto the profile stub of the power-take off.
3. Release the lock pin/collar.
4. Move the drive shaft somewhat back and forth, until the lock mechanism engages audibly.
5. Attach the safeguard chains of the drive shaft to a certain part at the tractor and the attachment. (Fig. 4.6)

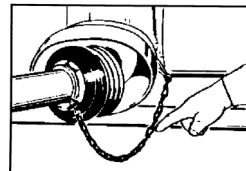


FIG 4.6

### 7.3 Connecting Attachments to front or rear Linkage with Hydraulic Drive



#### Note!

Damage to the tractor and the attachment may occur if the Hydraulic connection is not adapted correctly the application. Use only the hoses and couplings provided and carefully follow instructions listed in this section.



#### Attention!

Always consult the manufacturers information for the power unit/ tractor prior to mounting attachments to their machines.

Debris Blowers may be mounted on the front or rear of a tractor or dedicated power unit. They may be mounted using a quick attach triangle, 3 point linkage pins or in the case of many front mowers a dedicated 2 point linkage. The attachments may be powered by either hydraulic or mechanical power take off. Caution must be taken when initial mounting of the attachment is made to ensure the hydraulic system is designed to suit the attachment to prevent serious damage to the attachment or power unit. This should only be carried out by qualified personnel.



Ensure the power unit has enough flow and pressure to operate the attachment.

Ensure the power unit has enough oil capacity of the correct grade to remain at a safe working temperature in all conditions.

Ensure any bypass systems is piped and functioning correctly if applicable.

Pay attention to cleanliness of the oil system, particularly quick release couplings when attaching and detaching the Debris Blower.



## Maintenance and Adjustment

### 8 Maintenance and Adjustment

#### 8.1 Adjusting the height of the blower outlet

The height of Blower outlet may be adjusted by the changing the position of spacers on the front wheel spindles. To raise the height remove locking pin A (Fig. 3), remove plastic collars from position B (Fig. 3), remove wheel spindle C (Fig. 3), from support assembly, place required amount of collars B on to spindle and replace spindle in to support assembly, placing any remaining collars on top. Refit locking pin A (Fig. 3),

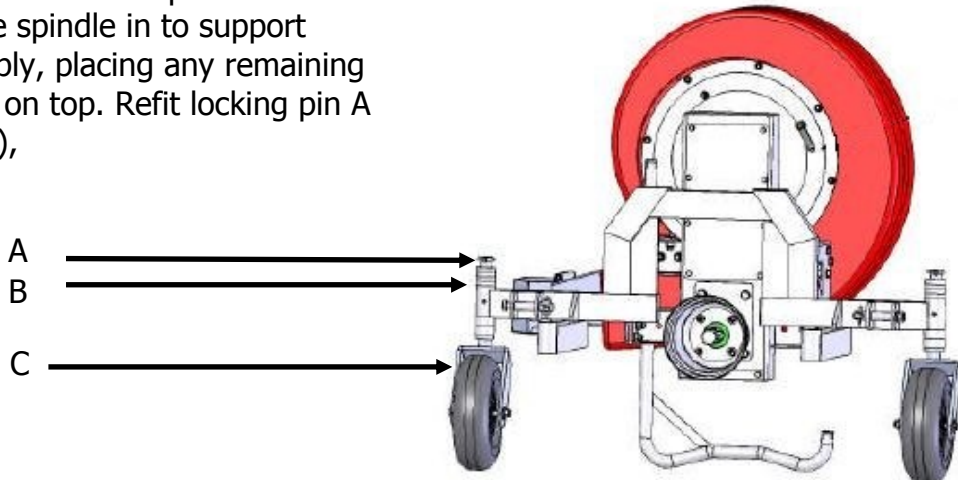


Fig 3

#### 8.2 Adjusting drive belt tension

The twin drive belts on the LBV Blower are constantly tensioned by an internal spring acting on an idler pulley tensioning the back of the belts. There is no requirement to adjust the tension. If it is suspected the belts are slipping then the belts and spring should be replaced. Always replace belts as a pair.



**Inspect belts regularly and replace if adjustment runs out or signs of deterioration occur. Keep belt housing free from debris.**

#### 8.3 Greasing the Debris Blower

The flail mower must be greased regularly. See maintenance schedule. There are grease points located on each of the wheel spindles A1, A2 (Fig 4).

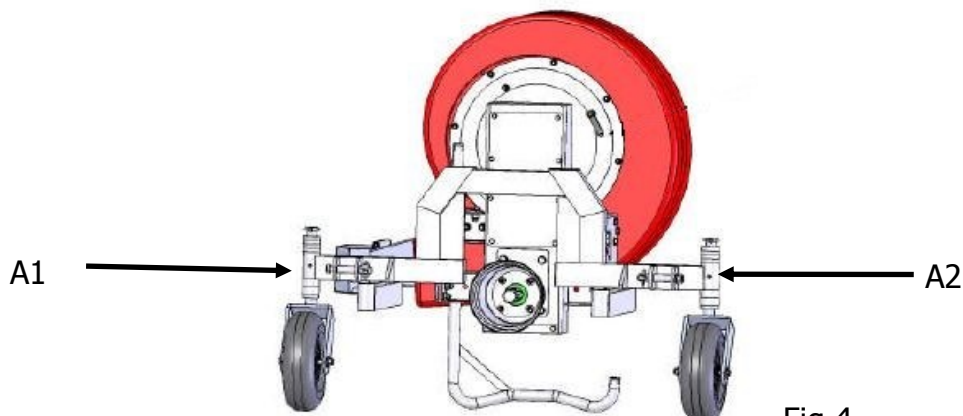


Fig 4

### 8.4 Garage Stand

The garage stand B1 (Fig. 5), should be set in to lowered position when removing the Debris Blower attachment from the tractor. Loosen locking clamp B2 (Fig. 5), , lower Garage Stand B1 (Fig. 5), to floor level and retighten locking clamp. The Garage stand must be raised when the Debris Blower is attached to the tractor. Care should be taken to position the garage stand so it supports the attachment effectively.

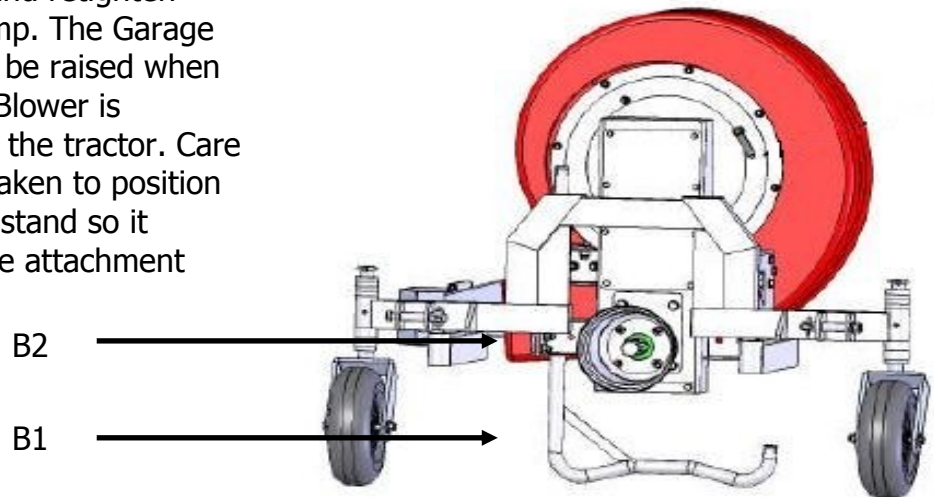


Fig 5

### 8.5 Adjusting the air flow direction

The direction of air flow may be adjusted in two ways

1. The complete poly housing may be rotated. Release Clamp handle C (Fig. 6). The Plastic housing is now free to rotate to the desired direction. Retighten clamp handle C (Fig. 6), when the required position has been achieved.
2. The side vent may be covered by the air flow deflector D (Fig. 7). Simply lower the deflector to divert the air forwards and raise the deflector to divert the air flow sideways.

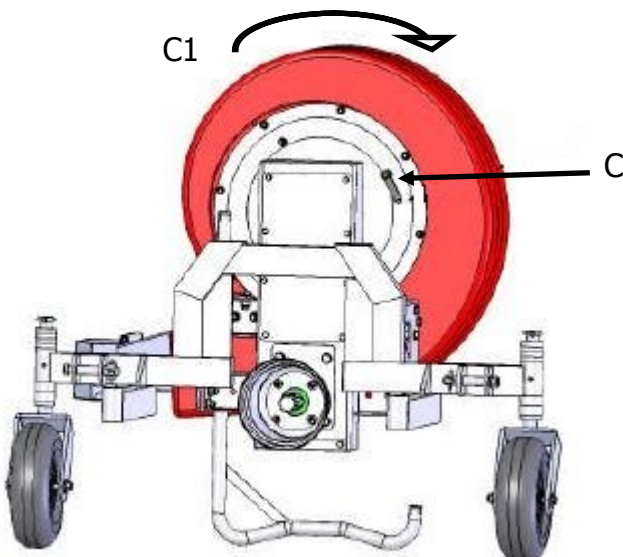


Fig 6

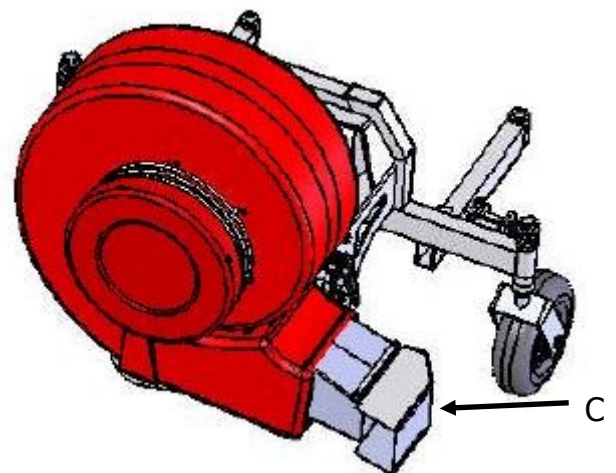


Fig 7

## Maintenance and Adjustment

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### 9 Maintenance

It is now assumed all of the information in the previous section has been read and understood and is used in conjunction with the following information. If this is not the case, do it now.

#### 9.1 General maintenance instructions

- To prevent injuries to people or damage to machines thoroughly check all safety relevant parts before use.
- Change oils and check levels to the respective engine manufacturers instructions
- Ensure all hydraulic coupling are connected and there are no leaks.
- Fluids escaping under high pressure (e.g. hydraulic oil and fuel) can cause serious injury! In the event of an accident, immediately seek medical advice.
- The hydraulic system on this machine has been filled with bio-degradable oil at time of manufacture.
- This machine should be regularly maintained.
- Waste oils, fuels and filters should be disposed of in their separate waste streams for recycling.
- Cleaning, repairs and maintenance should only be carried out when the machines is stopped. All guards and safety devices removed for during service should be replaced and checked for correct function.
- If the machines is transported by some other method than its own drive, then ensure the engine is switched off
- After the first 5 hours of operation check all nuts, bolts and other fixings for tightness.
- Regularly check all nuts, bolts and other fixings for tightness.
- Always disconnect the battery and alternator (where applicable) before carrying out any welding to the machine.
- Use only original parts from the manufacturer.
- All moving parts should be regularly lubricated with oil or grease or the appropriate material.
- Check all hydraulic fittings after the first 5 hours of operation and tighten if required. If tightening does not stop the leak then loosen the connection slightly, twist the connection forwards and backwards and re tighten.



### 9.2 Daily maintenance instructions

- Before use, check all safety devices, moving and wearing parts.
- Always keep attachment clean. High pressure water cleaners a effective for this purpose. Always use the correct PPE.
  - Ensure blades are in good condition, free from debris, free to move as designed and no uncharacteristic vibration is experienced.
- Check the conditions of hydraulic hoses and connections/ PTO shaft.
- Check tyre pressures where applicable.
- Test run the machine before and after each use.
- Check drive belt tension.
- Grease rotor bearings, PTO, height adjustment wheels/roller and any other grease points.

### 9.3 Every 20 hours maintenance instructions

(Or if the machine is not used for a prolonged interval)

- As per daily maintenance

### 9.4 Every 100 hours maintenance instructions

- As per daily maintenance

If the machine is not to be used for a prolonged period it is recommended to follow these instructions.

### 9.5 Storage

- Thoroughly clean, lubricate and test the machine.

## Technical Data

### 10 Technical Data

Model Number	LBV3300-GE	LBV4300-GE	LBV3300-GH	LBV4300-GH
Air Volume	60 litre/min	80 litre/min	60 litre/min	80 litre/min
Performance	8 metres	8 metres	8 metres	8 metres
Drive Method	PTO Min 15hp (11kw) 540rpm, 1000rpm, 2000rpm (with the appropriate gearboxes fitted)		Hydraulic min oil flow 24l/min @ 180bar	
Options for mounting	Kersten MU 70 for UBS 2 Wheel Tractor Quick attach CAT 0 "A" frame for front or rear linkage CAT 0 and CAT 1 Three point linkage front and rear Two point linkage mounting for front mowers eg Kubota, JD, Iseki, Stiga, Grillo, Husqvarna, Shibaura, New Holland			
Noise level	Less than 97 dB (A)			
Weight	150kg	170kg	150kg	170kg
Gearbox Oil (when fitted)	85W90	85W90	85W90	85W90

### 11 Fault Finding

This section describes the main problems which you may encounter when operating this machine. Problems that are outside the scope of this information should be referred to your dealer for repair.

Always observe the safety instructions as your first priority.

Fault	Cause	Remedy
Low air volume	Belts slipping	Renew belts
	Rotor speed too low	Increase rotor speed to recommended speed.
	Air intake partially blocked	Ensure air intake is clear
Wheels not steering correctly	Wheels spindles partially seized	Grease wheel spindles

**12 EG - Konformitätserklärung**  
**CE Déclaration de conformité**  
**EC Declaration Conformity**  
**EG conformiteitsverklaring**



**D**

**F**

**GB**

**NL**

Wir

Nous

We

Wij

Kersten Maschinen GmbH  
 Empeler Straße 93 – 95  
 D- 46459 Rees

erklären, dass das  
 Produkt

déclarons que le  
 produit

herewith declare  
 that the product

verklaren dat het  
 produkt

**Anbau –  
 Laubblasgerät**

**Souffleurs de feuillage**

**Cultivation –  
 Blowers**

**Teelt - Blowers**

**LBV – GE & LBV – GH**

mit allen einschlägigen  
 Bestimmungen der  
 EG-Maschinenricht-  
 linie 2006/42/EG in  
 Übereinstimmung ist.

satisfait à l'ensemble  
 de la directive machines  
 2006/42/CE.

fulfills all relevant  
 provisions of Directive  
 2006/42/EC.

voldoet aan alle  
 toepasselijke be-  
 palingen van EG-  
 Machinerichtlijn  
 2006/42/EG.

Die Maschine ist auch  
 in Übereinstimmung  
 mit allen einschlägigen  
 Bestimmungen der fol-  
 genden 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  
 bepalingen van de vol-  
 gende EG- richtlijnen:

Weiterhin wurden fol-  
 gende Normen ange-  
 wendet:

En outre, les normes et  
 spécifications techniques  
 suivantes ont été utilisées:

The following  
 harmonised standards  
 apply:

Volgende geharmoni-  
 seerde normen werden  
 gehanteerd:

**EN ISO 12100 Teil 1:2004**  
**EN ISO 12100 Teil 2:2004**

Herr

Monsieur

Mr.

De heer

Dipl. Ing. Georg Kersten  
 Empeler Straße 93 – 95  
 D- 46459 Rees

ist bevollmächtigt  
 die technischen Unter-  
 lagen zusammenzu-  
 stellen.

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, 20.01.2012

Geschäftsführer


Directeur

Managing Director

Bedrijfsleider

# Kersten

## SITE MAINTENANCE EQUIPMENT




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Your contact at **Kersten UK:**  
 Christopher Faulkner, Managing Director  
 Sean Faulkner, Sales Manager  
 Trevor Thorp, Area Sales Manager  
 Sabrina Wood Sales Administrator

Kersten UK are the sole UK distributor of the **Meyer** range of snow management equipment.  
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Telephone: 0118 986 9253

Kersten (UK) Ltd, Progress House, 39 Boulton Road, Reading RG2 0NH

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 Prices are subject to VAT E&OE

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