



**Weed brush
WKB 330 Petrol / Battery**

chemical-free | effective | sustainable

Operating instructions



Table of contents	2
1 EC Declaration of conformity	4
2 Legal information	6
3 Important general information	7
3.1 Scope of supply	7
3.2 Conventions	8
3.2.1 Symbols and signal words	8
3.2.1 Pictogram overview	9
3.3 Markings on the machine	10
3.3.1 Warning pictogram on the machine	10
3.4 Ordering spare parts	11
4 Safety	12
4.1 Intended use of the machine	12
4.2 Machine naming information	12
4.3 Requirements for the operator	13
4.4 Danger areas	14
4.5 Foreseeable misuse	
Reasonably foreseeable misuse	15
4.6 Procedure in case of an emergency	15
4.6.1 Personal injury	15
4.6.2 Fire	15
4.6.3 Technical complications	15
4.7 Area of use	16
4.7.1 Local requirements	16
4.7.2 Disposal	16
4.8 Responsibility of the operator	17
4.8.1 Obligations of the operator	17
4.9 Personnel responsibility	18
4.10 Observance of the operating instructions	19
4.11 Residual dangers and safety measures	19
4.12 Safety markings on the machine	19
4.13 Personal Protective Equipment (PPE)	20
5 Safety notes for the operator/user	21
6 Technical specifications	22
6.1 General dimensions WKB 330	22
6.2 General technical data WKB 330	23
7 Assembly - Initial commissioning	24
7.1 Safety	24
7.2 Assembly	24
7.3 Initial commissioning	24

8	Product description.....	25
9	Commissioning	26
	9.1 Adjusting the handle height.....	26
	9.1.1 Adjustment process	26
	9.2 Engine start WKB 330	26
10	Operation	27
	10.1 Operation description	27
	10.2 Service interval.....	27
11	Maintenance and servicing	28
	11.1 General information	28
	11.2 Engine WKB 330	29
	11.3 Lubrication.....	29
	11.4 Replacing the brush element.....	29
	11.4.1 Removal and attachment of wire brush braids.....	30
	11.5 Changing the V-belt Tensioning the V-belt.....	31
	11.6 Screw fittings	31
	11.7 Measures after maintenance	32
	11.8 Note on servicing work.....	32
	11.9 List of records	32
12	Residual dangers.....	33
13	Storage conditions.....	35
14	Cleaning.....	36
15	Troubleshooting	37
	15.1 WKB 330	37
16	Decommissioning	38
	16.1 Decommissioning.....	38
	16.2 Disassembly/Disposal	38
17	Warranty policy	39
18	Spare parts list	41
	WKB 330	41
	Detail A	43
	Detail B	44
	Spare parts list	45
19	Maintenance overview	47

1 EC Declaration of conformity

EC declaration of conformity in accordance with Machinery Directive 2006/42/EC Annex II 1.A

The manufacturer / distributor:
Westermann GmbH & Co. KG
Daimlerstraße 1
D - 49716 Meppen

hereby declares that the following product

Product name: WKB 330 / Akku

Make: Westermann GmbH & Co. KG

Serial number: _ _ _ _ _

Model / type description: WKB 330

Description: The Westermann weed brush is designed exclusively for normal use in cleaning heavily littered paved areas such as yards, roads and car parks. Any other use is considered improper. The manufacturer is not liable for any damage resulting from this! The risk for this is borne solely by the user.

Intended use also includes compliance with the operating, maintenance and servicing conditions prescribed by the manufacturer.

The following additional EU directives have been applied:

The protection objectives of the following EC Directive are complied with.

Machinery Directive 2006/42/EC

EMC Directive 2014/30/EU

Low Voltage Directive 2014/35/EU

1 EC Declaration of conformity

The following harmonised standards were applied:

EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)

The following other technical specifications were applied:

Name and address of the person authorised to compile the technical documentation:

Westermann GmbH & Co. KG
Mr Alfons Westermann Tel.: +49 (0) 5931 49690-0
Daimlerstraße 1 E-Mail: info@westermann-germany.com
D-49716 Meppen URL: www.westermann-germany.com

Location: 49716 Meppen
Date: 19.01.2017



(Signature)

Alfons Westermann Managing Director

Issuer: Westermann GmbH & Co.KG

Publisher:

Westermann GmbH & Co. KG

Mr Alfons Westermann

Daimlerstraße 1

49716 Meppen

Phone: +49 (0) 5931 / 49690-0

Fax: +49 (0) 5931 / 49690-99

E-Mail: info@westermann-germany.com

Internet: www.westermann-germany.com

Managing Director: Alfons Westermann

Form of organisation: Limited partnership

Location: 49716 Meppen

Commercial Register Osnabrück, HRA 100274

Personally liable partner:

Westermann Beteiligungs-GmbH

HRB Osnabrück no. 100562

UST-ID no.: 193643718

Copyright notice:

The contents of this document are protected by copyright under German copyright law and international treaties.

All copyrights to the contents of this document are owned by Westermann GmbH & Co. KG unless and to the extent that another author is expressly indicated or obviously recognisable.

The user is not granted or reserved any industrial property rights, rights of use or other rights by the provision of the contents. The user is prohibited from registering rights of any kind for the know-how or parts thereof.

The passing on, transfer and other dissemination of the contents of this document to third parties, the making of copies, duplicates and other reproductions as well as the utilization and other use - even in part - are prohibited without the prior, express and written consent of the author, unless and insofar as mandatory statutory provisions permit such use.

Infringements against copyright are illegal, according to §§ 106 ff. Copyright Act and grant the holders of copyrights claims for injunctive relief and damages.

Subject to change:

The Westermann GmbH & Co. KG reserves the right to change this document and the subject matter described therein at any time without prior notice, in particular to improve and expand it, provided and insofar as contractual agreements or legal requirements do not conflict with this.

3 Important general information

3.1 Scope of supply

The operating manual is part of the working equipment and must be kept accessible in the immediate vicinity of the machine at all times.

The operating manual contains important information for safe and effective operation of the machine. Therefore, the operator must read and understand this operating manual carefully.

The basic requirement for safe working is compliance with all safety instructions and operating procedures given in this operating manual. The local accident prevention regulations and general safety regulations for the specific application must also be observed.

The provided supplier documentation for the installed components must also be observed.






The illustrations are provided for basic understanding and may deviate from the actual design.

The manufacturer assumes no liability for damage due to non-observance of the operating manual, improper use, improperly performed maintenance or repairs, unauthorised modifications, technical modifications and use of unauthorised spare parts.

3 Important general information

3.2 Conventions






3.2.1 Symbols and signal words

Symbol / signal word	Meaning
	Indicates the handling and effects of the safety information.
	Alerts you to a dangerous situation that, if not avoided, <u>will</u> result in death or serious injury.
	Alerts you to a dangerous situation that, if not avoided, <u>may</u> result in death or serious injury.
	Alerts you to a dangerous situation that, if not avoided, may result in minor or moderate injury.
	Indicates possible damage to property and other important information.

3 Important general information

3.2.2 Pictogram overview

The safety instructions contained in this operating manual, which can cause danger to persons and the machine if ignored, are specially marked with the following pictograms.

Pictogram	Importance
	General warning sign
	Falling hazard
	Automatic start-up hazard
	Opposing rollers hazard (Entanglement risk)
	Harmful or irritating substances hazard
	Toxic substances hazard
	Hand injuries hazard
	Hot surface hazard
	Crushing hazard
	Slip hazard
	Electrical voltage hazard
	Obstacles on the ground hazard

3 Important general information

3.3 Markings on the machine

The **WKB 330 Weed brush** has a nameplate that contains all basic data. Components and accessories from suppliers have their own nameplates.



(WKB 330)



(WKB 330 Battery)

3.3.1 Warning pictogram on the machine



Article number: AUF-00-00016

NOTICE

Labels must always be kept clean. Missing or damaged labels must be replaced.

3 Important general information

3.4 Ordering spare parts

NOTICE

When ordering spare parts or accessories, state the type designation, machine number and year of manufacture. The use of accessories and spare parts from other manufacturers is only permitted after consultation with the manufacturer.

Original accessories and manufacturer-authorized accessories are provided for safety. Use of other accessories may void liability for consequential damages.

4.1 Intended use of the machine

The Westermann **WKB 330 Weed brush** is to be used exclusively for the intended use described here. The Weed Brush WKB 330 is a hand-guided machine. Areas of application of the working machine are the sweeping of hard surfaces such as yards, paths, parking lots and clearing snow or similar work.

The **WKB 330 Weed brush** only has the brush in its basic version. The approved attachments can be found under the accessories chapter.

Any other use is considered improper. **The manufacturer is not liable for any damage resulting from this. The risk for this is borne solely by the user.** Intended use also includes compliance with the operating, maintenance and servicing conditions prescribed by the manufacturer.

4.2 Machine naming information

The Weed Brush WKB 330 (petrol drive or rechargeable battery) is referred to below simply as the machine, Weed Brush or WKB 330.

4.3 Requirements for the operator



Danger due to misuse!
Misuse can lead to dangerous situations.

Therefore:

- ✓ Refrain from any use beyond the intended use or different use.
- ✓ Strictly comply with all information in this operating manual and, where applicable, the associated documents.
- ✓ Switching operations on the controls can only be carried out by instructed persons.
- ✓ Maintenance and servicing must be carried out exclusively by trained maintenance personnel.
- ✓ Refrain from modifying, converting or altering the design or individual pieces of equipment with the aim of changing the area of application or usability.
- ✓ Only use the equipment with the aids specified in the operating manual.
- ✓ Only use the equipment in a technically perfect condition.
- ✓ Use in areas with an explosive atmosphere is prohibited.
- ✓ Do not exceed the carrying capacity of the equipment.
- ✓ Avoid transporting persons with the equipment.

NOTICE

Maintenance and repair
Maintenance and repair work is part of the intended use and must be carried out in compliance with the maintenance intervals.

4.4 Danger areas



Danger while staying in the danger areas!



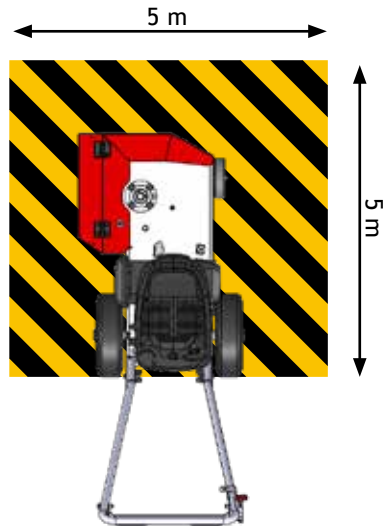
Staying in the danger zone involves risks that unauthorised persons cannot assess.

Therefore:

- ✓ Always monitor the danger zone during the work process and ensure that no persons are present there.
- ✓ If an unauthorised person enters the danger zone, warn the person and stop operating immediately.

The area surrounding the machine with a safety distance of at least one meter is defined as a danger area. This area must be free of persons during the operation in order not to influence the work process and to cause hazards. Attachments and ejected debris can increase the danger area of the machine, depending on their size.

(Fig. 1 - Danger area)



4 Safety

4.5 Foreseeable misuse | Reasonably foreseeable misuse

All use deviating from the intended use is considered misuse and is not permitted.

These include, for example

- Transport of humans and animals
- Use as a climbing aid
- Use outside the permissible operating limits

4.6 Procedure in case of emergency



4.6.1 Personal injury



If during use, an event occurs from which personal injury results, the measures taken depend on the severity of the injury.

4.6.2 Case of fire



fire extinguisher

In the event of a fire, immediate action must be taken.

- Protect people
- Fight the fire
- Repair damage

4.6.3 Technical complications

If technical complications occur during use, they must be remedied by a specialist before further use.

4.7 Area of use

The area of use includes all locations worldwide that allow safe use of the machine. Use must be in accordance with the specified intended use.

4.7.1 Local requirements

The area of application includes all locations worldwide that enable safe use of the machine. To this end, it is essential that the following criteria are met.

- ✓ Safe installation of the machine
- ✓ Temperature range of max. -10°C to $+40^{\circ}\text{C}$ (for the battery machine, refer to the enclosed motor operating manual)
- ✓ Suitable area of use that ensures safe use of the WKB 330.

4.7.2 Disposal

For environmentally friendly disposal, the hazardous materials must be disposed of separately. All other materials must be sorted according to their material quality and disposed of accordingly.

4.8 Responsibility of the operator

If the machine is used commercially, the operator is subject to the statutory provisions on occupational safety.

4.8.1 Obligations of the operator

The operator is responsible for the machine's perfect condition.

- ✓ The operator must regularly check all safety devices for functionality and completeness.
- ✓ The operator must ensure that the scheduled maintenance is carried out as planned.
- ✓ The operator must inform the manufacturer immediately of any damage found.
- ✓ The operator must provide the personnel with the required protective equipment and inspect, maintain and replace defective parts in accordance with the regulations.
- ✓ The operator must request a new copy of the operating instructions if they are in poor condition or parts are missing.
- ✓ The operator must immediately replace any lettering, signs or stickers that are in poorly legible condition or have been lost.
- ✓ The operator must keep the work areas and escape routes obstruction-free and in good condition.

4.9 Personnel responsibility

Basic requirements

- ✓ Only persons who can be expected to observe the safety regulations and perform their work reliably may enter the danger zone.
- ✓ Persons whose ability to act is influenced by drugs, alcohol, medication or similar are not permitted.
- ✓ When selecting personnel, the age and occupation-specific regulations applicable at the place of use must be observed.
- ✓ The user must be at least 16 years old!

Qualifications

As a matter of principle, persons may only perform actions for which they have the necessary qualifications.

Qualified personnel for installation and commissioning

Due to their technical training, knowledge and experience as well as knowledge of the relevant regulations, these persons are capable of carrying out the work assigned to them and of independently recognising and avoiding hazardous situations.

Service personnel for maintenance and commissioning

Due to their technical training, knowledge and experience as well as knowledge of the relevant regulations, they are able to carry out the work assigned to them and to recognise and avoid possible dangers independently.

Qualified electrician for maintenance, installation and commissioning

Due to their technical training, knowledge and experience as well as knowledge of the relevant standards and regulations, electricians are able to carry out work on electrical components and to independently recognise and avoid possible dangers. The qualified electrician is trained for the specific site in which he is working and knows the relevant standards and regulations.

Instructed operating personnel for operation

Has been instructed by the operating company on the tasks assigned to them and possible dangers in case of improper behaviour.

4.10 Observance of the operating instructions



Operating instructions are enclosed by the manufacturer or supplier of the product to provide the user / operator with essential knowledge for proper and safe use and to point out dangers when handling the machine.

Before commissioning the machine, the operating instructions must be read and carefully observed. We would like to point out that we accept no liability for damage and operational faults resulting from failure to observe the operating instructions.

We reserve the right to make technical changes to the illustrations and information in these operating instructions which are necessary to improve the machine.

4.11 Residual dangers and protective measures

The knowledge and technical implementation of the safety instructions contained in this documentation is a prerequisite for a fault-free product. However, this documentation cannot cover all details of every conceivable case of machine use. Therefore, as in any other case, a residual risk remains, in particular due to human error. This residual risk should be kept to a minimum by this documentation.

4.12 Safety signs on the machine

NOTICE

Danger and warning signs as well as important information must be clearly marked on the machine and must be cleaned or replaced if they become dirty or unrecognisable.

4.13 Personal Protective Equipment (PPE)

The Personal Protective Equipment (PPE) is not included in the scope of delivery. Responsibility for the availability, testing and proper use of PPE therefore lies with the operator.

- ✓ Wear PPE according to the instructions below.
- ✓ Do not enter the danger area without PPE.
- ✓ On the equipment follow the attached instructions for PPE.



Wear foot protection

Protection of the feet from heavy falling parts, slip prevention, piercing of footwear by sharp-edged parts.



Wear protective clothing

Close-fitting workwear with low tear resistance, with tight sleeves and no protruding parts. Predominantly serves as protection from being drawn into rotating machine parts. When working on the electrical system, wear work clothing with arc protection.



Use hand protection

Protection of hands from friction, abrasions, punctures and cuts, as well as from contact with hot surfaces. When working on live parts, use insulated gloves.



Use hearing protection

Protection of hearing from damaging sound frequencies.

If other persons are to operate the machine, they must be fully knowledgeable of the operation of the machine, and the operating instructions must be read and understood in order to avoid accidents.

Before removing safety devices such as a safety cover, make sure that all moving parts of the machine have come to a standstill. It is mandatory to replace removed parts after maintenance.

Before using the machine, be aware of people, animals, obstacles, etc. in the area of the machine to prevent personal injury or damage to property. Never carry persons on the machine or on attachments.

The area to be swept must first be cleared of large foreign bodies. Stones, wires, pieces of wood and the like can also be thrown out uncontrollably by the weed brush under certain circumstances.

Observe chapter 4.4 Danger zone on page 14

NOTICE

Notes WKB 330

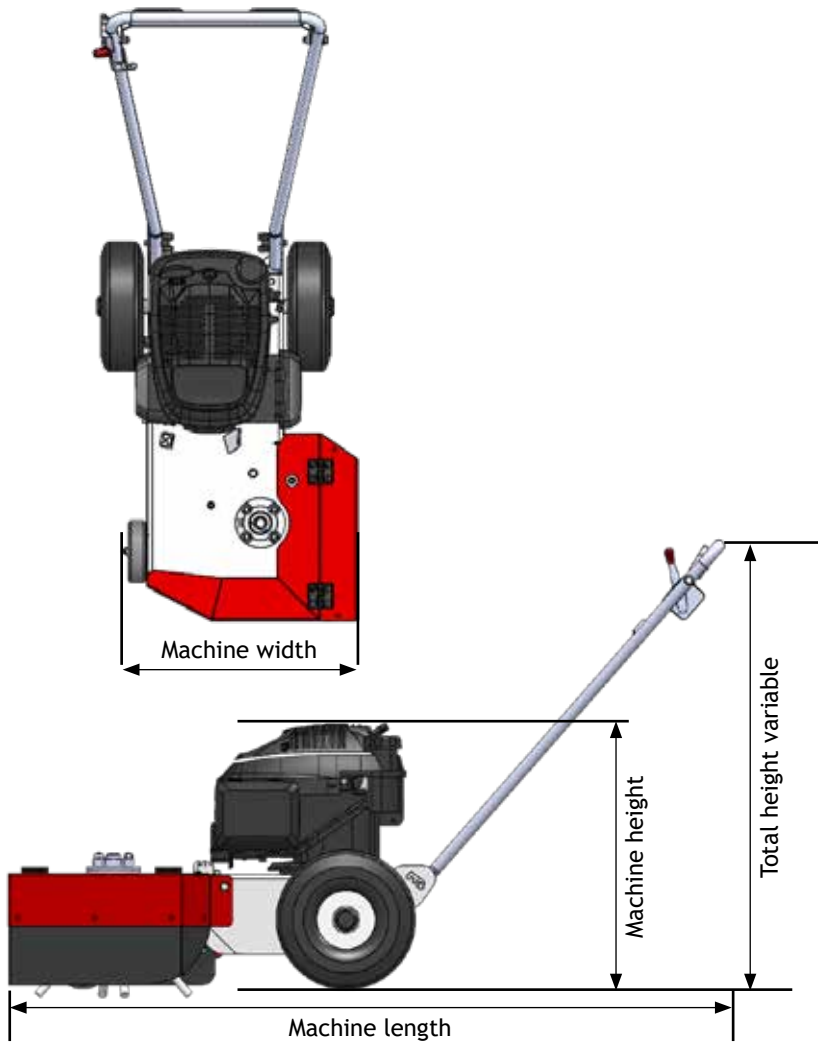
Please never leave the unit running unattended.

Familiarise yourself with the handling of the motor. Remember how to stop the motor in an emergency. For further information, please refer to the enclosed motor operating instructions.

6 Technical specifications

6.1 General dimensions WKB 330

Basic dimension	WKB 330	Unit
Machine length	1.33	metres (m)
Machine width	0.53	metres (m)
Working width	0.33	metres (m)
Machine height	0.5	metres (m)
Total height variable	0.82 - 0.92	metres (m)



6 Technical specifications

6.2 General technical data WKB 330

Technical data	WKB 330
Handlebars	Height-adjustable
Working width	Approx. 330 mm
Rotation	Right
Weight	approx. 38 kg (depending on type of motor)
Tyres	260 / 85 foamed
Guide wheel	N/A
Brush	4 braided brushes
Area output	approx. 700 m ² /h (depending on degree of soiling)
Further information	see enclosed motor operating instructions



(Fig. 2 - Technical data)

7 Assembly - Initial commissioning

7.1 Safety

NOTICE

To ensure the safety of the operator and others, the design of the machine includes minimal-risk assembly/handling.

The machine is subject to all applicable DIN EN standards. Operator training and instructions are required to further reduce the risk to the safety of the operator.

7.2 Assembly

The complete assembly and initial commissioning is carried out exclusively by the manufacturer. The machines are subjected to an extensive test run and are only delivered after successful acceptance.

7.3 Initial commissioning

NOTICE

Before using the machine for the first time, check the entire machine for possible damage.

8 Product description

The Westermann WKB 330 is designed and implemented for the demanding user. It is possible to remove weeds and debris from paved areas such as yards, paths and car parks.

The machine is easy to operate via the Bowden cable on the base frame. Furthermore, the machine design makes it possible to use the WKB 330 in almost any corner. The brush angle also smoothes out any unevenness.

Not only the general safety instructions listed under the main point “Safety” must be observed, but also the special safety instructions inserted under the other main points.

The base frame consists of a robust, galvanised torsion-free steel construction.

9 Commissioning

For commissioning, the walk-behind sweeper is moved from the rest position to the working position.

9.1 Adjusting the handle height

A handle height adjustment is provided for the adjustment of the handle height, which can be adjusted without tools. This makes it easy to adjust the handle height for different body heights in the shortest possible time in an ergonomically favourable way.

9.1.1 Adjustment process



- ✓ Loosen the wing nut on the inside.
- ✓ Pull up the bar and move it to the desired position
- ✓ Lower the bar so that the screw falls into the cut-out.
- ✓ Tighten the wing nut.

(Fig. 3 - Handle height)

9.2 Engine start WKB 330

See enclosed motor operating instructions.

10.1 Operation description

Start in neutral position, then move from neutral position to working position.

Depending on the amount of cleaning and the degree of soiling, a reaction force is generated on the hand-guided machine, which must be counteracted accordingly by the operator. An abrupt reaction force (kickback) can also occur if the rotating weed brush is pushed against a fixed resistance.

Caution is advised here!

10.2 Service interval

The first 50 hours of operation have a great influence on the performance and service life of the machine. The following points should be taken into account so that you can enjoy your WKB 330 for a long time.

- ✓ Repeatedly inspect nuts, bolts and screws etc. and tighten if necessary.



Proper maintenance is of crucial importance for the operational for the operational safety of the machine.

11.1 General information



All maintenance, repair and conversion work on the WKB 330 must only be carried out when the machine is at a standstill and the power supply is disconnected or the motor is switched off. The procedure for shutting down the machine described in the enclosed motor operating instructions must be followed without fail.



The WKB 330 must be checked to ensure that it is stable, and secure it against rolling away.



The safety regulations from chapter 4 apply.

Conversions or modifications of the machine are only permitted after consultation with the manufacturer. Original spare parts and accessories authorised by the manufacturer are used for safety. The use of other parts cancels the liability for the resulting consequences.

Observe before starting work:

- ✓ Check for externally visible damage and defects. Immediately report any changes (including changes in operating behaviour) to the responsible service personnel! If necessary, immediately arrange for decommissioning.
- ✓ Check the completeness and functionality of all accessories. Worn parts or parts whose function is restricted must be replaced. Replacement parts must be ordered from the manufacturer.
- ✓ Monitor the completeness and legibility of all type and information plates as well as the operating instructions. Replace missing or illegible plates and documents.

11 Maintenance and servicing

Observe during regular maintenance work:

- ✓ If applicable, electronically stored instructions for maintenance must be available in paper form during maintenance.
- ✓ For maintenance work on components from other manufacturers, consult them directly. If necessary, consult the documentation of the third-party manufacturer.
- ✓ Have maintenance work that requires specialist knowledge carried out by trained service personnel.
- ✓ As a minimum, observe the intervals specified in the maintenance plan.
However, depending on the operator's specifications and ambient conditions, the service intervals may also be shorter.
- ✓ **Immediately rectify safety-relevant defects!**
- ✓ Only use original spare parts and accessories and tools approved by the manufacturer.
- ✓ Only use components that have the required specification.

11.2 Engine WKB 330

Note

For maintenance and care of the engine, please refer to the enclosed operating instructions. It includes all inspection intervals concerning the engine.

11.3 Lubrication

Regularly check the wheel and brush bearings for leaks. Damaged bearing units must be replaced.

11.4 Replacing the brush element

If the wire braids are worn or defective, you are able to replace each wire braid individually with a new one. Please follow the steps below on page 30.

11.4.1 Removal and attachment of wire brush braids

Empty the fuel tank of the WKB 330 Honda to be able to tilt the power sweeper. Now tilt the power sweeper backwards to enable access (lay handles on the floor to stabilise the machine and ensure safe access).



! DANGER

Risk of crushing due to falling weed brush.

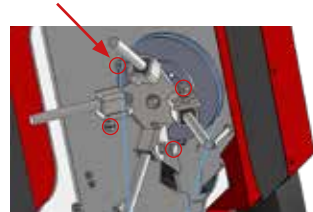
The weed brush can uncontrollably be tilted by external influences, thus causing dangers.

Therefore:

- ⇒ Tilt the weed brush by carefully following the steps.
- ⇒ If necessary, secure the weed brush in its position by placing additional weight on the handle.



(Fig. 4 - Replacing the brush element)



(Fig. 5 - changing wire braids)

The wire brush braids are located in the mounting console. Each mounting console has four mounting points for the separate wire brush braids. The braided wire can easily be pulled out from below by loosening the screws. If the other braided wires show similar signs of wear, this step must be repeated.

NOTICE

Reassemble by following the disassembly steps in reverse order. The screws M10x1x30 are tightened, so that the brush is clamped in the recess on the aluminum sleeve, until it is well seated and can't move. Then the screw is locked with the hex nut. No locking torque is necessary, as it would damage the aluminium sleeve and make a later replacement of the brushes more difficult.

11 Maintenance and servicing

11.5 Changing the V-belt | Tensioning the V-belt

The V-belt can be changed easily and without tools. To do this, tilt the machine backwards so that the underside of the machine is clearly visible. Important: the cleaning start lever must not be pulled. Now the belt can be pulled out of the pulleys, past the guides. When inserting the new belt, make sure that it is guided exactly like the old belt. It is especially important that the belt is centred in the tensioner pulley so that it works properly.

Now lever the V-belt out of the groove from the bottom upwards (possibly with the help of a screwdriver). Turn the brush element so that the V-belt slides completely upwards out of the groove.

Drive belt designation: **XPA 1220**
Please use original belts from authorised dealer only!

11.6 Screw fittings

Check bolts and nuts for tightness after five hours of operation for the first time, then regularly (every 50 hours) and retighten if necessary.

- All torques TA are standard values for standard metric threads according to DIN. Coefficient of friction 0.14 - new screws - unlubricated. These values have been recommended as standard values by various screw manufacturers. We cannot assume any liability for the application.
- Self-locking nuts must be replaced after each disassembly.



Torque for screws TA						
Thread	3.6	5.6	6.8	8.8	10.9	12.9
M6	3.43	4.51	8.73	10.3	14.71	17.65
M8	8.24	10.79	21.57	25.50	35.30	42.17
M10	16.67	21.57	42.17	50.01	70.61	85.32
M12	28.44	38.25	73.55	87.28	122.58	147.10
M14	45.11	60.80	116.70	135.27	194.17	235.36
M16	69.63	93.16	178.46	210.84	299.10	357.94
M18	95.13	127.40	245.17	289.30	411.88	490.34
M20	135.33	180.44	348.14	411.88	576.50	669.26
M22	162.40	245.17	470.72	558.98	784.45	941.44

11.7 Measures after maintenance

After completing all maintenance work, perform the following steps:

- Make sure that all previously loosened bolts are tightened.
- Make sure that all previously removed safety devices and covers are properly reinstalled.
- Make sure that all tools, materials and other equipment that have been used are removed from the working area.
- Clean the working area, and remove cleaning material such as cleaning rags etc.
- Make sure that all safety devices function properly.

11.8 Note on servicing work

NOTICE

Only original spare parts may be used for servicing work and components replaced for this reason.

11.9 List of records

NOTICE

Events and interventions must be recorded in a list of records. The lists of records must be filed digitally and/or in paper form.



Hot surfaces



Danger of injury due to hot surfaces.
Excessive use may lead to the parts and components of the machine heating up and causing personal injury if directly touched.

Therefore:

- ✓ The machine may only be operated by trained personnel.
- ✓ Perform all operating steps according to the information in these operating instructions.
- ✓ Mark all affected components with warning notices.



Machine kickback



Danger of injury due to unpredictable machine movements.
Unpredictable machine movements may lead to personal injury or damage to property.

Therefore:

- ✓ The machine may only be operated by trained personnel.
- ✓ Perform all operating steps according to the information in these operating instructions.
- ✓ Sweepings and sweeping quantity must be considered
- ✓ Check brush height
- ✓ Avoid collisions with solid objects



Improper operation

DANGER

Danger of injury due to improper operation. Improper operation may lead to personal injury or damage to property.

Therefore:

- ✓ The machine may only be operated by trained personnel.
- ✓ Perform all operating steps according to the information in these operating instructions.
- ✓ Before commencing work, ensure that all fastenings are properly installed and undamaged.
- ✓ Observe order and cleanliness. Loose objects such as tools, cables and components that are lying around or piled up are sources of accidents.

Movements during operation



DANGER

Danger of injury due to moving components. During operation, individual components or parts of the machine may move and lead to dangerous situations.

Therefore:

- ✓ Always observe the danger area during operation and ensure that no unauthorised persons are present therein.
- ✓ Use the main switch to switch off the equipment and secure it against reactivation before performing any work on the machine.
- ✓ Perform all operating steps according to the information in the operating instructions.
- ✓ Do not operate the machine without the safety devices. Before commencing work, firmly mount all safety devices.

13 Storage conditions

Park the Westermann WKB 330 in a dry and clean place and secure it against accidental starting.

(Fig. 6 - WKB 330)



Danger of accidents.



Secure the weed brush in a stable position and prevent it from rolling away.

- Park the machine horizontally in standby position.



(Fig. 7 - Standby position)

NOTICE

Check the machine for damage! Clean the WKB thoroughly if necessary. Dirt attracts moisture and leads to corrosion. Repair paint damage if necessary.

14 Cleaning

The following points must be observed for cleaning.



- Cleaning with water or a high-pressure cleaner is not permitted.
- Clean only with compressed air or aids such as hand brushes.

Dirt attracts moisture and leads to corrosion.

15.1 WKB 330

Fault	Cause	Corrective Measure
Engine does not start	<ul style="list-style-type: none"> • Engine failure • Brush rotation hand lever not in neutral position 	<ul style="list-style-type: none"> • See troubleshooting in the engine operating manual. • Move hand lever to neutral position (right).
brush does not sweep correctly	<ul style="list-style-type: none"> • Sign of wear of the wire brush braids • Screw fittings loose 	<ul style="list-style-type: none"> • Replace wire brush braids • Check screws and retighten if necessary
Brush does not rotate or is stopped by small resistance	<ul style="list-style-type: none"> • V-belt defective • Drive belt pre-tension insufficient • Selection lever position incorrect 	<ul style="list-style-type: none"> • Check V-belt and replace if necessary • Tighten drive belt clamping screw • Move selection lever to drive position
Brush does not rotate despite the selection lever being set	<ul style="list-style-type: none"> • V-belt defective • Drive belt pre-tension insufficient • Insufficient belt pre-tension (lever can be pushed past designated holes) 	<ul style="list-style-type: none"> • Check V-belt and replace if necessary • Tighten drive belt clamping screw • Adjust belt tensioner

16.1 Decommissioning

After decommissioning, the WKB must be stored properly.

When storing the machine, it is essential to observe the following points:

- The WKB must be parked in such a way that it cannot tip over or fall down.
- The ambient conditions at the storage location must meet the required conditions (see technical data)
- The machine, which does not have sufficient protection itself, must be protected from the effects of the weather and aggressive substances, as these may impact the safety.

If the machine is not used for a longer period of time, preservation measures may have to be taken to prevent corrosion and other damage.

16.2 Disassembly/Disposal

Disassembly/Disposal should be carried out by a specialist. Specialists in recycling and waste management ensure that waste is disposed of and recycled correctly. The available raw materials of the weed brush must be sorted according to disposal type and material.

The copper-containing components such as cables can be recycled. The operating materials such as fuses, batteries, capacitors, regulators, etc. must be disposed of as electrical waste; these must not be disposed of in household waste in order to prevent environmental damage. The support frame can be recycled as metal scrap and the protective bonnet as a plastic part is disposed of at the recycling centre.

The following policies are valid from 01.01.2002 for the Westermann warranty.

1. For Westermann products of the consumer goods sector (private use), which have been sold via the Westermann specialist trade, the warranty period is 2 years from the date of sale to the end customer. For Westermann products of the capital goods sector (commercial/professional), which have been sold via the Westermann specialist trade, the warranty period is 1 year from the date of sale to the end customer.
2. The warranty covers defects which can be traced back to material and/or manufacturer defects. All faults occurring due to a Westermann product or production defect during the warranty period will be acknowledged and corrected by repair or a spare parts delivery via a Westermann specialised dealer.
3. Excluded from this are wear parts such as Bowden cables, starter ropes, V-belts, bearings, clutch plates, tyres, air filters, spark plugs, glow plugs, fuel filters, oil filters, sweeping brushes, rubber lips, batteries if these cannot be proven to have clear material defects.
4. Warranty claims are generally excluded in the event of inadequate maintenance and care. Regular maintenance and cleaning of the product as specified in the Westermann operating instructions is essential. Damage due to improper maintenance and cleaning cannot be accepted as a case of warranty.
5. The operating instructions for the respective product as well as the safety notes must be observed. Damage caused by faulty operation, improper use or use of accessories not authorised by Westermann GmbH & Co. KG, cannot be accepted as a case of warranty.
6. Make sure that only original Westermann spare parts and Westermann accessories are used. They can be obtained from Westermann specialised dealers. Damage and an increased danger of accidents cannot be ruled out if other than original Westermann spare parts or Westermann accessories have been used. These consequential damages are not subject to warranty claims.
7. As from 01/01/2002, only Westermann warranty claim forms must be used. The warranty claim forms are mandatory. Exceptions will not be accepted. Warranty claim forms without the required information cannot be processed and will be returned unprocessed for completion of the missing information.

17 Warranty policy

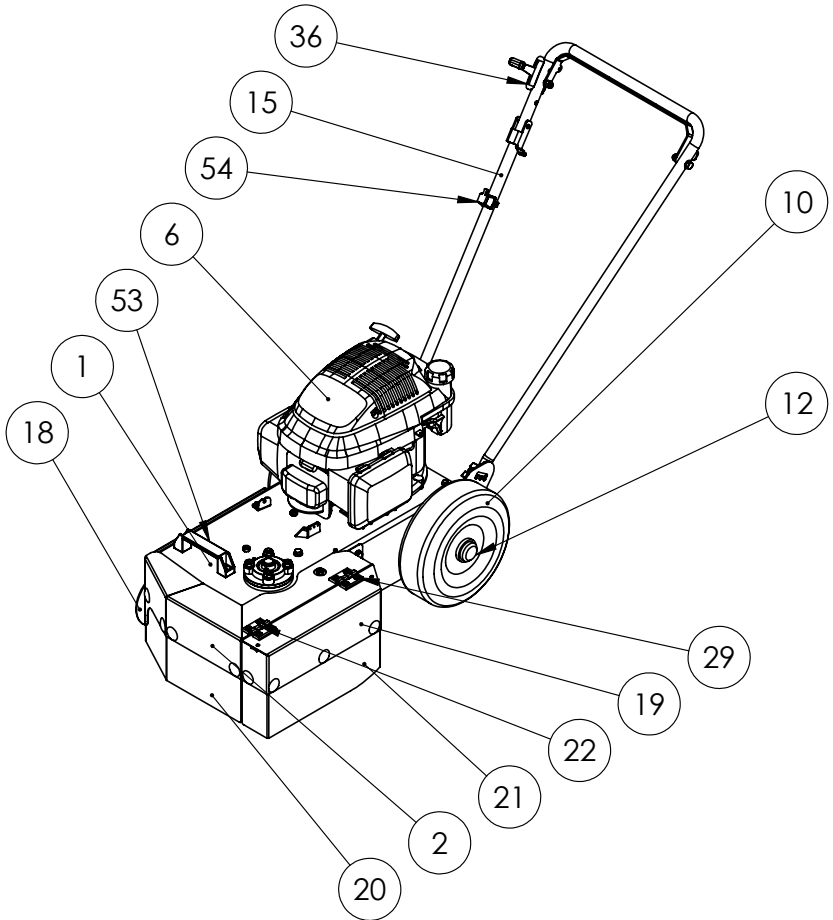
8. The warranty period for original Westermann spare parts, with proven installation by a Westermann specialist dealer, is 1 year for commercial customers and 2 years for private customers (for wearing parts, the restriction under point 3 applies). In the case of warranty claims relating to spare parts deliveries or warranty repairs, we ask you to keep the parts concerned on call for 2 months after receipt of the warranty claim. If necessary, we will call in the part in question for inspection.
9. For logistical reasons, the ordering of required spare parts for warranty purposes can only be done via the Westermann customer service from 01.01.2002 onwards. Orders can be placed by telephone from Monday to Friday between 8:00 a.m. and 4:30 p.m., stating the part no., the serial no. of the unit in question and the customer no. at
Tel.: +49 (0) 5931 49690-0.
In addition, it is possible to forward your order for warranty spare parts to us by fax: +49(0) 5931 49690-99 or by e-mail service@westermann-radialbesen.de. If your warranty claim is rejected, please contact us.
10. Should your warranty claim be rejected, you will be invoiced for the ordered spare parts at your usual purchase conditions. Invoices will be issued even if no warranty claim has been received by Westermann customer service after 4 weeks. If a Westermann spare part for warranty repairs is not available at short notice (within 2 working days) and you use an original Westermann spare part from your stock to repair the damage, we will provide a replacement free of charge after it is available again or can be supplied by Westermann customer service. If a spare part is no longer available (NML), the purchase price paid by you will be refunded.
11. The complained parts or machines are to be sent free of charge to the Westermann works in Meppen. After the warranty has been accepted, the freight costs will be reimbursed.
12. The warranty claim must be submitted to the Westermann customer service no later than 5 working days after the repair has been carried out in order to ensure rapid processing. Warranty claims received 3 months after repair can no longer be processed.
13. All previous warranty guidelines as well as the conditions of the general terms and conditions and point 7 hereby lose their validity.



Westermann GmbH & Co. KG

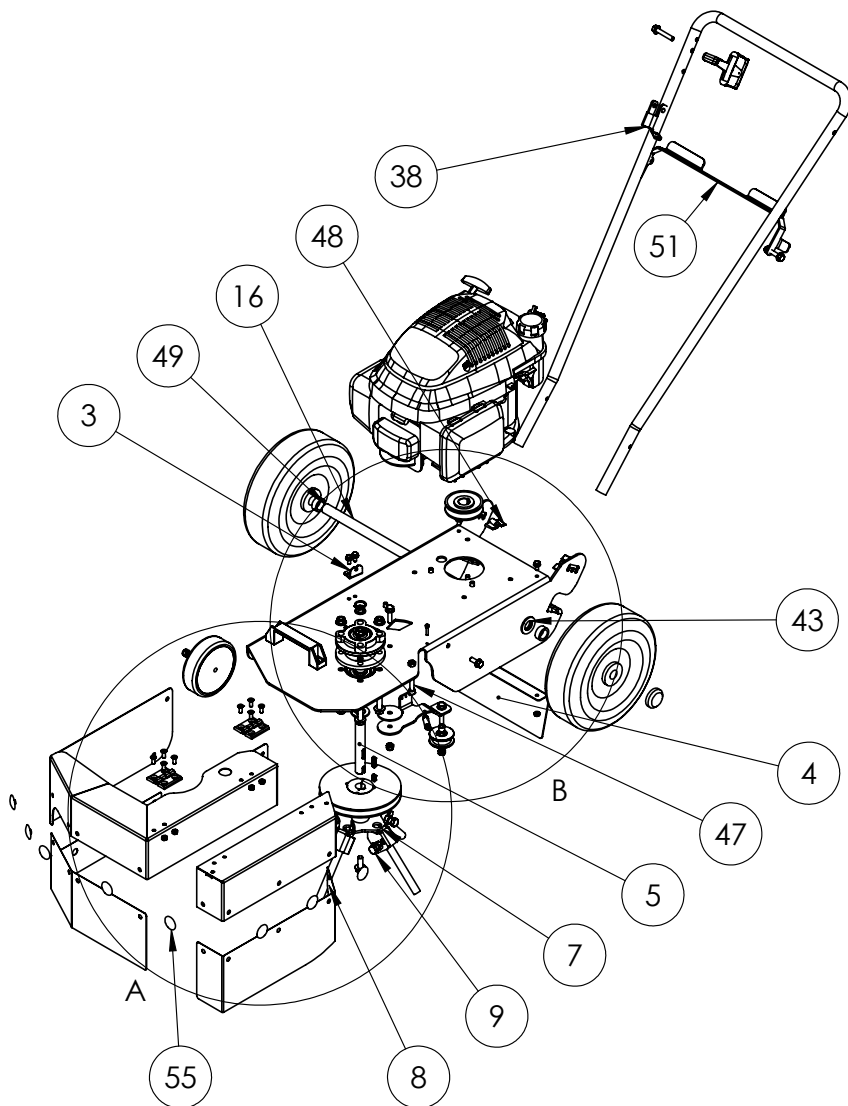
18 Spare parts list

18. WKB 330

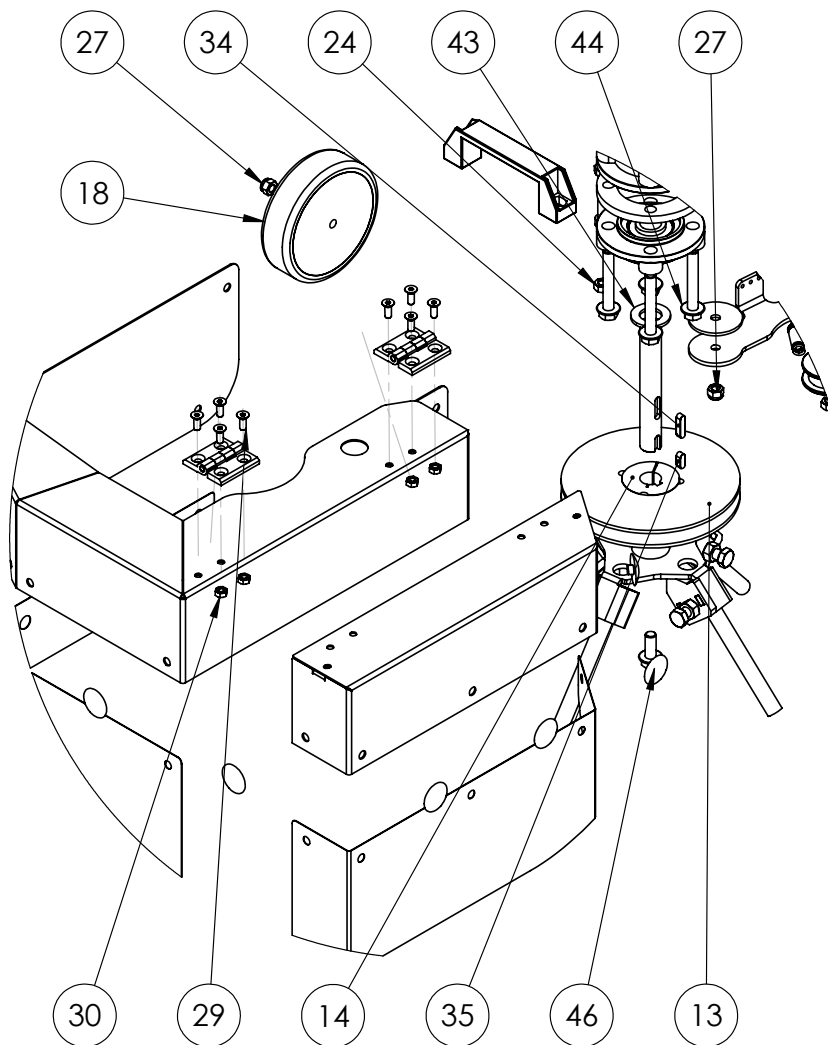


18 Spare parts list

18. WKB 330

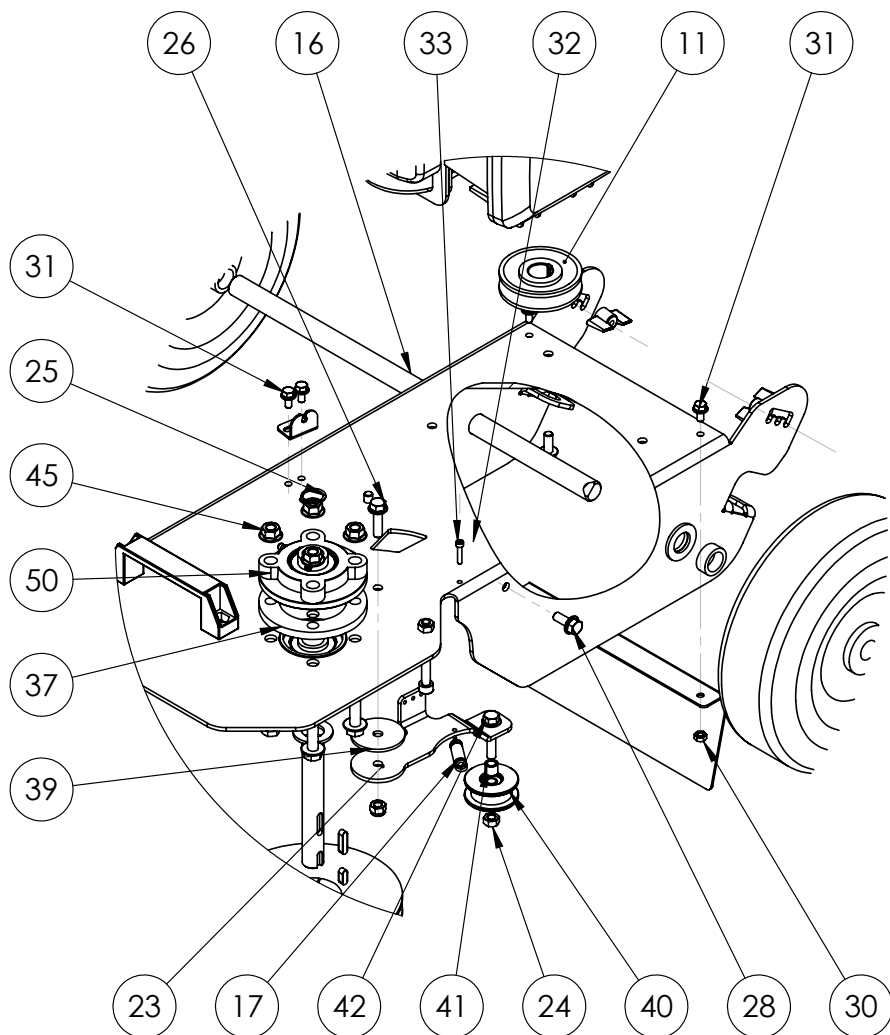


18. Detail A



18 Spare parts list

18. Detail B



18 Spare parts list

POS-NR.	Article	BESCHREIBUNG	part name	QTY
1	LA-00-01169	Grundrahmen WKB 330	main frame	1
2	LA-00-01171	Schutzhaube	dust cover	1
3	LA-00-01173	Bowdenzugbefestigung	bowden cable fixing	1
4	LA-00-01174	Riemenabdeckung	v-belt guide	1
5	DR-00-00224	Antriebswelle Drahtzopfaufnahme	driveshaft	1
6	MO-00-00035	Benzinmotor	gasoline engine	1
7	SB-00-00074	Drahtzopfhalterung	wire braid holder	1
8	KT-00-00709	Drahtzopf	wire braid	4
9	KT-00-01008	Schraube +Mutter M10x1x30	screw with nut M10x1x30	4
10	RE-00-00021	Luftrad 260 x 85 (ausgeschäumt)	wheel 260x85 (foam filled)	2
11	KT-00-00815	Riemenscheibe SPA Motor	belt pulley	1
12	KT-00-00186	Radkappe 20er	wheel hub	2
13	KT-00-01080	Riemenscheibe SPA d160	belt pulley d=160mm	1
14	KT-00-01081	Taper Spannbuchse	taper bush	1
15	DR-00-00112	Bügel	push handle	1
16	DR-00-00055	Achse	wheel axle	1
17	KT-00-00861	Zugfeder	extension spring	1
18	RE-00-00010	Vollgummirad 125er	solid rubber wheel	1
19	LA-00-01172	Klappe	dust cover flap	1
20	PE-00-00074	Plane groß	canvas big	1
21	PE-00-00075	Plane klein	canvas small	1
22	KT-00-00904	Scharnier	hinge	2
23	LA-00-01175	Spannhebel	clamping lever	1
24	DIN-934-M8	Sechskantmutter M8	hexagon nut m8	10
25	DIN-471-A20	Seegering A20	circlip A20	1
26	DIN-6921-M8x30	Sechskantschraube mit Flansch M8x30	hexagon locking screw M8x30	1
27	DIN-985-M8	Sechskantmutter M8 selbsts.	selflocking hexagon nut M8	6
28	DIN-6921-M8x20	Sechskantschraube M8x20	hexagon screw M8x20	6
29	DIN-7991-M6x16	Senkschraube M6x16	countersunk bolt M6x16	8

18 Spare parts list

POS-NR.	Article	BESCHREIBUNG	part name	QTY
30	DIN-934-M6	Sechskantmutter M6	hexagon nut M6	12
31	DIN-6921-M6x12	Sechskantschraube mit Flansch M6x12	hexagon locking screw M6x12	4
32	DIN-934-M8	Sechskantmutter M8	hexagon nut M8	1
33	DIN-912-M4x20	Zylinderschraube M4x20	cylinder head screw M4x20	1
34	DIN-6885-6x6x25	Passfeder 6x6x25	parallel key 6x6x25	1
35	DIN-6885-6x6x16	Passfeder 6x6x16	parallel key 6x6x16	1
36	KT-00-00192	Gaszug (1320mm mit Hebel)	bowden cable 1320mm	1
37	LA-00-01170	Lagerblech	bearing plate	1
38	LA-00-01177	Bowdenzughalter Holm	mount for bowden cable	1
39	LA-00-01187	Distanzscheibe Spannhebel	spacer for clamping lever	1
40	URS1010	Spannrolle	tightener	1
41	DR-00-00175	Distanzhülse Umlenkhebel	distance bush	1
42	DIN-6921-M8x40	Sechskantschraube mit Flansch M8x40	sountersunk bolt M8x40	2
43	DIN-125-21,0	Scheibe 21mm	washer 21,0	3
44	DIN-6921-M10x65	Sechskantschraube mit Flansch M10x65	hexagon locking screw M10x65	4
45	DIN-SZ-M10	Sperzahnmutter M10	locking nut M10	4
46	DIN-SZ-M10x30	Sechskantschraube mit Flansch M10x25	hexagon locking screw M10x25	1
47	DIN-912-M8x80	Zylinderschraube M8x80	cylinder head screw M8x80	5
48	KT-00-00195	Plastomer Mutter M6	plastomer nut M6	2
49	KT-00-00886	Distanzstück 20x28x11	spacer 20x28x11	2
50	KT-00-01078	Lager UCFC 204	bearing UFC 204	2
51	LA-00-01176	Kupplungshebel	clutch lever	1
53	KT-00-00196	Handgriff aus Polyamid	handle	1
54	KT-00-01096	Motorausschalter	kill switch	1
55	KT-00-00221	Druckknopf schwarz	push button	11

Article number	Bezeichnung	part name	QTY
KT-00-01082	Keilriemen XPA 1220	v-belt XPA 1220	1



Westermann GmbH & Co. KG
Daimlerstraße 1
D-49716 Meppen

Phone: +49 (0) 5931 49690-0

Internet: www.westermann-germany.com

E-Mail: info@westermann-germany.com

Your expert dealer