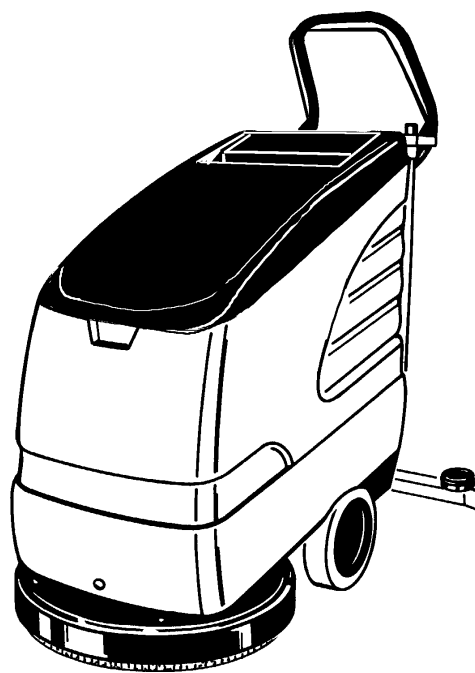
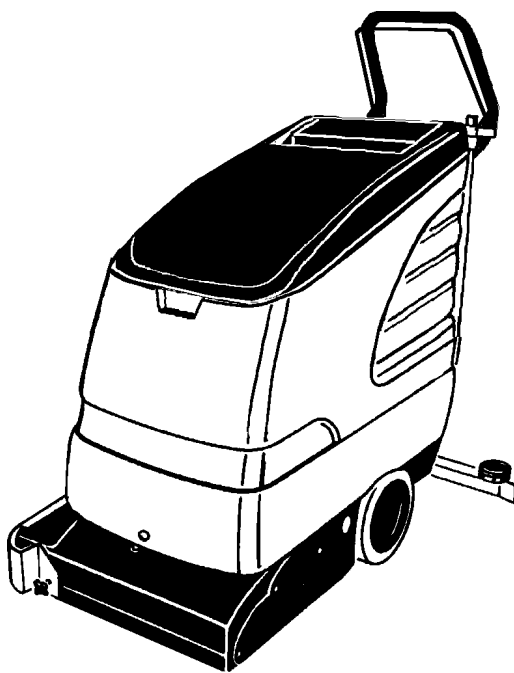


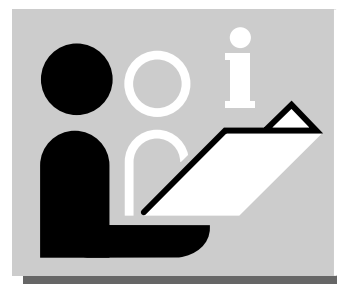


**BR 530 BAT**  
**BR 53/40 W**

**BD 530 BAT**  
**BD 53/40 W**



[www.karcher.com](http://www.karcher.com)



5.959-398 A2005839 06/03

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## Important information

### For your safety

Before using this appliance for the first time, please read and pay attention to these Operating Instructions, and the enclosed leaflet “**Safety Information**”.

### Guarantee

The terms of the guarantee that is applicable in each country have been published by our authorized sales companies. Any fault that occurs with your appliance during the guarantee period will be repaired free of charge, provided that it has been caused by a material or manufacturing defect. Guarantee claims should be addressed to your dealer or the nearest authorized customer service depot, and supported by documentary evidence of purchase.

### Protection of the environment

#### Please dispose of packaging in an environmentally friendly manner



The packaging materials can be recycled. Please do not dispose of the packaging with domestic refuse but have it recycled.

#### Please dispose of old units in an environmentally friendly manner



Old units contain valuable recyclable materials which should be reclaimed. Batteries, oil and similar substances must not pollute the environment. Please therefore dispose of old units via suitable collection systems.

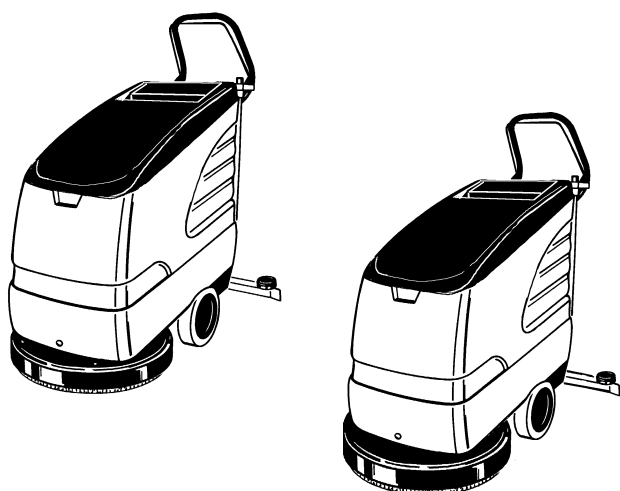
### General Information

The Floor Cleaners are intended for use with 24 V d.c. They are powered by 2 x 12 V batteries connected in series. Only included in supply kit for BAT Package units. (For other models – see section “Battery Types and Chargers”).

The floor cleaners have been designed so that the user can easily recognize and operate all functions. The operating console contains all the switches and indicators, the functions of which are represented by symbols.

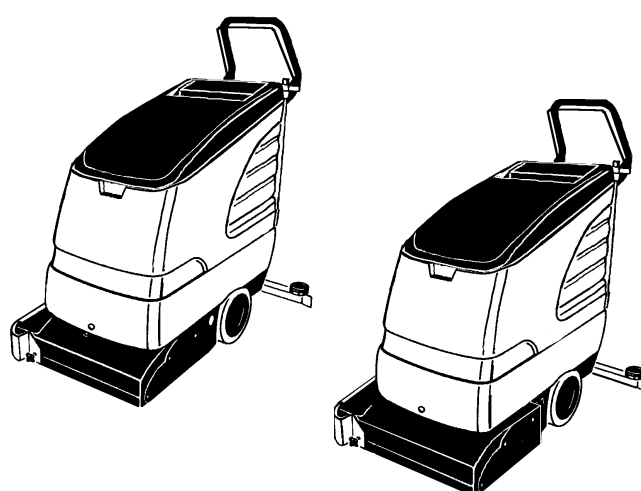
BD 530 BAT

BD 53/40 W

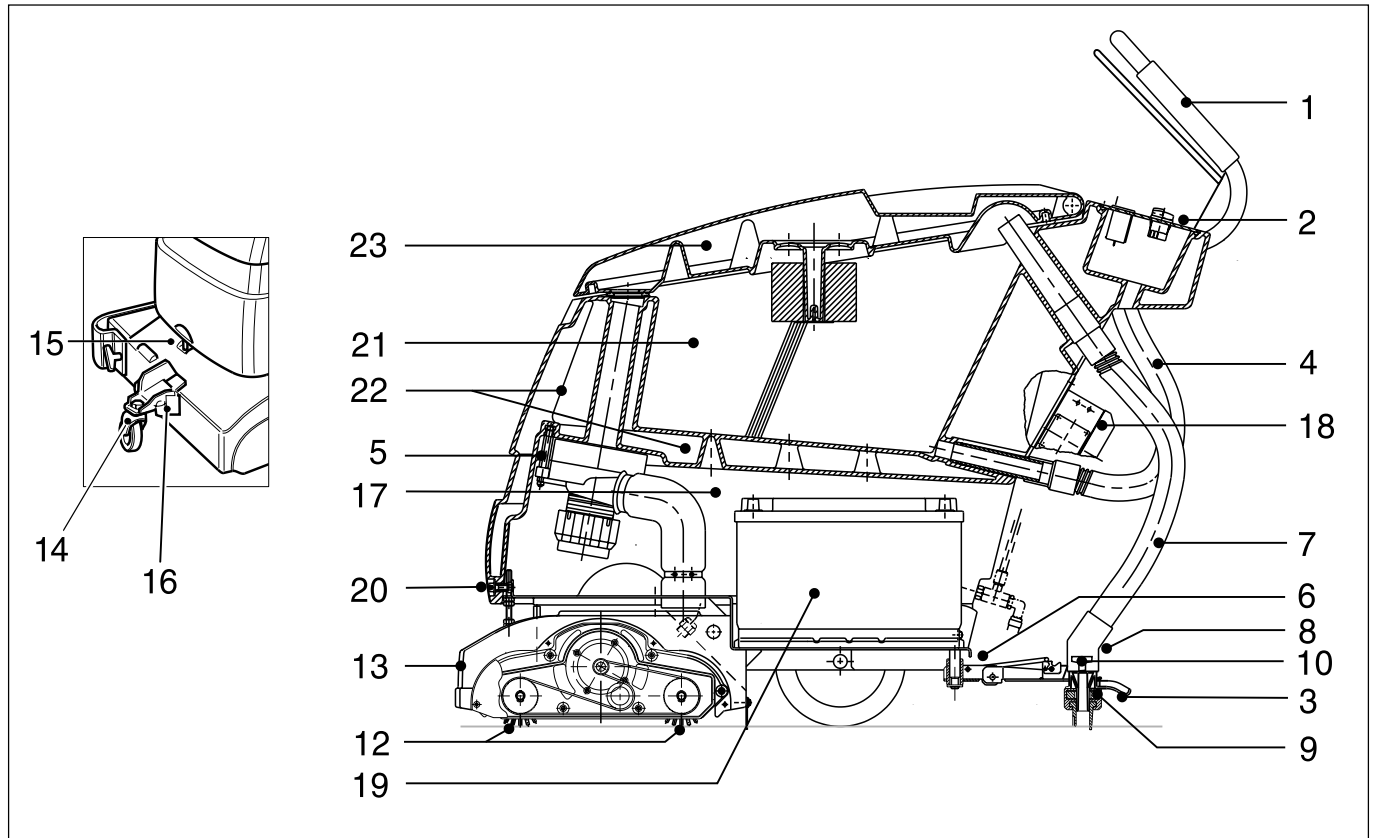


BR 530 BAT

BR 53/40 W



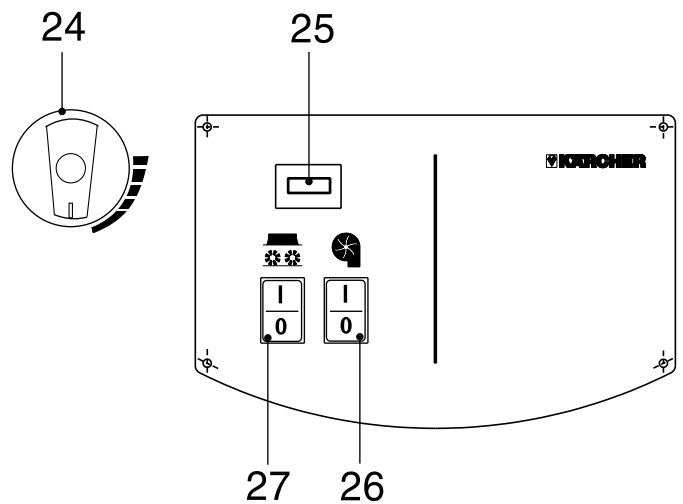
# Unit diagram



- 1 Push handle with hand lever for brush operation
- 2 Control panel
- 3 Adjusting lever "Suction bar"
- 4 Drain hose dirty water
- 5 Suction turbine
- 6 Rating plate
- 7 Suction hose
- 8 Connection for suction hose
- 9 Suction bar
- 10 Star knobs "Fixing of suction bar"
- 12 Brush rollers (BR 530 BAT/BR 53/40 W)  
Disc brushes \* (BD 530 BAT/BD 53/40 W)
- 13 Cleaning head
- 14 Running gear
- 15 Handle
- 16 Locking device
- 17 Fuses and electronics \*
- 18 Battery charger \*\*
- 19 Batteries \*\*
- 20 Reservoir catch
- 21 Dirty-water reservoir
- 22 Fresh-water reservoir
- 23 Cover

\* not shown

\*\* only included in supply kit for BAT Package units



## Control panel

- 24 Metering detergent solution
- 25 Battery charging control indicator
- 26 Switch suction turbine
- 27 Switch brush operation

## Operation

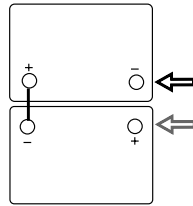
### Preparation for commissioning

- After removing the packing wrapping the unit is still standing at first on its wooden pallet. The side planks of the packing are used to construct a ramp.
- Open the reservoir catch – turn the socket-head screw with the supplied key and tip up the reservoir.
- Obtain batteries (only included in supply kit for BAT Package units) – see Chapter “Battery types and charging devices”
- The batteries must be installed and connected by a specialist.

As shown in the sketch the batteries are placed in the trough and the connecting cable is connected (grease the poles).

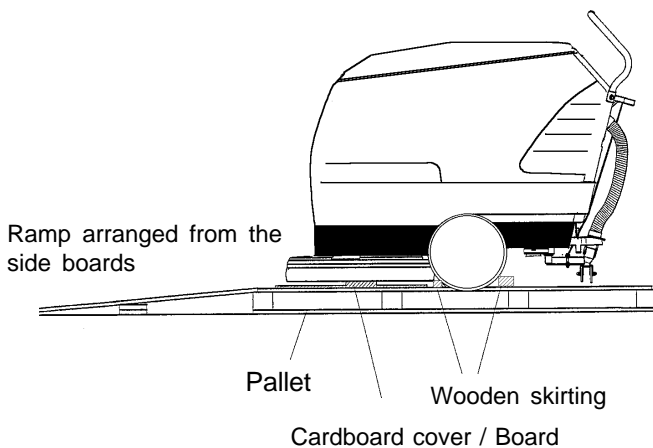
The connecting cable is clamped on to the free battery poles, (+) and (–).

**Caution: make sure the polarity is correct!** Connect red cable to (+) pole, black cable to (–) pole. Close reservoir again. **Charge the batteries before taking the unit into operation!**



- Fasten the push handle with the 4 screws supplied and fit the protective caps.
- Attach drain hose to plugs on the push handle.
- Move the unit off the pallet:

*Preparation (see sketch):*



Make a ramp from the long, side boards of the packing by laying them on the pallet. Secure the boards with nails. Lay the shorter boards under the ramp for support. Remove wooden skirting.

Raise the cleaning head and draw out the cardboard cover and board.

The unit can now be moved downwards on the ramp.

- Install suction bar  
Install supplied suction bar in the suction-bar carrier and tighten the star knobs. Push the suction hose on to the connection to the suction bar.
- Install disc brush and brush rollers  
BD 530 BAT / BD 53/40 W

When the unit is received the supplied disc brush is not yet installed in the cleaning head.

Install it before commissioning – see Chapter “Care and Maintenance”.

For various disc brushes – see Chapter “Accessories”.

BR 530 BAT / BR 53/40 W

On delivery the brush rollers are already fitted.

For exchange of brush rollers – see Chapter “Care and Maintenance”.

For differing brush rollers – see Chapter “Accessories”.

- Park the unit; for this purpose press the push handle downwards. In the cleaning head the locking lever folds downwards and holds the unit in its idle position. To release again simply push the unit forwards.

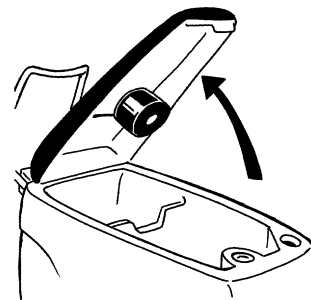
### Commissioning and notes on use

#### Selection of the correct brushes for the cleaning task:

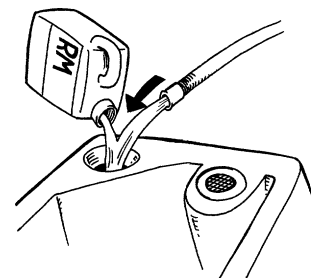
In the Chapter “Accessories” you will find a selection of various scrubbing brushes, pad driving discs and pads with application notes, which enable you to make the correct selection for adapting to the particular cleaning task.

#### Fill with detergent solution

- Open reservoir cover.



- It is best to fill the fresh-water reservoir with a water hose, **max. 60 °C**.
- Add detergent appropriate to the cleaning task (see Chapter “Recommended detergents”).



- Do not fill the fresh-water reservoir higher than one hand's width below the rim of the reservoir opening.
- Before taking into use close the reservoir cover.
- Foam-limiting detergents are to be added with appropriate metering.

### Starting the work

- Close reservoir cover.
- Turn on the switches for brush operation and suction operation.

**Note:** The charging control lamps show the charging state of the battery.

If the brush motor does not run after switching it on, relieve the strain on the brush head by drawing back the unit.

### Running gear

Down: Transportation

Up: Cleaning

- Raise the unit slightly with the handle.
- Pull out the locking device.
- Swivel the running gear into the desired position.
- Engage the locking device.

### Driving to the place of work

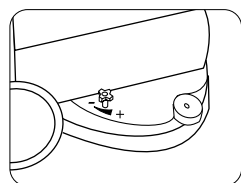
- Swivel down the running gear and lock.
- Push the unit to the place of work.

### Cleaning

- Swivel up the running gear and lock.
- Clean the unit.

### Adjust forward speed

(only BD 530 BAT / BD 53/40 W)



Slower speed (–)

- rotate towards left

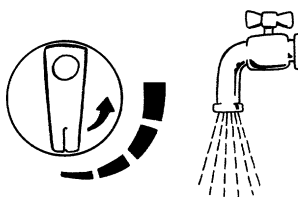
Greater speed (+)

- rotate towards right

**Important:** Before brush removal, turn speed down

### Setting the water flow rate

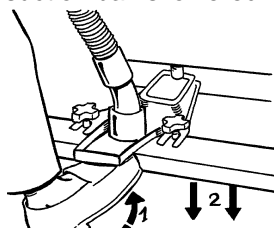
- Open up the metering for the detergent solution.



**Note:** The selection of the position depends on the type and degree of the accumulation of dirt on the floor covering.

### Lowering the suction bar

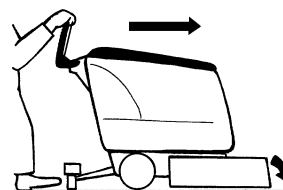
- Raise the suction bar with the foot, locking releases itself and the suction bar is lowered.



**Note:** The suction bar adapts autonomously to the floor circumstances and does not require special adjustment. The inclination of the suction bar is adjusted at the works for normal, common floor coverings. Any setting changes can be made on the suction bar suspension.

### Switching on the brush head

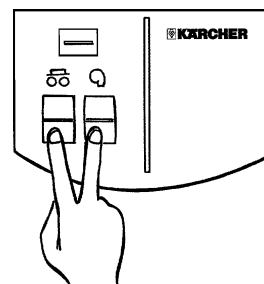
- Push the unit forwards with the push handle and activate the hand lever – the brushes switch themselves on, and the work can be started.



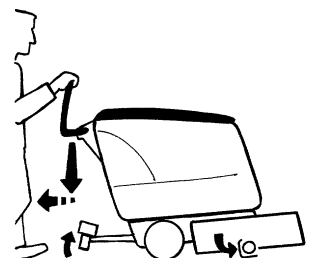
**Important note:** Do not let the unit run whilst standing still, in order to avoid damaging the floor.

### Shut-down procedure

- Close off the metering of the detergent solution.
- Move the unit 1–2 m forwards in order to suck up residual water.
- Turn off the switches for brush operation and suction operation.

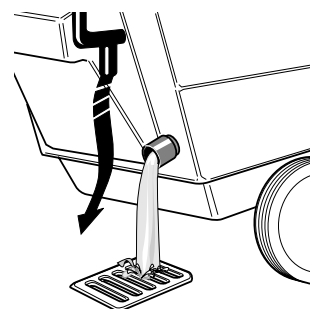


- Raise suction bar.
- Swivel down the running gear and lock.



**Important:** After terminating work it is essential that the disc brushes and the brush rollers are relieved of strain (**danger of deforming the brushes**).

- Drain away dirty water (**observe local regulations!**).



- Before long periods of no use, empty and clean the fresh-water reservoir. For this purpose, undo the locking knob with an appropriate tool (e.g. a coin).
- Unload batteries.

## BATTERIES

The unit contains circuitry that provides protection against over-discharging the batteries; i.e., when the minimum permissible battery capacity has been reached, the brush motors and the turbine are switched off. In this case the battery charge indicator on the operating console flashes red.

Push the scrubber to the charging station and recharge the battery.

**Never** use battery chargers in the rain, in areas with high humidity or in damp rooms!



### Hazard warnings

Naked flames, activities that might generate sparks, and smoking is strictly forbidden in the vicinity of batteries or in a charging room (**DANGER OF EXPLOSION!**).

Any cuts or abrasions should not be allowed to come into contact with lead; always wash hands thoroughly after working on batteries.

Never deposit tools or similar objects on top of batteries; i.e., on terminals and cell connections (**DANGER OF SHORT CIRCUIT AND EXPLOSION!**).

**The following information applies to batteries that are NOT maintenance-free:**

Always add distilled water about one hour before the charging process is due to end. Check that the acid content is correct. The batteries are marked correspondingly. Adding water to a discharged battery can cause acid to escape.

Observe whether bubbles form in all the cells when charging has been completed. Measure the acid density of each cell every 4 weeks.

Batteries should only be charged with the unit cover opened (**DANGER OF EXPLOSION!**).

Always use chemically pure battery acid (as per VDE 0510) with a density of 1.28 kg/L.

Use only distilled or desalinated water (VDE 0510) to dilute the sulphuric acid.

Never use any additives (so-called enhancing agents) otherwise the guarantee will be void. Take special care when handling battery acid (danger of injury and/or damage to clothing!), use protective goggles, and observe relevant regulations! If any acid touches skin or clothing, rinse immediately with plenty of water.

### Please dispose of battery or rechargeable battery in an environmentally friendly manner



Batteries and rechargeable batteries contain substances which must not pollute the environment. Please therefore dispose of batteries via suitable collection systems.

### Charge battery

#### BR/BD 530 BAT/ BR/BD 53/40 W

Open the reservoir catch – turn the socket-head screw with the supplied key and tip up the reservoir.

**Important:** Before tipping up the reservoir please pull away the suction hose on the suction bar (**Danger of snapped hose!**).

Clamp the charging device to the batteries and switch on, **ensure correct polarity!** On average, charging takes 10–15 hours. The charging devices recommended by us (suited to the batteries being used!) are electronically regulated and terminate the charging process automatically.

### Battery types

The following types of battery are suitable for use with this cleaner:

#### Batteries:

Manufacturer	Designation	Capacity	Voltage	Kärcher Order No.
SONNENSCHNEIN	12 V / 70 Ah maintenance-free	70 Ah	12 V	-
DETA *	12 V GIS 80 low-maintenance	80 Ah	12 V	6.654-097
	12 V GIV 75 DT maintenance-free	75 Ah	12 V	6.654-093

\* Recommended by manufacturer

## CARE AND MAINTENANCE

**The battery plug must be disconnected before cleaning and servicing the unit, or replacing any components.**

– *The unit should be tested at least once per year by KÄRCHER or a qualified person; e.g., for damage, leaks, and for correct functioning of the control devices.*

### Maintenance schedule

**Daily, and after each use:**

- Drain off dirty water.
- Rinse out dirty-water tank.
- Check the fluff strainer on the suction connection of the suction turbine.
- Run finger along the squeegee blades to ascertain condition, and replace/turn round if required.
- Check brushes for wear, and replace if required.
- Clean the exterior of the unit; do not use a high-pressure cleaner.

**Monthly:**

- Check brushes for wear, and replace if required.
- Check squeegee blades; disassemble and turn round/replace if required.
- Check battery terminals for oxidation; brush over terminals, and smear with grease. Check that the connecting cable is firmly attached.
- Check tank cover seals for leakage, and replace if required.
- Overall cleaning of the inside and outside is recommended, and prolongs the life of the appliance.

**Annually:**

- Arrange for the prescribed inspection to be carried out by a service engineer.

### Sub-zero temperature protection

If there is a danger of freezing temperatures, activate the pump until no more water is discharged. The safest procedure is to store the appliance in a room protected from freezing temperatures.

### Maintenance agreement

A maintenance agreement can be concluded with the responsible KÄRCHER Sales Office.

### Transporting the Unit

When loaded onto a transport vehicle, the unit must be secured by straps or ropes to prevent movement during transit.

Brush head must always be in the raised position, otherwise the brushes could become deformed. This would result in the brushes running out-of-true, and to subsequent destruction of the bearings.

For transportation of the unit it is recommended that you take the disc brushes and the brush rollers out of the cleaning head.

### Replace the squeegee blades

In the course of time the squeegee blades of the suction bar become worn and must then be replaced:

- Undo star knobs in order that the deflector rollers and the squeegee blades can be removed.
- Fit the new squeegee blades and tighten up the star knobs again.

### Replacing the disc brush

BD 530 BAT, BD 53/40 W

- Turn the positive drive to slow speed (–).
- Raise the disc brush slightly, turn it anti-clockwise by approx. 45° and detach it by pulling it downwards.
- To attach the replacement brush, reverse the above procedure.
- Turn the positive drive to the required speed (+).

### Replacing the brush rollers

BR 530 BAT, BR 53/40 W

- Undo the star knob screws. Remove the side bearing cover.
- Withdraw the brush rollers from the side.
- When inserting the new brush rollers, turn them slightly so that it is easier for them to join with the driver.
- Finally replace the bearing covers and close them again with the star knob screws.

### Recommended cleaning agents

Cleaning agents can be obtained from your dealer, quoting the appropriate order number.

- Use only cleaning agents that contain no solvents, hydrochloric acid nor hydrofluoric acid.
- Do not use cleaning agents that generate large amounts of foam, as they could cause damage to the suction turbine or other components.

Recommended for:		Part No.
Routine cleaning (including alkali-sensitive surfaces)	RM 746	6.291-462
Removal of greasy dirt deposits	RM 69 ASF	6.291-523
PVC surface stripping	RM 752	6.291-466
Linoleum surface stripping	RM 754	6.291-425
Sanitary cleaner	RM 25 ASF	6.291-252
Disinfectant cleaner	RM 732	6.291-382



## ■ Accessories

The following table gives details of the various accessories that are available for use with this unit. Accessories can be obtained from your local dealer, quoting the appropriate part number.

BD 530 BAT / BD 53/40 W		Part No. BD 530 BAT	Part No. BD 53/40 W	Quant	Quantity required by unit
Disc brush, white	for slightly dirty or delicate surfaces	6.906-054	6.905-864	1	1
Disc brush, grit (hard, grey)	for very dirty floors	6.906-055	6.905-865	1	1
Disc brush, black (soft)	for polishing	6.906-056	6.905-866	1	1
Cleaning pad base	for fitting cleaning pads	6.906-078	6.906-075	1	1
Cleaning pad, black	for very dirty floors	6.369-022	6.369-015	5	1
Cleaning pad, green	for medium dirty floors	6.369-023	6.369-016	5	1
Cleaning pad, red	for slightly dirty floors	6.369-024	6.369-017	5	1
BR 530 BAT / BR 53/40 W		Part No. BR 530 BAT	Part No. BR 53/40 W	Quant	Quantity required by unit
Brush drum, white (standard)	for routine cleaning, also for medium to very dirty floors	5.762-169	5.762-208	1	2
Brush drum, black (soft)	for polishing, and for routine cleaning of delicate surfaces	5.762-172	5.762-211	1	2
Brush drum, red (high/low)	for scrubbing uneven patterned surfaces (safety/non-slip tiles, etc.)	5.762-170	5.762-209	1	2
Brush drum, grey (hard)	for thorough cleaning of very dirty floors, and for surface stripping (e.g., waxes, acrylates)	5.762-171	5.762-210	1	2
Pad roller shaft	for mounting roller pads	4.762-184	4.762-214	1	2
Roller pad (red)	for slightly contaminated floors	6.369-453		20	60 (80-BR 53/40 W)
Roller pad (green)	for normally contaminated floors	6.369-452		20	60 (80-BR 53/40 W)
Roller pad (yellow)	for polishing	6.369-451		20	60 (80-BR 53/40 W)
Roller pad (white)	for fine polishing	6.369-388		20	60 (80-BR 53/40 W)
BD 530 BAT / BR 530 BAT BD 53/40 W / BR 53/40 W		Part No. BD 530 BAT/ BR 530 BAT BD 53/40 W/ BR 53/40 W		Quant	Quantity required by unit
One-sided rubber strips					
Rubber lip, blue	standard	6.273-185		pair	1 pair
Rubber lip, brown	oil-resistant	6.273-168		pair	1 pair
Suction bar straight	standard	4.777-027		1	1
Suction bar curved	standard	4.777-028		1	1
Reversible rubber strips (only for suction bars 4.777-047 and 4.777-054)					
Suction bar straight	standard	4.777-047		1	1
Suction bar curved	standard	4.777-054		1	1
Rubber lip, blue	standard	6.273-229		1	1
Rubber lip, brown	oil-resistant	6.273-207		1	1

## ■ TECHNICAL SPECIFICATIONS

### BR 530 BAT (BR 53/40 W\*)

#### Power

Nominal voltage .....	24 V
Battery capacity .....	75 AH(5h)
Power consumption .....	1200 (1560*) W
Suction motor .....	500 W
Brush motor .....	600 W

#### Suction

Air flow .....	30 l/s
Negative pressure .....	140 mbar

#### Brush rollers

Length .....	460 (530*) mm
Diameter .....	96 mm
Brush speed .....	1500 1/min

#### Dimensions and Weight

Effective cleaning width .....	460 (530*) mm
Theoretical area rating .....	1840 (2120*) m <sup>2</sup> /h
Container volumes, fresh water .....	40 l
Container volumes, dirty water .....	40 l
Total weight .....	150 (155*) kg
Sound pressure level (EN 60704-1) .....	70 dB(A)

### BD 530 BAT (BD 53/40 W\*)

#### Power

Nominal voltage .....	24 V
Battery capacity .....	75 Ah(5h)
Power consumption .....	1200 (1560*) W
Suction motor .....	500 W
Brush motor .....	600 W

#### Suction

Air flow .....	30 l/s
Negative pressure .....	140 mbar

#### Disc brush

Diameter .....	460 (530*) mm
Brush speed .....	140 1/min

#### Dimensions and Weight

Effective cleaning width .....	460 (530*) mm
Theoretical area rating .....	1840 (2120*) m <sup>2</sup> /h
Container volumes, fresh water .....	40 l
Container volumes, dirty water .....	40 l
Total weight .....	150 (155*) kg
Sound pressure level (EN 60704-1) .....	70 dB(A)

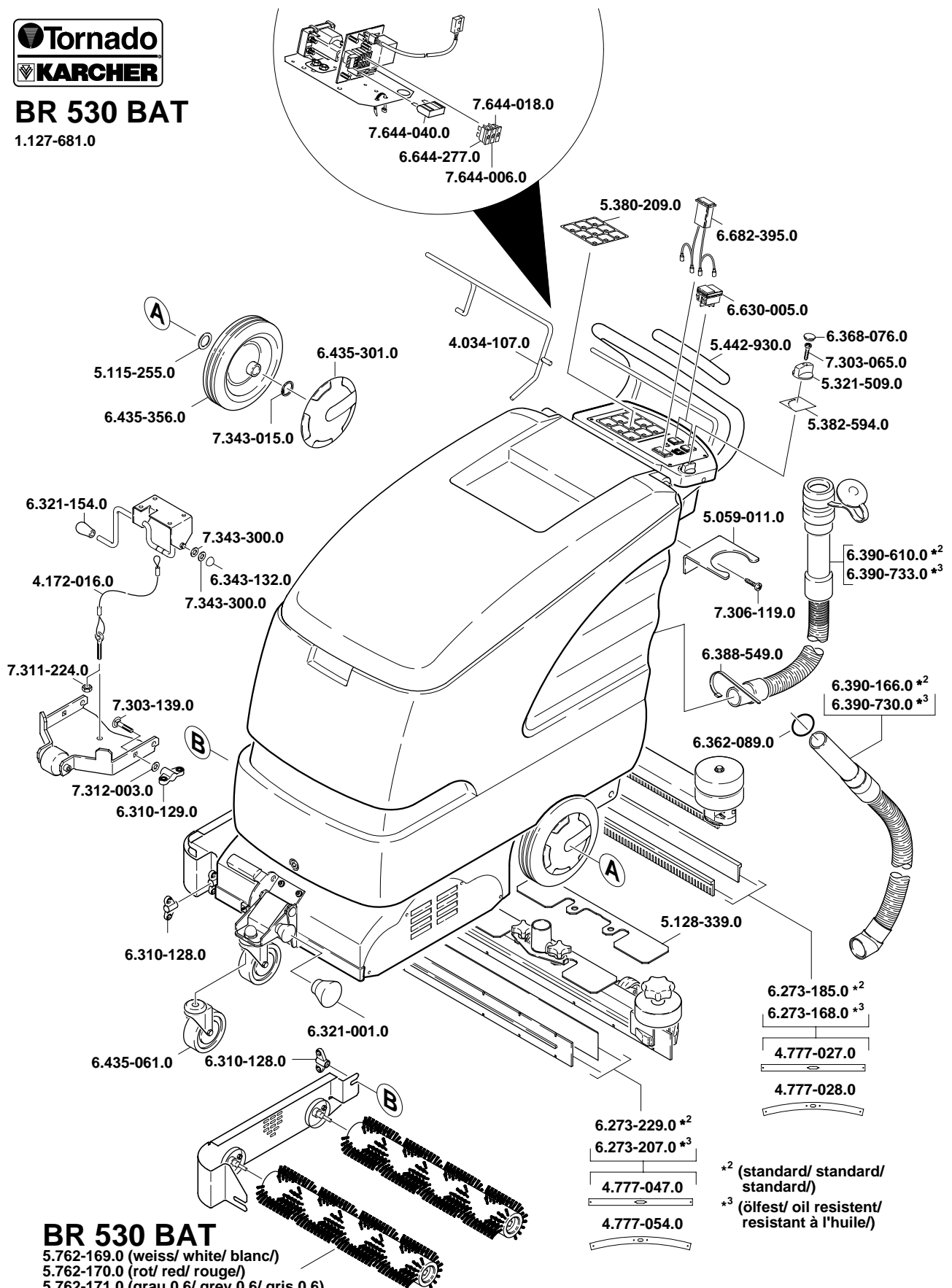
## TROUBLESHOOTING

All tests and other work to be carried out on electrical components should be performed by a suitably qualified expert. Please contact Kärcher Customer Service in the case of more complex problems.

Problem	Possible causes	Clearance
<b>Cleaner cannot be started</b>	Fuse defective	Clear cause of damage, replace fuse
	Battery run down	Charge battery
	Plug or connector on battery loose	Check and connect
<b>No or not enough detergent solution on the floor</b>	Fresh-water reservoir empty	Fill up
	Water feed blocked	Check hoses and coupling for blockage
<b>Not enough suction or unsatisfactory vacuuming results from floor</b>	Fuse defective	Clear cause of damage, replace fuse
	Seal on cover contaminated or damaged	Clean or replace
	Fluff strainer blocked	Clean
	Rubber lips on suction bar contaminated or worn	Clean or replace
	Suction hose blocked	Clean
	Suction turbine defective	Call Customer Service
<b>Inadequate cleaning results</b>	Brushes worn down	Replace
	Brushes not suited to application	Install other brushes – see Chapter “Accessories”
<b>Brushes have jammed, Indicator light illuminated</b>	Foreign object has penetrated	Undo connection to the battery. Clear away foreign object and connect battery again.
<b>Brushes do not rotate</b>	Fuse defective	Clear cause of damage, replace fuse
	Toothed belt torn (BR 530 BAT, BR 53/40 W)	Call Customer Service
	Brush motor defective	Call Customer Service
	Worm drive defective (BD 530 BAT, BD 53/40 W)	Call Customer Service
	Switch defective	Call Customer Service

# BR 530 BAT

1.127-681.0

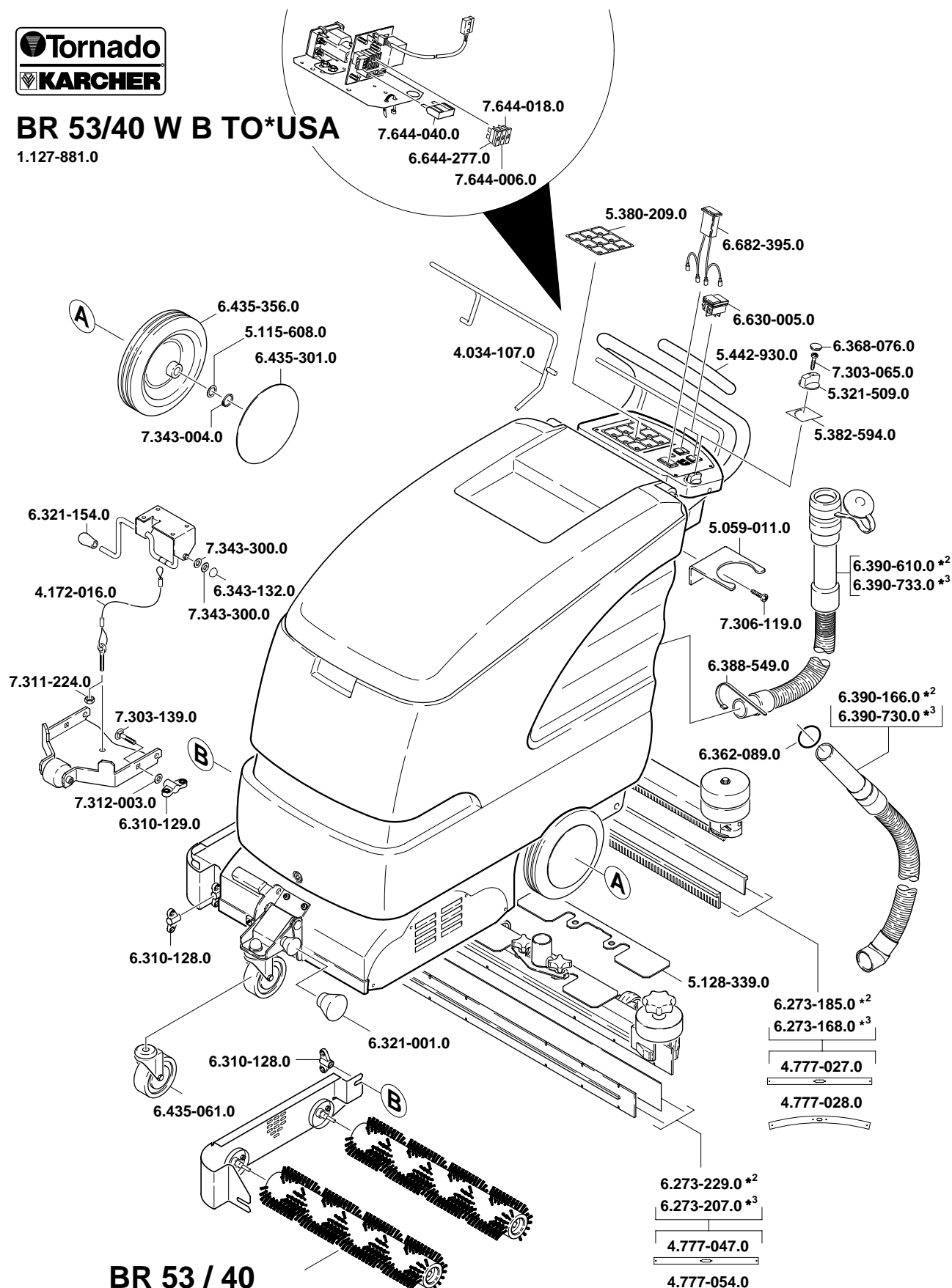


## BR 530 BAT

5.762-169.0 (weiss/ white/ blanc/)  
5.762-170.0 (rot/ red/ rouge/)  
5.762-171.0 (grau 0,6/ grey 0,6/ gris 0,6)  
5.762-264.0 (grau 1,0/ grey 1,0/ gris 1,0)  
5.762-172.0 (schwarz/ black/ noir/)

# BR 53/40 W B TO\*USA

1.127-881.0



## BR 53 / 40

5.762-208.0 (weiss/ white/ blanc)  
5.762-209.0 (rot/ red/ rouge)  
5.762-210.0 (grau 0,6/ grey 0,6/ gris 0,6)  
5.762-263.0 (grau 1,0/ grey 1,0/ gris 1,0)  
5.762-211.0 (schwarz/ black/ noir)

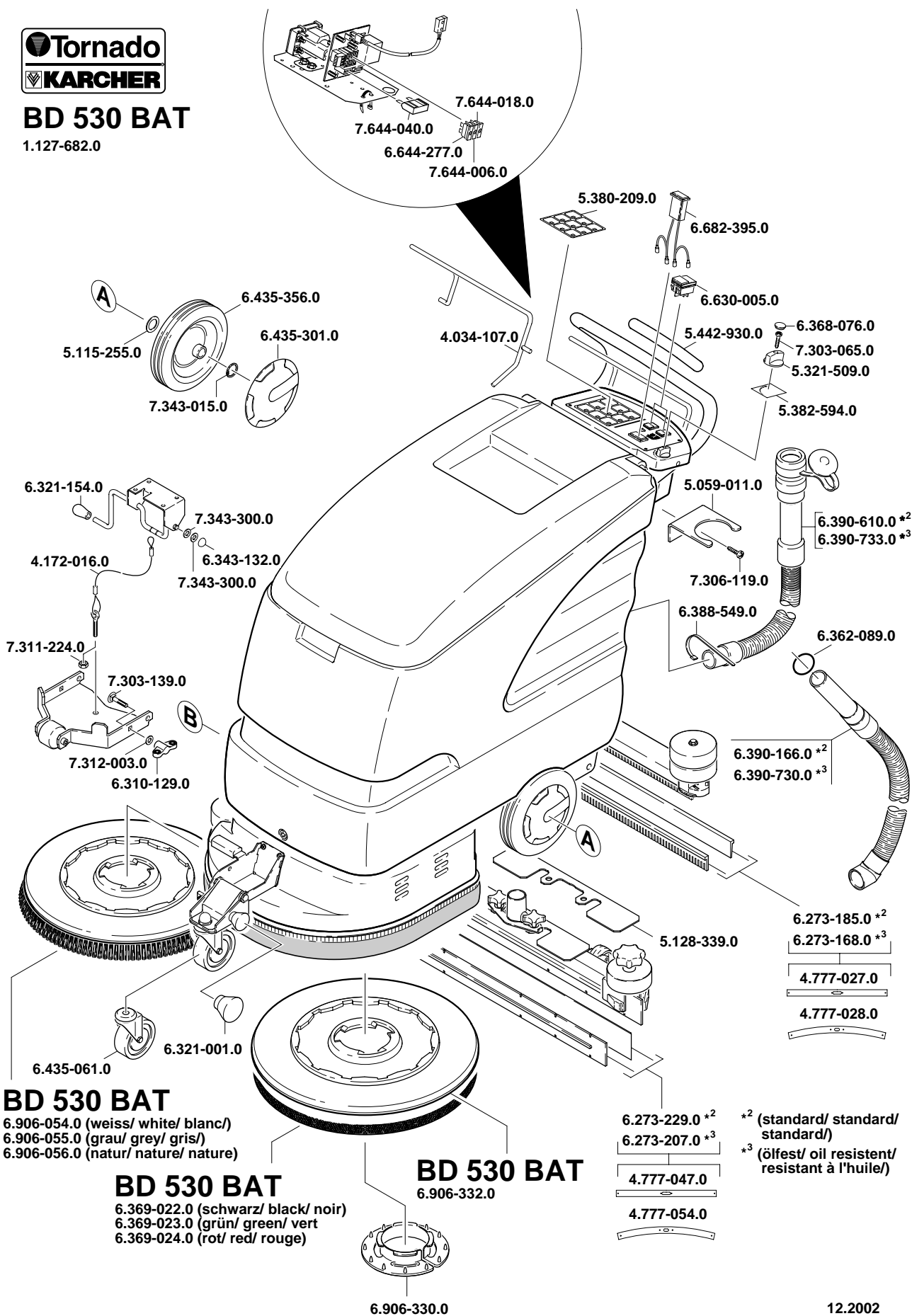
\*<sup>2</sup> (standard/ standard/  
standard/)

\*<sup>3</sup> (ölfest/ oil resistant/  
resistant à l'huile/)

12.2002

# BD 530 BAT

1.127-682.0



# BD 53/40 W B TO\*USA

1.127-882.0

