Bull 250 Vacuum Manual

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Congratulations on your decision to get the Power of SASE behind you! SASE is committed to excellence, excellence in the quality of products we sell and excellence in service and support after the sale. It is important to us that your business continues to succeed and grow, and we know that the right products, service and support can have a great impact on your bottom line.

SASE has made great strides in the concrete preparation and polishing industry over the years. With a 40,000 square foot distribution and service facility in Seattle, a 22,000 square foot distribution and service facility in Knoxville, and local sales and technical support representatives throughout the United States, SASE is able to provide unsurpassed service and technical support for the contractor.

At SASE we engineer and manufacture our own equipment, which allows us to be in control of the quality of the equipment we sell. SASE offers a complete line of concrete preparation and polishing equipment, our newest introduction being our new line of PDG planetary diamond grinders, which is setting a new standard for the concrete grinding and polishing industry. SASE is also the leader in diamond tooling technology.

We look forward to a long and prosperous partnership with you! Thank you again for choosing SASE. You won't regret having the Power of SASE behind your company!

Sincerely,

SASE Company, Inc.

Jim Weder

President

User's Manual

List of contents

BULL 250

Heavy Duty Industrial vacuum cleaner

Congratulations with your new BULL 250 Industrial vacuum cleaner from SASE Company, Inc.

The BULL 250 is a heavy-duty industrial vacuum cleaner, developped for the collection of large amounts of fine dust and dust hazardous to health. BULL 250 meets the demands for vacuum cleaners in the production and construction industries. It is suitable for larger cleaning assignments, in combination with larger grinding machines for floors of wood or concrete.

- Self-cleaning Teflon-coated tube-filter
- Continuous filter-cleaning during operation
- Monitoring suction-power during operation
- HEPA-filter
- Steel frame with large wheels
- Splash proof
- Emptying from the bottom
- Diversion for statically electricity
- Average emission during recognized test with quartz-dust 0,06 mg/m^3
- Holds back 99,999% of all particles larger than 0,3 μm (0,0003 mm)

Technical data

Make sure that the voltage and fuse from the power supply correspond with the data on the data plate and in this manual.

The diagram shows the technical data for the BULL 250.

Suction motor voltage	100	Volt
Air flow, max.	295	CFM
Noise level, 1 m	72	dB(A)
Container capacity	43	L
Capacity in plastic sack	28	L
Height	1300	mm
Length	580	mm
Width	620	mm
Weight without accessories	48	kg
Container coupling	Ø50	mm
Number of motors	2	

Description of the main parts

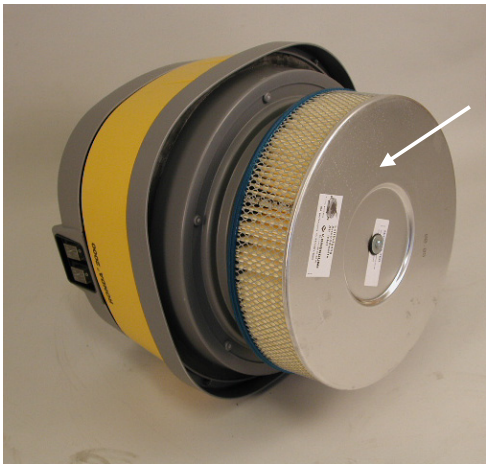
The BULL 250 is designed as a heavy-duty industrial vacuum cleaner for the collection of fine dust and dust hazardous to health. Here follows a description of the main parts and how they work and operate.

Motor head with suction motor and HEPA-filter

The motor head is equipped with an integrated handle and switches for the powerful suction motors.

The suction motors in the BULL 250 are placed in the motor head. Depending upon the version 2 or 3 suction motors are mounted in the motor head.

Collecting fine dust can generate or produce static electricity, which can be of inconvenience. The power cable has a separate wire for diversion of static electricity.



The HEPA-filter is an integrated part of the motor top. The HEPA-filter is classified as a Dust-class "H"-filter.

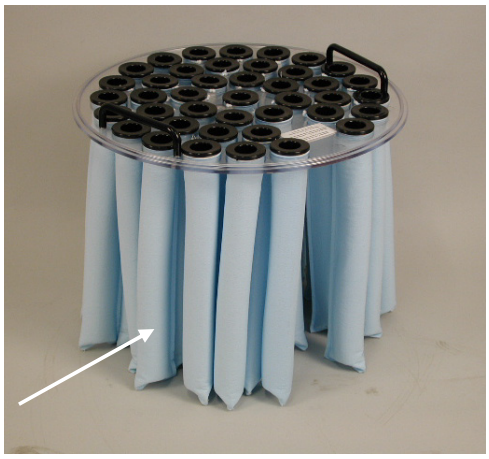
The filter holds back the finest and smallest dust particles that are not held back by the tube-filter. The HEPA-filter holds back particles of the size of only 0,3 μm (0,0003 mm). The filter surface it self is 2,2 m^2 large and is protected by a metal-framework.

Adaptor-ring with manometer and pressure relief valve.

The motor head is mounted on an adaptor ring and is secured with four container-clips. A manometer (1) and a pressure relief valve (2) are also mounted on the adaptor-ring.

The manometer measures the suction power and has a green and red section. Is the pointer in the red section during operation, it indicates that the filter is being blocked and the air velocity to small. The filter can be cleaned during operation by using the pressure relief valve.

Filter container with tube-filter



The large tube-filter in the BULL 250 is mounted in the filter-container. The tube-filter is tested with quartz-dust-particles, of which more than half is less than 5 μm. (5 μm is the same as 0,005 mm.) The filter holds back 99,97% of all the particles, which corresponds to an emission of 0,06 mg/m^3 in the cleaned air.

The filter surface is 18.650 cm^2 large and covered by a Teflon-coating. The dust particles are held back by the Teflon-coating, which makes it difficult for the particles to block the filter.

The filter consists of a number of tubes mounted on springs. During operation the tubes vibrates and part of the dust sucked on to the tube-surface falls down in the dust container.

Dust container

The dust container is attached to the filter container with to heavy-duty adjustable container clips. The four wheels under the dust container make it easy to transport.

The black ring in the dust container secures the plastic sack and avoid that the sack is sucked up against the tube filter by creating vacuum on the outer side of the plastic sack.

Dust collecting can be done in several ways:

directly in the dust container:

in the disposable container with lid:

or in the plastic sack:

Applications

The BULL 250 may not be used to collect fluids or moist dust.

The BULL 250 is not approved and must not be used to collect flammable, explosive, poisonous or other dust, fluids or gasses hazardous to health.

The BULL 250 may only be used in dry environments and may not be used or stored outdoors under wet conditions.

Safety precautions

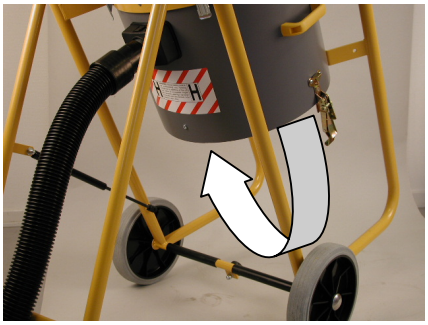
- Avoid damaging the supply cord. The supply cord shall be replaced only by the type which is mandatory in this manual.
- The user must ensure that the appliance is adjusted for the task and that statutory requirements are met.
- Connect the appliance to a power supply with reliable connection to earth.
- The plug must be removed from the power supply before repair- or maintenance operations.
- The BULL 250 must be connected to a 110V power supply. Make sure that the voltage and current of the power supply corresponds with the data on the data plate and the information given in this manual.

Does the safe use or maintenance of the appliance raise any questions, do not hesitate to SASE Company, Inc..

Mode of operation

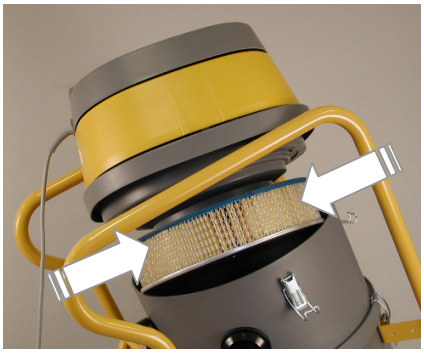
When the suction motors are turned on, the air is drawn trough the appliance collecting dust near the floor nozzle.

Due to the high air velocity the dust particles are transported to the dust container. The large particles are quickly gathered in the bottom of the dust container.



The air flow carrying the finer particles continues towards the tube filter. The tube filter separates the majority of the particles.

The tube filter holds back all the particles that are larger than 0,005 mm as well as most of the particles less than 0,005 mm.



The finest particles are held back by the HEPA-filter under the motor top. The HEPA-filter holds back 99,999% of all particles larger than 0,0003 mm.

The cleaned air continues through the suction motors and is led through the exhaust filters and the noise reduction foam in the motor top.

Finally the air leaves the appliance under the yellow motor top.

IMPORTANT!
Do not cover the motor top during operation. If the air flow is blocked the motor top may be over-heated.

Assembling

- Unpack your BULL 250 and make sure that everything you ordered is present.
- Fasten the rubber fitting of the hose to the pipe and mount the other end of the hose in the coupling on the filter container.
- Make sure that the dust container is empty and that the tube filter is mounted correctly in the filter container. Make sure the filters are not damaged. (Also see the chapter "Replacing filters").
- Make sure that the electrical main supply cord and plug are not damaged. Is the cord and/or plug damaged it must be replaced by an original cord or plug.

- Connect the appliance to 110V power supply with reliable ground connection. Make sure that the power supply corresponds with the data on the data plate.

The BULL 250 is now ready to collect dust hazardous to health. The suction and collecting process is described in details in the following chapter.

Collecting dry dust

- Pull out the rear wheel frame and lean back the appliance so it is supported by the rear wheel frame.

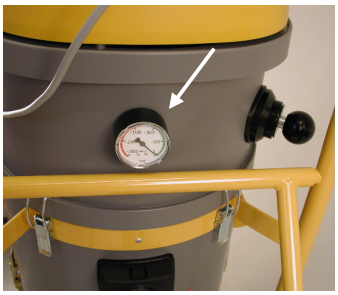
During operation the BULL 250 can be driven around on the wheels of the metal frame.

When the accessories have been assembled and the appliance has been connected to a power supply it can be turned on using the switched on the motor head.

The BULL 250 equipped with two motors each switch turns on one motor.

If the suction job requires gentle collection of the dust, the number of active suction motors can be adjusted accordingly.

Manometer and filter cleaning during operation



The manometer placed on the adaptor ring measures the air pressure inside the appliance during operation.

If the tube filter is blocked by fine particles, the air pressure inside the appliance will drop. The manometer will indicate the drop in air pressure. By reaching the red section the pointer indicates that the air velocity in the hose is to low and that the tube filter needs to be cleaned.

The tube filter is cleaned during operation.

- Release the hose from the pipe
- Press the hose against the pressure relief valve.

Vacuum is now being build up inside the machine and in the hose. At the same time the springs in the filter tubes will be pressed together.

- Let the hose remain on the pressure relief valve.
- Pull out the pressure relief valve.

The springs in the filter tubes will now expand and release the blocking dust particles.

At the same time fresh air floats the opposite way through the tube filter in order to ballance the pressure in the dust container and in the hose.

In this way the tube filter is cleaned in an effective way. The effect of the cleaning process can be seen on the manometer

If necessary repeat the filter cleaning process until the pointer in the manometer re-enters the green section.

It is advisable to leave the appliance for a few minutes before emptying it. This allows the dust to settle and the risk of polluting the environment during the emptying process is reduced.

NOTICE:
The manometer on the BULL 250 is calibrated for correct indication, when the appliance is used with its standard accessories (50 mm). Using hoses or pipes of a smaller dimension the manometer will indicate too high a value. To be safe having the sufficient air velocity in pipe and hose, it is recommended to clean the filter and if necessary to empty the appliance, if the pointer of the manometer enters the red section.

Dust collecting and emptying

Depending upon which type of dust is to be collected, the BULL 250 can contain the dust in three different ways. The BULL 250 can collect the dust directly in the dust container, in the disposable container or in the plastic sack. Independently of the chosen method of collecting the dust, the machine must always be in its upright position, when it is being emptied. Has the dust just been collected it is recommended to leave the appliance for a few minutes before emptying it. This allows the dust to settle and the risk of polluting the environment during the emptying process is reduced.

The three methods of dust collecting are described in details on the following pages.

Collecting and emptying with dust container:

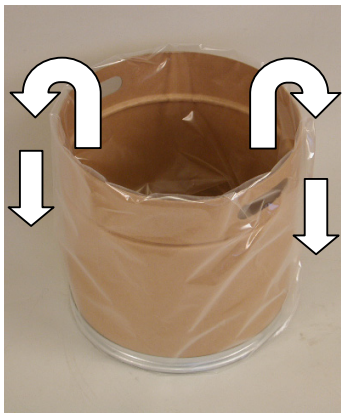
If the collected material does not consist of fine dust it can be collected directly in the dust container.

- Place the black ring on the dust container.
- Roll the dust container under the appliance.
- Fasten the container to the filter container using the two adjustable container clips.

Emptying the dust container:

- Release the dust container from the filter container by releasing the two container clips.
- Remove the black ring on the dust container.
- Roll or carry the dust container to the place to dispose of the collected material.

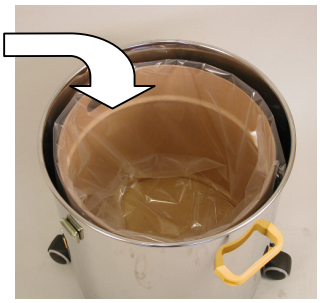
Collecting and emptying with disposable container:



If light dusty material containing sharp objects likeable to penetrate the plastic sack is being collected, it is recommended to use the disposable container. The disposable container secures dust-free emptying of dust hazardous to health.

- Place the plastic back in the disposable container.
- Fold the upper part of the plastic sack around the upper part of the container.

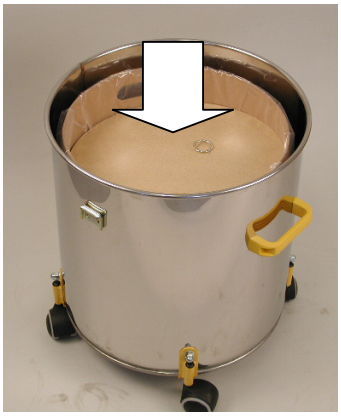
- Place the container with plastic sack in the dust container.



- Place the black ring on the dust container.
- Fasten the dust container to the filter container using the two container clips.

Emptying the disposable container:

- Release the dust container from the filter container by releasing the two container clips on the filter container.
- Remove the black ring
- Press down the lid of the disposable container to secure dust free emptying.



- Wrap the plastic sack around the lid and secure it with the binder.
- If necessary secure the container with the sealing ring.
- Lift up the sealed disposable container and dispose it according to the guidelines given from the environmental authorities.

Collecting and emptying with plastic sack:

If the collected material does not contain sharp objects likable to penetrate the plastic sack, the sack can be used to collect the dust.

Place the plastic sack in the disposable container as described in the section above.

Emptying after collecting dust directly in the plastic sack:

- Release the dust container by releasing the two container clips holding the dust container.

- Remove the black ring
- Seal the plastic back with the binder.
- Remove the plastic sack and the disposable container from the dust container.
- Lift up the plastic sack from the disposable container and dispose it according to the guidelines from the environmental authorities.

Cleaning and maintenance

IMPORTANT!
The appliance must not be connected to the power supply during cleaning or maintenance.

Empty the appliance after each use to avoid the risk for spontaneous ignition.

Clean the appliance the following way:

- Clean the tube filter depending upon the need. Follow the instruction in the section: "Manometer and filter-cleaning during operation.
- Wipe the outer surface of the appliance with a wet or dry cloth.

Maintenance of the motor head

The motor head is manufactured from maintenance-free parts and needs no daily maintenance apart from external cleaning as described above. A daily inspection of the electrical cord and plug is advisable to avoid electrical hazards and accidents.

Wipe the outer surface of the motor top with a wet or dry cloth.

To secure the reliability of the appliance an annual inspection at an authorised service centre is recommended.

It is recommended to let an authorised service centre inspect the suction motors after approximately 800 working hours.

Replacing filters

In general

When replacing the filters, the necessary precautions to protect the environment and the respiratory passages of the operator must be taken. The nature and scope of these precautions must be based upon the type of dust sitting on the surfaces of the filters. Before checking or replacing the filters, clean the tube filter and empty the appliance as described earlier.

Control and replacing tube filter

The tube filter is manufactured from very robust filter materiel and has a very long life span. Inevitable the surface of the filter will be mechanically worn by all the small particles. Consequently the filter must be check for holes and fissures on a regular basis. Even small holes in the tube filter will allow particles to penetrate the filter and then be held back in the HEPA-filter. The HEPA-filter is designed for very small particles and will rapidly be blocked if the tube filter is damaged.

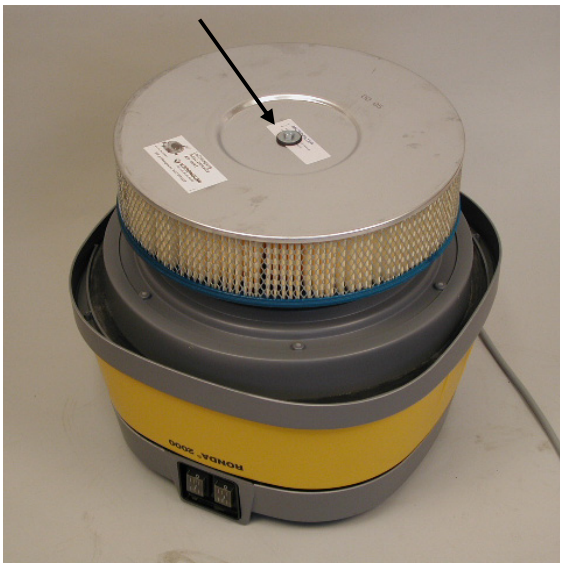
- Release the motor head by releasing the container clips fastening the motor top to the adaptor ring.
- Place the motor head on a dry and clean surface.
- If necessary also release the adaptor ring in order to be able to inspect the tube filter.
- Inspect the upper surface of the tube filter. Can dust particles be visually identified on the top surface; this indicates that the tube filter is damaged or worn.

A damaged or worn tube filter must be replaced.

A replacement of the tube filter should include a replacement of the HEPA-filter as well. Please see the next section.

Replacing HEPA-filter

- Dismount the motor head by releasing the container clips. Place the motor head on a horizontal surface and upside down.
- Loosen the screw holding the HEPA-filter. The HEPA-filter can now be removed.
- When mounting a new HEPA-filter make sure, that the surface of contact between the HEPA-filter and the motor head is clean.
- Tighten the screw so the HEPA-filter is secured under the motor head. The bottom of the HEPA-filter is made of a thin metal material, so be sure not to tighten the screw too much.



Disposal of used filters

When disposing used filters make sure that they are disposed according to the guidelines given by local and national environmental authorities.

Troubleshooting

IF the appliance does not collect material in a satisfactory way:

- The suction hose, tube or nozzle may be blocked.
  Stop the appliance and remove the blocking.

- The dust container may be full.
  Stop the appliance and empty the dust container (Refer to the section: "Dust collecting and emptying).

- There may be a leak between the motor head, adaptor ring, filter container or the dust container.
  Start the appliance and block the suction hose. Normally a leak can be located by its characteristic sound. Dismount the part where the leak has been located. Make sure that the surfaces of contact are clean and remount the part. Repeat the operation if necessary.

- The tube filter may be blocked.
  Clean the tube filter (Refer to the section: "Manometer and filter-cleaning during operation").

- The HEPA-filter may be blocked.
  Replace the HEPA-filter. (Refer to the section: "Replacing HEPA-filter").

Service and repair

Service and repair are free of charge within the warranty period (invoice must be presented) under the following conditions:

- The defect is caused due to defects in materials or defective design. (Defects due to normal wear, misuse or insufficient maintenance are not covered by the warranty.)

- No repair attempts have been made by parties other than SASE Company, Inc. or authorised service centres approved by SASE Company, Inc..

Service and repair free of charge includes spare parts and the cost for related working hours.

The appliance shall be delivered to the factory or send postage paid to:

SASE Company, Inc.
26423 79th Ave South
Kent, WA 98032

Tel. 800 522 2606
Fax 877 162 0748
E-mail sales@sasecompany.com
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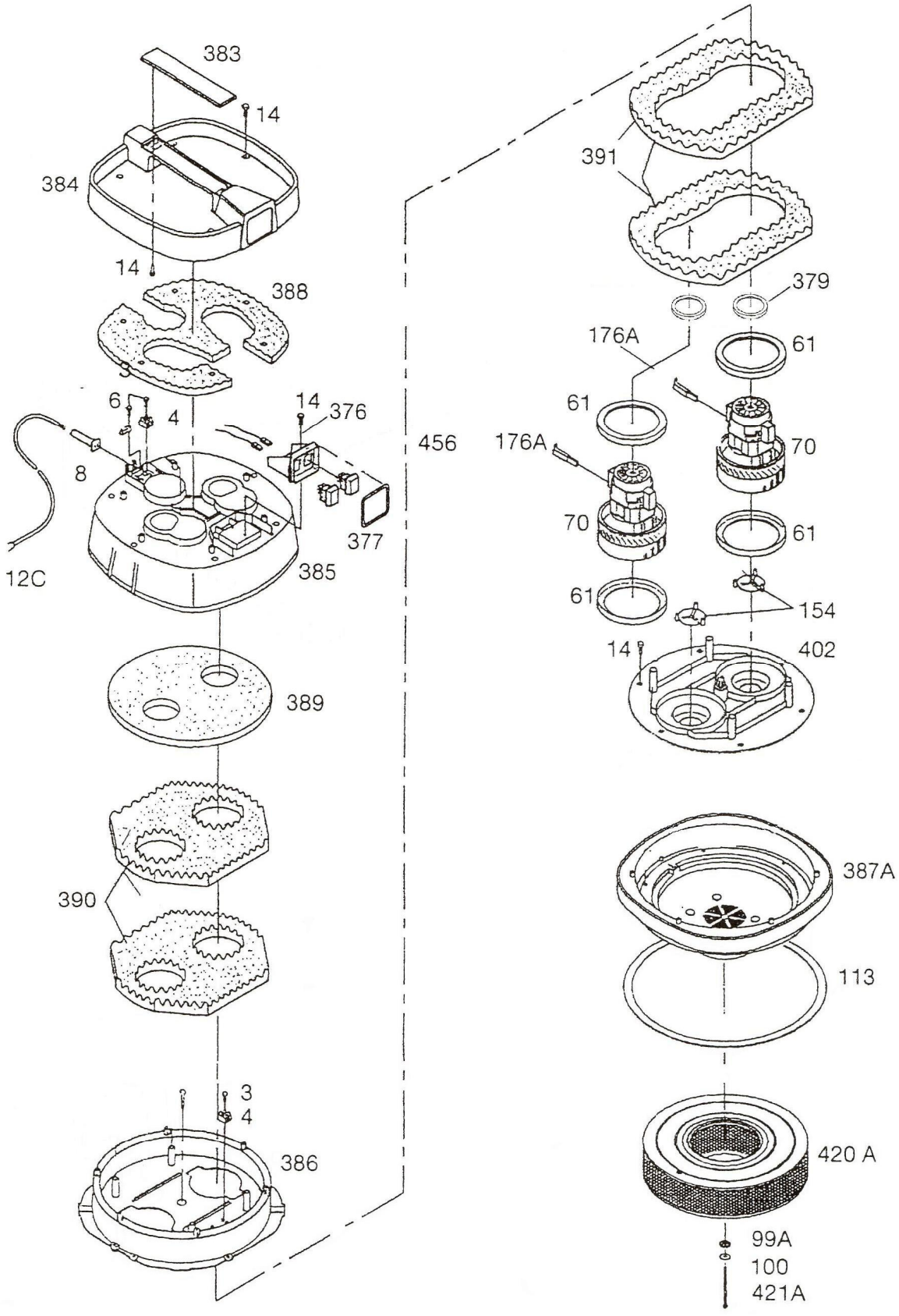
SASE Company, Inc. reserves the right to introduce changes without further notice.

SASE Company, Inc.	Reservedelsliste – Motortop Spare Parts List – Motor Top Ersatzteilliste - Motorkopf	**Bull 250** Ø50



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SASE Company, Inc.	Reservedelsliste – Motortop Spare Parts List – Motor Top Ersatzteilliste Motorkopf	Bull 250 Ø50

POS.	BESKRIVELSE	DESCRIPTION	VARE/ITEM NO.
3	Skrue	Screw	81970030
4	Kronmuffe	Supply terminal	81750041
6	Aflastningsklemme	Bracket	81750060
8	Ledningsindføring	Packing	81750080
12C	El-kabel u/stik pr/m	Cable no plug /meter	85750080
14	Skrue	Screw	81970140
61	Motorpakning	Motorpacking	81950610
70	Motor 1250 W	Motor 1250 W	84720120
99A	Gummiskive	Rubberwasher	8197099A
100	Skive	Washer	81970100
113	Beholderpakning	Packing	81951130
154	Ventil	Valve	81891540
176A	Motorkul	Motorcoal	8173176A
	Ledning, komplet	Cable, complete	
376	Afbryderhus	Housing	81893760
377	Pakning	Packing	81953770
379	Motorpakning	Motorpacking	81953790
383	Afdækning	Cover	81893830
384	Topdæksel	Topcover	81893840
385	Motoroverdel	Motorcover	81893850
386	Luftledeplade	Exhautplate	81893860
387A	Motorunderdel	Motortop lower part	8189387A
388	Lyddæmperskum	Noise reduction foam	81934030
389	Lyddæmperskum	Noise reduction foam	81933890
390	Lyddæmperskum	Noise reduction foam	81933900
391	Lyddæmperskum	Noise reduction foam	81933910
395	Skrue	Screw	81973950
402	Motorplade	Motorplate	81894020
420A	HEPA-filter	HEPA-filter	84675007
421A	Skrue	Screw	8397421A
456	Kontakt	Switch	85754560
458	Samlestik	Connector	83754580

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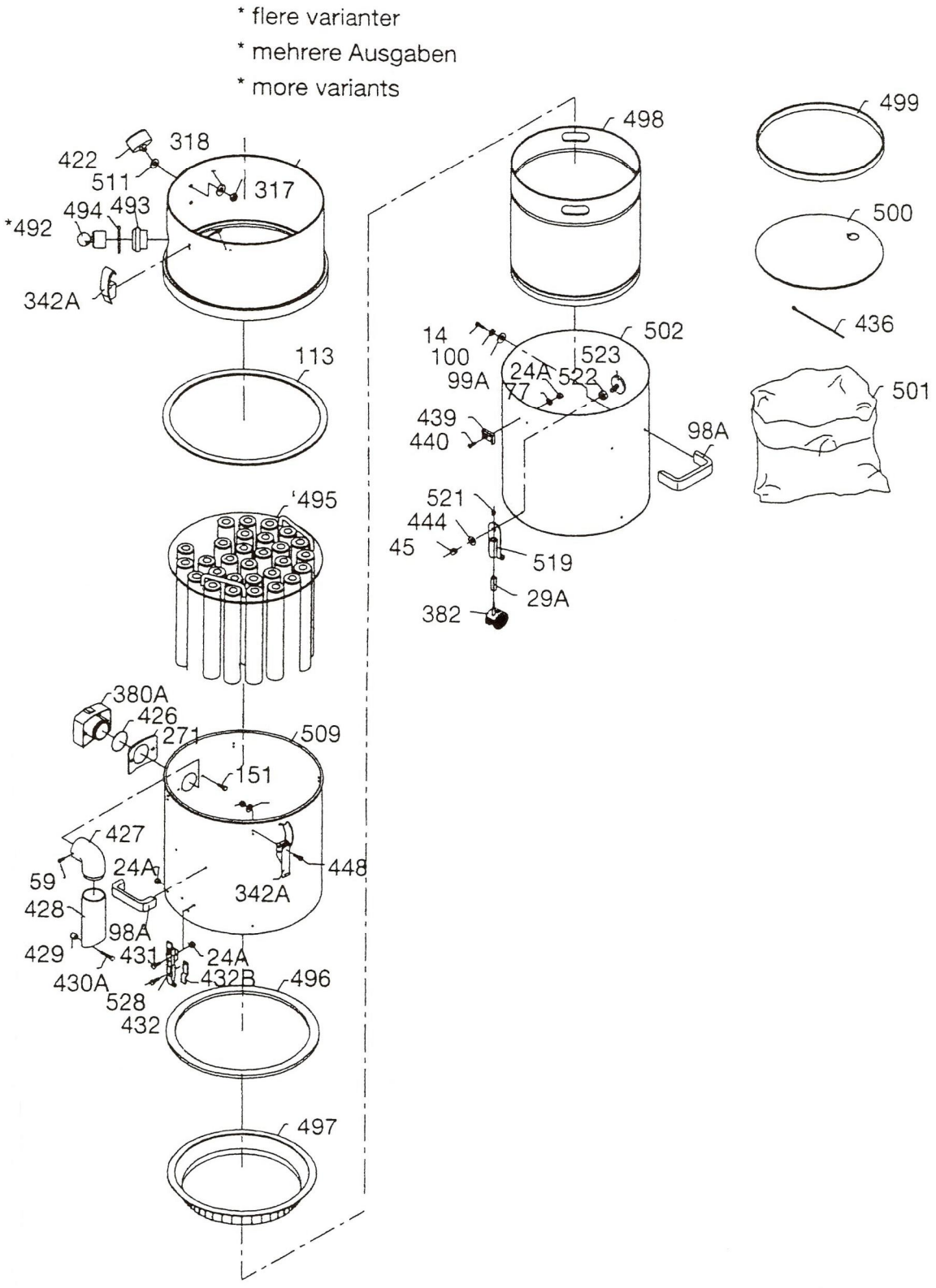
SASE Company, Inc.	Reservedelsliste – Beholderdel Spare Parts List – Container Part Ersatzteilliste - Behälterteil	**Bull 250** Ø50



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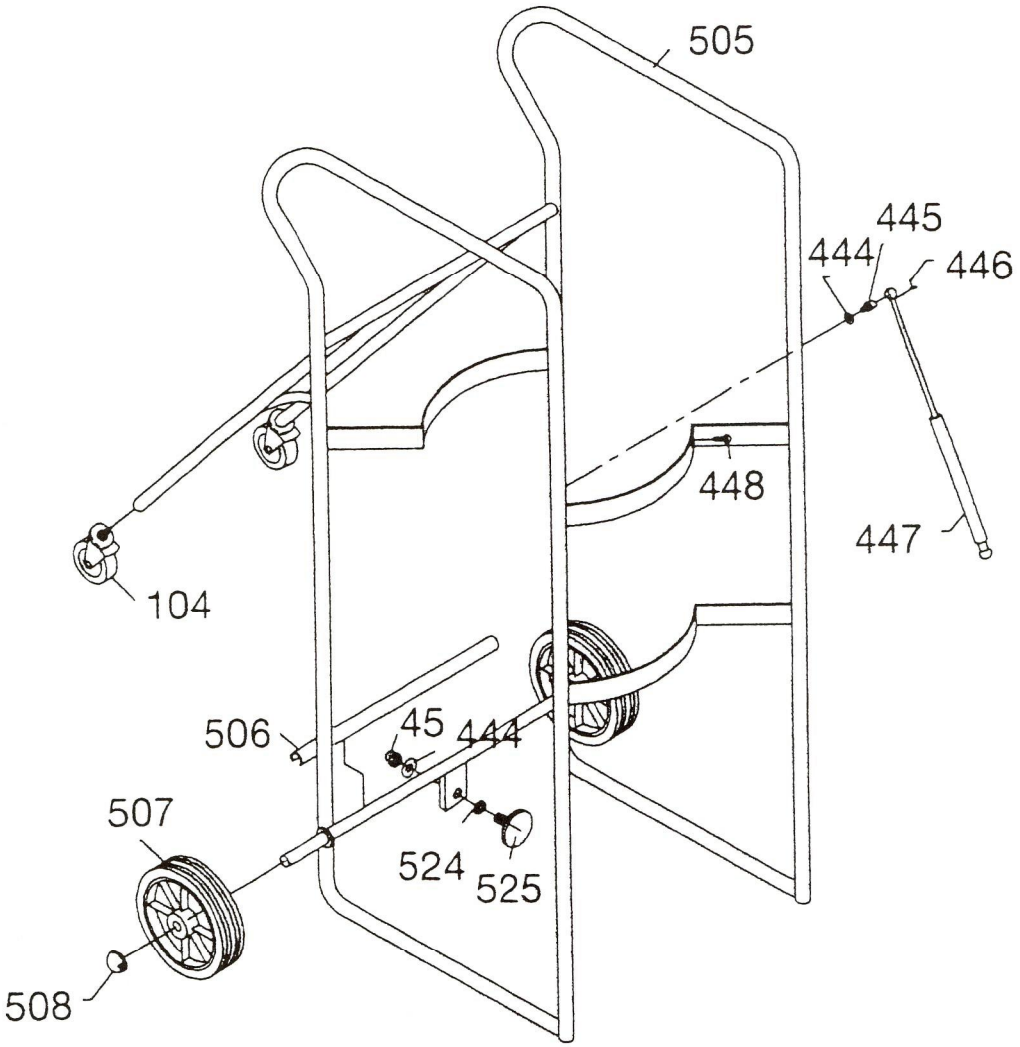
POS.	BESKRIVELSE		DESCRIPTION	VARE/ITEM NO.
14	Skrue		Screw	81970140
24A	Møtrik		Nut	81970240
29A	Hjul bøsning		Wheel bushing	8183029B
45	Møtrik		Nut	81970450
59	Skrue		Screw	81970590
77	Skive		Washer	81970771
98A	Håndtag		Handle	8191098A
99A	Gummiskive		Rubber washer	8197099A
100	Skive		Washer	81971000
113	Beholderpakning		Packing	81951130
151	Skrue		Screw	81971510
271	Gummipakning		Packing	81952710
317	Kontramøtrik		Nut	83973170
318	Skive		Washer	85973180
342A	Beholderclip		Containerclip	8191342A
380A	Beholderstuds		Containerpipe	8181380A
382	Drejehjul		Turningwheel	81873820
422	Trykdifferensmåler		Manometer	80310069
426	O-ring		O-ring	83954260
427	Vinkelstuds		Elbow	8389427A
428	Luftlederør		Air duct	83894280
429	Afstandsstykke		Distance	83974290
430A	Skrue		Screw	83970033
431	Skrue		Screw	83974310
432	Beholderclip		Containerclip	83914320
432B	Støttebeslag		Support	8391432B
436	Posebinder (25 stk.)		Binders (25 pcs.)	84649992
439	Griber		Grib	83914390
440	Skrue		Screw	83974400
444	Fladskive		Washer	83974440
448	Skrue		Screw	83974480
492	Trykudligningsventil		Pressure valve	83894920
493	Studs		Fitting	81814932
494	Pakning		Packing	81954940
495	Kanalfilter		Tube filter	84671098
496	Pakning		Packing	83954960
497	Monteringsring		Mounting ring	83894810
498	Papbeholder		Fiber container	84649989
499	Del af 498		Part of 498	
500	Del af 498		Part of 498	
501	Plastsæk		Plastic bag	84649990
502	Opsamlingsbeholder		Container	83790001
509	Filterbeholder		Filtercontainer	83775090
511	O-ring		O-ring	83955110
519	Hjulophæng		Wheel attachment	83855190
521	Rørben		Plug	83975210
522	Afstandsstykke		Distance	83975220
523	Stilleskrue		Adjustment screw	83975230
528	Ikke en reservedel		Not a spare part	-

SASE Company, Inc.	Reservedelsliste – Beholderdel Spare Parts List – Container Part Ersatzteilliste - Behälterteil	**Bull 250** Ø50



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POS.	BESKRIVELSE		DESCRIPTION	VARE/ITEM NO.
45	Møtrik		Nut	81970450
104	Drejehjul		Turningwheel	8187104C
444	Fladskive		Washer	83974440
445	Kuglehoved		Ball head	83974450
446	Kugleled		Ball joint	83974460
447	Gasfjeder		Shock absorber	83854470
448	Skrue		Screw	83970430
505	Rammestativ		Frame	83855050
506	Plastskinne		Protection	83895060
507	Hjul		Wheel	81875070
508	Hjulkapsel		Wheel cap	81855080
524	Kontramøtrik		Nut	83975240
525	Stilleskrue		Adjustment screw	83975250