



**SPARE PART AND OPERATION MANUAL**  
**FOOD MIXER Model V30K**

## Caution -READ BEFORE OPERATING- Caution

---

Varimixer recommends that mixer operators be at least 18 years of age and be thoroughly trained on the use of the mixer.

---

Varimixer recommends that the following precautions be adopted to help make the mixer operation safer and more efficient.

- All operators should be at least 18 years of age.
- All operators should be thoroughly trained before being allowed to operate the mixer.
- NEVER reach into the bowl when the mixer is running.
- Do not wear loose clothing or rings while operating the mixer.
- Stop the mixer and lower the bowl before adding ingredients, scraping the bowl, removing the agitator, or removing the product.
- Stop the mixer before removing or installing attachments into the drive hub.
- Do not attempt to assemble or disassemble attachments while mounted into the drive hub.
- Always use the pusher plate with the slicer/meat grinder attachments.
- NEVER bypass the safety mechanisms supplied on the mixer. Doing so can cause injury and is the responsibility of the user to insure these safety mechanisms are operating properly.



## LIMITED WARRANTY

Varimixer warrants its commercial mixers to the original purchaser against defects in material or manufacture for a period of one year from the date of original purchase, subject to the following exclusions and limitations. The warranties provided by Varimixer do not apply in the following instances:

### EXCLUSIONS

1. In the event that the equipment is improperly installed. Proper installation is the responsibility of the installer, proper installation procedures are covered in the Varimixer Spare Parts and Operations Manual.
2. In the event that the equipment is improperly maintained. Proper maintenance is the responsibility of the user. Proper maintenance procedures are covered in the Varimixer Spare Parts and Operations Manual.
3. In the event that failure or malfunction of the appliance or any part thereof is caused by abnormal use or is otherwise not attributable to a defect in material or manufacture.
4. In the event that the appliance, by whatever cause, has been materially altered from the condition in which it left the factory.
6. On parts which would normally be worn or replaced under normal conditions.
7. With regard to adjustments and/or calibrations. Checking of and changes in adjustments and calibrations are the responsibility of the installer, Proper installation is the responsibility of the installer, proper installation procedures are covered in the Varimixer Spare Parts and Operations Manual.

If any oral statements have been made regarding the appliance, such statements do not constitute warranties and are not part of the contract of sale. This Limited Warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS.

### LIMITATIONS OF LIABILITY

In the event of warranty claim or otherwise, the sole obligation of Varimixer shall be the repair and/or replacement at the option of Varimixer, of the appliance or component or part thereof. Such repair or replacement shall be the expense of Varimixer *except* that travel over 100 miles or two hours, overtime, and holiday charges shall be, the expense of the purchaser. Any repair or replacement under this warranty does not constitute an extension of the origin, warranty for any period for the appliance or for any component part thereof. Parts to be replaced under this warranty will be repaired or replaced at the option of Varimixer with new or functionally operative parts. The liability of Varimixer on any claim of any kind, including claims based on warranty, expressed or implied, contract, negligence, strict liability or any other theories shall be solely and exclusively the repair or replacement of the product as stated herein, an such liability shall not include, and purchaser specifically renounces any rights to recover, special, incidental, consequential or other damages of any kind whatsoever, including, but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, or loss of use of the product.

### TO SECURE WARRANTY SERVICE

If you claim a defect covered by this Limited Warranty, first direct your claim to the local Authorized Service Agency, giving model, serial and code numbers, voltage, a description of the problem and your sales slip. If this procedure fails to be satisfactory to you, you may write to the Varimixer National Service Manager, 14240 South Lakes Drive, Charlotte, NC 28273; you should include the information listed above.

## **CONTENTS:**

<b>GENERAL:</b> .....	<b>4</b>
<b>UNPACKING:</b> .....	<b>5</b>
<b>TRANSPORT:</b> .....	<b>5</b>
<b>INSTALLATION AND FIXING:</b> .....	<b>5</b>
<b>COMMISSIONING:</b> .....	<b>6</b>
<b>RECOMMENDED USE OF THE MACHINE:</b> .....	<b>6</b>
<b>TECHNICAL DATA:</b> .....	<b>6</b>
<b>MAX. CAPACITY OF THE MACHINE:</b> .....	<b>6</b>
<b>COMPONENTS OF THE MACHINE:</b> .....	<b>7</b>
<b>SAFETY:</b> .....	<b>8</b>
<b>ADJUSTMENTS:</b> .....	<b>8</b>
<b>KODIAK USER-FRIENDLINESS:</b> .....	<b>9</b>
<b>OPERATING THE MIXER:</b> .....	<b>10</b>
<b>OVERLOADING:</b> .....	<b>11</b>
<b>PROCEDURE IN CASE OF OVERLOADING:</b> .....	<b>11</b>
<b>RECOMMENDED MAX. SPEEDS:</b> .....	<b>11</b>
<b>RECOMMENDED MAX. SPEEDS FOR ATTACHMENT DRIVE:</b> .....	<b>11</b>
<b>CORRECT USE OF TOOLS:</b> .....	<b>11</b>
<b>CLEANING:</b> .....	<b>11</b>
<b>LUBRICATION AND GREASE TYPES:</b> .....	<b>11</b>
<b>ATTACHMENT DRIVE:</b> .....	<b>11</b>
<b>DISPLAY OF MIXER DATA</b> .....	<b>12</b>
<b>ERROR CODES AND POSSIBLE SOLUTIONS:</b> .....	<b>12</b>
<b>ACCESS TO THE FUSE:</b> .....	<b>13</b>
<b>EXAMPLE ELECTRICAL CONNECTIONS:</b> .....	<b>13</b>
<b>CIRCUIT DIAGRAM:</b> .....	<b>14</b>
<b>MIXER SPARE PARTS</b> .....	<b>16</b>

## **GENERAL:**

This manual should be seen as an integral part of the mixer and should be kept by the machine throughout its working life. Before the machine is commissioned, it is important to read these instructions thoroughly, particularly the section on user safety.

The manufacturer may update the product manual without updating this copy of the manual.

The manufacturer will not be liable for faults caused by:

- Careless, improper or incorrect use of the mixer
- Non-standard use (not for the purposes described in the manual)
- Incorrect installation
- Incorrect power supply to the machine
- Failure to comply with maintenance instructions
- Modifications to the machine
- Spare parts and accessories that are not original or specified for this model
- Failure to comply with instructions in this manual

In case of faults with the mixer, please contact the Lokal Authorized Service Agency.

## **UNPACKING:**

The machine should be unpacked and the packaging disposed of according to regulations applicable in the country concerned.

Before the mixer is removed from the pallet, check that all parts are present with the machine:

- Bowl Screen, Power cable, 32 mm fixed spanner for legs, Bowl trolley
- Bowl, Whip, Beater, Hook and Scraper with blade, if these were selected with the order.

The machine can be released from the pallet by cutting the strips.

**TRANSPORT:**

Lifting equipment should always be used to move the machine. Allowance should be made for the fact that the machine is 'top-heavy'.

The machine must not be pulled or lifted by the bowl lift handle.

When the machine is moved, it should be in a vertical position at all times.

**INSTALLATION AND FIXING:**

The ambient temperature around the machine must not exceed 45°C.



The machine should be level before it is taken into use.

The bowl arms should be at the correct height above the floor before the machine is taken into use – see **Adjustments, page 8**.

The legs of the mixer are adjustable and can be adjusted by turning them individually. See **Adjustments, page 8**.

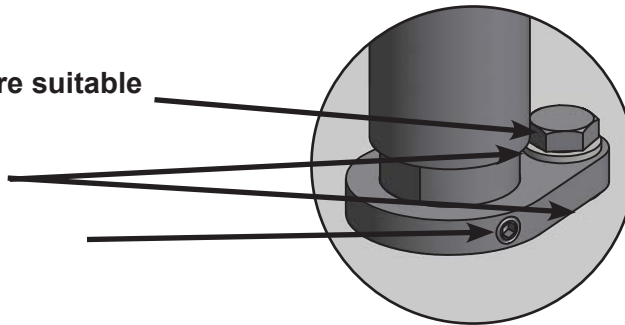
**The mixer is fixed in place using the fittings that come supplied:**

- The mixer should be fixed to the floor if it is installed on board a ship.
- The mixer should be fixed to the floor if the hook tool is used at speeds above setting 3 (recommended maximum speed with hook).

**Use M10 screws that are suitable for the floor material.**

**2 pieces washer M10**

**Tighten the M8 pointed screw after installation.**

**Electrical connection:**

Users can connect the mixer to the power supply themselves; refer to the section on **Electrical connection** which must be followed.

For the benefit of service staff, it should be clear to see when the mains plug to the mixer has been removed from the socket in the wall.

The cable is fixed to the machine on the mains board with a wire loop.

**Electrical connection**

Before the machine is connected to the mains, check that the voltage and frequency printed on the name plate are correct for the installation location. The name plate is positioned uppermost on the back of the machine.

There is a risk of injury if the machine is not earthed.

It must be ensured that the cable used to connect the machine to the mains meets the standard for the country in which the machine is installed. See also **Example electrical connections, page 15**

**The mixer must be earthed. Failure to do so may cause injury.** If there is no earth connection, the EMC filter will not work, with the risk of damage to the frequency converter.

When the machine is connected, **phase + neutral + earth** or **phase + phase + earth** should be used. In both cases, it is important to ensure that the voltage between the two live pins matches the name plate. **(See examples on page 15)**

The machine must only be connected to an earthed mains supply.

A plug with two pins plus earth should be used. Alternatively, two wires plus earth from a three-phase supply may be used.

The machine is protected by a 10A fuse. The fuse is built into the socket on the back of the machine.

**COMMISSIONING:**

Bowl, tools and Bowl Screen should be cleaned before use – see section on **Cleaning, page 9.**

The bowl arms should be at the correct height above the floor before the machine is taken into use – see **Adjustments, page 6.**

**RECOMMENDED USE OF THE MACHINE:**

The machine is designed for the manufacture of products that do not trigger any reactions or release substances that may be harmful to the user when in use.

The machine must not be used in an explosive atmosphere.

The mixer must only be operated by staff who have been trained in the use of the machine according to these instructions. Users must be over 18 years of age.

The mixer is designed for commercial use in kitchens, catering outlets and bakeries.

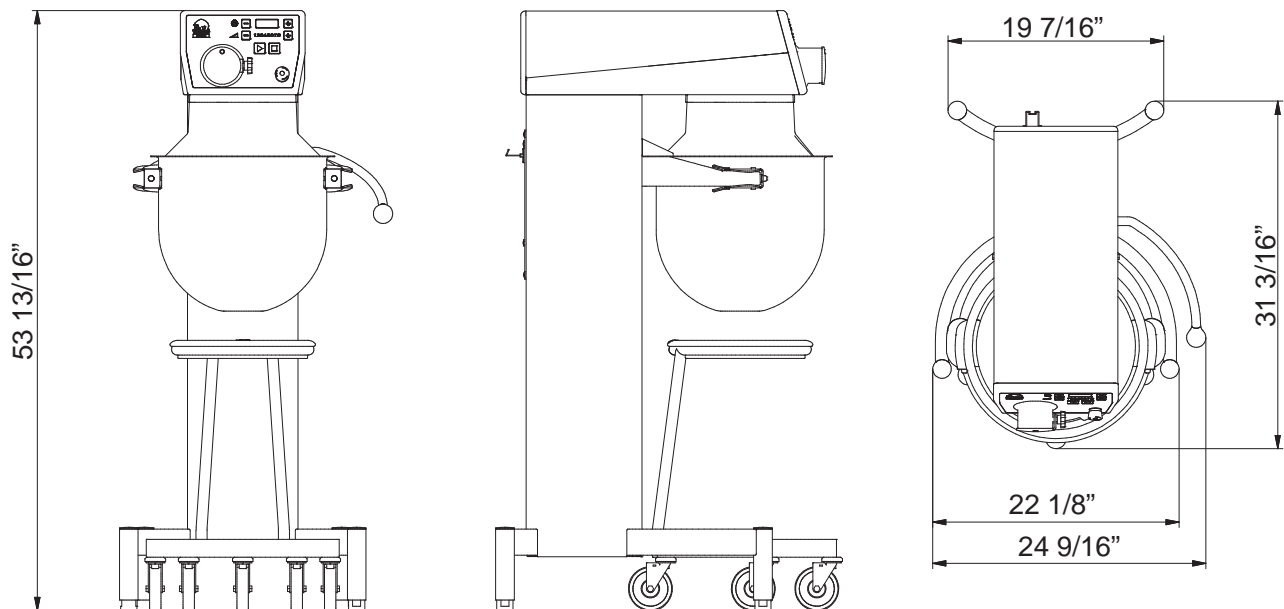
The machine may only be used as specified in this manual.

Unless the change is recommended by the manufacturer, modifying the machine is prohibited.

If the machine is fitted with an attachment drive, only accessories produced or recommended by manufacturer should be attached.

**TECHNICAL DATA:**

Gross weight	Net weight	HP	Volts	Amps	Variable speed, tool
319.7 lbs	253.5 lbs	1.6	115V, 208V, 230V	4.4A	64 – 353 rpm

**MAX. CAPACITY OF THE MACHINE:**

Capacity per mix	Tool	KODIAK
Egg white	Whip	3.17 Qts
Mayonnaise	Whip	21.13 Qts
Yeast dough (60% AR)	Hook	28.7 lbs
Meatball mix	Beater	44.1 lbs

Local variations in the quality of the raw materials may affect water absorption, volume, baking characteristics etc., and hence capacity.

**AR = absorption ratio (%AR)**

(liquid as % of dry matter)

E.g. a basic recipe includes 2.2 lbs dry matter and 1.3 lbs liquid:

$$\text{this gives AR} = \frac{1.3 \text{ lbs} \times 100}{2.2 \text{ lbs}} = 60\%$$

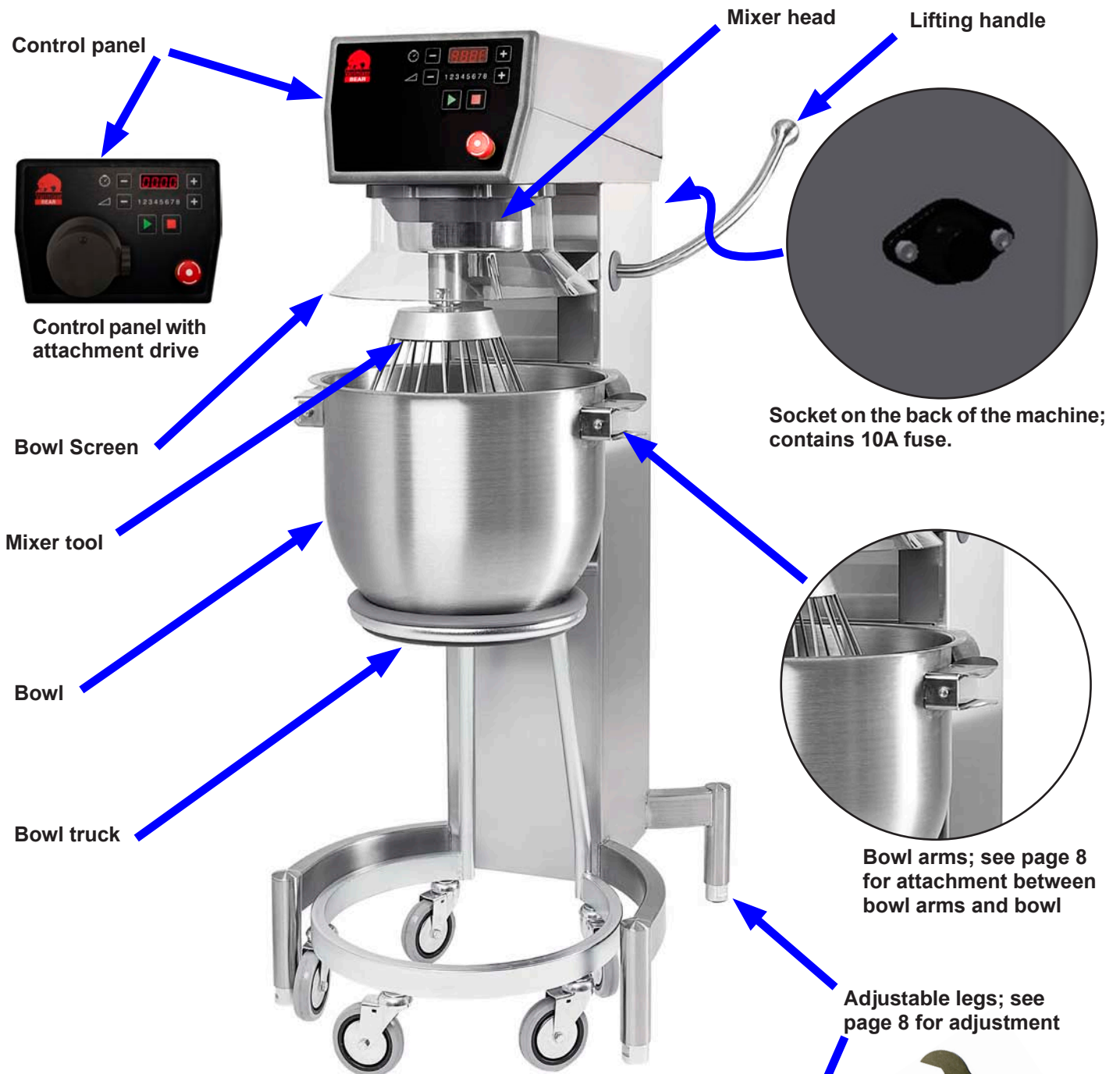
If, for example, the maximum capacity of the mixer is required, the calculated AR = 60% is used to determine the amount of dry matter and liquid in the dough:

Maximum capacity of the machine = 28.7 lbs for dough with AR = 60%

Now the weight of the dry matter in this dough is calculated as follows:

$$\text{Dry matter} = \frac{\text{max. capacity} \times 100}{\text{AR} + 100} = \frac{28.7 \text{ lbs} \times 100}{60 + 100} = 17.9 \text{ lbs}$$

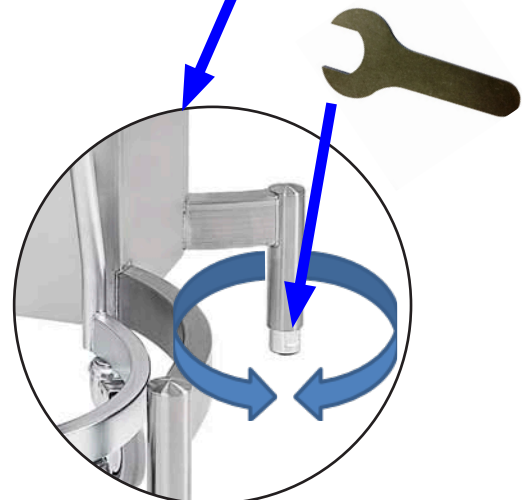
$$\text{Weight of liquid} = 28.7 \text{ lbs} - 17.9 \text{ lbs} = 10.8 \text{ lbs}$$

**COMPONENTS OF THE MACHINE:****Standard equipment, as follows:**

- Bowl trolley
- Bowl – 30 Qt
- Hook, beater and whip for 30 Qt bowl

**Optional accessories**

- Scraper for 30 Qt bowl, if mixer is fitted for a scraper
- Bowl – 16 Qt
- Hook, beater and whip for 16 Qt bowl
- Scraper for 16 Qt bowl, if mixer is fitted for a scraper



**SAFETY:**

The machine is designed for the manufacture of products that do not trigger any reactions or release substances that may be harmful to the user when in use.

Users must be over 18 years of age and trained in the use of the machine according to these instructions.

**User safety is assured as follows:**

- Tools can only rotate when the Bowl Screen is in place and the bowl is lifted.
- The Bowl Screen is made of plastic. It is not possible to attach the guard incorrectly.
- No access to rotating tools.
- The spread of flour dust is inhibited.
- Equipped with emergency stop - The tool stops rotating in less than 4 seconds (also for normal shut-down and stop via bowl screen).
- Clearance between guard/stand and lifting handle at least 1 31/32".
- Noise level under 70 dB.
- Machine remains stable on a slope of up to 10°. The distance from the floor to the bowl arm should be adjusted as shown in the section on **Adjustments, page 6**.

The machine is protected against overvoltage.

Non-ionising radiation is not produced intentionally, but rather technically conditioned by electrical equipment (e.g. electric motors, live power lines or solenoids). The machine is not equipped with strong permanent magnets. By maintaining a safe distance (between the field source and implant) of 11 13/16", any impact on active implants (e.g. pacemakers, defibrillators) can likely be prevented.

The machine should be positioned to allow space for normal use and maintenance.

Good ergonomics for the user is ensured by the accompanying bowl trolley, which eliminates heavy lifting of the bowl and maintains the right working height.

**The following recommendations apply to work with powdery ingredients:**

- Powdery ingredients should not be poured into the bowl from a great height.
- Bags of e.g. flour should be opened at the bottom, down in the bowl.
- Do not run up to the maximum speed too quickly.



There is a risk of injury if the machine is not earthed.

It must be ensured that the cable used to connect the machine to the mains meets the standard for the country in which the machine is installed. See also '**Electrical Connection**'.

Placing your hands in the bowl while the machine is running may cause physical injury.

**ADJUSTMENTS:**

When the mixer is delivered, the adjustable feet will be turned right to the bottom. **The height of the legs should be adjusted** so that the bowl on the bowl trolley fits perfectly into the bowl arms.



If the floor is not level, the legs can be adjusted individually to ensure that installation is correct

To lower leg =  
turn anticlockwise

To raise leg = turn  
clockwise



Together with the mixer comes a 32 mm fixed spanner to be used for adjustments.



## **KODIAK USER-FRIENDLINESS:**

KODIAK has designed in partnership with kitchen and bakery staff, which has resulted in a number of user benefits:

### **The machine itself**

Can be connected to the mains by the user

Is made of stainless steel

Has height-adjustable feet to ensure that the high bowl trolley works properly

Is easy to clean, with large surfaces and a removable safety guard which can be machine-washed

The inclined control panel combined with the large bowl diameter provides a good view of the contents of the bowl.

### **Control panel:**

The control panel is simple and intuitive, with large push buttons.

The speed can be increased/decreased continuously by holding down **+** and **-**. It is also possible to 'step' between the predefined speeds **12345678**.

The panel is inclined at the ergonomically correct height, making it very comfortable to use.

The panel is easy to clean with a damp cloth.

There is a built-in timer function with a display, which can also be used to show the number of operating hours.

### **Bowl screen:**

The one-piece Bowl Screen is made of transparent plastic. The Screen is easy to remove and clean. The Screen can be machine-washed at up to 140° F and can withstand up to 194° F for short periods (Max 20 sec.)

The Screen is made of a special impact-resistant material which can withstand daily use in a commercial kitchen.

The Bowl Screen is held in place by magnets, so there are no loose parts that can break or collect dirt.

It is not possible to attach the Screen incorrectly.

The filling hole in the bowl screen can be turned to suit the user's needs.

### **Bowl and bowl trolley:**

The bowl is not very deep but has a large diameter, which makes it easier to see the contents while working.

The bowl does not have to be lifted into place in the bowl arms, but can be wheeled directly into position.

The bowl trolley is used for transfer from mixer to workbench, dishwasher, stores etc.

The bowl trolley provides an ergonomically correct working height.

The bowl trolley spares the user any heavy lifting.

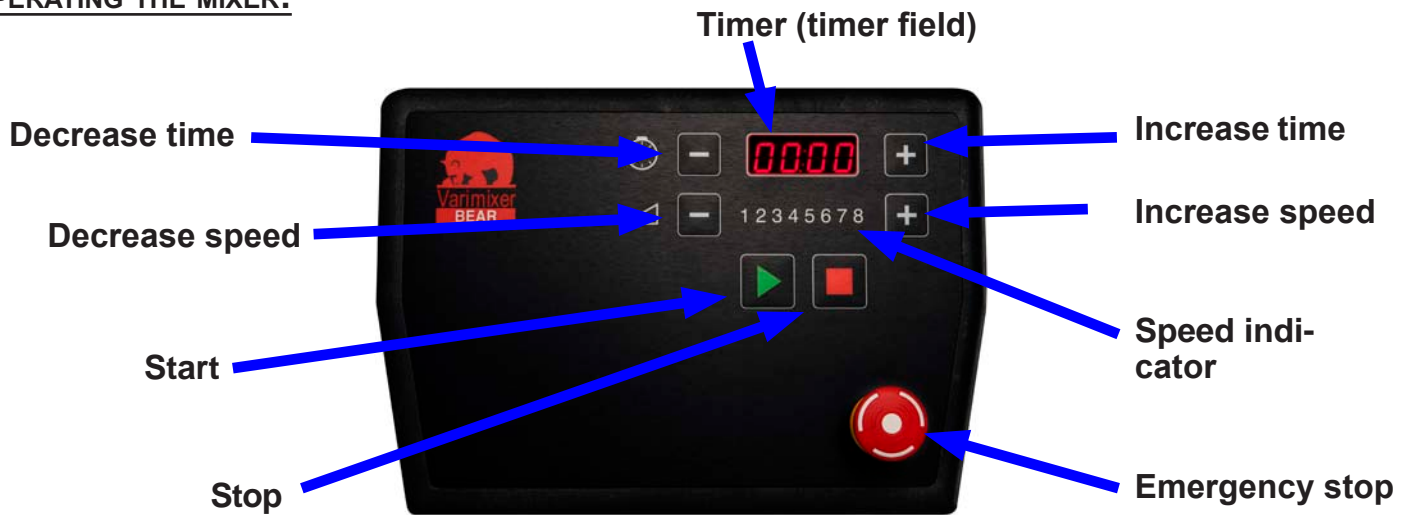
The bowl can be tilted in the rubber ring on the bowl trolley.

### **Tools:**

The mixer whip is very compact in design, which provides for a long service life. It must be handled according to these instructions.

The beater and hook are made of stainless steel.



**OPERATING THE MIXER:****Before starting the machine:**

Place the bowl in the bowl trolley.

Put the desired tool into the bowl and wheel it into position between the bowl arms. Ensure that the bowl is correctly engaged with the bowl arms; see **Adjustments, page 6**.

Fit the Bowl Screen and turn it so the filling hole is accessible when the machine is running.

Turn the tool to lock it into the bayonet fitting.

Lift the bowl with the aid of the lifting handle.

The mixer is now ready to start.

It is possible to set both the running time and speed before starting the machine; see next section:

**Start the machine:**

Press to start the mixer.

Press next to to increase the speed.

Press next to to reduce the speed.

The speed is shown as a number on the scale 12345678.

The display **12345678** represents the lowest speed, approx. 64 rpm.

The display **12345678** represents the highest speed, approx. 353 rpm.

**Display of running time – hours:**

Select a running time for the mixer by pressing next to . The running time is shown in minutes and seconds in the timer field between and .

Running times of up to 90 minutes are available.

The running time will not be reset if is pressed once; press once more and it will be reset.

If no running time is selected, the display will show the time elapsed since the mixer was started.

**Inspection of ingredients while in use:**

If the mixer needs to be stopped temporarily without affecting the running time, press . The mixer will slow down and then stop and the running time will stop too.

The bowl can now be lowered and the ingredients checked.

Lift the bowl and press , and the mixer will start and the running time will resume.

**Stop the machine:**

To stop the machine:

- Press . Running time not reset.
- Press twice. Running time reset.
- Press the emergency stop - the running time will be reset.
- 'Tilt' the bowl screen - the running time will be reset.
- Lower the bowl - the running time will be reset.

In all cases the mixer can be restarted by pressing .

It will start at the lowest speed.

**Resetting the timer:**

The timer can be reset by pressing and next to at the same time. If the timer is reset while the mixer is running, the machine will stop and beep.

**OVERLOADING:**

The mixer must not be overloaded.

Possible overload situations:

- Working with excessively tough and heavy dough
- Mixer tool exceeding the recommended speed
- Wrong mixer tool being used.

Larger lumps of fat or chilled ingredients must be reduced before they are placed in the bowl.

Prolonged overloading will cause the frequency converter to stop the machine.

**OL:** will be displayed in the timer field; the speed will not be reduced, but the mixer will stop and the display will change to **EE: 7**. Follow the description under **Procedure in case of overloading**.

**PROCEDURE IN CASE OF OVERLOADING:**




Remove the cause of the overloading, e.g. empty the bowl.

To remove the display, **EE: 7** press .

The mixer can now be restarted.

**RECOMMENDED MAX. SPEEDS:**

- The mixer should be fixed to the floor if the hook tool is used at speeds above setting 3 (recommended maximum speed with hook).

	<b>12345678</b>
	<b>12345678</b>
	<b>12345678</b>

**RECOMMENDED MAX. SPEEDS FOR ATTACHMENT DRIVE:**

	<b>12345678</b>
	<b>12345678</b>

**CORRECT USE OF TOOLS:****Recommended uses of tool:**

Whip	Beater	Hook
Cream	Cake mix	Bread dough
Egg whites	Buttercream	Rye bread
Mayonnaise	Waffle mix	etc.
etc.	Forcemeat	
	etc.	



The whip should not be struck against hard objects such as the edge of the bowl. This will shorten the life of the tool because of increasing deformation.


To make mashed potato, use the beater and then the standard whip.

**CLEANING:**

The machine may only be cleaned by trained staff over 18 years of age.

The machine should be cleaned daily after use. It should be wiped with a soft brush and clean water. Sulphonated soaps should be used with care, as they destroy the lubricants in the machine.

The machine should never be rinsed with a hose.

 Aluminium parts should not be used for strongly acidic, alkaline or saline food products, which may attack non-coated aluminium.

Aluminium mixer tools must not be washed in strongly alkaline agents (**pH between 5.0 and 8.0**).

Please note that the plastic bowl screen may be damaged if it is exposed to high temperatures for a prolonged period. (more than 20 sec.) (**Max. temperature 140°F**)

The soap suppliers may be able to help by recommending the right type of soap.

**LUBRICATION AND GREASE TYPES:**

Lubrication and other servicing may only be carried out by trained staff over 18 years of age.

The lid of the mixer may only be removed when the cable to the mains supply has been removed.

When repairs are made to the mixer head, the gearwheel and internal gear should be lubricated with **Statoil GreaseWay ALX 42**, but the needle bearings in the mixer head should not be lubricated with this type of grease.

If the machine is supplied with an attachment drive, the gear for the attachment drive should be lubricated with **Statoil GreaseWay LiCa 80**.

Do not use any other grease types than those specified above.

**ATTACHMENT DRIVE:**

The machine may be fitted with an attachment drive into which optional accessories, such as meat mincers and vegetable cutters, can be attached.






For further information on the assembly and use of optional accessories, please refer to the manual that comes with the accessory.



The machine must be shut down when the accessory is fitted to the attachment drive.



## DISPLAY OF MIXER DATA

### Number of mains connections and control panel and frequency converter software version:







- When the machine is connected to the mains, three values will be displayed in the text field on the panel:
- Number of times the machine has been connected, e.g.  for three times
- Control panel software version; first  is displayed, then the version, e.g.  for version 26
- Frequency converter software version; first  is displayed, then the version, e.g.  for version 18

### Running time and error log

It is possible to display the time the machine has been on (the motor has been running):

- Hit emergency stop and press  next to .
- Time displayed in hours: 0 - 1 - 2 etc.
- Deactivate emergency stop to cancel the display.

It is possible to display a log of the errors that have occurred:

- Hit emergency stop and press  next to .
- The display shows the latest error first.
- To scroll back through the errors, press  next to ; to scroll forward, press  next to .
- The last eight errors can be displayed.
- Deactivate emergency stop to cancel the display.

## ERROR CODES AND POSSIBLE SOLUTIONS:

For some errors, the control system will show an error code in the display:

 User pressed  without raising the bowl to working height.

**Solution:** Raise bowl to working height.

 User pressed  without fitting the bowl screen.

**Solution:** Fit the bowl screen.


 The frequency converter has overheated.

**Solution:** The error will disappear when the temperature has dropped to an acceptable level.


Stop the mixer and reduce the quantity of ingredients in the bowl. When it starts again, select a lower speed.

 There is an error in communication between the control panel and the frequency converter.


**Solution:** Call the engineer.

 Error in frequency converter.

**Solution:** Call the engineer.

 Thermal sensor in the frequency converter has cut out.

**Solution:** The error will disappear when the temperature has dropped to an acceptable level.

 Intermittent low voltage in the power supply.

**Solution:** The power supply to the mixer should be checked by an expert.

 Intermittent high voltage in the power supply.

**Solution:** The power supply to the mixer should be checked by an expert.

 The mixer is overloaded because of excessively heavy dough etc.


**Solution:** Reduce the quantity in the bowl; the product may need to be reduced or thinned before the machine is restarted. When it starts again, select a lower speed.

**ACCESS TO THE FUSE:**

If the fuse burns out, it can be replaced without the aid of technical staff.

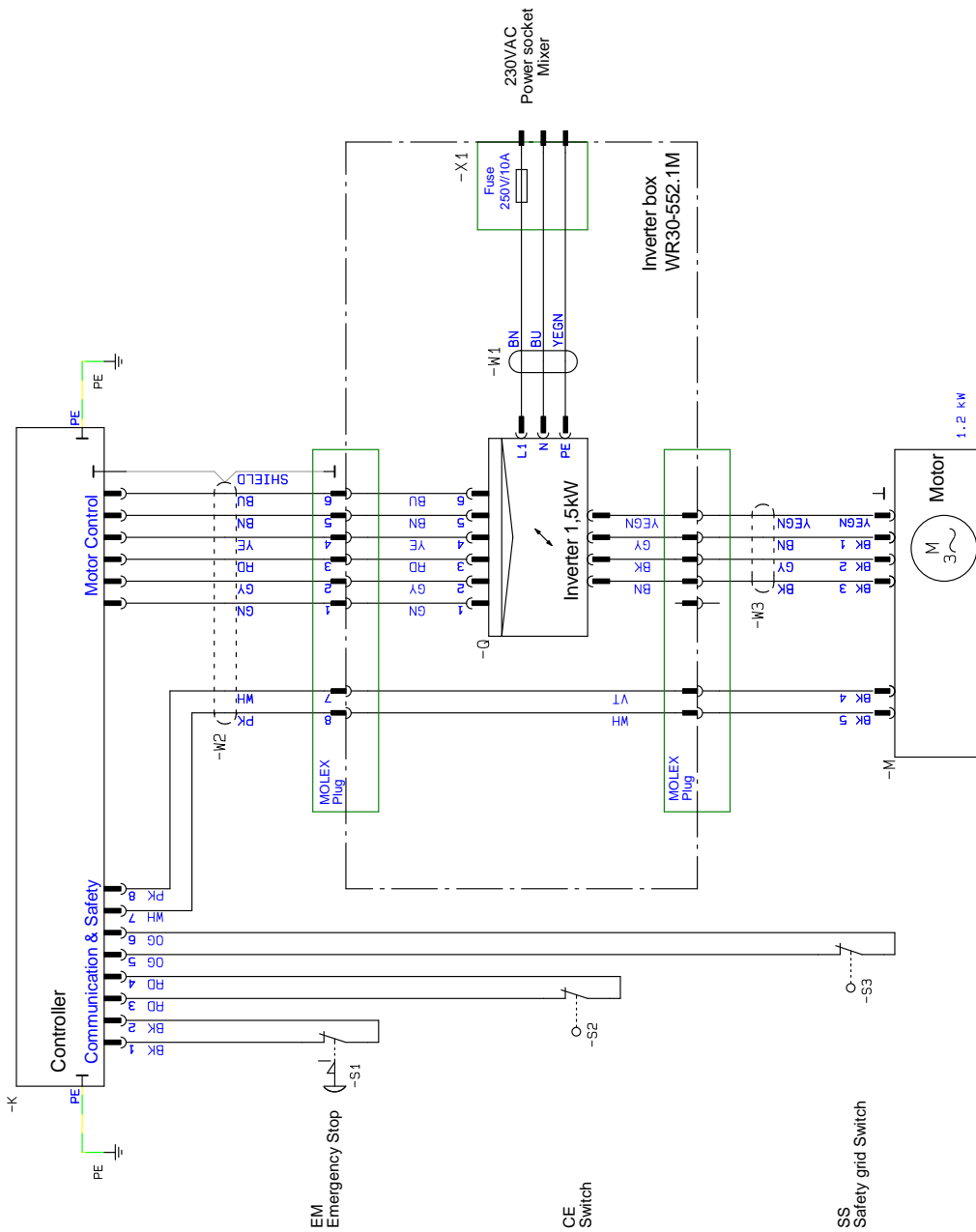
- The fuse is located in the socket on the back of the machine.
- Remember to remove the mains cable before changing the fuse.
- The fuse can be changed by unscrewing the fuse knob from the fuse holder.


**EXAMPLE ELECTRICAL CONNECTIONS:**

Local 50/60 Hz supply.			Name plate				Notes
Power supply: phases x voltage	With neutral	Earth	Voltage	Phases	Use neutral	Use earth	
1 x 115V +/- 10%	Neutral	yes	115V	1	yes	yes	Note that the machine must not be connected without earth, as this may compromise the action of the EMC filter by removing the discharge to the ground, and may be dangerous for the user.
1 x 208V +/- 10%	Neutral	yes	208V	1	yes	yes	
1 x 230V +/- 10%	Neutral	yes	230V	1	yes	yes	
							 <p><b>For functional and safety reasons, the machine <u>must</u> be connected to the earth.</b></p>

Wire code, IEC/EN 60757

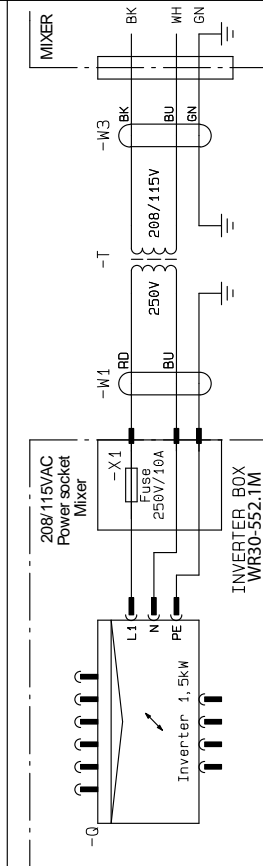
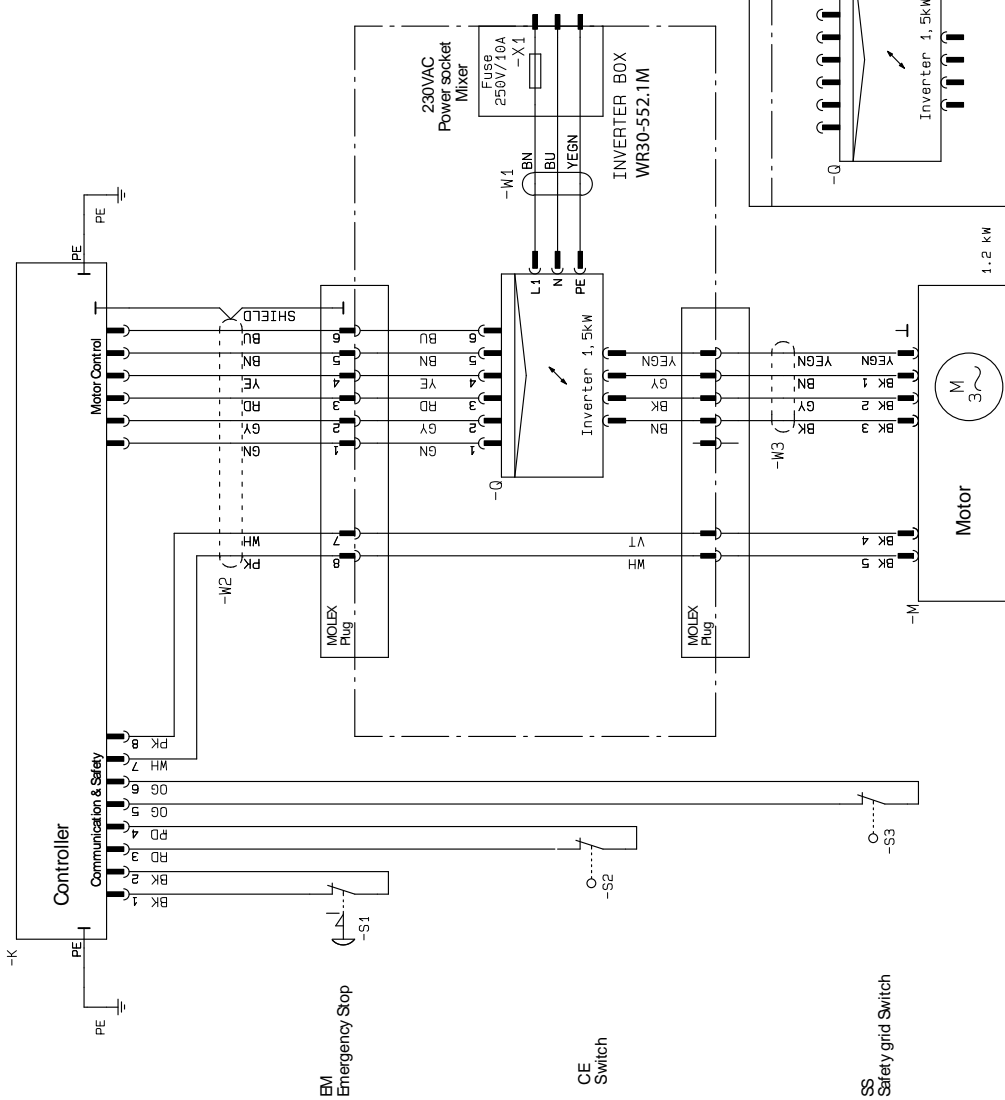
BE	BEIGE	OGRD	ORANGERED
BK	BLACK	PK	PINK
BN	BROWN	RD	RED
BNBU	BROWNBLUE	ROBK	REDBLACK
BNGN	BROWNGREEN	ROBU	REDBLUE
BNRD	BROWNERED	ROGN	REDGREEN
BU	BLUE	VT	VIOLET / PURPLE
BUBK	BLUEBLACK	WH	WHITE
BUGN	BLUEGREEN	WHBK	WHITEBLACK
GN	GREEN	WHBU	WHITEBLUE
GNBK	GREENBLACK	WHGY	WHITEGRAY
GY	GRAY	WHOG	WHITEORANGE
GYBK	GRAYBLACK	WHRD	WHITERED
GYBN	GRAYBROWN	WHVT	WHITEVIOLET
GYBU	GRAYBLUE	WHYE	WHITEYELLOW
GYGN	GRAYGREEN	WHGN	WHITEGREEN
GYRD	GRAYRED	WHBN	WHITEBROWN
GYVT	GRAYVIOLET	YE	YELLOW
OG	ORANGE	YEBK	YELLOWBLACK
OGBU	ORANGEBLUE	YEBU	YELLOWBLUE
OGGN	ORANGEGREEN	YEGY	YELLOWGRAY
OGGY	ORANGEGRAY	YEBN	YELLOWBROWN




<b>A/S WODSCHOW &amp; CO</b> Kirkebjerg Søpark 6 DK-2605 Brøndby, Denmark <a href="http://www.beearinverter.dk">www.beearinverter.dk</a>	Project title:	CR30	Subject name:		Project rev.:	Page	1
	Page title:	CR30	Drawing no.:	CR30	Page rev.:	Previous page	
	File name:	CR30-20140824	Const. (project/page):	/Stelbi	Last printed:	Next page	
			Appr. (init/date):	/	Last corrected:	Number of pages:	1

Wire code, IEC/EN 60757

BE	BEIGE	OGRD	ORANGERED
BK	BLACK	PK	PINK
BN	BROWN	RD	RED
BNBU	BROWNBLUE	ROBK	REDBLACK
BNGN	BROWNGREEN	ROBU	REDBLUE
BNRD	BROWNERED	ROGN	REDGREEN
BU	BLUE	VT	VIOLET/PURPLE
BUBK	BLUEBLACK	WH	WHITE
BUGN	BLUEGREEN	WHBK	WHITEBLACK
GN	GREEN	WHBU	WHITEBLUE
GNBK	GREENBLACK	WHGY	WHITEGRAY
GY	GRAY	WHOG	WHITEORANGE
GYBK	GRAYBLACK	WHRD	WHITERED
GYBN	GRAYBROWN	WHVT	WHITEVIOLET
GYBU	GRAYBLUE	WHYE	WHITEYELLOW
GYGN	GRAYGREEN	WHGN	WHITEGREEN
GYRD	GRAYRED	WHBN	WHITEBROWN
OC	ORANGE	YE	YELLOW
OCGY	ORANGEGRAY	YEBK	YELLOWBLACK
OCBU	ORANGEBLUE	YEBU	YELLOWBLUE
OCGN	ORANGEGREEN	YEGY	YELLOWGRAY
OCGY	ORANGEGRAY	YEBN	YELLOWBROWN
		YEGN	YELLOWGREEN



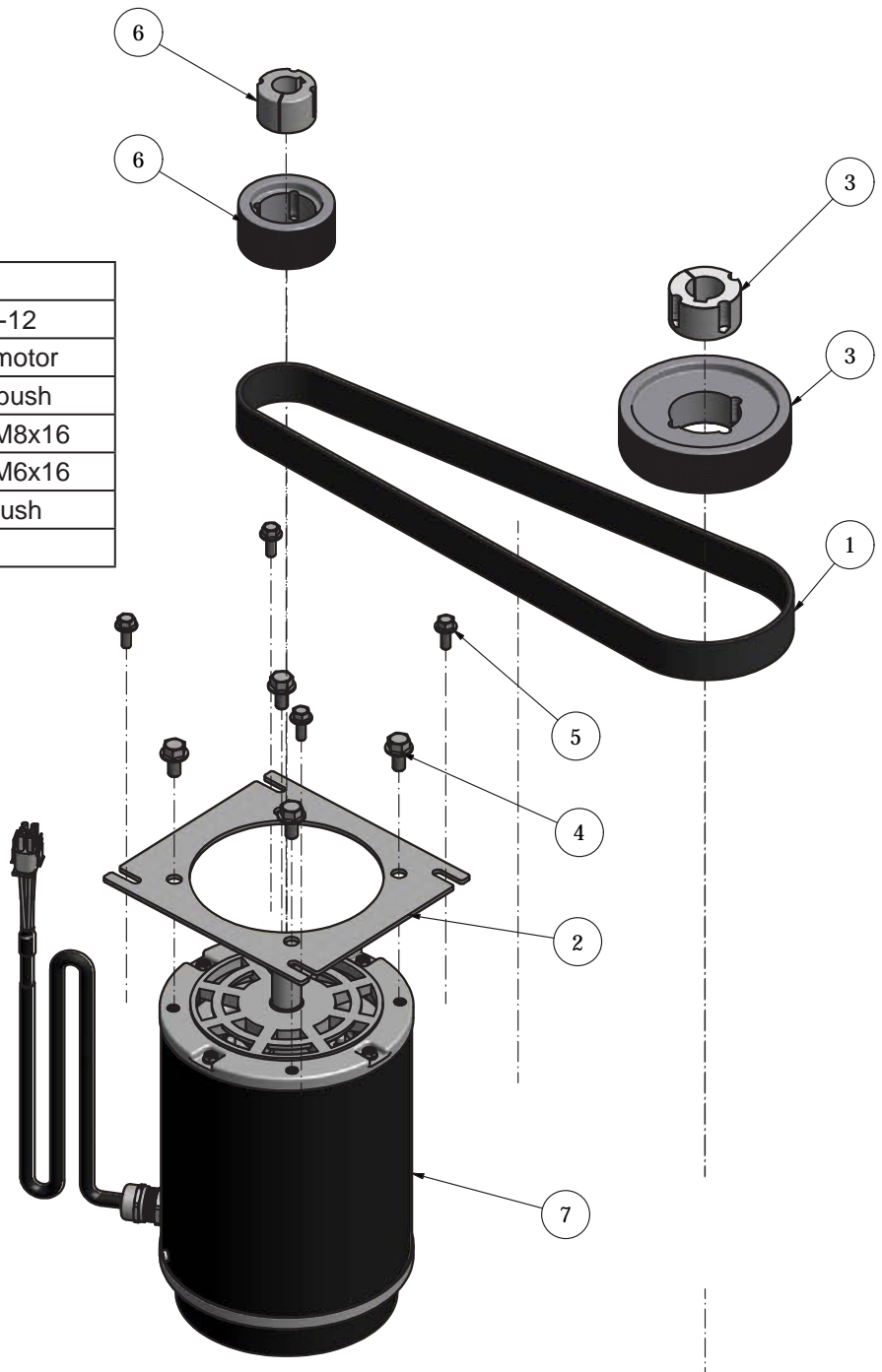
 <p><b>A/S WODSCHOW &amp; CO</b> Industrivejringet 6 DK-2605 Brøndby, Denmark www.bearvarmixer.dk</p>	Project title: CR30	Subject name: CR30	Project rev.: 1	Page 1
	Page title: CR30 - 230V / 115V / 208VAC	Drawing no.: 7/Stelbi	Page rev.: /	Previous page 14-02-2016
File name: CR30-20160214	Const. (project/page): /	Last printed: /	Next page 14-02-2016	
	Appr. (int/date): /	Last corrected: /	Number of pages: 1	

**MIXER SPARE PARTS**

TRANSMISSION.....16  
 BOWL SCREEN.....17  
 BOWL ARMS .....17  
 LIFTING SYSTEM.....18  
 PLANETARY HEAD.....20  
 ATTACHMENT HUB .....22  
 MACHINE COLUMN .....24  
 ELECTRIC-BOX.....26  
 FRONT PANEL .....28  
 FRONT PANEL, attachment drive .....30  
 CABLES.....31  
 ACCESSORIES .....32

**TRANSMISSION**

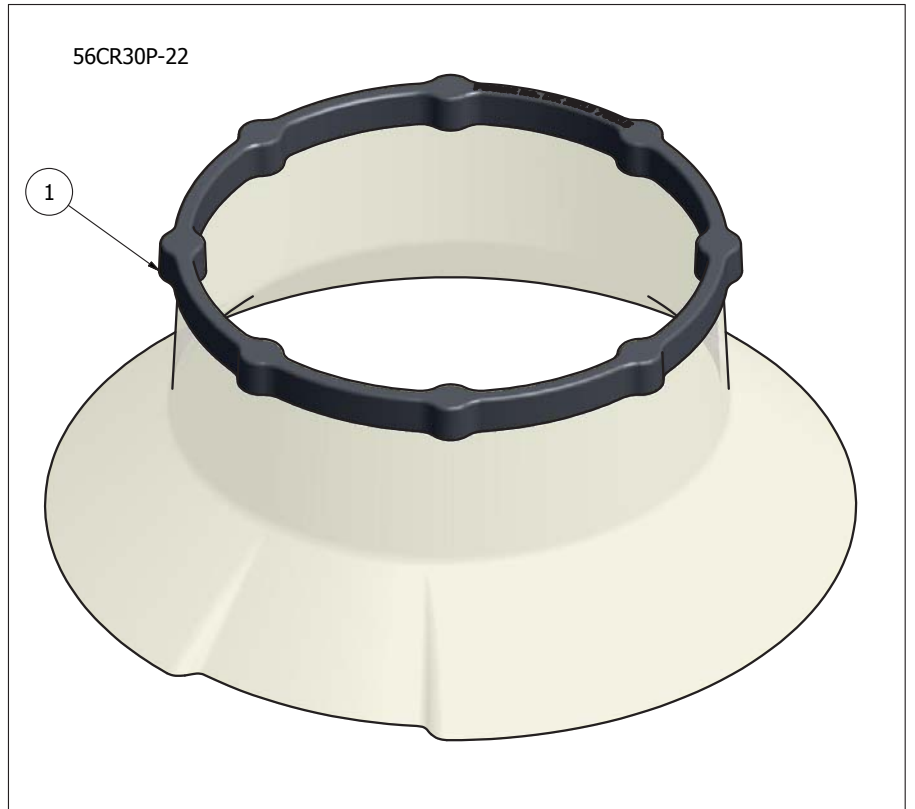
ITEM	QTY	Part number	Name UK
1	1	CR30-90	Micro-V PJ1016-12
2	1	CR30-61.3	Mounting plate motor
3	1	CR30-129	Pully ø112 with bush
4	4	STA5751	Hex cap screw M8x16
5	10	STA5750	Hex cap screw M6x16
6	1	CR30-128	Pully ø63 with Bush
7	1	CR30-85	Motor 1 phase



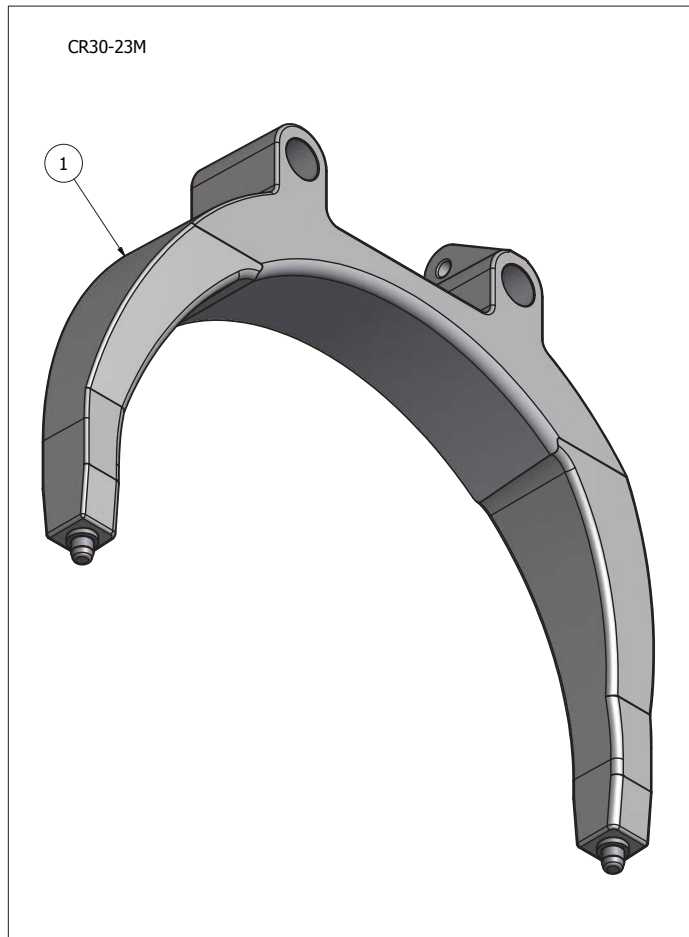


**BOWL SCREEN**

Part number	Name
56CR30P-22	Removeable plastic bowl screen

**BOWL ARMS**

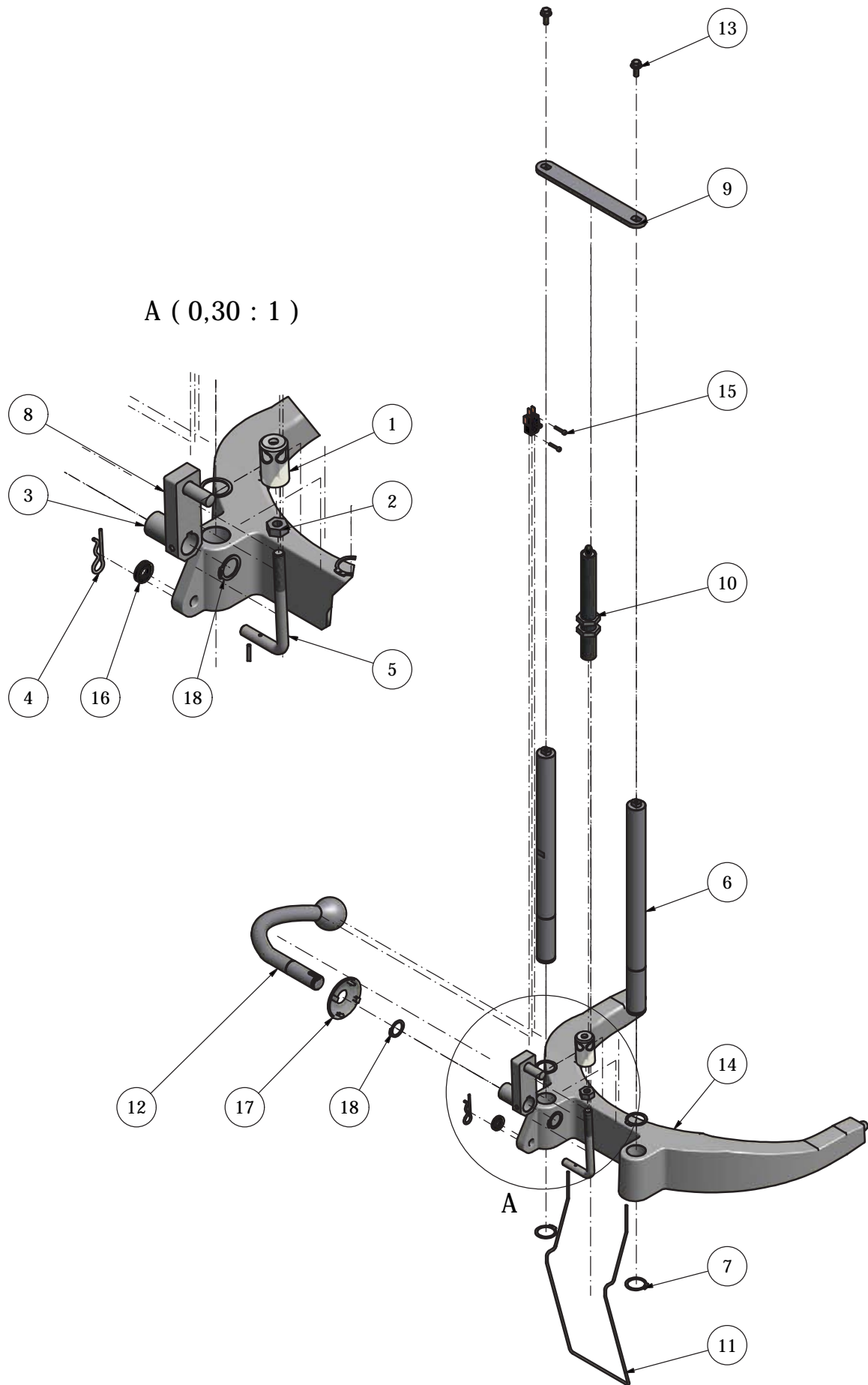
Part number	Name
CR30-23M	Bowl arm mounted with pins



**LIFTING SYSTEM**

---

<b>ITEM</b>	<b>QTY</b>	<b>Part number</b>	<b>Name</b>
1	1	CR30-65.1	Lifting nut
2	1	STA5806	Hexagon nut M10
3	1	STA2515	Bearing MB2030DU
4	1	STA6205	Spring cotters for bolt $\varnothing$ 2,5
5	1	CR30-83.1	Lifting bolt
6	2	CR30-68.5	Shaft
7	4	STA3410	Circlip A25
8	1	CR30-63M	Crankshaft
9	1	CR30-68.6	Absorber crossbar
10	1	CR30-604	Shock absorber with Cap
11	1	CR30-310	Spring wire
12	1	CR30-62M	Lifting arm
13	10	STA5750	Hex cap screw M6x16
14	1	CR30-23M	30L Bowlarm
15	4	STA5697	Socket head screw M3x16
16	1	STA6006	Flatwasher $\varnothing$ 10,5- $\varnothing$ 20x4
17	1	CR30-62.9	Cover for liftarm
18	2	STA3408	Retainning ring A20

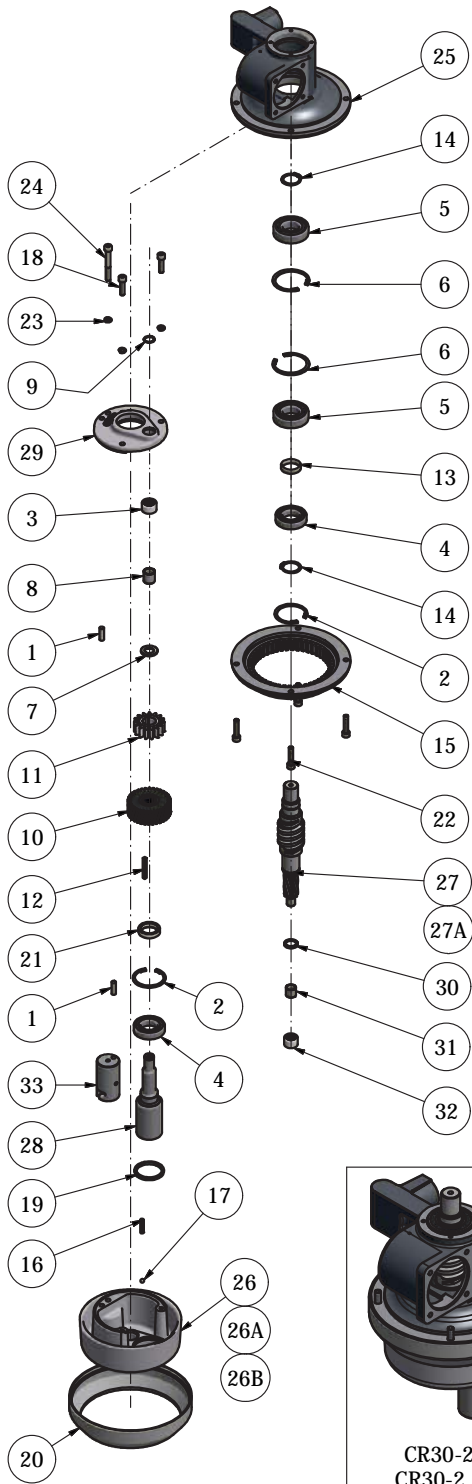


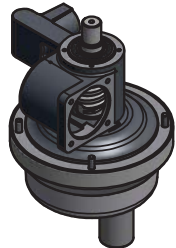
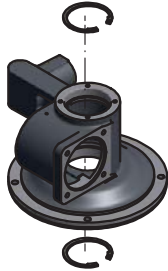
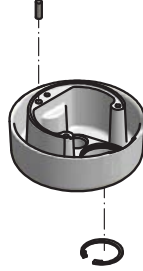







**PLANETARY HEAD**


---

ITEM	QTY	Part number	Name	
1	1	STA6460	Dowel pin $\varnothing$ 8x24-KS4	
2	2	STA3515	Retainning ring J55	
3	1	HK2016	Needel bearing	
4	2	6006 2RS	Ballring 6006	
5	2	6206 2RS	Ballring 6206	
6	2	STA3518	Retainningring J62	
7	1	R20-235	Axial washer	
8	1	LR17	Bushing	
9	1	STA3470	Circlip SW17	
10	1	R20-32	Toothed wheel 1	
11	1	R20-31	Toothed wheel	
12	1	STA2008	Shaft key	
13	1	CR30-37	Distance ring f. CR30	
14	2	STA3414	Circlip A30	
15	1	RN20-1	Toothed wheel - machined	
16	1	R15-109	Spring bajonet	
17	1	R20-106	Ball 1/4"	
18	3	STA5626	Socket head screw M8x30	
19	1	STA3160	Sealing ring G45x52x4	
20	1	RN20-272.1	Shawl 20L	
21	1	CR30-34	Distance ring	
22	4	STA5638	Socket head screw M8x35	
23	3	STA6055	Helical springlock washer M8	
24	1	STA5729	Socket head screw M8x65	
25	1		Sold as RN20-3.7Z	Main bearing mounted front
26			Sold as CR30-2Z	Eccentric head compl.
26A	1		Sold as CR30-2.10Z	Eccentric head assy.
26B	1		Sold as CR30-2.11Z	Eccentric head assy. prepared for scraper
27	1		Sold as CR30-30.5Z	Mainshaft assy. for attachment drive
27A	1		Sold as CR30-30.6Z	Mainshaft assy. <b>not</b> for attachment drive
28	1		Sold as CR30-33Z	Bajonet shaft assy.
29	1		Sold as CR30-36Z	Exentric disc mounted
30	1		Sold as RN20-101Z	Needel bearing comppl. BK1816/LR15
31	1		Sold as RN20-101Z	Needel bearing comppl. BK1816/LR15
32	1		Sold as RN20-101Z	Needel bearing comppl. BK1816/LR15
33	1		Sold as 42CR20-105Z	Bajonet for scraber compl

<b>CR30-2M</b>	Planetary head compl.
<b>CR30-2.1M</b>	Planetary head compl. prepared for scraber

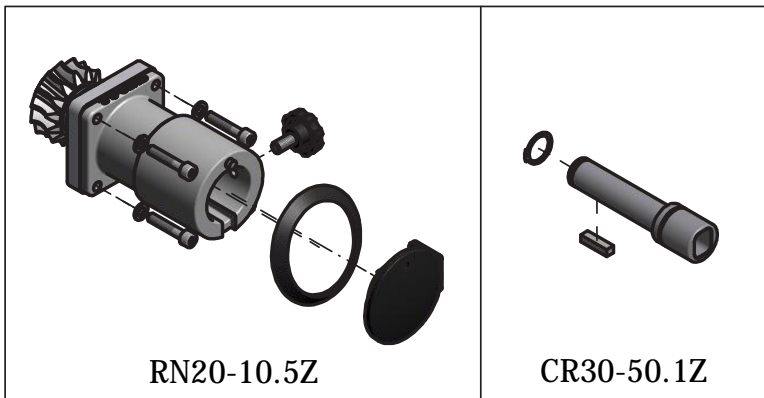
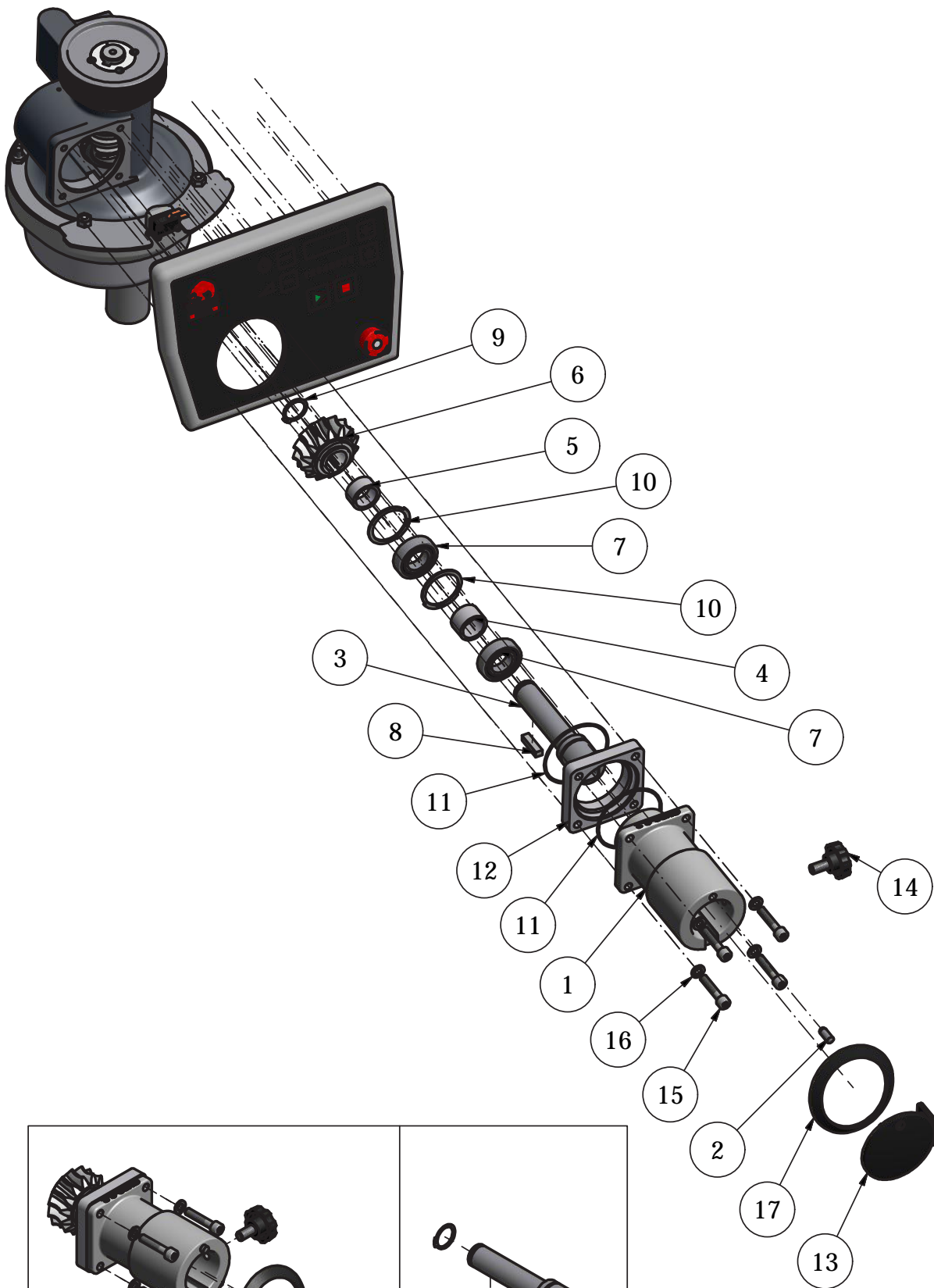


			
CR30-2M CR30-2.1M	RN20-3.7Z	CR30-2Z	CR30-2.10Z CR30-2.11Z
			
42CR20-105Z	CR30-30.5Z	CR30-30.6Z	CR30-33Z
			
			CR30-36Z
			
			RN20-101Z

**ATTACHMENT HUB**

---

ITEM	QTY	Part number	Name	Sold as
1	1	RN20-8.2	Bearing house machined	RN20-10.5Z
2	1	STA6316	Dowel pin $\varnothing$ 8x20 DIN6325	
3	1	CR30-50.1R	Attachment hub shaft CR30	CR30-50.1Z
4	1	RN20-37	Distance bushing	
5	1	R100-143	Spacer	
6	1	RN20-9	Worm wheel	
7	2	6005 2RS	Ball ring 6005 2RS	
8	1	STA2031	Feather Key 8x7x30	
9	1	STA3410	Circlip A25	
10	2	STA3512	Circlips Type J 47x1,75	
11	2	STA3127	O-ring $\varnothing$ 66x2	
12	1	CR30-8.4	Attachment hub adaptor	
13	1	R15-215	Blindcover	
14	1	STA5561	M10 Handscrew	
15	3	STA5636	Socket head screw M8x40	
16	4	STA6038	Spring lock washer $\varnothing$ 8	
17	1	R15-215	Blind cover	



RN20-10.5Z

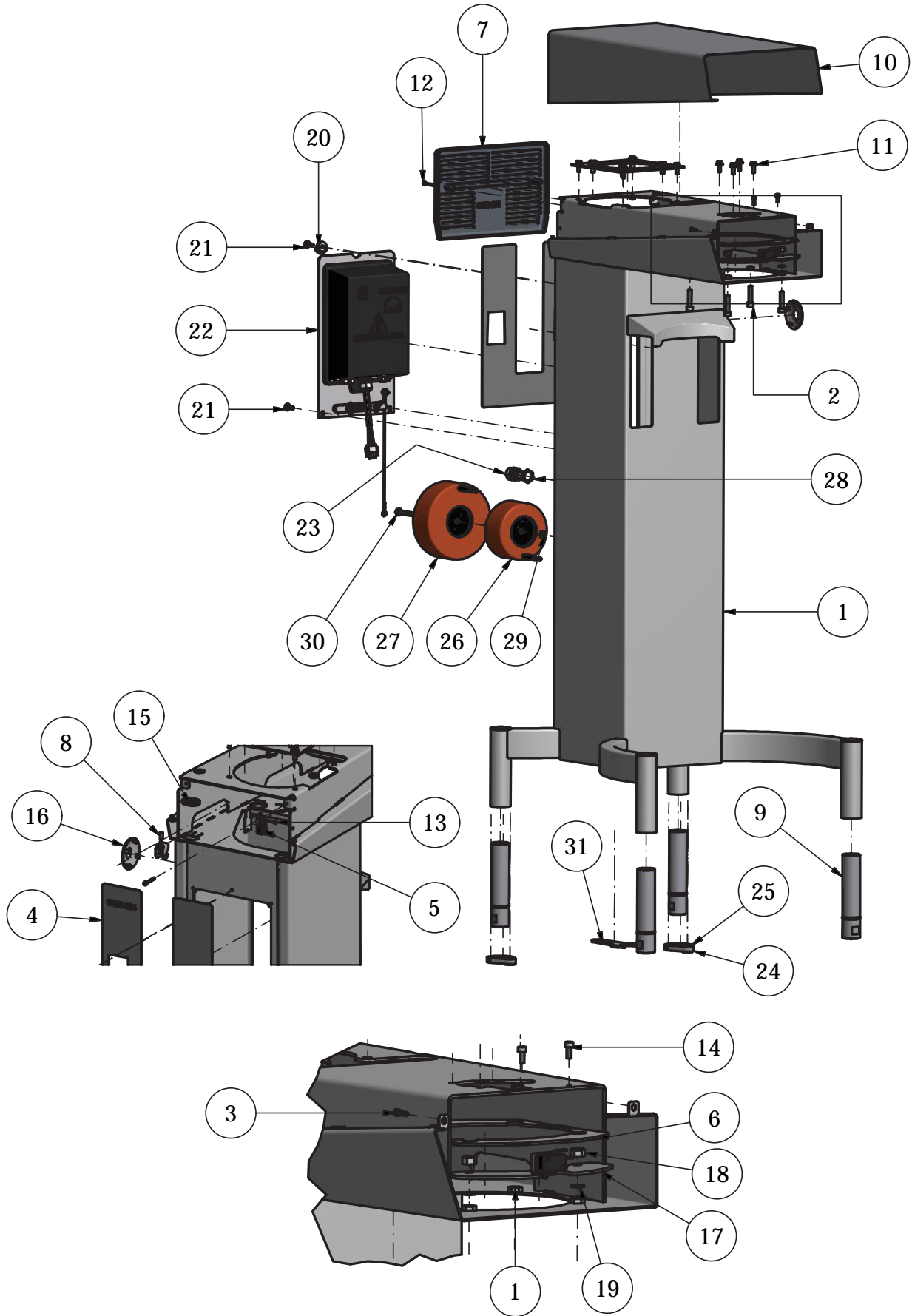
CR30-50.1Z

**MACHINE COLUMN**

---

ITEM	QTY	Part number	Name
1	1	CR30-22R	Machine frame welded
2	1	CR30-2.1M	Planetary head scraber
3	2	STA5712	Socket head screw M4x16
4	1	CR30-304	NSF Coverplate
5	1	56SN20-31	Micro switch CE U83160.7
6	1	56CR30-109	Micro switch ring
7	1	CR30-291	Ventilation cover
8	1	STA3103	Shield Clamp
9	4	CR30-218	Adjustable leg
10	1	CR30-21R	Top cover
11	12	STA5750	Hex cap screw M6x16
12	3	STA5714	Socket head screw M4x30
13	2	STA5697	Socket head screw M3x16
14	2	STA5623	Socket head screw M5x12
15	1	STA3104	Rubber cable gland $\varnothing$ 25,5
16	1	CR30-62.9	Cover for liftarm
17	1	56CR30-110M	Switch bracket complete
18	2	STA5842	Hexagon locknut M8
19	2	STA6100	Flatwasher $\varnothing$ 8/ $\varnothing$ 14x1mm
20	1	CR30-22.18	Wring
21	3	STA5028	Thruss head Captive screw M6x20
22	1	WR30-552.1M	Box converter US complete
23	1	STA3002	PG 13.5 Cable inlet
24	2	CR30-25.1M	Floor Bracket CR mounted
25	4	STA6029	SS Flatwasher $\varnothing$ 10,5- $\varnothing$ 21x2
26	1	CR30-430.7M	Transformer 208V mounted
27	1	CR30-430.8M	Transformer 115V mounted
28	1	STA3014	PG 13.5 nut
29	1	STA5898	Hexagon nut M8 A2
30	1	STA5369	Hex cap screw M8x65 A2
31	1	CR30-350	Fixed spanner NV32



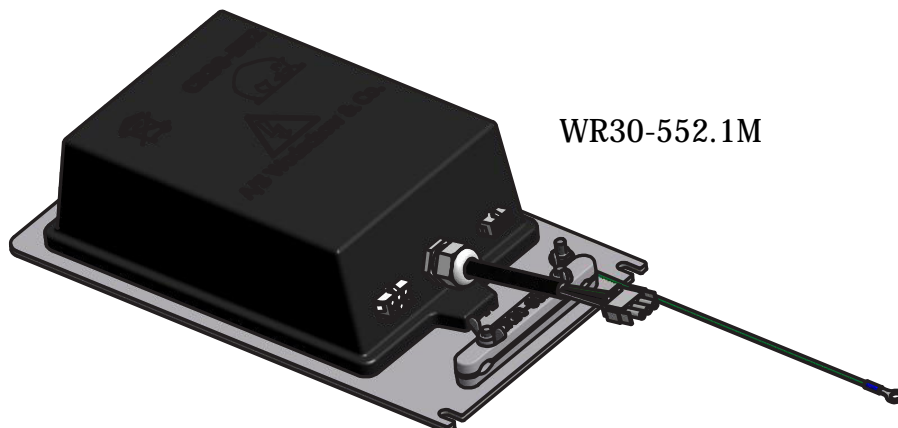
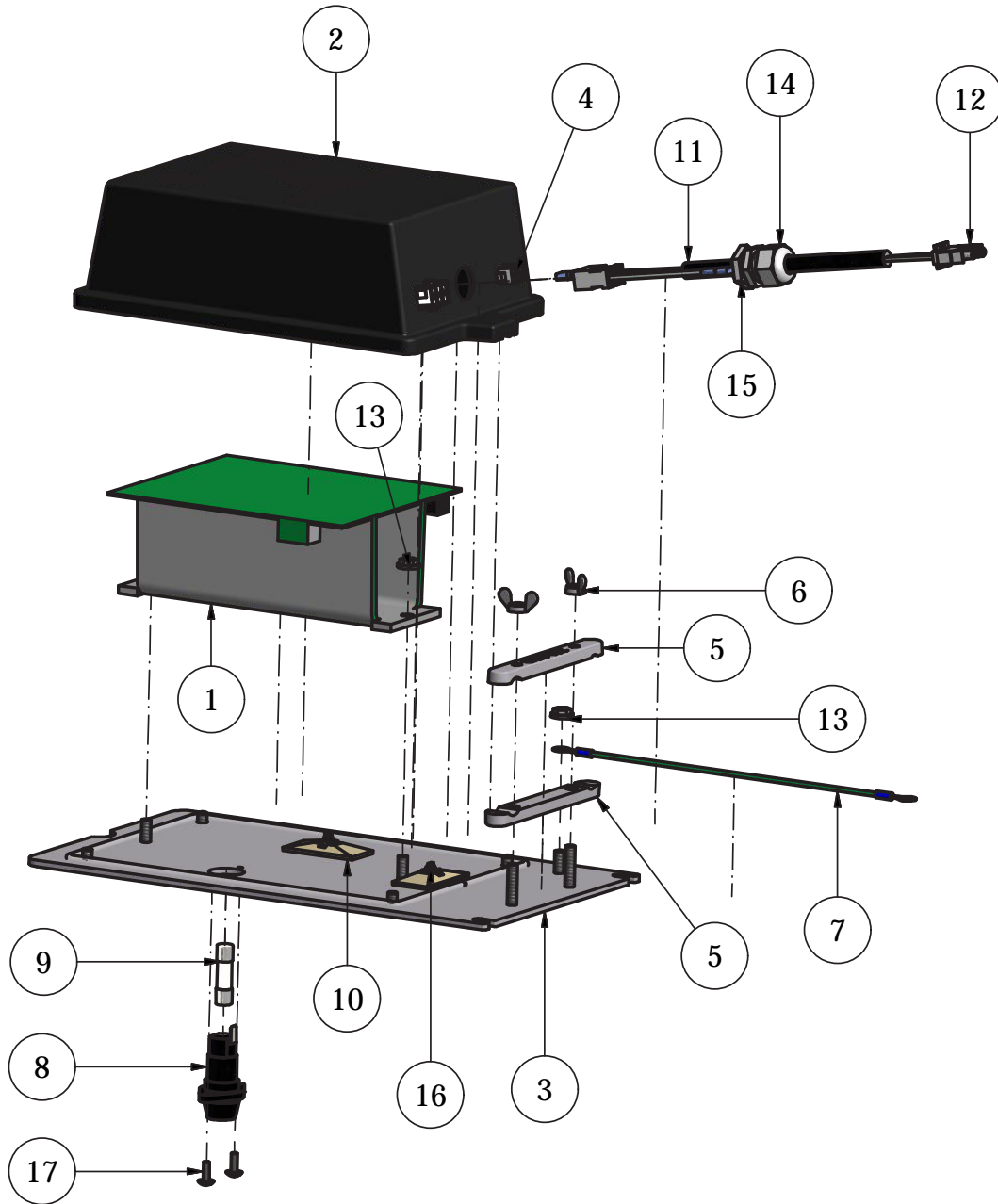


**ELECTRIC-BOX**

---

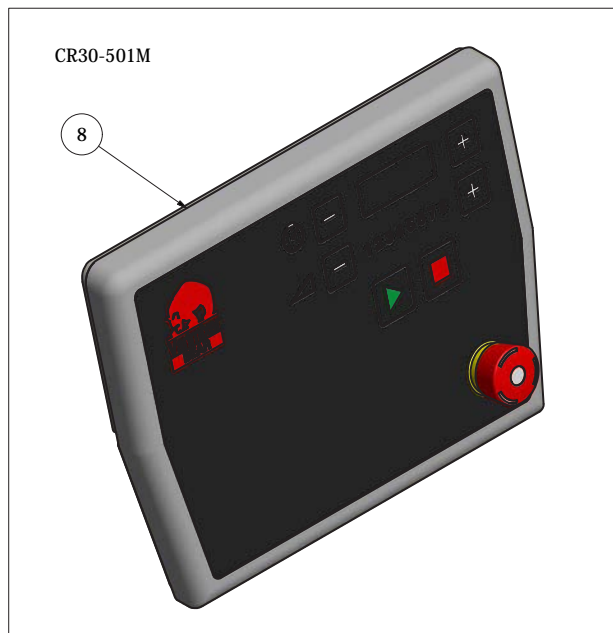
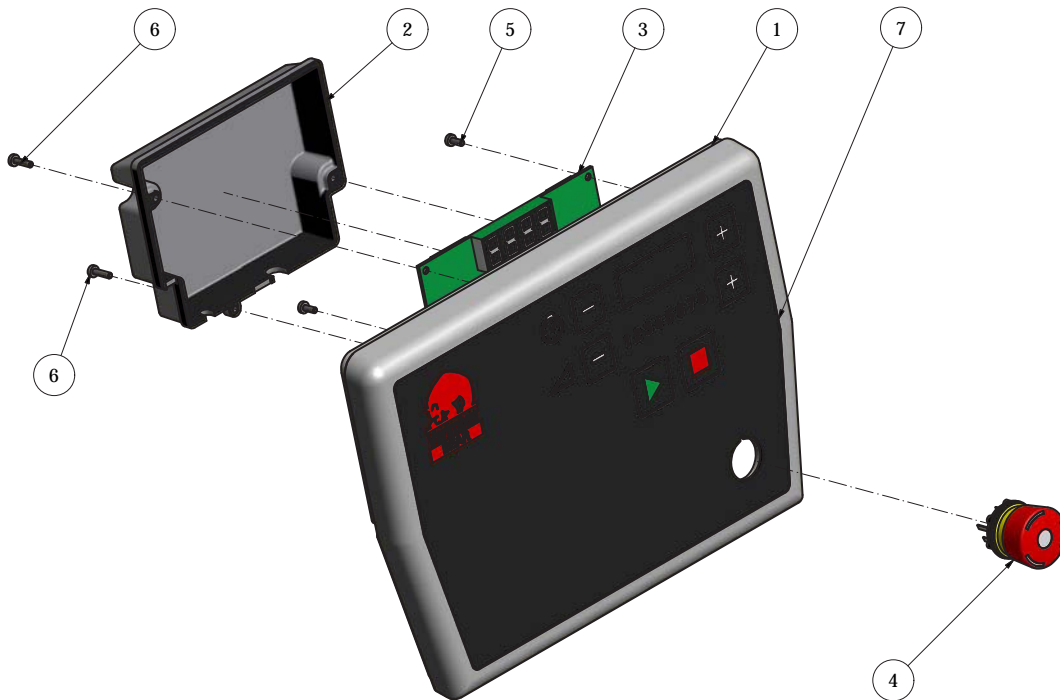
<b>ITEM</b>	<b>Part number</b>	<b>Name</b>
<b>1</b>	CR30-601	Inverter
<b>2</b>	CR30-552.1	Converter box U.S.
<b>3</b>	WR30-22.17A	Backplate US
<b>4</b>	CR30-194.26M	Frequency converter Cable
<b>5</b>	CR30-602	Shield bracket
<b>6</b>	STA5803	Wingnut M6
<b>7</b>	CR30-194.7M	Grounding cable with connectors M6
<b>8</b>	R20E-416.01	Fuse holder $\varnothing$ 10x38
<b>9</b>	R20E-418.01	Fuse $\varnothing$ 10x38 500V - 1Amp
<b>10</b>	STA6161	Cable holder self adhesive 3M nr.790
<b>11</b>	CR30-194.2M	cable for box conterter
<b>12</b>	R20E-510.13	Molex plug MLX 42021-3 pol
<b>13</b>	STA5896	Hexagon nut M6 FZB DIN6923
<b>14</b>	STA3002	PG 13.5 Cable inlet
<b>15</b>	STA3014	PG 13.5 nut
<b>16</b>	STA3033	Strap L100*2,5 mm Black
<b>17</b>	STA5099	Thruss head schrew M4x12

	WR30-552.1M	Box Converter US mounted
--	-------------	--------------------------



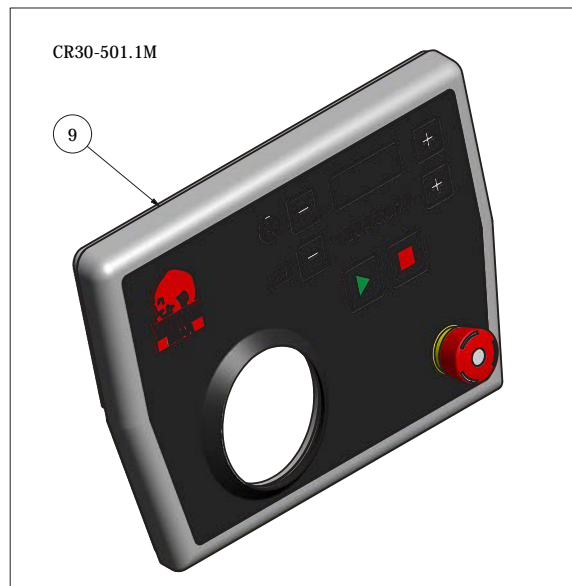
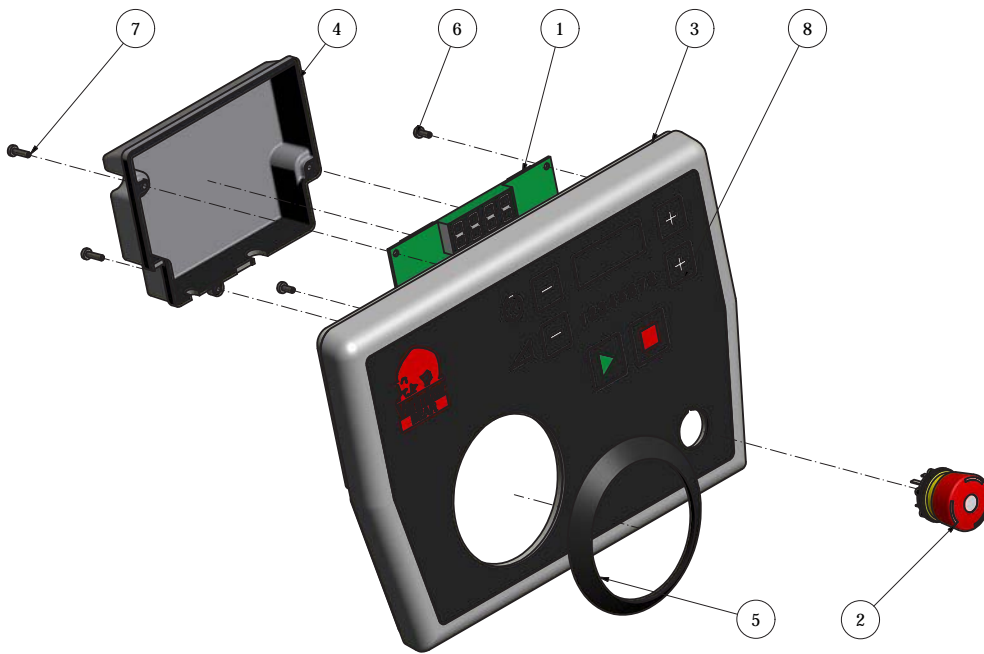
## FRONT PANEL

ITEM	QTY	Part number	Name
1	1	CR30-650.20	Front panel
2	1	CR30-553	Controller print box
3	1	CR30-501	Control print
4	1	CR10-174.11	Emergency stop
5	2	STA5762	pan head screw M3x8
6	3	STA5763	pan head screw M3x12
7	1	CR30-149	Front foil
8	1	CR30-501M	Front panel complete



## FRONT PANEL, attachment hub

ITEM	QTY	Part number	Name
1	1	CR30-501	Control print
2	1	CR10-174.11	Emergency stop
3	1	CR30-650.20	Front panel
4	1	CR30-553	Controller print box
5	1	CR30-211	Attachment drive collar
6	2	STA5762	pan head screw M3x8
7	3	STA5763	pan head screw M3x12
8	1	CR30-149.1	Frontfoil attach. hub
9	1	CR30-501.1M	Front panel complete



## CABLES

QTY	Part number	Name	Placement
1	CR30-194.01M	Ground Cable	Front panel
1	CR30-194.02M	Ground Cable 60mm	Front panel
1	CR30-194.7M	Grounding cable with connectors M6	Converter
1	CR30-194M	City Cable	Converter
1	CR30-194.2M	Cable for box Converter	Converter
1	CR30-194.26M	Frequency Converter Cable	Converter
1	CR30-542	Main Cable	Front panel

CR30-194.01M



CR30-194.02M



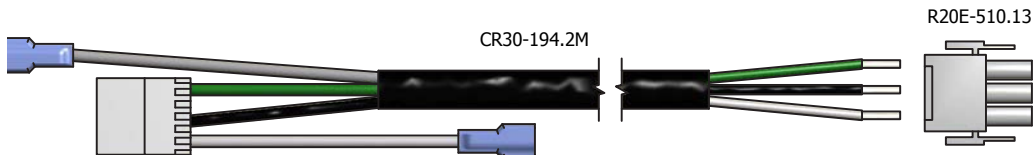
CR30-194.7M



CR30-194M



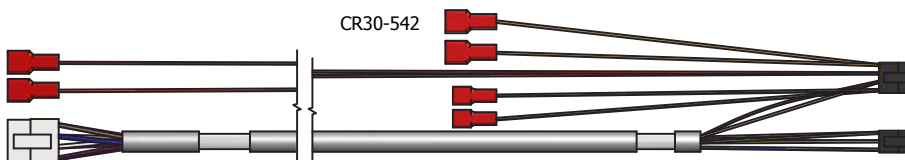
CR30-194.2M



CR30-194.26M

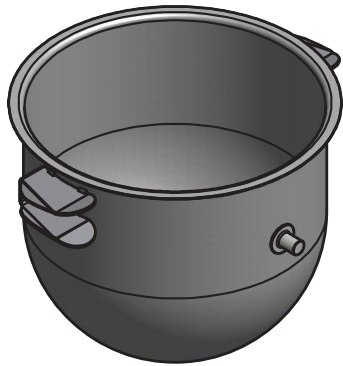


CR30-542

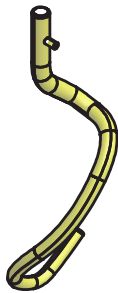


## ACCESSORIES

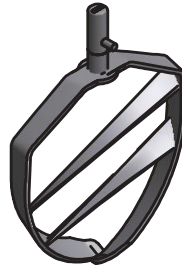
ITEM	Part number	Name
1	CR30-75M	Bowl 30L
2	CR30-75AM	Bowl 30/15L
3	CR30-78M	30L hook, stainless steel
4	CR30-78AM	30/15L hook, stainless steel
5	CR30-27.3M	30L flat beater, stainless steel
6	CR30-27.3AM	30/15L flat beater, stainless steel
7	CR30-28.1M	30L whip
8	CR30-28.1AM	30/15L whip
9	42CR30P	30L scraper complete
10	42CR30AP	30/15L scraper complete
11	42CR30-204	30L scraper blade
12	42CR30-204A	30/15L scraper blade
13	22CR30	Bowl truck Kodiak 30L



1, 2



3, 4



5, 6



7, 8



9, 10



11, 12



13

