Operating and Servicing Manual

Shaker *Viba 15 & Viba 25*

Machine number:	
Year of manufacture:	

Collomix®

Edition 2.3-05

Contents

1. Layout drawings

1.1 Machine components

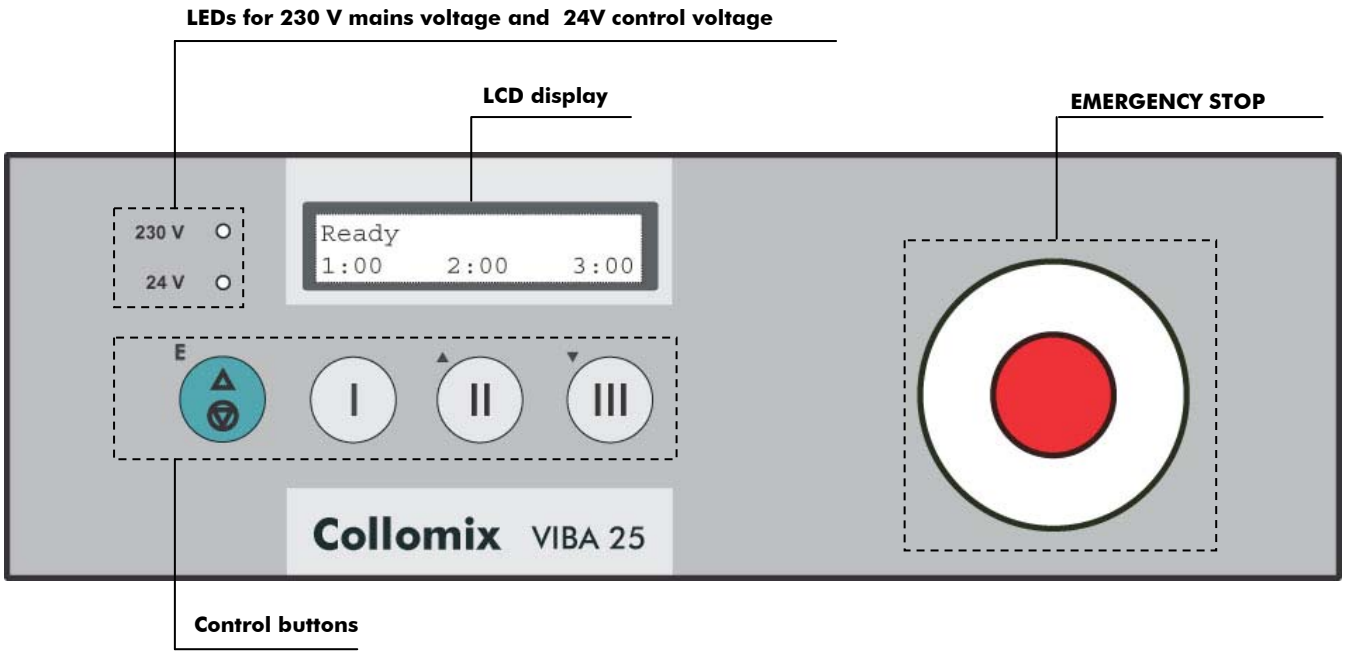
Machine components

1. Mixing table	5. Control panel
2. Manual door release	6. Door
3. Clamping plate	7. Loading shelf
4. Main switch	8. Roller

1.2 Variants

	
VIBA 15	***VIBA 15 INOX & VIBA 25 INOX***
	
VIBA 25	***VIBA 25 DOOR***

1.3 Operator's controls



Control buttons

	**Button E**	• **OPEN the clamping unit** • **QUIT stand-by mode** • **STOP mixing cycle prematurely** • **ACKNOWLEDGE messages**
	**Button I**	• **Mixing cycle I** (works setting: 1:00 minutes)
	**Button II**	• **Mixing cycle II** (works setting: 2:00 minutes)
	**Button III**	• **Mixing cycle III** (works setting 3:00 minutes)

2. General information

Before you use the machine for the first time, please read this operating manual and the safety instructions carefully and follow the information exactly.

Keep this manual safe and within immediate reach.

The machine is to be used only by persons who have read the operating manual and who are acquainted with the occupational safety and accident prevention regulations in force in your country.

Those parts of the manual that are important for the correct and safe operation of the machine are printed in bold type.

Pictograms and symbols used in this manual

	**The "caution" symbol** is used to indicate a situation in which persons are at risk of suffering physical injury. The warning must be heeded at all costs.
	**The "stop" symbol** is used to indicate a situation in which the machine is at risk of being damaged.
	**The "hazardous electric voltage" symbol** is used to indicate live components that may pose a risk to life and limb.

2.1 Proper use

The Viba 25 is a stationary shaker for closed, tightly closing, round, rectangular and oval containers made of metal or plastic.

It can be used to mix all types of paints, master batches, house paints, industrial paints and other low-viscosity materials.

Practical applications are to be found in the wholesale and retail paint trade, in the paint, lacquer and chemical industries, and many other related sectors. This shaker is particularly ideal as a component in paint dosing systems.

The VIBA can be used with containers from 40 mm to 400 mm in height with a maximum footprint of 340 x 370 mm.

Never use the machine in areas where a potentially explosive atmosphere may arise, either permanently or temporarily.

2.2 Working principle

Material in the clamp-mounted container is mixed by means of linear forces of inertia generated through an alternating orbital shaking movement.

This mixing principle guarantees that low-viscosity materials are prepared at high speed.

The duration of the mixing cycles can be programmed as required by a service technician using the control buttons (works setting: 60,120 and 180 seconds).

3. Safety instructions

For your own protection, read the safety instructions carefully and follow them exactly.

Observe the electrical regulations in force at your company and those listed in this manual when you install the machine.

Wear safety shoes when installing or relocating the machine.

Make sure the machine stands securely.

Keep your work place tidy. There is a higher risk of accidents at an untidy work place.

Consider ambient conditions. Do not install the machine in damp rooms. Provide good lighting and good access.

Keep third parties away from your work place.

Close the machine when it is not being used. Projecting parts may injure you and others.

Take care of the power cable. Make sure it is laid neatly and where it cannot be damaged. Protect the cable in particular from heat, sharp edges, oil and acid. Check the cable and plug regularly for signs of damage. Use only suitably approved extension cables and plugs.

Do not overload the machine. Check that the weight and dimensions of the mixing container are suitable.

Never lift large and heavy containers into the machine by yourself.

Use only undamaged and sturdy mixing containers. If you don't, the container may burst.

The mixing container has to be closed completely.

Make sure that the mixing container sits in central position on the mixing table. Secure the container handles with rubber bands or adhesive tape.

Take good care of the machine. Make sure that the moving parts move smoothly and without restriction. Remove any dirt immediately. Follow the maintenance instructions.

Do not use high-pressure equipment to clean the machine.

Make sure that the safety devices work properly and are clean.

Do not use the machine if the door or the acrylic glass window is damaged. If the acrylic glass window is broken, do not reach into the interior! There is a high risk of injury from rotating components.

Do not start the machine with the housing open. Pull out the power plug! There is a high risk of accidents!

Before switching on the machine after maintenance work, check that no wrenches or setting tools are left inside the machine compartment.

Examine the machine for signs of damage. Check regularly that all parts are in good working order. Have repairs carried out only by the manufacturer or an approved specialist.

Use only original replacement parts.

Do not start the machine if any safety devices or switches are defective.

Always pull out the power plug before carrying out any maintenance work.

The VIBA is not to be operated in any way different to that described in the operating manual.

In particular it is prohibited

- to operate the machine if any parts of the housing are missing
- to operate the machine with any defective parts
- to bridge or deactivate any safety devices
- to operate the machine in areas with a potentially explosive atmosphere
- to use and install non-original replacement parts
- to run the machine for longer than 20 minutes (risk of the mixing container bursting)

3.1 Safety-relevant components

Closed housing

The housing is a stationary safeguard and partition that can only be opened with the use of tools.

Machine door with interlock

The door is an interlocking safeguard and partition. It is impossible to start the machine when the door is open. The door is not unlocked until after the mixing cycle is ended and the mixing container released.

Emergency Stop function:

With the Emergency Stop function you can

- reliably interrupt the control voltage supply so that the machine is unable to move.
- bring the machine to a halt when it is running.

4. Using the machine for the first time

4.1 Installing the machine – Transport notes

Your VIBA Shaker is delivered in reusable cardboard packaging on a wooden pallet.

Use a suitable hoist to lift the machine off the pallet. Be particularly careful with the bottom of the machine so that no bearing parts are damaged or bent. Weight: 168 kg.

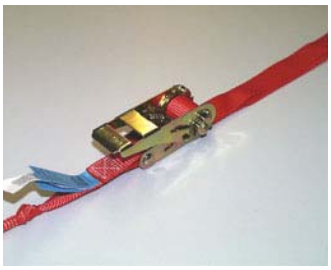
Place the machine on firm, level ground and check the proper alignment by using a water level. Slight unevenness can be compensated with the height-adjustable machine feet using a size 17 fork wrench. To ensure that the machine runs as smoothly as possible, always set the machine feet as low as possible.

4.2 Removing the transport brace

The mixing unit is secured by a lashing strap to protect it from damage in transit. This transport brace has to be removed before you put the machine into operation for the first time!

Switch on the machine with the **main switch (4)**. The word ***READY*** will appear in the LCD display and you can open the door by hand.

Refit the transport brace whenever you want to transport the VIBA Shaker over long distances.



opening the lashing strap

4.3 Fitting the loading shelf and the door handle

The loading shelf and the door handle are delivered separately.

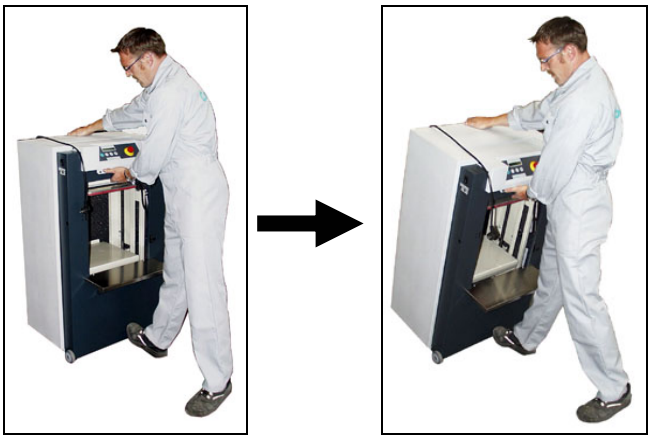
To fit them you must first open the door of the VIBA Shaker as described in 4.2.

Fit the door handle and the loading shelf with the supplied mounting materials as shown in the pictures along side.

4.4 Moving the machine

The VIBA Shaker has two transport rollers at the front end of the housing. Moving the machine over short distances is thus easy and requires little effort.

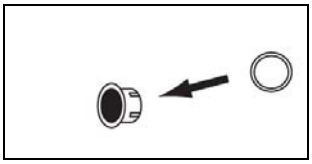
- Grip under the panel above the door recess with the one hand and hold the top of the housing with the other.
- Carefully tilt the machine forward until the transport rollers come to rest on the floor.
- You can now push the machine along on its rollers with ease.



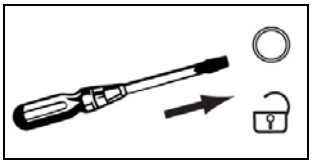
Grip the machine ***Move the machine***

4.5 Manual door release

The door of the VIBA Shaker comes with a safety interlock. The door is locked when a mixing cycle is started and cannot be opened while the machine is working. For servicing purposes, however, it is possible for the door interlock to be released by hand.



<u>Releasing the safety door interlock</u>



- Remove the plastic plug cap from the left side of the machine.
- Use a screwdriver to push the release button of the door interlock
- Open the door.

Do not start the machine if any safety devices are defective or modified!

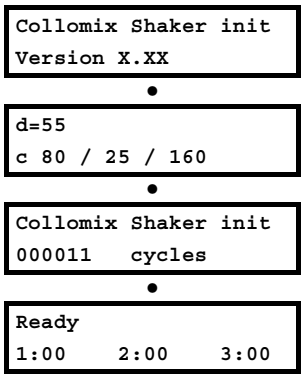
5. Operation

5.1 Switching on the machine

The machine is switched on with the main switch (4).

Switch-on is followed by an initialization routine. The word ***READY*** appears in the display when initialization is completed.

If any errors occur during initialization they will be indicated in the display. For further information see Messages and troubleshooting.



LCD display: Initialization

5.2 Trial run

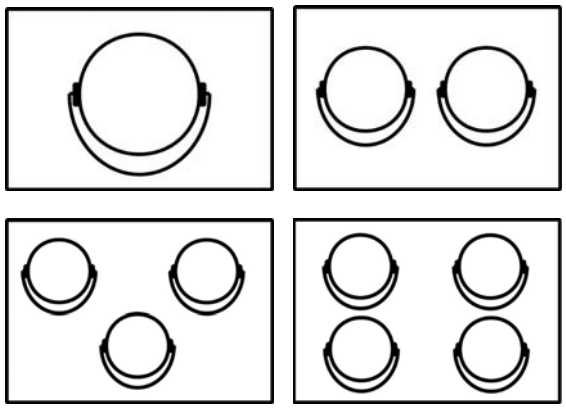
It is best to carry out a trial run with an empty mixing container when you are starting up the machine for the first time or after carrying out maintenance work or repairs.

Remove the transport brace, tools and any other loose items from the inside of the machine.

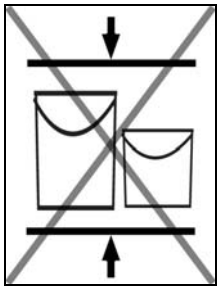
If the machine wobbles while it is working, adjust the machine feet to compensate the differences in height. It is prohibited to operate the machine on its shipment pallet.

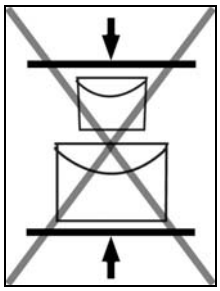
5.3 Loading the container

- **Open the door** (if necessary cancel **"STAND-BY" mode** by pressing **button E**).
- Press **button E** to move the clamping unit apart to match the height of the container.
- **Secure the container handle with a rubber band or adhesive tape and place the mixing container on the mixing table in central position**. It is also possible to shake several identical containers simultaneously. In this case, make sure the containers are placed on the mixing table in a symmetrical arrangement.



Positioning the containers

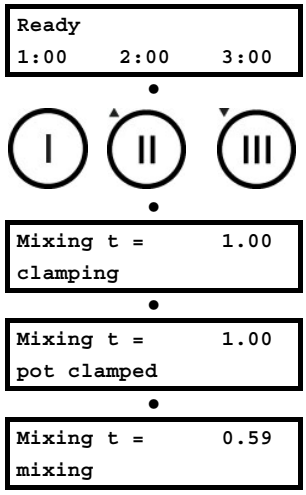




Don't stack the containers!

5.4 Starting the mixing cycle

- The door has to be closed to start the mixing cycle.
- Start the mixing cycle by pressing one of the timer buttons **I, II or III**. The corresponding mixing times are indicated in the LCD display above the buttons.
- The mixing container is clamped in the clamping unit and the mixing cycle started.
- The remaining mixing time is indicated in the display as the mixing cycle progresses.



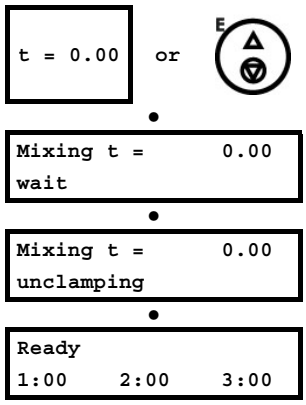
LCD display:
Start mixing cycle

5.5 Ending the mixing cycle

The mixing cycle is ended automatically **when the selected mixing time is over**. The clamping unit is opened and the door interlock released. You can open the door and take out the container.

You can end the mixing cycle prematurely **before the selected mixing time is over** by pressing **button E**. The mixing cycle is ended as normal. The clamping plate opens and the door interlock is released.

The machine is then ready for the next mixing cycle. **When you have finished using the machine, be sure to switch it off with the main switch!**

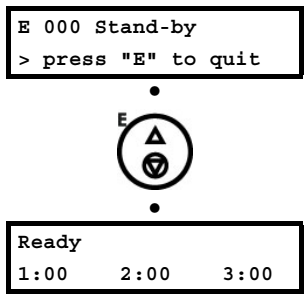


LCD display:
End of mixing cycle

5.6 Stand-by

If approximately 60 minutes pass without the user actuating any function, the VIBA will automatically switch to stand-by mode. All unnecessary consumers are switched off and the door can no longer be opened.

To quit stand-by mode, press BUTTON E. The machine will then return to base position and you are again able to open the door.



LCD display:
Stand-by

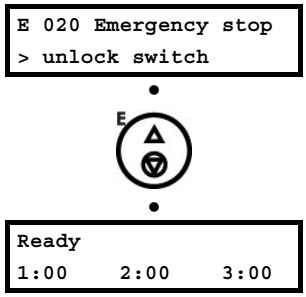
5.7 Triggering the Emergency Stop function

Press the **Emergency Stop button** to switch off the machine if ever the container develops a leak or its handle becomes loose or some other potentially dangerous situation for man or machine arises while the mixing cycle is in progress.

After the machine is switched off, the mixing unit will coast to a standstill and remain in this position.
The Emergency Stop button **has to be unlocked again by hand**. This is done by turning the red actuator clockwise.

After unlocking the Emergency Stop button you must cancel the message in the display by pressing **button E**.

Both the mixing unit and the door interlock are automatically released. You can then remove the container.



LCD display:
EMERGENCY STOP

CAUTION!

The Emergency Stop button only interrupts the program flow. The machine is not disconnected from the mains supply!
Therefore, before performing any maintenance work or repairs be sure to always disconnect the machine from the mains by pulling out the power plug!

5.8 Average mixing cycles

The VIBA Shaker has three mixing cycles whose lengths can be individually programmed by a service technician.

The length of a mixing cycle depends on the properties of the material to be mixed. The times quoted in the following table are intended to serve as a guide only. Depending on the actual material it may be necessary to select a longer mixing cycle in order to obtain optimal results.

Material to be mixed	**Mixing time**
House paints, industrial paints	- 60 seconds
Dispersion paints	60 - 150 seconds
Ready-mixed plasters	150 - 240 seconds

6. Program flow

6.1 Switching on

After being switched on with the main switch the VIBA Shaker first carries out a self-test and initializes the control system. For further details see chapter 6.

- **Display of software version**

```
Collomix Shaker init
Version X.XX
```

- **Display of system-internal parameters**

```
d=55
c 80 / 25 / 160
```

- **Display of mixing cycles performed so far**

```
Collomix Shaker init
000011   cycles
```

- **Basic display when no faults are active. The mixing cycle can be started.**

```
Ready
1:00    2:00    3:00
```

6.2 Mixing cycle

- **You have to be in the basic display to start a mixing cycle.**

```
Ready
1:00    2:00    3:00
```

- **Select the cycle with the mixing time required by pressing button I, II or III. The corresponding mixing times are indicated in the display above the buttons.**

- **The selected mixing time is indicated in the LCD display. The container (pot) is being clamped.**

```
Mixing t =      1.00
clamping
```

- **Clamping of the container (pot) is completed.**

```
Mixing t =      1.00
pot clamped       80
```

- **The mixing cycle begins. The time remaining to the end of the mixing cycle is indicated on the right in the display .**

```
Mixing t =      0.59
mixing
```

- **The mixing time has elapsed and the cycle has ended.**

```
Mixing t =      0.00
wait
```

- **The container is being unclamped.**

```
Mixing t =      0.00
unclamping
```

- **The door can be opened and the container removed. The VIBA Shaker is ready for the next mixing cycle.**

```
Ready
1:00    2:00    3:00
```

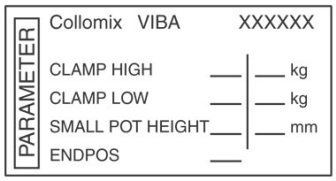
7. The service menu

Various machine parameters such as mixing time, speed and clamping pressure can be set in the service menu. These parameters were set by the manufacturer and there is normally no need to make any subsequent changes.

The service parameters set by the manufacturer are listed in a sticker beside the control pcb.

These parameters can be used as starting values for programming a new printed circuit-board if ever a replacement is necessary.

Changes in the service menu must be left strictly to authorized and suitably trained personnel. We can accept no warranty claims or liability for any damage due to changes to the parameters.



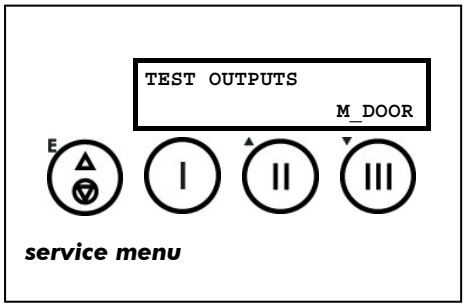
Settings made by the manufacturer

7.1 Activating the service menu

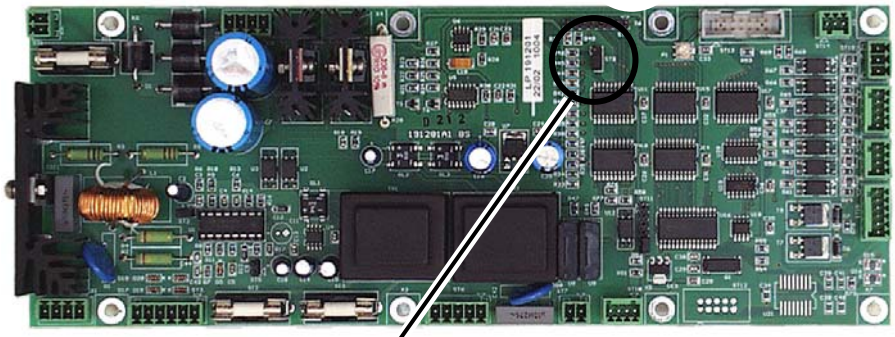
The service menu is activated by repositioning jumper ST8 on the control pcb.

Caution: This work must be left strictly to authorized and suitably trained personnel. Live parts of the pcb may be touched when the control panel cover is open. Before you leave the machine in this condition make sure that the machine is disconnected from the power supply and secured against unauthorized use!

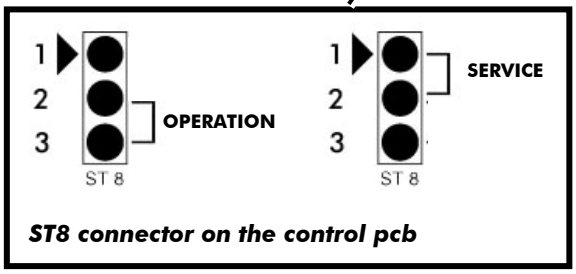
- Switch off the machine with the main switch
- Remove the cover from the control panel
- Move jumper ST8 on the control pcb to SERVICE
- Switch on the machine with the main switch
- The service menu is shown in the display



service menu

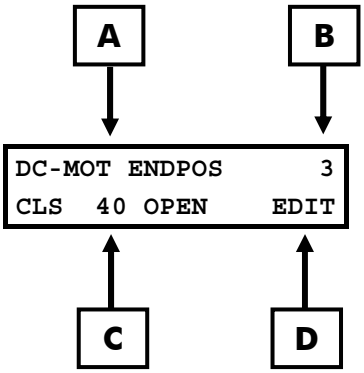


Control pcb



ST8 connector on the control pcb

7.2 Operator prompting



A - Menu point

The title of the currently displayed menu point is shown at the top left of the display.

B - Operating values

Feedback values for clamping pressure or electric current consumption. The relationship between the feedback value and the corresponding physical variable can be determined through the assignment tables in the menu description. (See 7.4 Setting the operating parameter.)

C - Parameters

Setting for clamping pressure or electric current consumption value. The relationship between the feedback value and the corresponding physical variable can be determined through the assignment tables in the menu description.

D - Assignment of functions to buttons

The indicated function is triggered by the button positioned underneath.

Press button "E" to call up the next menu point.

Button „E"

7.3 Service menu sequence

7.4.1 Door interlock function test

7.4.2 Edit mixing cycle 1

7.4.2 Edit mixing cycle 2

7.4.2 Edit mixing cycle 3
...

7.4.3 Low / high clamping pressure changeover point

*only VIBA 25

7.4.4 Open and close mixing unit by hand

7.4.5 Mixing unit end position

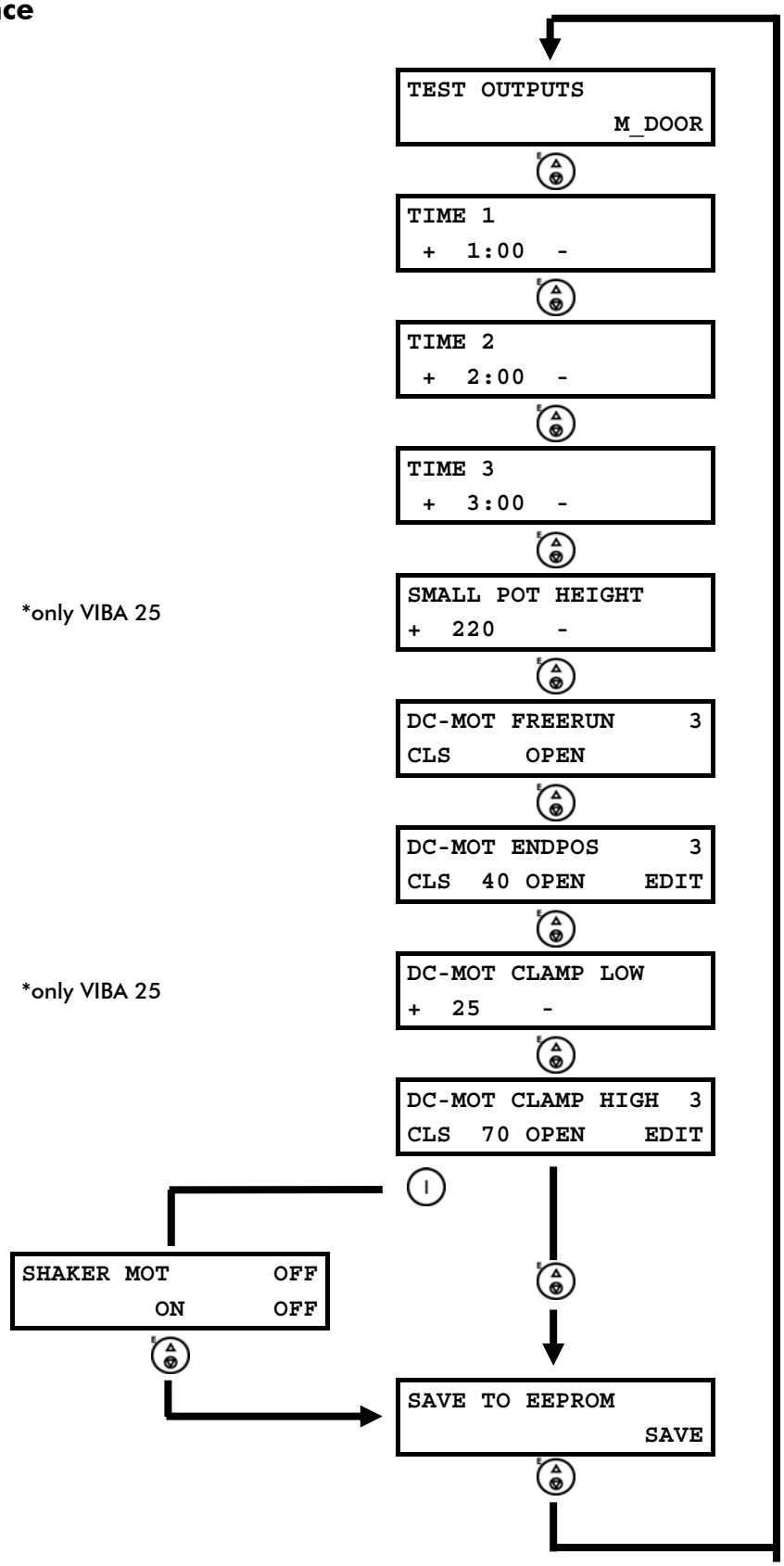
7.4.6 Clamping pressure for small containers

*only VIBA 25

7.4.7 Clamping pressure for large containers

7.4.8 Switch on the shaker motor

7.4.9 Save changes



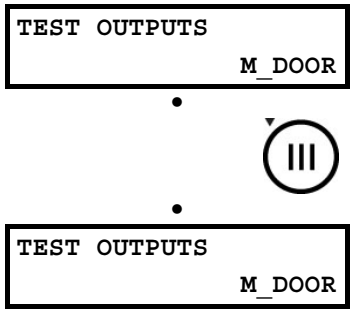
7.4 Setting the operating parameters

7.4.1 Switching output function test (TEST OUTPUTS)

- **The door interlock function can be tested in the TEST OUTPUTS menu:**

  Button III (M_DOOR) door interlock.

  The door is unlocked for as long as the button is pressed.



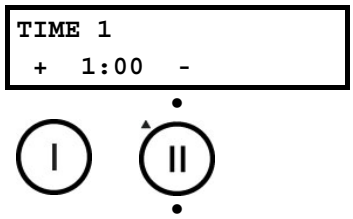
- **Press button "E" to call up the next menu point.**

7.4.2 Changing the mixing times (TIME 1 – 3)

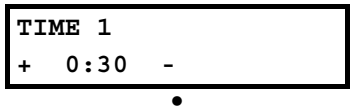
Buttons I, II and III can be assigned 3 different mixing times. The works settings can be changed in steps of 10s [m:ss] as required:

- **Set mixing time 1**

  Button I (+) Increase the mixing time
  Button II (-) Decrease the mixing time



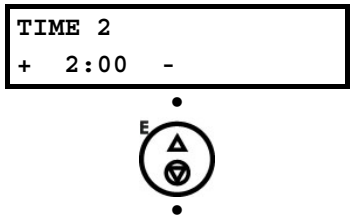
- **The set time is indicated in the display.**



- **Press button "E" to call up the next menu point.**

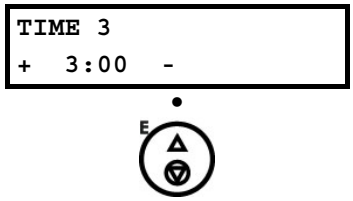
- **Set mixing time 2**

  See "Setting the mixing time 1"



- **Set mixing time 3**

  See "Setting the mixing time 1"



7.4.3 Low/high clamping pressure changeover point (SMALL POT HEIGHT) *only VIBA 25

The VIBA is able to clamp large and small containers with two different clamping pressures. The clamping pressure is automatically selected in accordance with the height of the clamping plate.

Small containers (pots) are securely held with relatively low clamping pressure. These containers usually have thin walls and may burst under too high clamping pressure. Small containers are clamped with the clamping pressure set in the menu point "DC-MOT CLAMP LOW" (see 7.4.6).

Large containers (pots) need a higher clamping pressure if they are to be held safely. These containers are made to be sturdier and can withstand higher clamping pressures. Large containers are clamped with the value set in the menu point "DC-MOT CLAMP HIGH" (see 7.4.7).

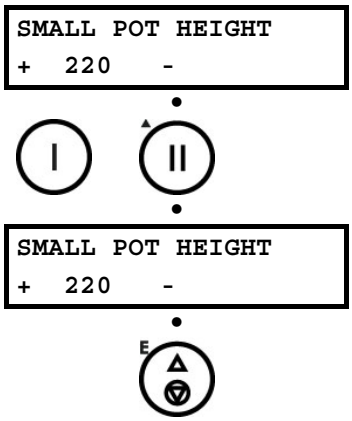
The changeover point between low and high clamping pressure is set with the value "SMALL POT HEIGHT". **The set value equals the opening of the mixing unit in millimeters** above which the machine changes over from low clamping pressure (CLAMP LOW) to high clamping pressure (CLAMP HIGH).

Set the CLAMP HEIGHT value so that the changeover point lies between a small and a large container.

- **Set the small/large pot changeover point**

  Button I (+): increase value
  Button II (-): decrease value

  The set value equals the opening of the mixing unit in mm.



- **Press button "E" to call up the next menu point.**

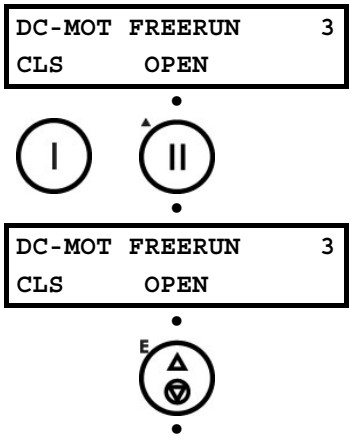
7.4.4 Opening and closing the mixing unit (DC-MOT FREERUN)

The clamp motor function is tested in the menu point **DC-MOT FREERUN.**

- **Open and close the mixing unit by hand.**

  Button I (CLS): close the mixing unit
  Button II (OPEN): open the mixing unit

  The mixing unit moves in the selected direction as long as the button is pressed.



- **Press button "E" to call up the next menu point.**

7.4.5 Setting the end stop of the mixing unit (DC-MOT ENDPOS)

The mixing unit is opened and closed by means of a DC motor whose electric current consumption is monitored.

When the end position is reached, the electric current consumed by the motor exceeds the value set for the electric current threshold and the clamp motor is switched off.

The parameter set by the manufacturer for the end stop was selected so that the mixing unit reliably adopts the end positions without being switched off beforehand.

Before you change the parameter "DC-MOT ENDPOS", check whether the threaded spindles are dirty or damaged. If necessary, clean and apply grease to the spindles as described in the maintenance instructions in the manual.

A higher value for "DC-MOT ENDPOS" means a higher level of electric current consumption and hence force of the clamp motor. The value should not be set too high, however, or the threaded spindles may jam.

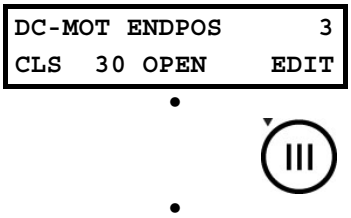
Please note that the electric current threshold of "**DC-MOT ENDPOS**" has **no impact on the clamping pressure**. The clamping pressure is set in the menu point "DC-MOT CLAMP HIGH" (see 7.4.6) and "DC-MOT CLAMP LOW" (see 7.4.7).

- **Set the electric current threshold for opening and closing the mixing unit**

  Button I (CLS): close the mixing unit
  Button II(OPEN): open the mixing unit

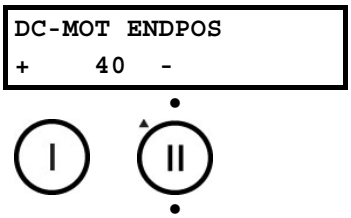
  The mixing unit opens or closes until the electric current threshold is reached.

  Button III (EDIT): edit parameter



- **Set the electric current threshold so that the mixing unit reliably adopts the upper and lower end position:**

  Button I (+): increase the value
  Button II(-): decrease the value



- **Press button "E" to return to the main menu**

- **Press button "E" to call up the next menu point.**

7.4.6 Setting the low clamping pressure (DC-MOT CLAMP LOW) *only VIBA 25

The clamping pressure, i.e. the force with which a container is held between the clamping plates, can be set with the parameters DC-MOT CLAMP LOW and DC-MOT CLAMP HIGH.

The value set with DC-MOT CLAMP LOW is used to clamp containers which are smaller than the value set under SMALL POT HEIGHT (see 7.4.3). Larger containers are clamped with the clamping pressure set under DC-MOT CLAMP HIGH.

The electric current consumption of the clamp motor is monitored during the clamping. If it rises above the set limit value, the motor will be switched off.

Too low a clamping pressure setting may result in the container working loose during the mixing cycle and "wandering" on the mixing table.

Too high a clamping pressure setting may cause the container to burst.

Setting the correct clamping pressure:

Load the biggest container and keep on increasing the clamping pressure until the container is securely held during mixing.
To check whether the container wanders during mixing, mark the circumference of the container with a felt pen prior to mixing.

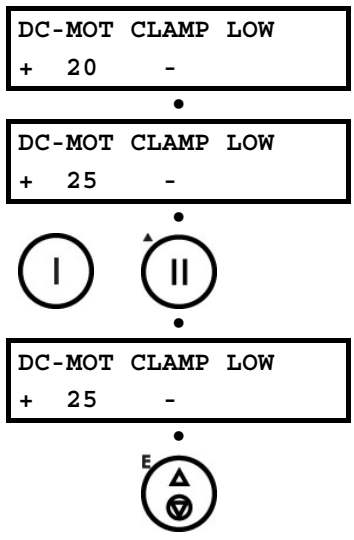
Proceed in the same way with a small container.

The works setting for low clamping pressure is 220 kg. To reduce stress on the container, set as low a clamping pressure as possible. Always use original material in an original container when setting the clamping pressure.

- **Change the low clamping pressure**

- **Set the clamping pressure by changing the parameter:**

  Button I (+): **increase the value**
  Button II (-): **decrease the value**



- **Press button "E" to call up the next menu point.**

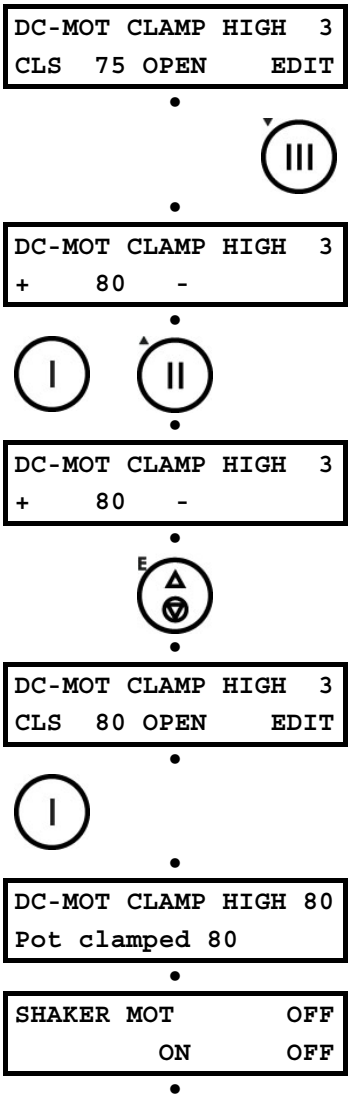
7.4.7 Setting the high clamping pressure (DC-MOT CLAMP HIGH)

The value set with DC-MOT CLAMP HIGH is used to clamp containers which are bigger than the value set under SMALL POT HEIGHT. **Works setting 390 kg.**

For details of how to set the correct clamping pressure see 7.4.6

- **Change the high clamping pressure**

  Button I (CLS): close the mixing unit
  Button II (OPEN): open the mixing unit
  Button III (EDIT): edit the parameter



- **Edit the parameter and use a pressure cell to check the clamping pressure**

  Button I (+): increase the value
  Button II (-): decrease the value

-

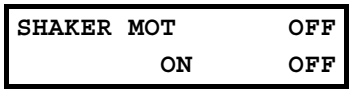
- **Press button "E" to return to the main menu**

- **The mixing unit is closed and the loaded container (pot) is clamped.**

7.4.8 Switching on the shaker motor (SHAKER MOT)

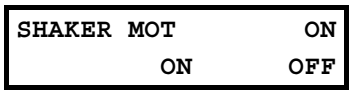
If the container moves during mixing in the mixing unit you will need to increase the clamping pressure. If the container becomes deformed you will need to reduce the clamping pressure (see 7.4.6 and 7.4.7)

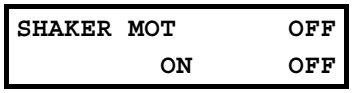
- **The motor can be switched on once a container is clamped in place.**



- **Press button "II" - ON – to start the motor**

- **The motor runs until you press button "III" – OFF.**





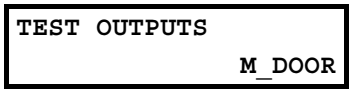
- **Press button "E" to call up the next menu point.**

7.4.9 Saving changes (SAVE TO EPROM)

New values are not adopted until they are saved with button III (SAVE).
If you do not want to adopt the changes, switch off the machine with the main switch without actuating the save function. The "old" values (previous settings) will then be retained.

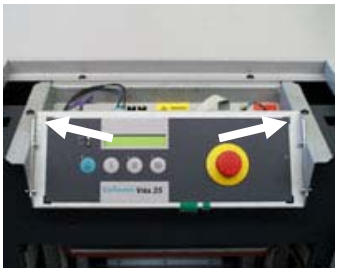
- **Save the entered values by pressing button III (SAVE).**

- **The first menu point is displayed. The service menu can be closed.**



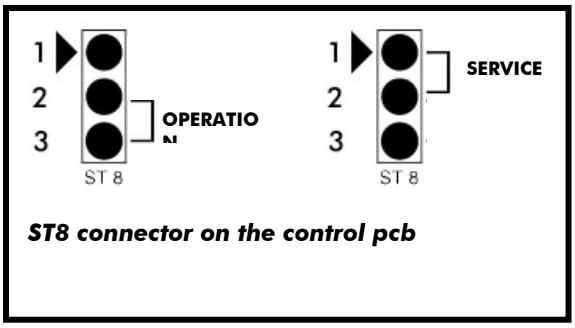
7.4.10 Deactivating the service menu

Control panel flipped down



Control panel closed

- Switch off the machine with the main switch
- Move jumper ST8 on the control pcb to OPERATION



ST8 connector on the control pcb

- Flip up the control panel and screw in place
- Fit the control panel cover (POS 10.119)
- Switch on the machine with the main switch
- The self-test routine follows after switch-on

- **Display of the software version**

```
Collomix VIBA init..
Version X.XX
```

- **Display of:**

  d = DC-MOT ENDPOS
  c = CLAMP HIGH / LOW : SMALL POT HEIGHT

```
d: 40
c: 80  / 25   : 220
```

- **Display of mixing cycles performed so far**

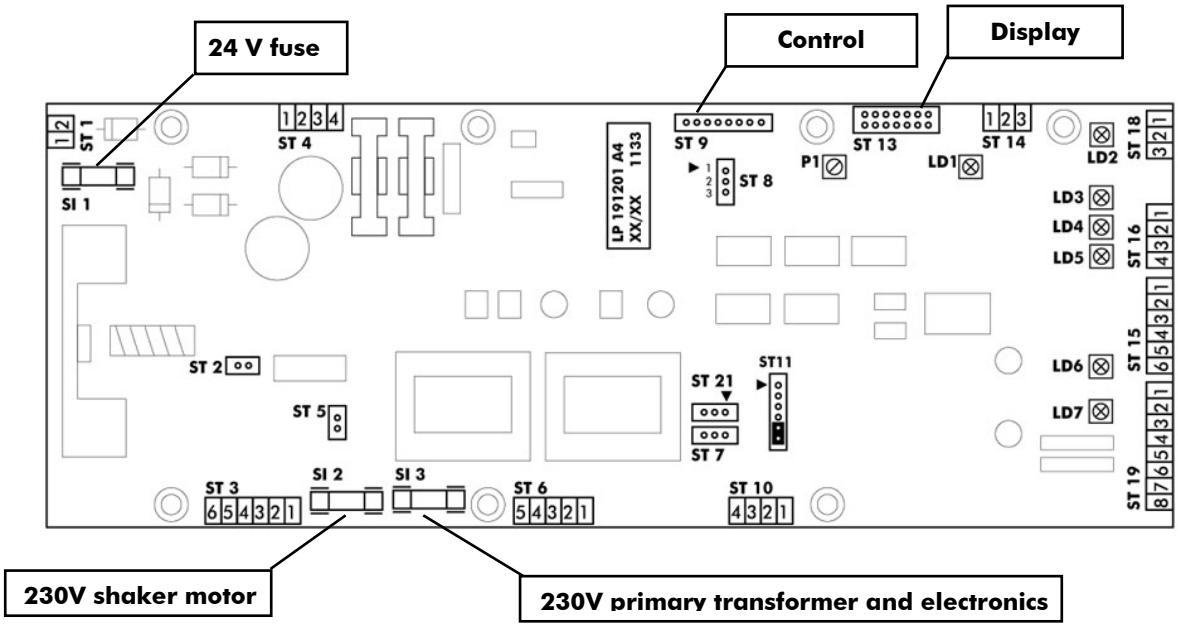
```
Collomix VIBA init..
000011   cycles
```

- **Basic display when no faults are active. The mixing cycle can be started.**

```
Ready
1:00    2:00    3:00
```

The changes were correctly saved and adopted when the edited parameters are displayed during initialization.

8. Layout of the control system



Fuses:

No.	Value	Function
SI1	6.3A T	24 V fuse
SI2	6.3A T	230V shaker motor
SI3	4.0A T	230V primary transformer / electronics

Connector assignment:

ST 1	Lead	Function
1	violet	24V AC from transformer
2	violet	

ST 3	Lead	Function
1	--	shaker motor
2	--	
3	blue	
4	--	
5	black	

ST 4	Lead	Function
1	1	clamp motor
2	--	
3	--	
4	2	

ST 6	Lead	Function
1	brown	230V AC to the transformer
2	brown	
3	black	L1
4	blue	N mains
5	green/yellow	PE

ST 10	Leitung	Funktion
1	weiß	emergency stop
2	--	
3	--	
4	weiß	

ST 14	Lead	Function
1	brown	clamping plate proximity switch
2	black	
3	blue	

ST 15	Lead	Function
1	4	door magnet
2	5	
3	1	+ 24 V
4	2	door contact signal
5	--	
6	3	door locked signal

ST 18	Lead	Function
1	3	rotation sensor
2	4	
3	5	

ST7, ST16 not assigned

Jumper assignment:

ST2	closed for BIAX/ROTA
ST5	closed for VIBA
ST8	1-2 Service / 2-3 Operation

LED signals:

LED	Meaning
LD 1	--
LD 2	rotary pulse encoder actuated
LD 3	--
LD 4	door closed
LD 5	door locked
LD 6	--
LD 7	door magnet open

8.1 Rotary pulse encoder *only VIBA 25

The proximity switch (11.370) is fastened by means of a bracket (11.322) to the cross-member (11.314) (see **Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.**).

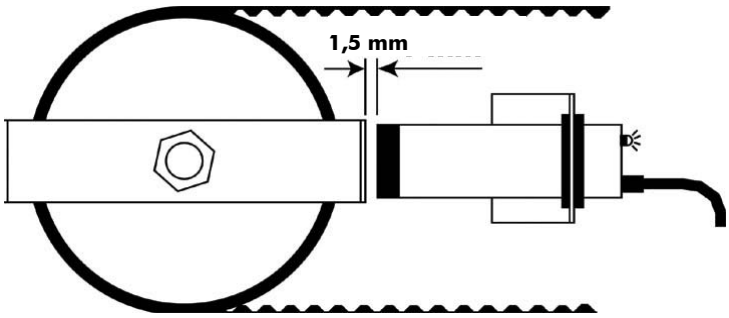
The opposite rotary pulse encoder (11.359) transmits two pulses per rotation of the spindle to the control system. From the number of pulses the control system calculates the position of the upper clamping plate in order to select high or low pressure.

The proximity switch for the rotary pulse encoder is connected to jumper ST18 on the pcb.

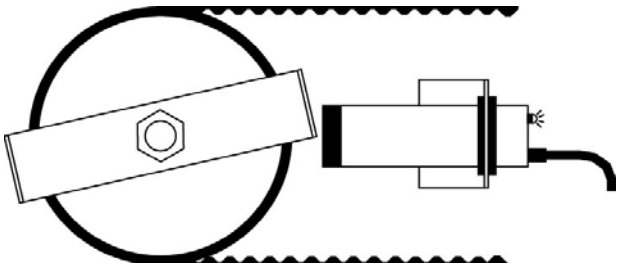
Rotary pulse encoder

Setting the rotary pulse encoder

- Undo the two fastening screws holding the proximity switch.
- Turn the rotary pulse encoder until one of its two contact faces is parallel to the end face of the proximity switch.
- Set the proximity switch a distance of approx. 1.5 mm from the rotary pulse encoder.
- Fix the proximity switch in place with the two fastening screws.
- Turn the rotary pulse encoder and check that it moves smoothly. The rotary pulse encoder must not rub against the proximity switch.
- If the distance between the proximity switch and the rotary pulse encoder is too big, four pulses instead of two will be recorded. In this case, shorten the distance until only two pulses per rotation are recorded.



Setting the rotary pulse encoder



Testing that the rotary pulse encoder runs smoothly

INFORMATION

If a defect is discovered on the rotary pulse encoder during initialization, the message "**only high clamp**" will appear in the display when the initialization routine is completed.

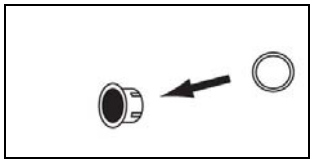
It is then only possible to clamp containers with high clamping pressure.

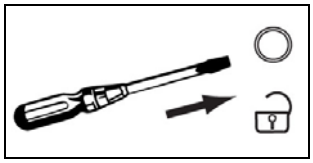
```
only high clamp
> call service
```

LCD display: Rotary pulse encoder error

8.2 Door switch

The VIBA Shaker is equipped with a door interlock system (10.289) which locks the door as soon as the mixing cycle is started.

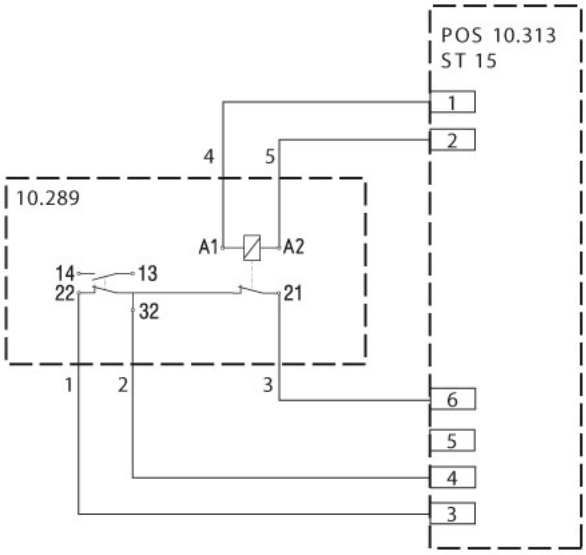




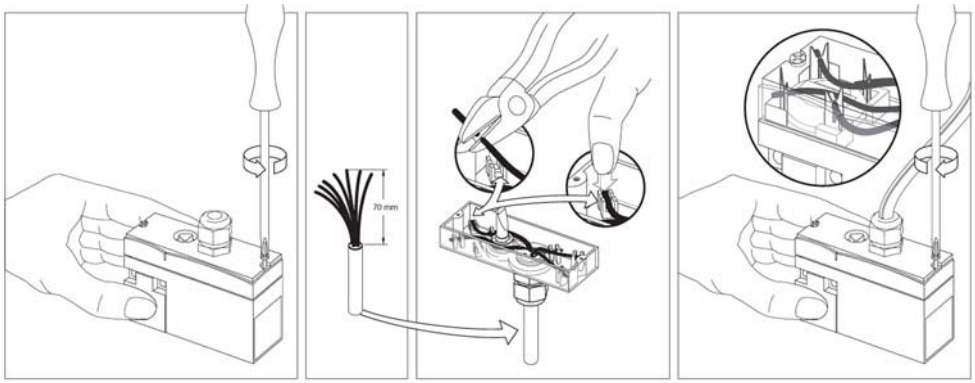
<u>Releasing the safety door interlock</u>

- Remove the plastic plug cap from the left side of the machine.
- Use a screwdriver to push the release button of the door interlock
- Open the door.

Do not start the machine if any safety devices are defective or modified!



Door switch terminal digram



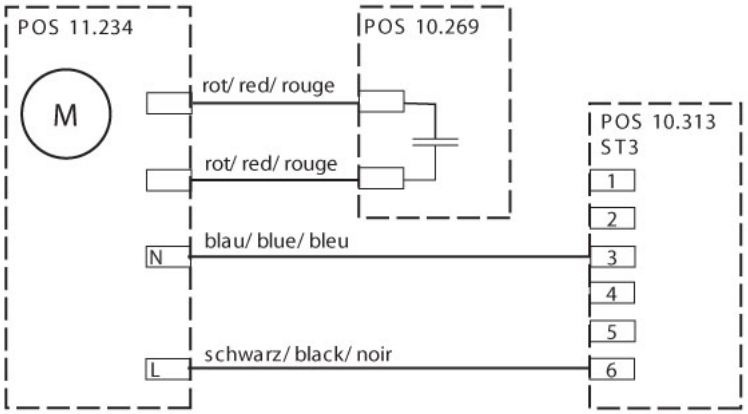
Connecting the leads to insulation-piercing terminals

8.3 Shaker motor

The shaker motor (11.234) is mounted underneath the oscillating frame.

The motor used is an asynchronous motor with a capacitor (10.269). It is connected to ST3 on the pcb (10.313) and operated at constant voltage/speed.

The capacitor is fastened to the plate holding the mains interference filter underneath the base housing.



Shaker motor terminal diagram

9. Messages and troubleshooting

Faults often arise in connection with dirt accumulation and poor maintenance and lubrication. Please read the notes on lubrication and the maintenance instructions to be found in this manual.

Caution!
Printed circuit-boards are live components. Only authorized personnel are allowed to work on the machine when it is opened.

Before you replace any components or leave the machine unattended when open, be sure to disconnect the machine from the power supply by pulling out the power plug!

9.1 Cancelling messages

The VIBA Shaker features intelligent error diagnostics. Faults are indicated in plain text and suggestions are made as to how to remedy the error in question.

Error messages can be cancelled as explained in the following example.

- **Display of error message in plain text**

  > Proposed remedial action

```
E 020 Emergency stop
> unlock switch
```

•

Reset the Emergency Stop button — **Remedy the error**

•

```
E 020 Emergency stop
> press "E" to quit
```

- **Cancel the error message by pressing button E**

- **The shaker is in base position and the door can be opened.**

```
Ready
1:00    2:00    3:00
```

9.2 Initialization

Initialization is performed each time the VIBA Shaker is switched on. The following error messages may appear as a result. Please note that all maintenance and servicing jobs must be left strictly to authorized and suitably trained personnel.

Caution: Before you switch on the machine make sure that the door is closed and not unlocked and that the EMERGENCY STOP button is released!

LEDs	Display	Items to remedy / actions to take
230 V ○ 24 V ○	**empty**	• Check the power supply • Check the 230 V fuse • Check the connector / cable of the control panel
230 V ● 24 V ●	**empty**	• Check the connector / cable of the display pcb • The display is defective • The control pcb is defective
230 V ○ 24 V ○	Ready 1:00 2:20 3:00	• Connector for control buttons in wrong position (buttons do not work)
230 V ● 24 V ○	Door open > Close door	• Check the 24 V fuse • Check the connector / cable of the transformer • The transformer is defective
230 V ● 24 V ●	Door switch fault > Call Service	• Check the door interlock system • Check the connector / cable of the door interlock system
230 V ● 24 V ●	Clamp motor fault > Call Service	• Check the clamp motor • Check the connector / cable of the clamp motor • The control pcb is defective
230 V ● 24 V ●	Clamp belt fault > Call Service	• Check the clamp belt • The threaded spindles have jammed • Check the clamp motor / cable – connector
230 V ● 24 V ●	Only high clamp > Call Service	• Check the rotary encoder • Check the connector / cable of the rotary encoder

Caution

All maintenance and servicing jobs must be left strictly to authorized and suitably trained personnel. This applies in particular to work performed with the housing open.

9.3 Error messages

The following table provides an overview of possible errors and their remedies. Please note that all maintenance and servicing jobs must be left strictly to authorized and suitably trained personnel. This applies in particular to those jobs printed on a **gray** background which have to be performed with the housing open.

Fault	Machine status	Remedial actions
E000 stand-by mode	• If 60 minutes pass without the user actuating any function, the machine will go into stand-by mode	• Press button E to cancel stand-by mode
E010 door open	• The door is open	• Close the door
	• The door is closed and the LED for 24V is off	• Check the fuse for 24 V • Check the 24 V circuit • Check the transformer
	• The door is closed and the LED for 24V is on	• Check the door interlock system • Check the lead/connector to the door interlock
E020 emergency stop	• The EMERGENCY STOP button has been pressed	• Release the EMERGENCY STOP button
	• The EMERGENCY STOP button has not been pressed	• Check the switching element of the EMERGENCY STOP button • Check the lead/connector to the EMERGENCY STOP button
E025 door not locked	• The door has been unlocked by hand	• Lock the door by hand
	• The door has not been unlocked by hand	• Check the door interlock system • Check the lead/connector to the door interlock
E040 max. open	• The mixing unit is fully open	• Note that the maximum container height is 400mm
	• The mixing unit is not fully open	• Check whether the threaded spindles move smoothly, clean and lubricate with grease as necessary
E050 defective pot	• The container is defective	• The container is too unstable
		• Check the clamping pressure
	• The container is not defective	• Check whether the clamping plate moves smoothly • Check the clamping plate proximity switch • Check the lead/connector to the clamping plate proximity switch
E130 door switch fault	The machine does not start	• Check the door interlock system • Check the lead/connector to the door interlock
E140 only high clamp*	The machine clamps with only high clamping pressure	• Check the rotation sensor • Check the distance from the sensor to the rotary pulse encoder • Check the lead/connector to the clamp motor
E150 clamp motor fault	The machine does not clamp	• Check the clamp motor • Check the lead/connector to the clamp motor
E150 clamp belt fault	The machine does not clamp	• Check the clamp belt

***only VIBA 25**

10. Maintenance and cleaning

Regular inspections, cleaning and maintenance are necessary to ensure that the machine remains in good working condition at all times.

10.1 Inspections

Check all safety-relevant parts of the machine before beginning with your work. Arrange for authorized personnel to replace defective or damaged parts before you work again with the machine.

10.2 Cleaning

If any material escapes from the mixing container when it is inside the machine, remove it immediately with a rag or a spatula, taking care not to damage any connecting leads or sensors.

Dirty threaded spindles can be cleaned with a rag or a wire brush. When you have finished cleaning the threaded spindles, lubricate them again with **Molykote BR 2 Plus**.

Important! Never clean the machine with a **high-pressure cleaner** or the like. This could wash the lubricating grease out of the ball bearings, leaving them to run dry and resulting in serious damage. Ball bearings which have run dry **must be replaced immediately!**

10.3 Maintenance intervals

Machine maintenance and repair work must be left strictly to authorized personnel. The extent of the maintenance is described in the servicing plan drawn up for this machine.

How often you repeat the maintenance depends on how intensively the machine is operated and its average load. The following table provides a guide to the maintenance intervals.

Average load	Number of cycles
12 kg	10000
20 kg	5000
30 kg	1000

The number of cycles completed so far is indicated in the display after the machine is switched on. This provides a guide to when maintenance is next due. When the number of cycles quoted in the table is reached it is time to arrange for maintenance.

```
Collomix Shaker init
000011   cycles
```

LCD display:
Number of cycles

10.4 Maintenance checklist

Maintenance checklist for the VIBA		
Machine number	***Counter total:***	***Date of maintenance:***
Location of the machine		
Maintenance technician		

Cleaning the machine

Clean the inside and the outside of the machine	
Remove paint residues from the spindle with a steel brush	

Inspections

Check the drive belt for wear and tension	
Check the flange and pedestal bearings of the crankshaft for wear	
Check the shock absorbers	
Check the upper and lower spindle bearings	
Check the toothed belt of the clamp motor for ear and tension	

Lubricating the machine

Lubricate the flange and pedestal bearings of the crankshaft with a grease gun (BEACON EP2)	
Lubricate the threaded spindles (MOLIKOTE BR2+)	

Miscellaneous

Replace the fuses on the pcb: S1, S2 = 6.3 AT 250V; S3 = 4.0 AT 250V (use only sand-filled, flow fuses)	
Add more spare fuses as required	
Carry out a function test with a large and a small container	

Comments

Date:	***Signtaure of the maintenance technician:***

10.5 Spare parts list

Parts which differ between the VIBA 15, 18, 25 models are marked in the exploded drawing with a superscript index after the item number. Item numbers without a superscript index are suitable for all ROTA/BIAX models.

POS	Art No.	Designation
10.200	64.100	housing VIBA 25
10.201	64.015	machine feet VIBA 25
10.202	50.806	934 DIN hex nut M 10 galv.
10.204	50.069	Sheet-metal nut 4.8
10.205	64.020	cable clamp 625 S
10.206	61.114	cable clamp 375 S
10.207	64.063	wheel polypropylene
10.208	51.092	7991 DIN hexagon socket scr M 6x40 galv.
10.209	50.012	rosette nickeled No. 188
10.210	64.101	cover doorswitch
10.211	64.101	cover doorswitch
10.212	51.088	7991 DIN hexagon socket scr M 4x18 galv. 8.
10.213	51.088	7991 DIN hexagon socket scr M 4x18 galv. 8.
10.214	50.018	Blind rivet M4x6x11
10.215	50.835	934 DIN hex nut M 4 galv.
10.216	50.835	934 DIN hex nut M 4 galv.
10.217	51.002	7985 DIN oval head screw M 4x10 galv.
10.218	50.017	127 DIN split washer B 4 galv.
10.221	74.005	wiring harness Viba 25
10.224	74.035	wiring harness Viba Vario
10.250	64.062	plug FK MCP 1,5 6polig Raster 3.5
10.251	64.061	plug FK MCP 1,5 5polig Raster 3.5
10.252	64.058	plug FK MCP 1,5 2polig Raster 3.5
10.253	64.121	motherboard Viba/Rota/Biax
10.256	62.564	Transformer
10.257	64.072	mains suppression filter
10.258	64.088	cable clamp 750 S
10.258	64.088	cable clamp 750 S
10.259	62.164	rectifier KBPC2506 F
10.260	64.122	motherboard Viba/Rota/Biax
10.261	62.236	Varistor Metalloxyd VDRs
10.262	64.102	mounting for suppression filter
10.264	51.002	7985 DIN oval head screw M 4x10 galv.
10.265	51.003	9021 DIN washer D 4,3 zn
10.266	64.081	mains suppression filter VIBA 25
10.267	50.835	934 DIN hex nut M 4 galv.
10.268	51.002	7985 DIN oval head screw M 4x10 galv.
10.269	64.080	capacitor VIBA 25
10.270	50.852	912 DIN sockedthead screw M 4x12 galv.
10.271	50.017	127 DIN split washer B 4 galv.
10.272	50.023	125 DIN washer B 4.3 zn
10.273	51.099	7985 DIN oval head screw M 4x20 galv.
10.274	50.820	934 DIN hex nut M 3 galv.
10.275	50.009	125 DIN washer B 3.2 zn
10.276	50.010	127 DIN split washer B 3 galv.

POS	Art No.	Designation
10.277	74.006	mains cable V25 R20/30 B22/33
10.281	61.104	strain relief device RSGU 1100 8/9
10.282	50.022	91 DIN cheese head screw M4x10 zn
10.283	51.003	9021 DIN washer D 4,3 zn
10.284	50.835	934 DIN hex nut M 4 galv.
10.285	50.943	933 DIN hex screw M4x10 galv.
10.286	50.835	934 DIN hex nut M 4 galv.
10.287	50.017	127 DIN split washer B 4 galv.
10.288	51.003	9021 DIN washer D 4,3 zn
10.289	72.138	door locking mechanism compl. R20/30 B22/33
10.290	64.013	door locking mechanism V25 R20/30 B22/33
10.293	51.091	7991 DIN hexagon socket scr M 4x35
10.294	50.428	557 DIN nut M4 galv.
10.295	62.562	Main switch
10.296	74.037	shock absorber Viba 25
10.297	74.038	case for shock absorber Viba 25
10.301	64.124	piston rod for shock absorber
10.302	51.077	6340 DIN washer 10,5
10.303	50.094	fender screw d10,5 D35
10.304	64.036	Rubber ronde with centring Viba 25
10.305	64.037	Rubber ronde without centring Viba 25
10.306	50.806	934 DIN hex nut M 10 galv.
10.307	50.801	936 DIN hex nut M 10 galv.
10.308	50.864	933 DIN hex screw M10x40 galv. 8.8.
10.309	50.001	127 DIN split washer B 10 galv.
10.310	64.125	compression spring D 328
10.312	64.103	carrier for motherboard VIBA
10.313	74.084	motherboard VIBA 25
10.314	62.058	distance sleeves
10.315	50.009	125 DIN washer B 3.2 zn
10.316	50.010	127 DIN split washer B 3 galv.
10.317	51.064	7985 DIN oval head screw M 4x6 galv.
10.318	64.084	connection M16x1,5
10.319	64.085	nut M16x1,5
10.320	61.114	cable clamp 375 S
10.321	50.069	Sheet-metal nut 4.8
10.322	61.261	Header
10.323	50.068	Self-tapping screw 4.8 x 13 zn
10.324	74.043	control unit VIBA 25
10.325	74.018	control unit VIBA 25
10.326	64.104	control unit 15/15i/18
10.327	64.070	carrier for control unit VIBA 25
10.328	64.053	LC-Display Viba 25
10.329	50.087	125 DIN disc Ø 3,2 polyamid
10.330	50.820	934 DIN hex nut M 3 galv.

POS	Art No.	Designation
10.331	64.039	key pad Viba/Rota/Biax
10.332	62.073	Emergency-Stop pushbutton RXV
10.333	72.198	cable for emergency switch
10.334	62.074	switching element BZO
10.338	64.055	plug FK MC 0,5 4polig Raster 2.5
10.339	62.058	distance sleeves
10.340	50.023	125 DIN washer B 4.3 zn
10.341	50.825	934 DIN hex nut M 4 galv.
10.344	64.059	plug FK MCP 1,5 3polig Raster 3.5
10.345	64.060	plug FK MCP 1,5 4polig Raster 3.5
10.346	50.017	127 DIN split washer B 4 galv.
10.347	51.002	7985 DIN oval head screw M 4x10 galv.
10.349	64.126	door VIBA 25/25V
10.350	74.026	plexiglass window 465x345x4 V25 R20/30
10.352	50.835	934 DIN hex nut M 4 galv.
10.353	51.003	9021 DIN washer D 4,3 zn
10.354	64.086	actuator bent Viba 25
10.355	50.943	933 DIN hex screw M4x10 galv.
10.356	50.023	125 DIN washer B 4.3 zn
10.357	50.017	127 DIN split washer B 4 galv.
10.358	64.016	hinge black VIBA 25
10.359	50.091	self-locking nut M6 galv. F90
10.360	64.127	magnet
10.363	74.047	plexiglass window 465x345x4 V25 R20/30
10.367	64.175	Door reinforcement, Hinge 15i/25i/25iV
10.367	64.105	Door reinforcement, Hinge Viba15/18
10.368	64.176	Door reinforcement, handle Viba15i/25i/25iV
10.368	64.106	Door reinforcement, handle Viba15/18
10.369	64.130	hinge
10.370	51.076	7991 DIN countersunk socket head hex scr M5x16
10.371	50.943	933 DIN hex screw M4x10 galv.
10.374	50.017	127 DIN split washer B 4 galv.
10.375	51.003	9021 DIN washer D 4,3 zn
10.376	64.086	actuator bent Viba 25
10.377	50.942	933 DIN hex screw M 4x14 galv.
10.378	50.877	933 DIN hex screw M4x12 galv.
10.379	50.023	125 DIN washer B 4.3 zn
10.380	74.049	guiding for sliding door compl. V25D/25Dv
10.381	64.131	carrier guide rail Viba 25D/25Dv
10.382	62.192	cap for guiding sliding door
10.382	62.192	cap for guiding sliding door
10.383	64.132	carrier guide Viba right 25D/25Dv
10.384	64.133	carrier guide Viba left 25D/25Dv
10.385	62.535	toothed rack PA Type
10.386	51.035	1481 DIN rollpin 3x16
10.387	64.134	Rack rail Viba 25D/25Dv
10.388	51.026	7991 DIN countersunk socket head hex scr M5x12
10.389	62.534	spur gear Z 26 compl.
10.390	50.935	931 DIN hex screw M 6x40 8.9 galv.
10.391	50.888	934 DIN hex nut M 6 galv.
10.392	51.019	9021 DIN washer B 6.4 zn
10.393	64.086	actuator bent Viba 25

POS	Art No.	Designation
10.394	50.943	933 DIN hex screw M4x10 galv.
10.395	50.023	125 DIN washer B 4.3 zn
10.396	50.017	127 DIN split washer B 4 galv.
10.397	50.045	7985 DIN oval head screw M 4x14 galv.
10.398	50.084	125 DIN disc Ø 5,3 polyamid
10.399	50.825	934 DIN hex nut M 4 galv.
10.400	51.065	7985 DIN oval head screw M 5x14 4.8 galv
10.401	50.019	127 DIN split washer B 5 galv.
10.402	50.045	7985 DIN oval head screw M 4x14 galv.
10.403	74.050	attachment for guide rail compl. B22/33
10.404	64.136	mounting for main motor R20/30 B22/33
10.405	74.051	guide rail adapted B22/33
10.407	74.052	sliding door right compl. V25D/25Dv
10.408	64.137	mounting for main motor R20/30 B22/33
10.409	74.054	plexiglass window 445x200x4 V25D/25Dv
10.411	50.835	934 DIN hex nut M 4 galv.
10.412	51.003	9021 DIN washer D 4,3 zn
10.413	74.053	sliding door left compl. V25D/25Dv
10.414	64.139	sliding door right V25D/25Dv
10.415	74.054	plexiglass window 445x200x4 V25D/25Dv
10.417	50.835	934 DIN hex nut M 4 galv.
10.418	51.003	9021 DIN washer D 4,3 zn
10.419	50.096	binding head screw M4x10
10.420	51.076	7991 DIN countersunk socket head hex scr M5x16
10.421	50.019	127 DIN split washer B 5 galv.
10.422	50.045	7985 DIN oval head screw M 4x14 galv.
10.423	51.082	7984 DIN socket head screw M6x8 galv.
10.424	50.026	127 DIN split washer B 6 galv.
10.425	64.077	cap
10.426	64.077	cap
10.427	74.079	hood compl. Viba 15/18
10.428	74.080	hood compl. Viba 15i/25i/25iv
10.429	74.020	hood compl. Viba 25
10.430	64.107	housing VIBA 25 RAL 7016
10.431	64.067	hood Viba 25
10.432	50.069	Sheet-metal nut 4.8
10.433	50.069	Sheet-metal nut 4.8
10.434	64.022	grip recess Viba 25
10.435	64.021	sound proofing panel Viba 25
10.436	64.021	sound proofing panel Viba 25
10.437	64.021	sound proofing panel Viba 25
10.438	51.002	7985 DIN oval head screw M 4x10 galv.
10.439	50.068	Self-tapping screw 4.8 x 13 zn
10.440	50.068	Self-tapping screw 4.8 x 13 zn
10.441	64.141	Flank 15i/25i
10.442	64.142	cover top V2A
10.443	50.069	Sheet-metal nut 4.8
10.444	50.068	Self-tapping screw 4.8 x 13 zn
10.445	64.108	cover for control unit Viba 15
10.446	64.143	cover for control unit Viba 18
10.447	64.144	cover for control unit RAL 7004
10.448	64.109	cover for control unit Viba 15i,25i,25iv

POS	Art No.	Designation
10.449	50.835	934 DIN hex nut M 4 galv.
10.450	50.023	125 DIN washer B 4.3 zn
10.451	64.145	cover for sliding door V25D/25DV
10.452	50.858	966 DIN countersunk socket head hex scre
10.453	50.017	127 DIN split washer B 4 galv.
10.454	50.825	934 DIN hex nut M 4 galv.
10.455	50.068	Self-tapping screw 4.8 x 13 zn
10.456	50.068	Self-tapping screw 4.8 x 13 zn
10.457	50.068	Self-tapping screw 4.8 x 13 zn
10.458	64.110	Loading shelf Viba 15/18
10.459	64.146	Loading shelf V25/25v
10.460	64.111	Loading shelf Viba 15 i/ 25 i/ 25 i v
10.461	64.147	Loading shelf V25D/25Dv
10.467	64.003	door handle
10.468	50.945	933 DIN hex screw M4x16 galv.
10.470	51.095	7985 DIN oval head screw M 4x6 galv.
10.471	50.946	933 DIN hex screw M4x12 galv.
10.472	50.017	127 DIN split washer B 4 galv.
10.473	51.003	9021 DIN washer D 4,3 zn
10.474	64.087	Triangular socket wrench M5
10.475	64.148	lashing strap
10.476	74.033	crankshaft spare part for VIBA 25
10.477	74.058	crankshaft spare part for VIBA 25
10.478	64.135	sealing
10.479	74.081	crankshaft spare part for VIBA 25
10.480	51.013	9021DIN washer B5,3 zn
10.481	64.020	cable clamp 625 S
10.482	62.100	Time-lag fuse 6.3 amp
10.483	50.017	127 DIN split washer B 4 galv.
10.484	74.082	cable clamping motor
10.485	64.054	plug FK MC 0,5 3polig Raster 2.5
10.487	74.086	motherboard VIBA 25 VARIO
10.488	74.085	motherboard VIBA 15
11.200	74.039	oscillation frame + mixing frame compl.
11.201	74.040	oscillation frame + mixing frame compl.
11.202	74.041	oscillation frame + mixing frame compl.
11.203	74.042	oscillation frame + mixing frame compl.
11.204	64.112	oscillation frame Viba 15/18/25/25v
11.208	64.010	crankshaft VIBA 25
11.209	51.085	6885 DIN feather key form A 6x6x30
11.210	51.086	6885 DIN feather key form A 8x7x20
11.211	51.087	6885 DIN feather key form A 10x8x30
11.212	74.000	counter balance Viba 25
11.215	50.841	914 DIN threaded pin M 8x16 galv.
11.216	64.009	crankshaft arm right VIBA 25
11.217	64.149	crankshaft arm right VIBA 25
11.218	50.841	914 DIN threaded pin M 8x16 galv.
11.219	64.008	crankshaft arm left VIBA 25
11.220	64.150	crankshaft arm right VIBA 25
11.221	50.841	914 DIN threaded pin M 8x16 galv.
11.222	64.007	crankshaft pin VIBA 25
11.223	69.020	pedestal bearing RASEY 30

POS	Art No.	Designation
11.224	64.038	zerk fitting H1 R 1/8"
11.225	64.031	clamping chuck Viba 25
11.226	64.096	Poly-V-belt pulley Viba 25
11.227	64.151	Flat belt pulley dia. 295
11.228	50.853	DIN 934 Nut M12
11.229	50.843	931DIN hex screw M12x40 galv.
11.230	50.033	127 DIN split washer B 12 galv.
11.231	50.007	125 DIN washer A13 galv.
11.232	64.095	Poly-V-belt pulley Viba 25
11.233	64.152	Poly-V-belt pulley Viba 25
11.234	64.089	main motor Viba 25 230 V 0,9 kW
11.235	62.560	main motor Biax 20-40
11.236	50.088	self-locking screw M8x16 galv. F90
11.237	74.030	clamping angle for motor Viba 25 galv.
11.241	50.896	915 DIN threaded pin M 8x25
11.242	50.888	934 DIN hex nut M 6 galv.
11.243	50.844	933 DIN hex screw M 8x25 8.8 galv.
11.244	50.006	127 DIN split washer B 8 galv.
11.245	64.041	ventilator cowl VIBA 25
11.246	50.067	self-locking screw M6x12 8.8
11.247	64.153	mounting for main motor R20/30 B22/33
11.248	50.088	self-locking screw M8x16 galv. F90
11.249	50.821	912 DIN socket head screw M 8x45 galv.
11.250	50.006	127 DIN split washer B 8 galv.
11.251	50.028	disc 8,4x30 zn
11.252	64.154	lateral mounting for main motor Viba 25v
11.253	50.844	933 DIN hex screw M 8x25 8.8 galv.
11.254	50.006	127 DIN split washer B 8 galv.
11.255	50.027	125 DIN washer B 8.4 zn
11.256	64.155	sliding bearing
11.257	64.156	distance sleeves for slide
11.258	64.157	clamping angle Viba 25v
11.259	50.844	933 DIN hex screw M 8x25 8.8 galv.
11.260	50.006	127 DIN split washer B 8 galv.
11.261	50.027	125 DIN washer B 8.4 zn
11.262	50.946	933 DIN hex screw M4x12 galv.
11.263	50.005	125 DIN washer B6,4 zn
11.264	50.888	934 DIN hex nut M 6 galv.
11.265	74.061	mixing frame_020
11.266	74.062	mixing frame_020
11.267	74.063	mixing frame_020
11.268	74.064	mixing table compl. V15/18
11.269	64.113	mixing table Viba 15/18
11.270	64.158	Plate PU 90 Viba 15/18
11.271	64.159	mixing table VIBA 25
11.272	64.160	mixing table VIBA 25
11.273	50.093	self-locking screw M5x12 galv. F90
11.274	50.850	912 DIN socket head screw M 8x50 galv.
11.275	50.092	self-locking nut M8 galv. F90
11.276	69.011	deep groove ball bearing 6002 ZZ CBF
11.277	64.004	threaded spindle right VIBA 25
11.278	64.005	threaded spindle left VIBA 25

POS	Art No.	Designation
11.279	69.018	deep groove ball thrust bearing 51202
11.280	51.080	6340 DIN washer 8,4
11.281	50.088	self-locking screw M8x16 galv. F90
11.282	74.065	clamping unit zop VIBA 25
11.283	74.066	clamping unit zop VIBA 25
11.286	74.069	clamping plate VIBA 25
11.287	74.070	clamping plate VIBA 25
11.290	64.023	Linatex disk 350x360x10 mm Viba 25
11.291	64.114	carrier for clamping plate Viba 15/18
11.292	64.162	carrier for clamping plate Viba 25/25V
11.293	51.074	7991 DIN countersunk socket head hex scr
11.294	50.091	self-locking nut M6 galv. F90
11.295	64.006	spindle nut right VIBA 25
11.296	50.877	933 DIN hex screw M4x12 galv.
11.297	50.835	934 DIN hex nut M 4 galv.
11.298	64.163	sliding bearing
11.299	51.096	7991 DIN countersunk socket head hex scr M8x20
11.300	51.092	7991 DIN hexagon socket scr M 6x40 galv.
11.301	50.091	self-locking nut M6 galv. F90
11.302	64.115	cover
11.303	64.116	Side cheeks
11.304	64.164	Side cheeks Viba 25/25v
11.305	50.098	self-locking screw M5x12 galv. F90
11.306	50.090	self-locking nut M10 galv. F90
11.307	50.098	self-locking screw M5x12 galv. F90
11.308	50.090	self-locking nut M10 galv. F90
11.309	50.832	912 DIN socket head screw M 6x10 galv.
11.310	50.091	self-locking nut M6 galv. F90
11.313	64.117	Cross beam for stroke transmission
11.314	64.165	Cross beam Viba 25/25v
11.315	69.021	flange bearing FLCTY 15
11.316	60.086	socket PM 2H25-M
11.317	61.117	cable strap 92mm
11.318	50.878	933 DIN hex screw M 6x25 galv.
11.319	50.091	self-locking nut M6 galv. F90
11.320	50.088	self-locking screw M8x16 galv. F90
11.321	50.092	self-locking nut M8 galv. F90
11.322	64.049	attachment bracket for rotation encoder
11.323	74.073	stroke transmission Viba 15/18
11.324	64.166	Bearing flange Viba 15/18
11.325	69.022	Ball bearing 3206 ZZ Viba15/18
11.326	64.168	spindle nut VIBA 15/18
11.327	50.956	988 DIN shim ring D35/d25/S2
11.328	51.070	6885 DIN feather key form A 6x6x20
11.329	64.169	spur gear Z 35
11.330	50.429	471 DIN lock ring 30
11.331	50.099	self-locking screw M5x12 galv. F90
11.332	74.074	clamping motor Viba 25 completely
11.333	74.075	clamping motor V15/18
11.334	64.170	main motor Viba 25 230 V 0,9 kW
11.337	64.171	sliding bearing
11.338	62.060	Cable conduit

POS	Art No.	Designation
11.339	64.118	Fixation for clamping motor Viba 15/18
11.340	51.097	7985 DIN oval head screw M 4x20 galv.
11.341	50.017	127 DIN split washer B 4 galv.
11.342	61.104	strain relief device RSGU 1100 8/9
11.343	51.002	7985 DIN oval head screw M 4x10 galv.
11.344	50.088	self-locking screw M8x16 galv. F90
11.345	50.091	self-locking nut M6 galv. F90
11.346	50.088	self-locking screw M8x16 galv. F90
11.347	50.092	self-locking nut M8 galv. F90
11.348	64.172	threaded spindle right VIBA 25
11.349	64.173	threaded spindle right VIBA 25
11.351	51.078	7991 DIN countersunk socket head hex scr
11.352	50.098	self-locking screw M5x12 galv. F90
11.353	50.090	self-locking nut M10 galv. F90
11.354	51.089	6885 DIN feather key form A 5x5x16
11.355	64.029	toothed belt pulley Viba 25
11.356	64.030	toothed belt Viba 25
11.357	50.067	self-locking screw M6x12 8.8
11.358	50.005	125 DIN washer B6,4 zn
11.359	64.048	rotation encoder
11.360	51.090	6885 DIN feather key form A 3x3x25
11.361	74.014	clamping motor Viba 25 completely
11.362	64.001	clamping motor Viba 25 24V DCSG 80
11.363	64.047	attachment bracket for clamping motor
11.364	50.852	912 DIN sockedthead screw M 4x12 galv.
11.365	50.017	127 DIN split washer B 4 galv.
11.366	50.023	125 DIN washer B 4.3 zn
11.367	62.060	Cable conduit
11.369	61.104	strain relief device RSGU 1100 8/9
11.370	74.027	proximity switch manufactured VIBA 25
11.373	61.123	Biscuit connector
11.374	50.093	self-locking screw M5x12 galv. F90
11.375	50.008	85 DIN cheese head screw M3x16 zn
11.376	50.010	127 DIN split washer B 3 galv.
11.377	50.820	934 DIN hex nut M 3 galv.
11.378	61.104	strain relief device RSGU 1100 8/9
11.379	50.945	933 DIN hex screw M4x16 galv.
11.380	50.835	934 DIN hex nut M 4 galv.
11.381	50.067	self-locking screw M6x12 8.8
11.382	50.091	self-locking nut M6 galv. F90
11.383	64.174	Fixation for pulse generator
11.384	74.076	proximity switch manufactured VIBA 25
11.385	62.013	proximity switch 12
11.386	61.140	end splice 0,75
11.387	50.936	933 DIN hex screw M 5x12 8.8 galv.
11.388	51.003	9021 DIN washer D 4,3 zn
11.390	50.835	934 DIN hex nut M 4 galv.
11.391	64.119	cover for cross beam Viba 15/18
11.392	51.098	7985 DIN oval head screw M 4x6 galv.
11.394	74.001	oscillating lever with ball bearing
11.395	74.001	oscillating lever with ball bearing
11.401	64.120	attachment for oscillating lever Viba 15/18

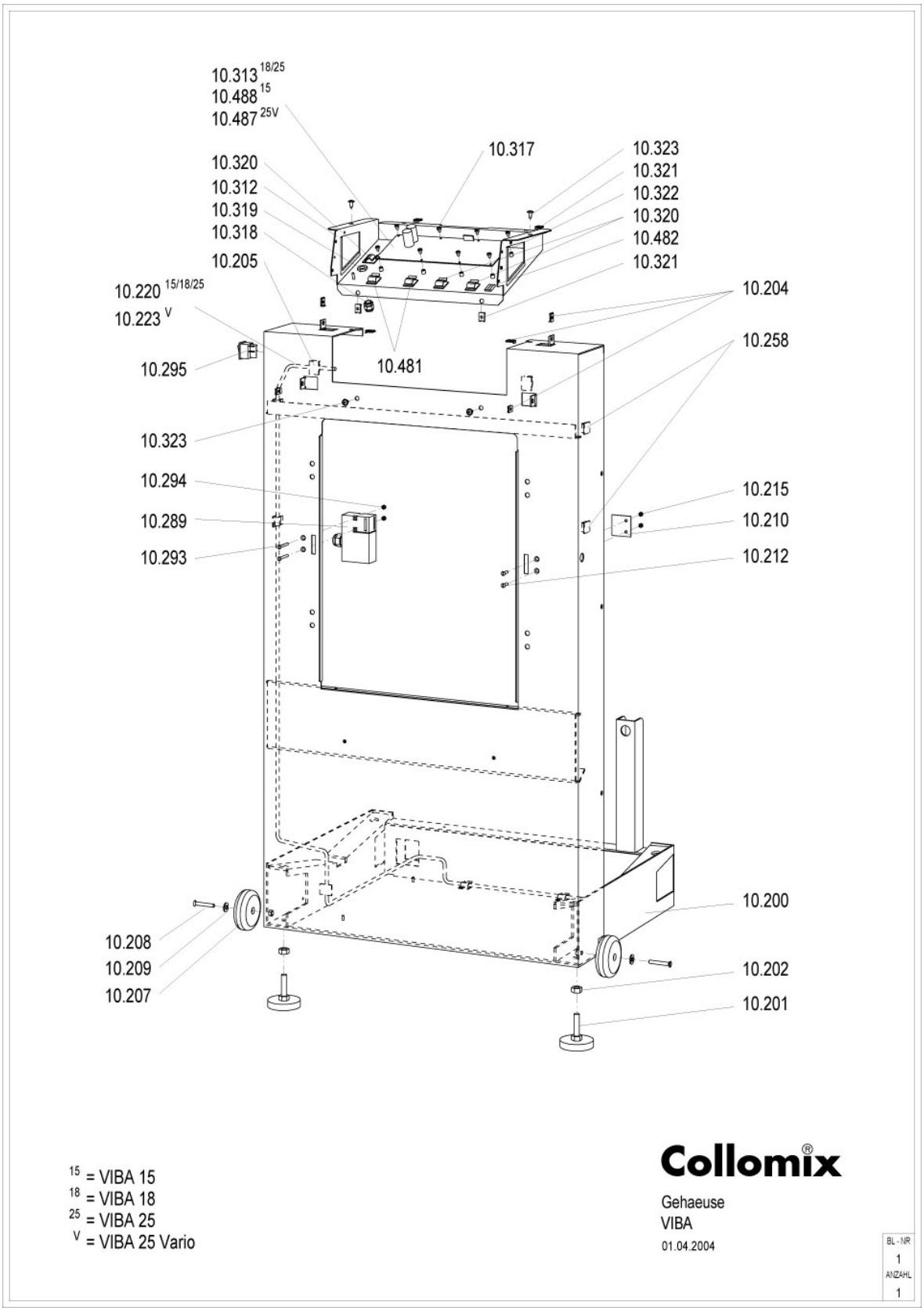
POS	Art No.	Designation
11.402	50.860	931 DIN hex screw M10x30 galv.
11.403	50.002	125 DIN washer B10,5 zn
11.404	50.426	Washer 10,5
11.405	50.863	934 DIN hex nut M 10 galv.
11.406	50.860	931 DIN hex screw M10x30 galv.
11.407	50.002	125 DIN washer B10,5 zn
11.408	50.426	Washer 10,5
11.409	50.863	934 DIN hex nut M 10 galv.
11.410	50.067	self-locking screw M6x12 8.8
11.411	50.091	self-locking nut M6 galv. F90
11.412	69.019	flange bearing UCF 204

POS	Art No.	Designation
	69.026	flange bearing RAY 20 *
11.413	50.089	self-locking screw M10x25 galv. F90
	50.088	self-locking screw M8x16 zn F90 *
11.414	50.090	self-locking nut M10 galv. F90
	50.092	self-locking nut M8 zn F90 *
11.415	50.860	931 DIN hex screw M10x30 galv.
11.416	50.426	Washer 10,5
11.417	50.002	125 DIN washer B10,5 zn
11.418	50.863	934 DIN hex nut M 10 galv.
11.419	50.091	self-locking nut M6 galv. F90
11.420	50.005	125 DIN washer B6,4 zn

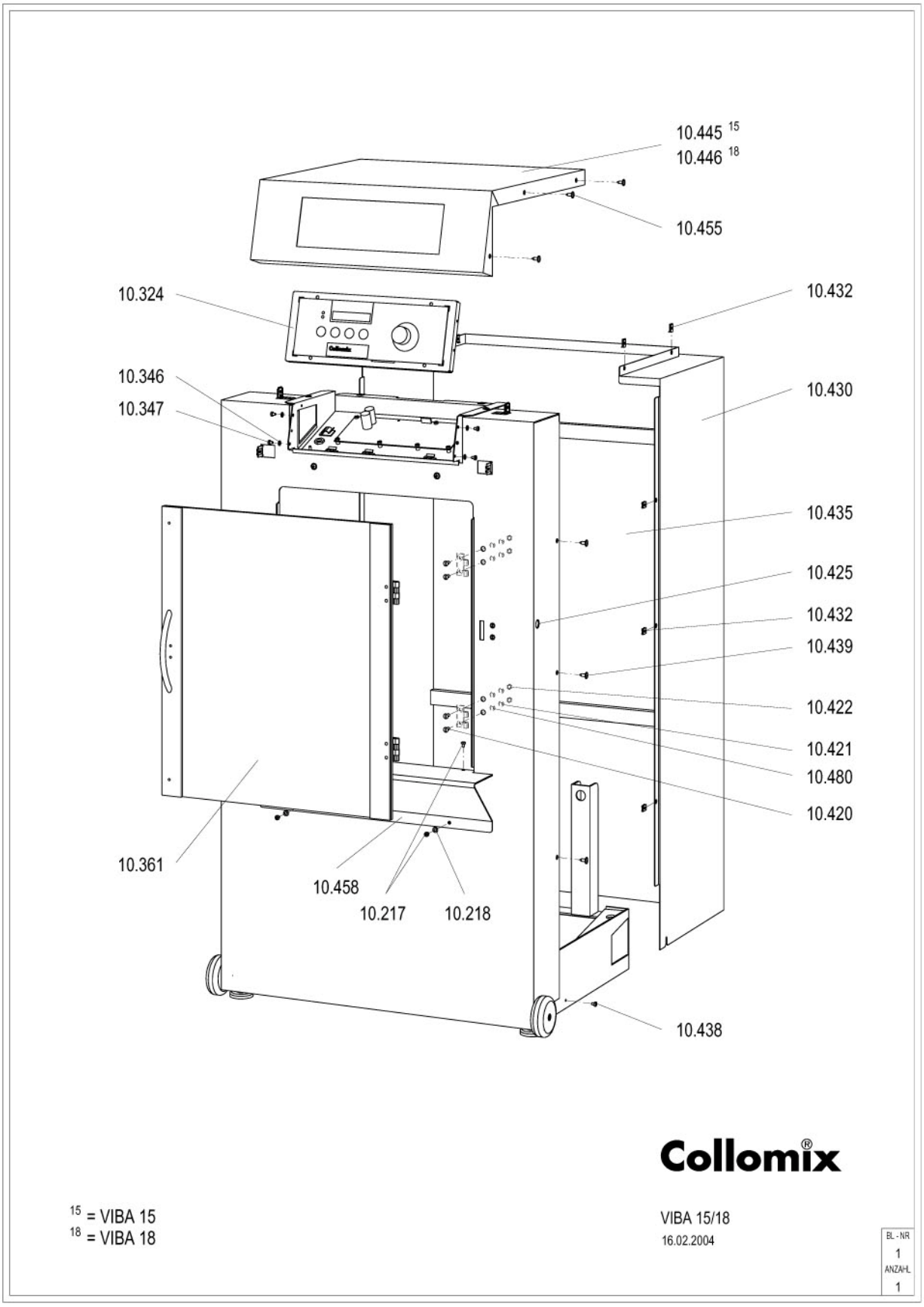
*VIBA 25 from 05/2005

10.6 Exploded drawings

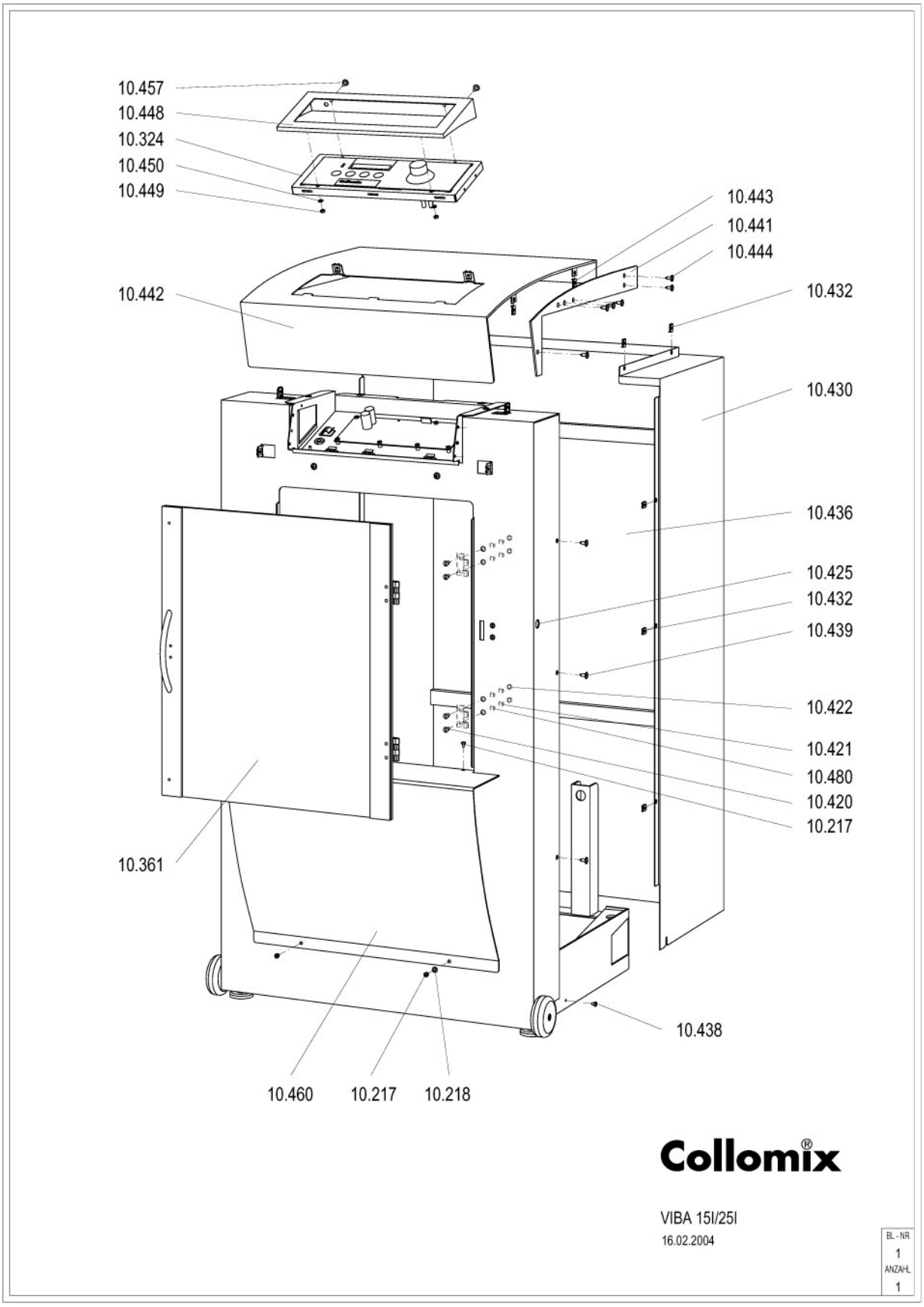
10.6.1 Housing



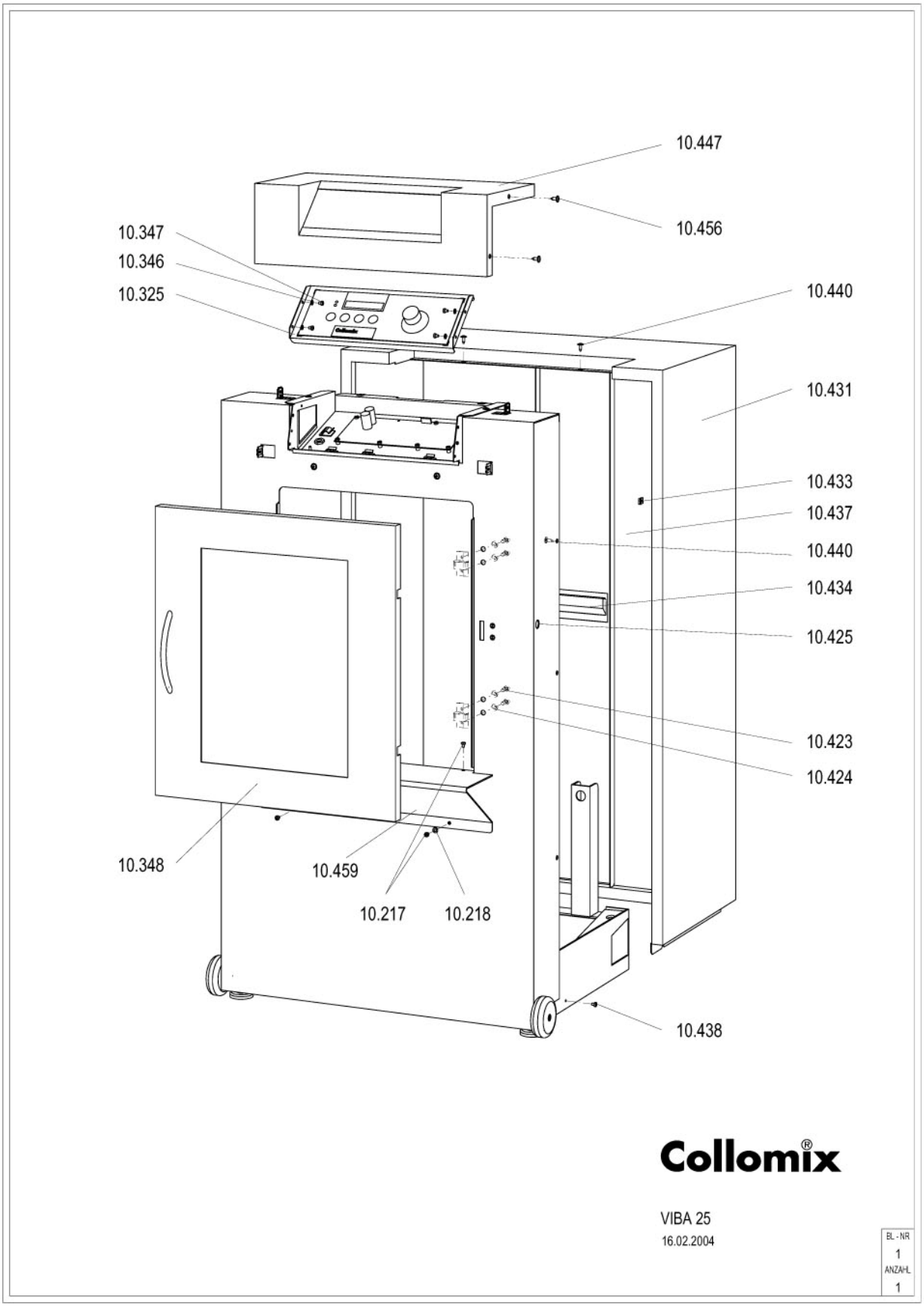
10.6.2 Housing VIBA 15



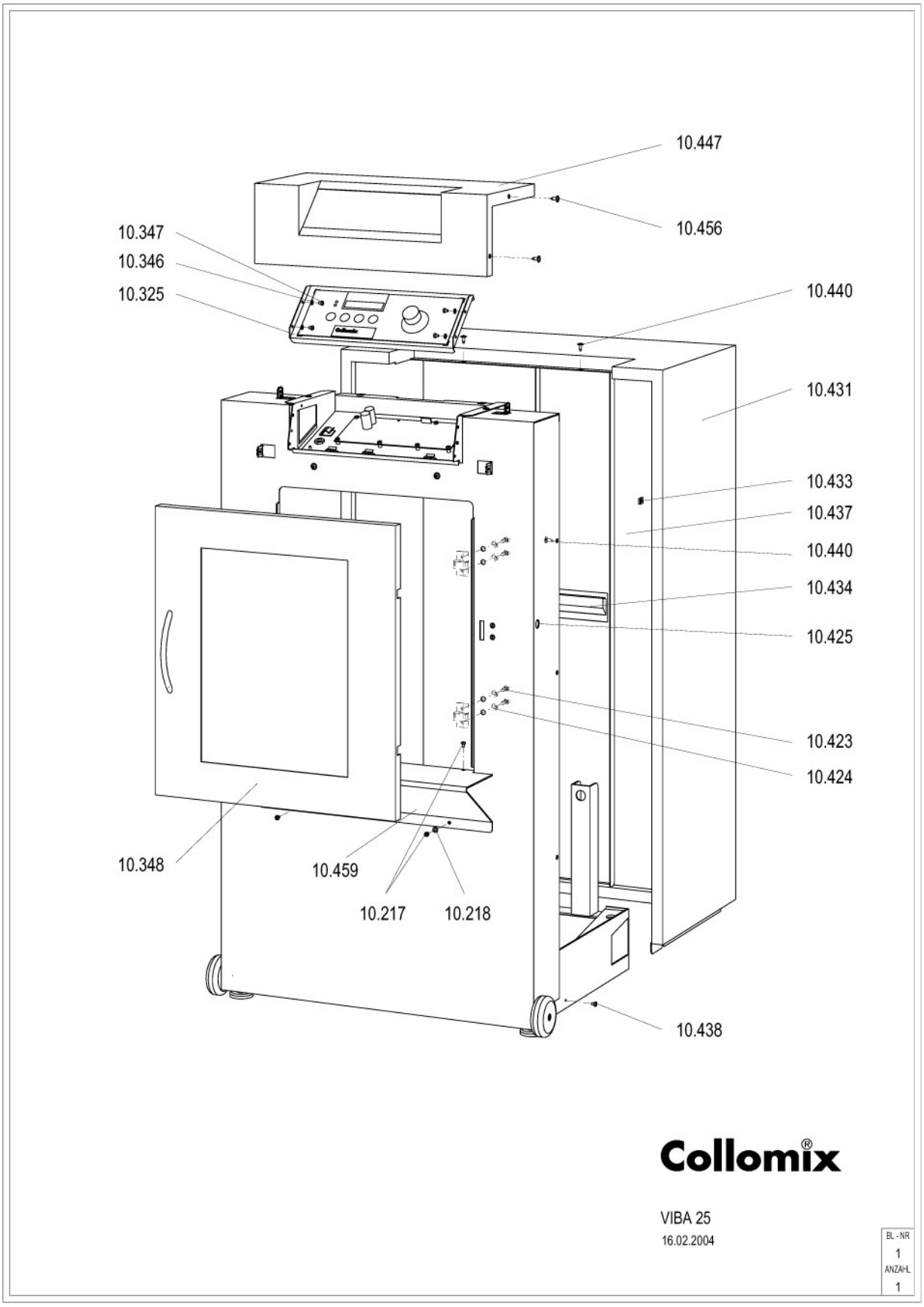
10.6.3 Housing VIBA 15 & VIBA 25 INOX



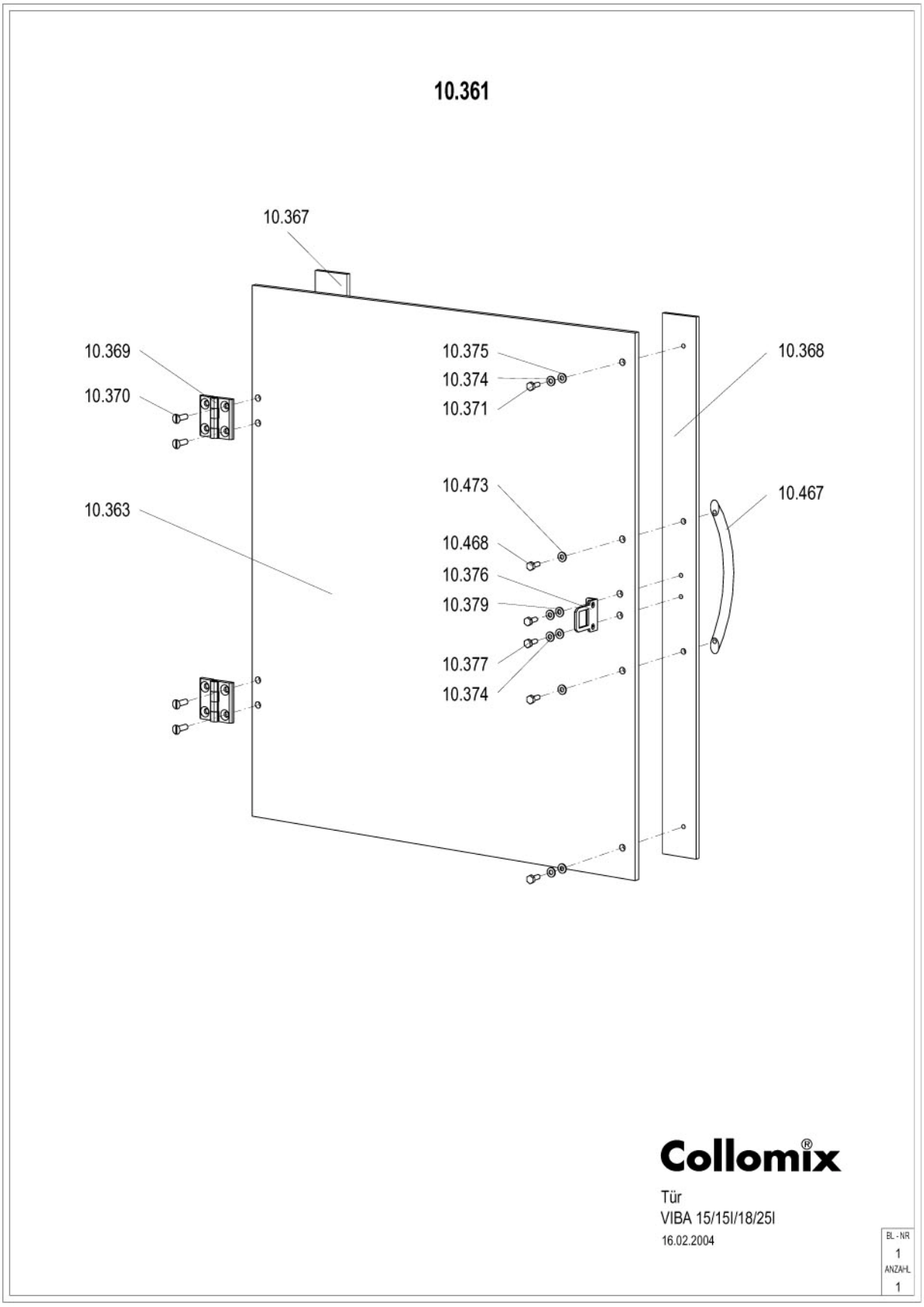
10.6.4 Housing VIBA 25



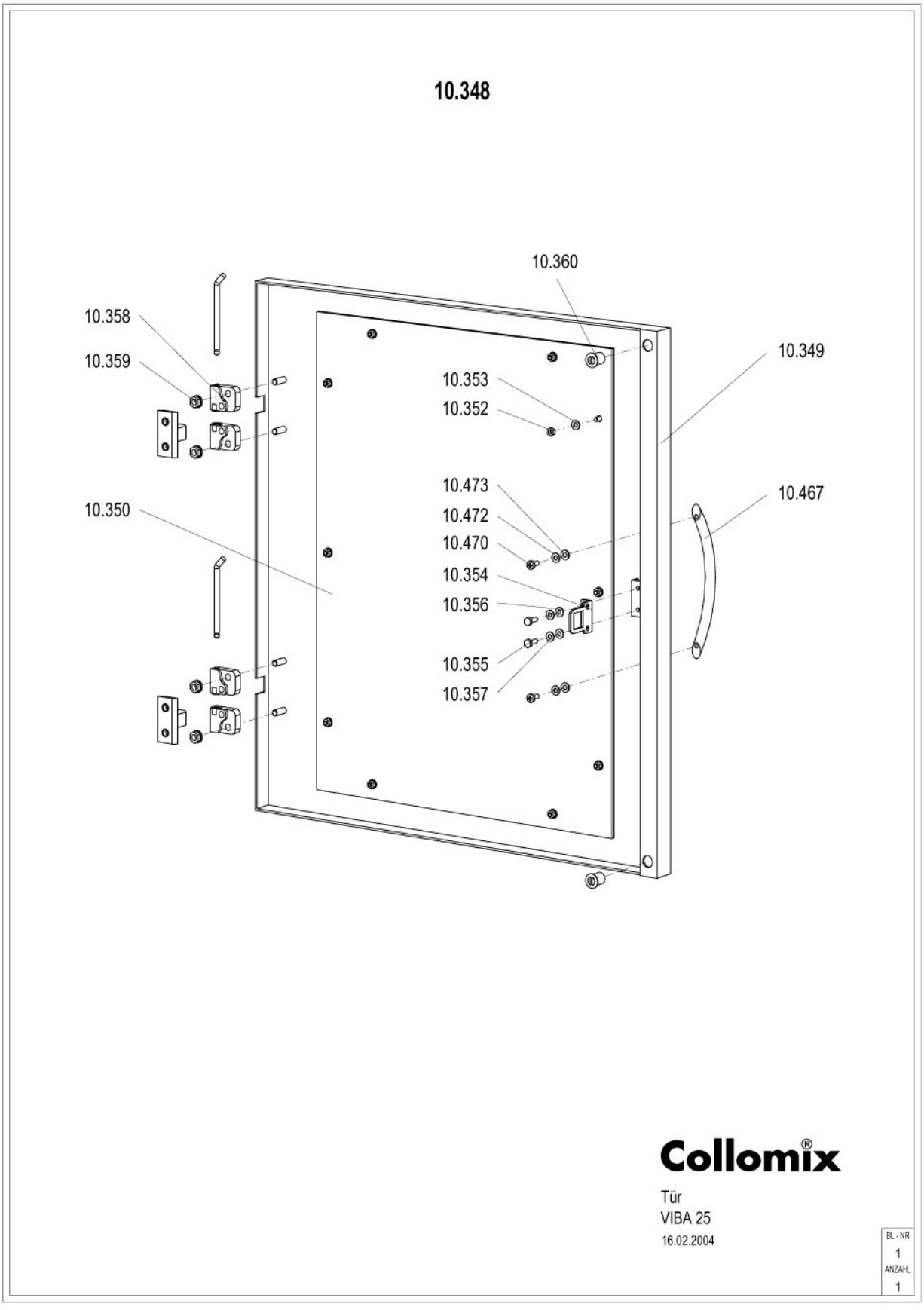
10.6.5 Housing VIBA 25 DOOR



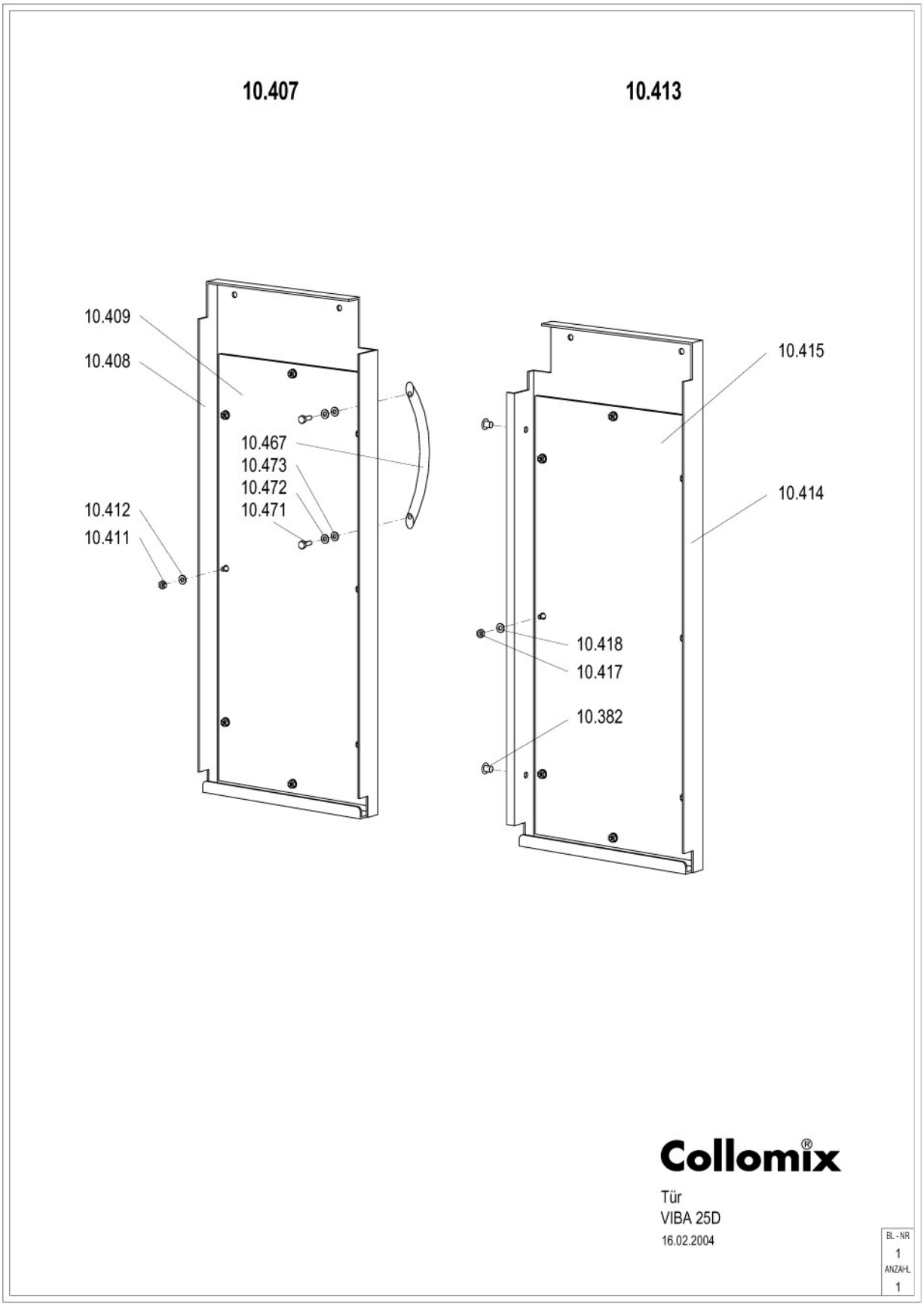
10.6.6 Door VIBA 15 and VIBA 15-25 INOX



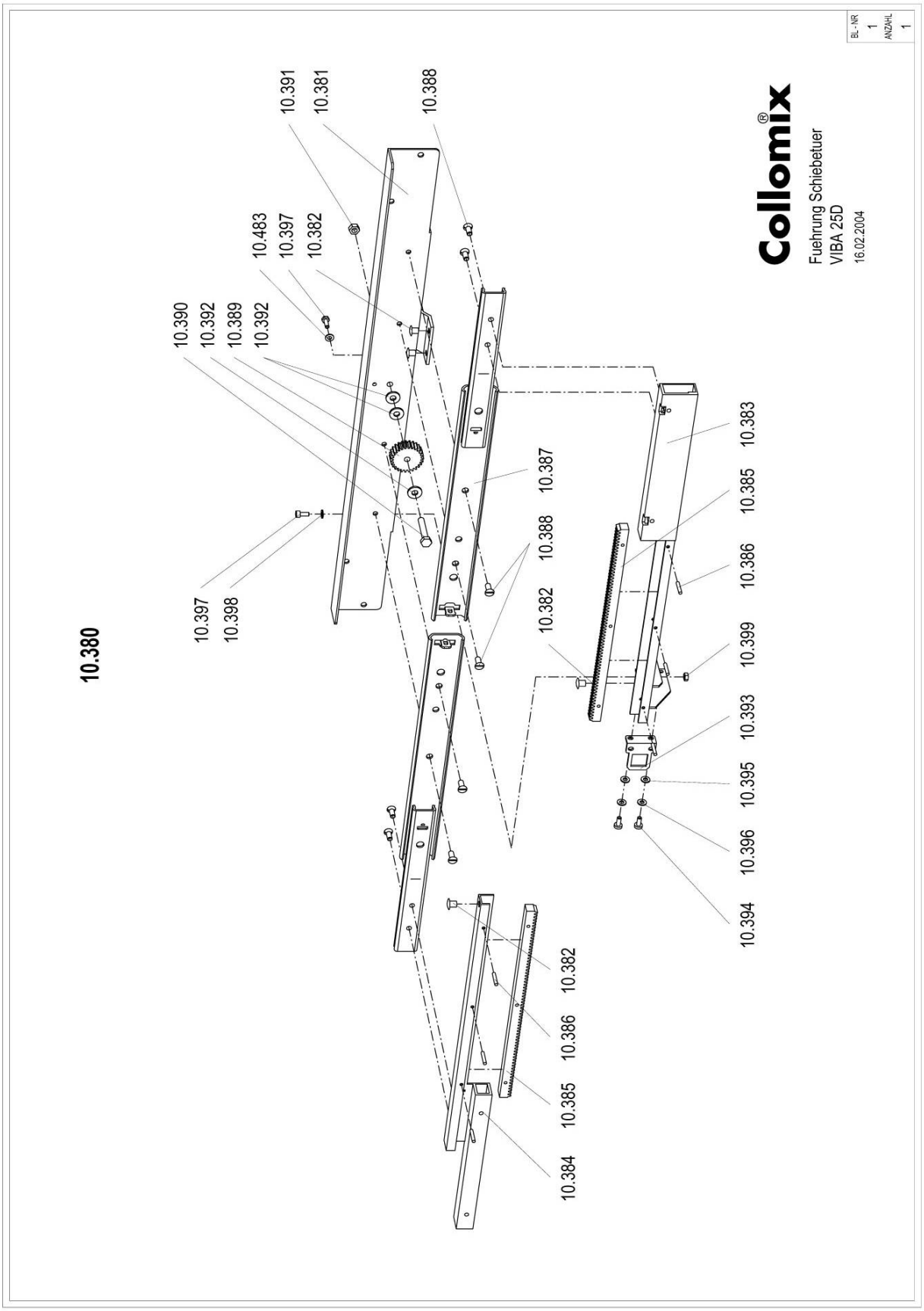
10.6.7 Door Viba 25



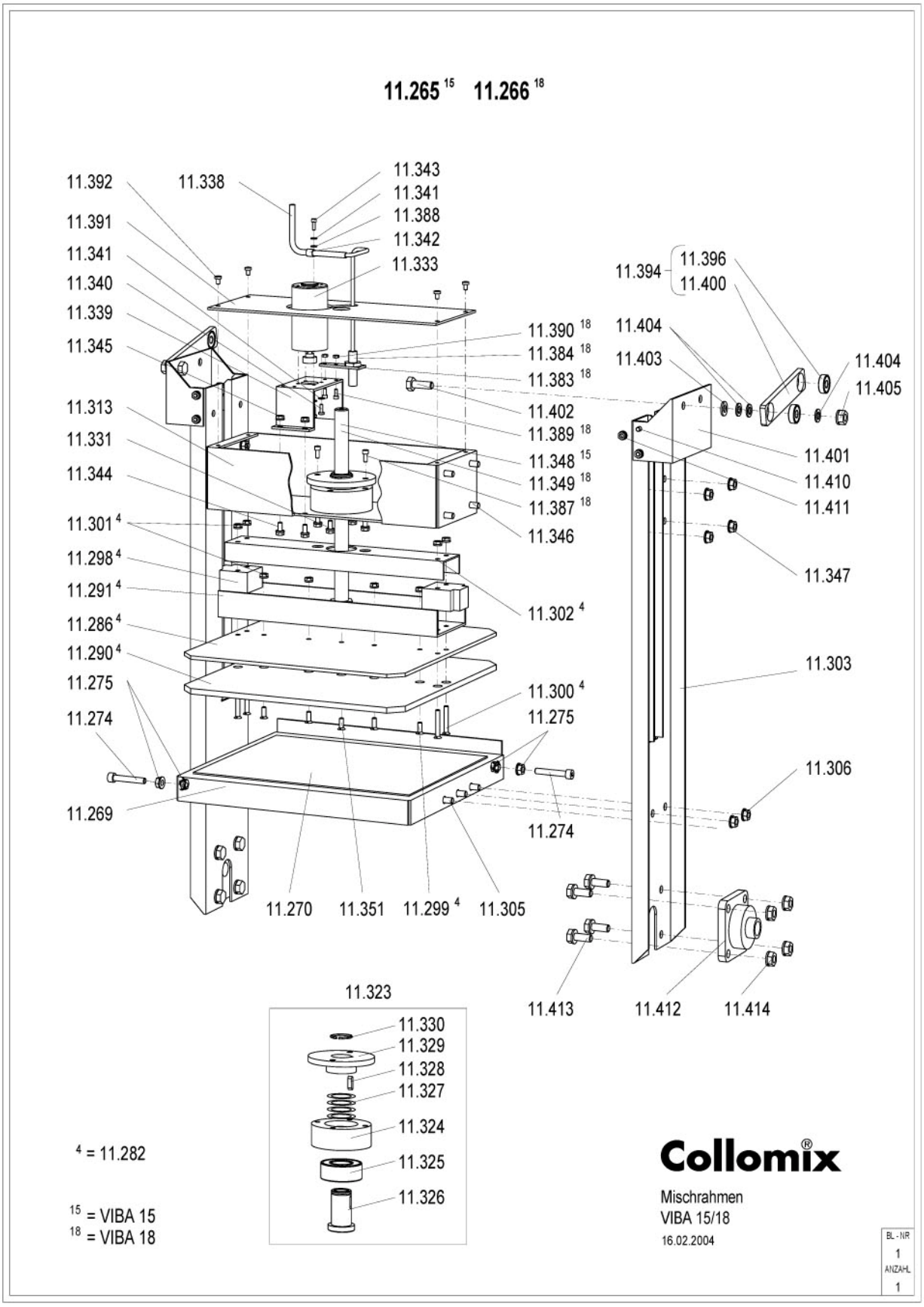
10.6.8 Door Viba 25 DOOR



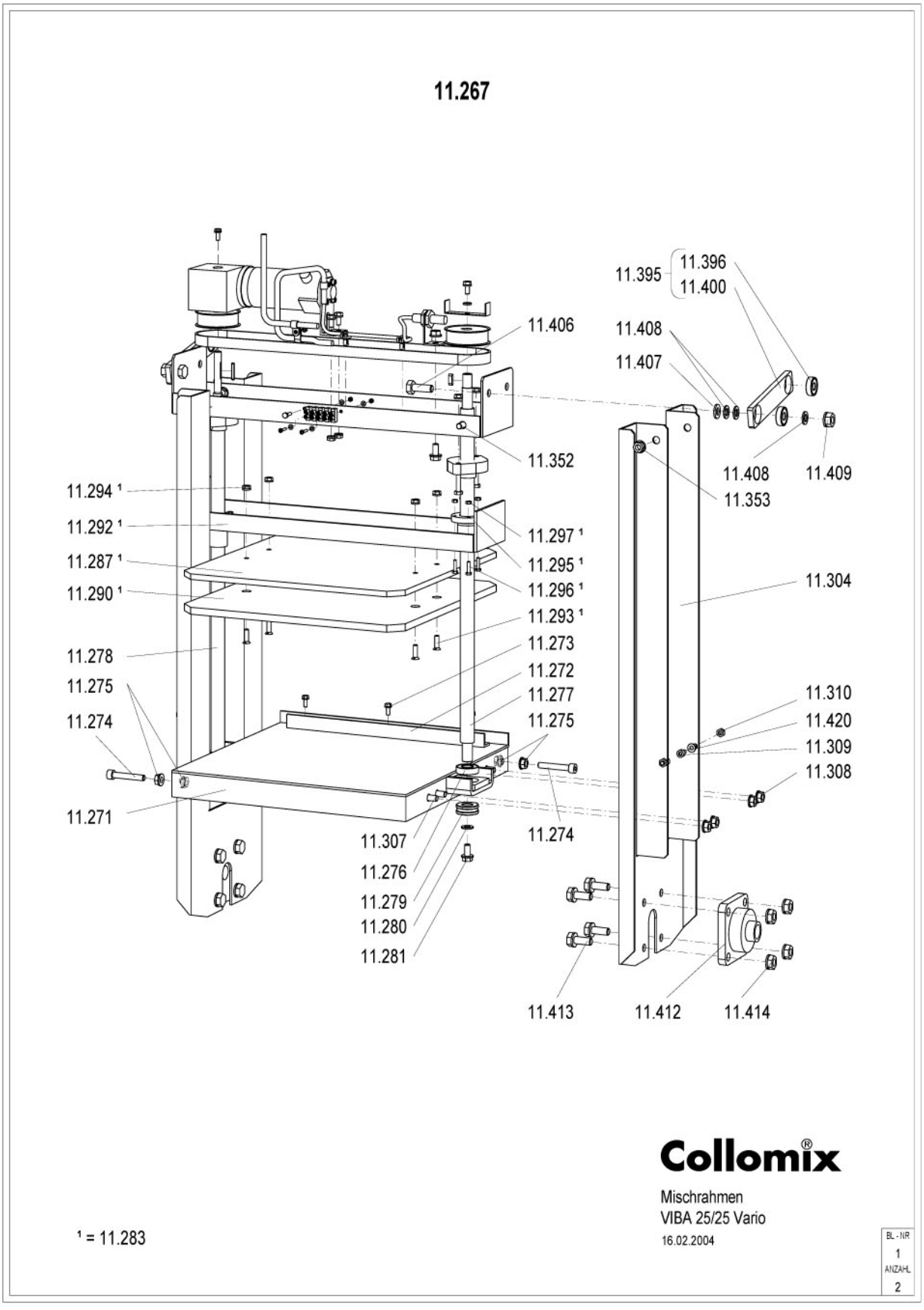
10.6.9 Sliding door guide Viba 25 DOOR



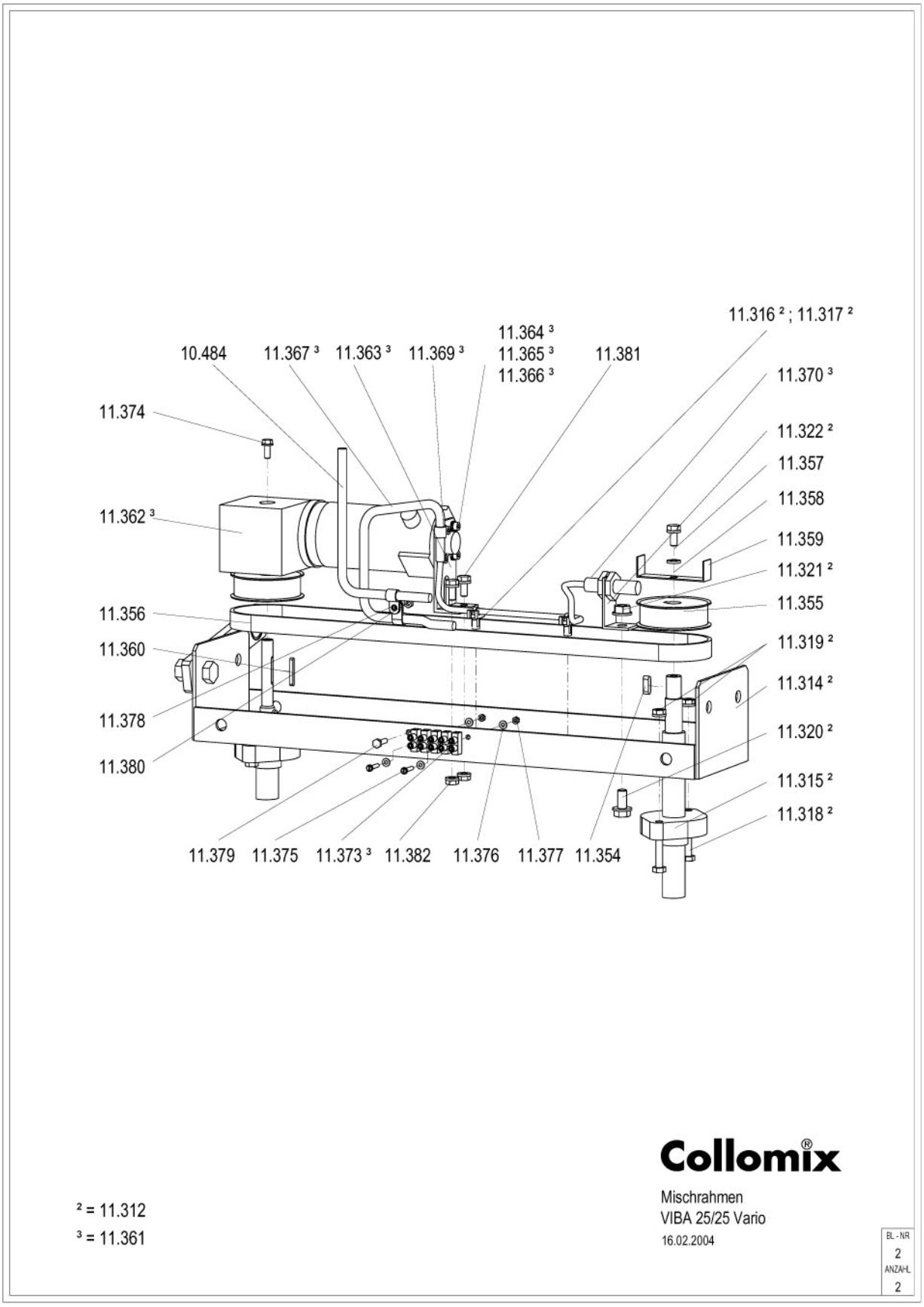
10.6.10 Mixing frame Viba 15



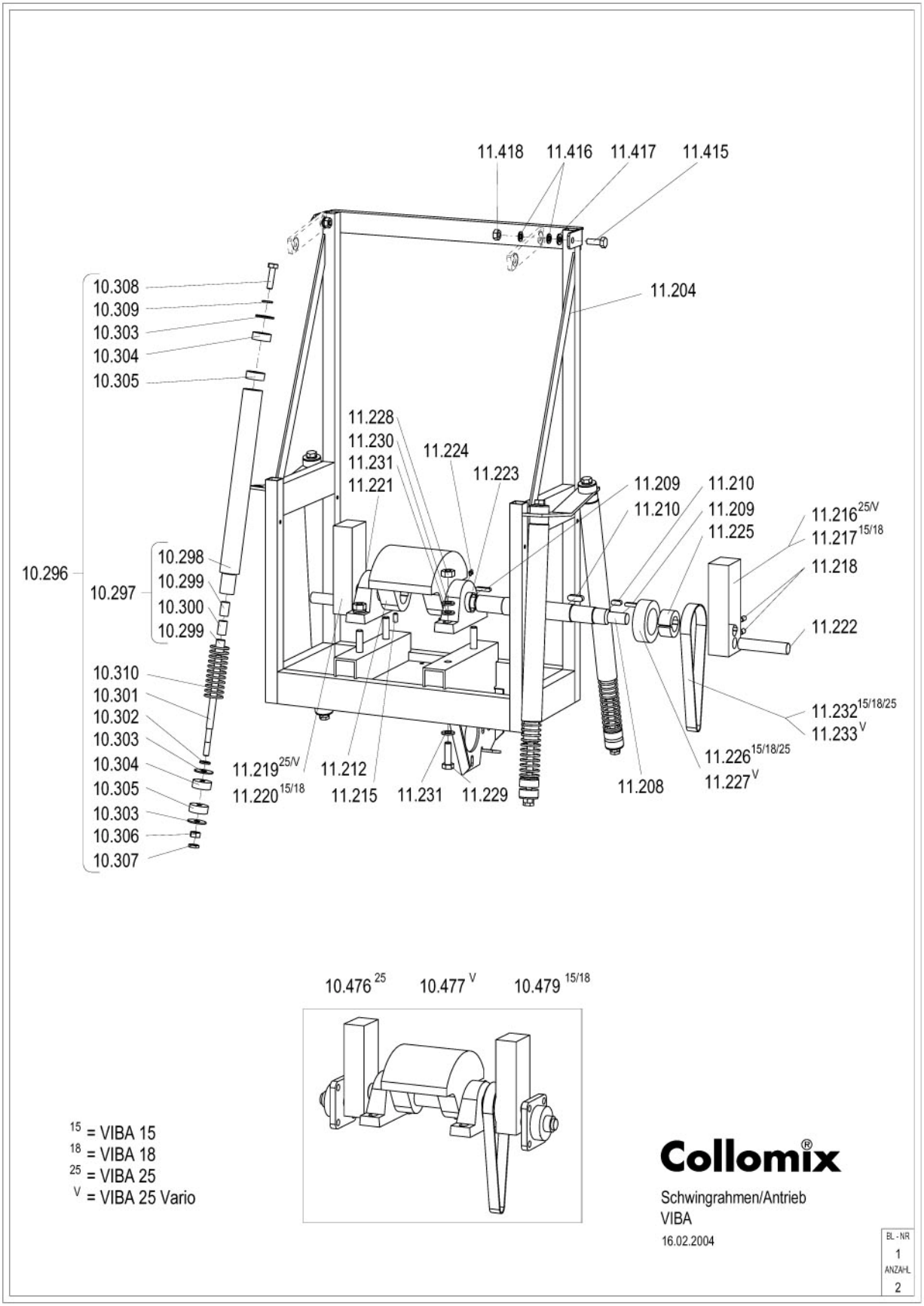
10.6.11 Mixing frame Viba 25



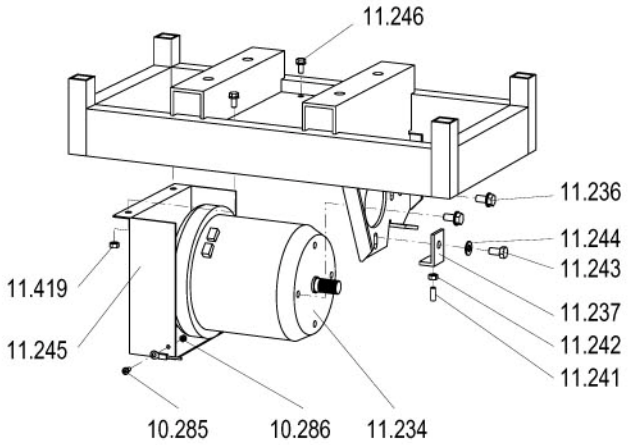
10.6.12 Clamp motor VIBA 25

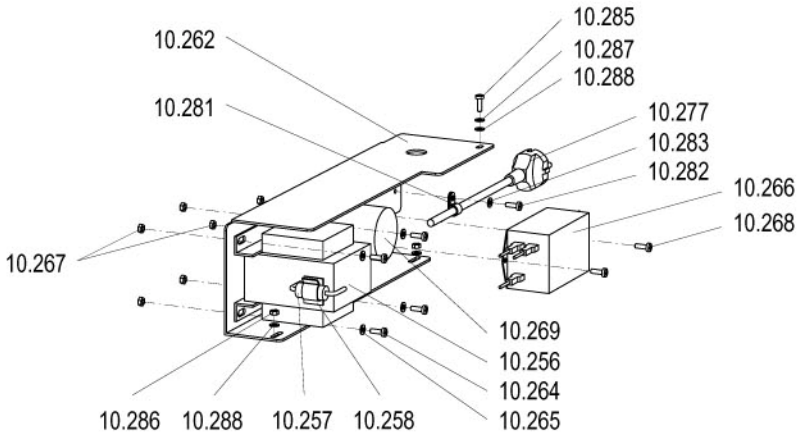


10.6.13 Oscillating frame Viba



10.6.14 Drive Viba





Collomix®

Schwingrahmen/Antrieb
VIBA 15/18/25
16.02.2004

BL - NR
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ANZAHL
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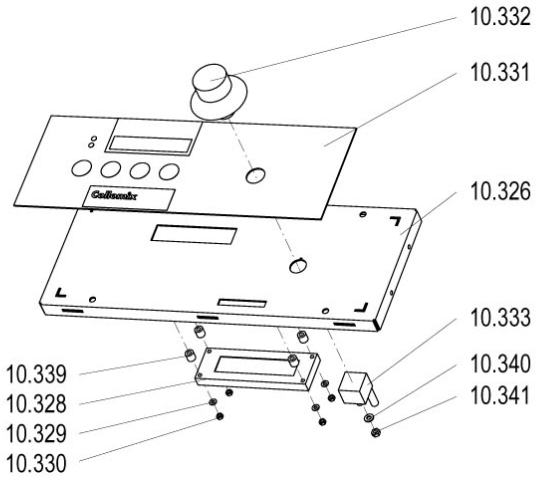
10.6.15 Control unit

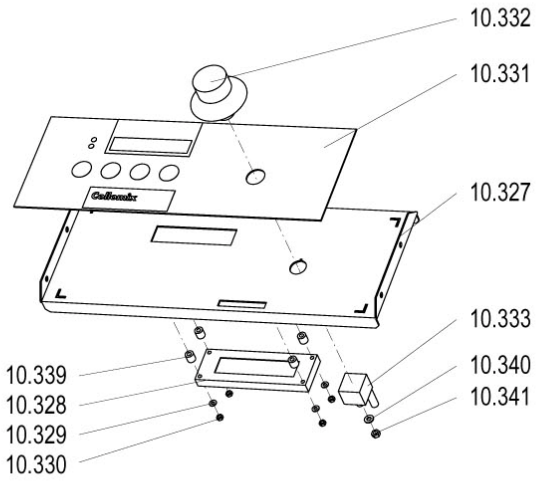
VIBA 15/15l/18/25l

10.324



VIBA 25/25D

10.325



Collomix®

Bedienteil
VIBA
16.02.2004

BL - NR
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ANZAHL
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11. Annex

11.1 Technical data

	VIBA 25	VIBA 15
Supply voltage:	L1, N, PE 50; 230 Volt AC	
Rated power:	0,9 kW	
Frequency:	50 Hz	
Fuse:	10 A	
Speed/motor:	- 630 rpm	
Noise emission:	< 65 dB (A) according to DIN 45.635	
Max. container weight:	bis 35 kg	bis 20 kg
max. container height:	40 - 400 mm	70 - 300 mm
Max. container footprint:	340 x 370 mm	330 x 370 mm
Machine weight:	168 kg	152 kg
Dimensions (w x d x h):	710 x 610 x 1180 mm	660 x 550 x 1180 mm

11.2 Warranty

The manufacturer undertakes to provide, as part of the general terms of supply and delivery, a twelve-month warranty. This warranty applies to single-shift operation and is counted from the date of initial start-up. It covers all defects arising from faulty material or workmanship. Please note that all warranty claims must be accompanied by the original delivery note or initial start-up report.

All essential warranty repair work must only be carried out by adequately trained service engineers or by third parties with express prior authorization from Collomix. The carrying out of unauthorized repairs may render the warranty null and void.

Please return any defective parts or machines carriage-paid to our factory. Collomix reserves the right to decide on whether cost-free parts replacement is applicable. Parts and labor covered by the warranty will be supplied free of charge. The warranty does not cover travel costs, expenses or possible overnight accommodation resulting from warranty repairs carried out off our premises.

Any further responsibility, with particular reference to damage claims, including foregone profit or other material losses on the part of the customer, is expressly excluded.

Warranty and liability claims for personal or material damages are excluded if attributable to one or more of the following causes:

- Incorrect operation of the machine, as defined in the operating instructions
- Failure to observe the instructions in the operating manual with respect to set-up, initial start-up, operation and maintenance of the machine
- Faults or damage caused by excessive accumulations of dirt and/or incorrect cleaning schedules, with particular reference to leaks and damaged containers
- Operation of the machine with defective safety and/or protection devices
- Unauthorized structural modifications to the machine
- Incorrect monitoring of parts subject to wear and consumables
- Unauthorized repairs and/or the fitting of non-original spare parts
- Damage caused by the impact of foreign bodies or force majeure

We reserve the right to make amendments as a result of ongoing advances in the technical field.

11.3 Recycling and disposal

The transport packaging consists of recyclable material. Please dispose of it accordingly.

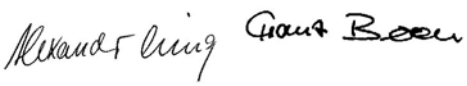
At the end of the machine's working life, the materials used in its construction must be properly recycled. If you have any questions concerning the disposal of any materials, please contact the manufacturer.

11.4 Declaration of CE conformity

We declare herewith that this product conforms with the following standards and standard-setting documents:

EN 292-1, EN 292-2, EN 294, EN 349, EN 954-1, EN 55011, 61000-6-2, 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5 in accordance to Directives 89/336EEC, 98/37EEC, 73/23EEC

Alexander Essing Franz Beron



Manufacturer:
Collomix Rühr- und Mischgeräte GmbH
Daimlerstr. 9, D-85080 Gaimersheim
Federal Republic of Germany
Tel.: ++49 (0)8458 32 98 - 0
Fax: ++49 (0)8458 32 98 30

Please note!
This declaration of conformity will lose its validity if any changes or modifications are made to the machine without the manufacturer's approval.

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