1 SAFETY

1.1 Safety instructions

Attention

Repairs may be carried out by a qualified electrician only!

The user may be put at risk and injured by improper repairs!

To prevent electric shocks, always comply with the following instructions:

- ► If the appliance is faulty, the housing or frame may be live!
- ► Electric shock may occur if live components are touched inside the appliance!
- ► Before commencing repairs, disconnect the appliance from the power supply!
- ► If tests have to be performed while the appliance is live, always use a residual-current-operated circuit-breaker!
- ► The protective conductor resistance must never exceed the values specified in the standard! The protective conductor is crucial for personal safety and appliance function.
- ► When repairs are complete, perform a test in accordance with VDE 0701 or the corresponding national regulations!
- ► When repairs are complete, perform a function and leak test.

Danger!

Comply with the following instructions:

The following pictograms are used in the repair instructions:

Electrostatic sensitive devices!
Please observe handling regulations!

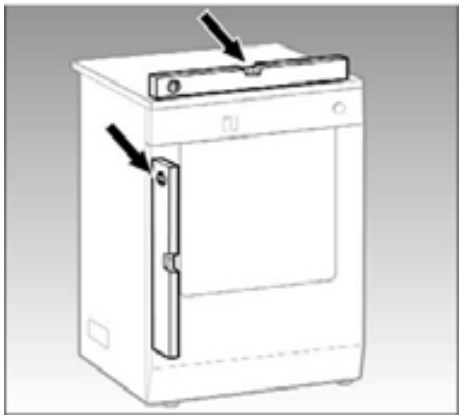
Sharp edges:
Wear protective gloves.

2 INSTALLATION

2.1 Setting up / Connection

The unit must stand horizontally and firmly on the floor, use spirit level.

Pic. 1



- The dryer can be set up in a combination with wash machine (front loader). In order to ensure a safe connection, are the original connecting sets to use (see instructions).

Danger of suffocation!

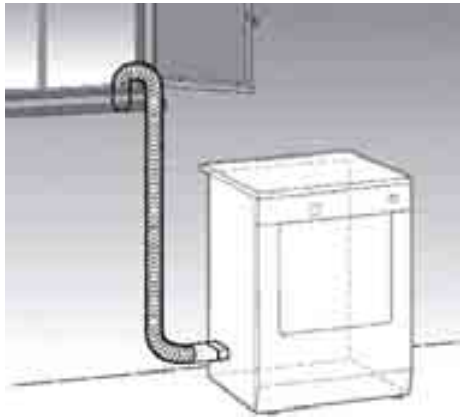
- Do not close the connection of the exhaust air duct to fire-places, at which gas -, coal oven or room heater are connected.
- Let from your chimney sweep be confirmed that this danger does not exist.

2.1.1 Use with an exhaust air duct

- With a loose installation from a window the opening of the exhaust air hose must show always downward (see fig. 2).
- Ensure for the fact that the outlet for the exhaust air duct lies in such a way that no counter-pressure (e.g. by wind) for the leaking out exhaust air of the dryer can develop. The counter-pressure can be avoided by suitable measures (e.g. back pressure flap).

- With installation of the dryer to an exhaust air system an back pressure flap must be installed. Here through it is prevented that exhaust air by other dryer or vapour departure hoods is back-flow-avoided into your washing room.
- Put the hose in such a way that no breaks and cross-section contraction arise.
- The setting up place should be selected so, that the minimum distance kept by 10 cm distance to the wall

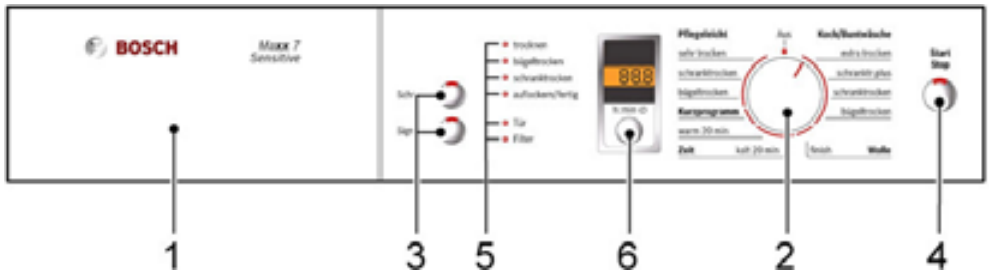
Pic. 2



- Further information see basic repair instruction washer/dryer 58300000002975

3 OPERATION

3.1 Control panel operation



1 Panel

3.2 Programme selector (2)

Single-button operation, 9 drying programmes, 2 of which are timed programmes.

Automatic programmes

Cottons / Coloureds

For cotton and linen washing which is to be mangled, ironed or dried cupboard-dry.

Easy-care programmes

For easy-care synthetic and blended fabrics and cotton washing which is to be ironed or dried cupboard-dry.

Timed programme

Timed programmes 20-40 min. warm for delicate textiles made of acrylic fibres or for redrying and airing up to 6 kg of washing. The programme duration is restricted to max. 40 min.

3.2.1 Start / stop button (4)

The programme can be started or stopped with the Start / Stop button.

3.2.2 Programme progress indicator (5)

The programme progress is indicated by LEDs.

3.2.3 Display LED (6)

The display indicates the remaining running time and any faults by F..

See circuit diagrams

3.2.4 Additonal functions (3)

Low heat (3)

For temperature-sensitive textiles (e.g. acrylic fibres) which are to be dried on a low heat. The temperature is reduced by 10 K.

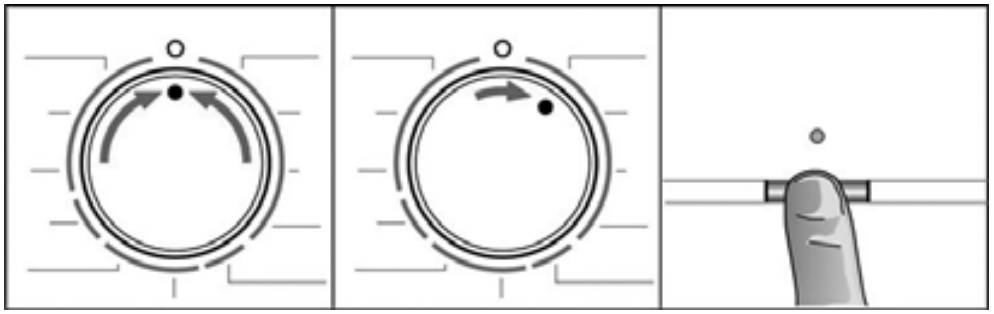
Signal (3)

The signal signals e.g. the end of the programme or a fault.

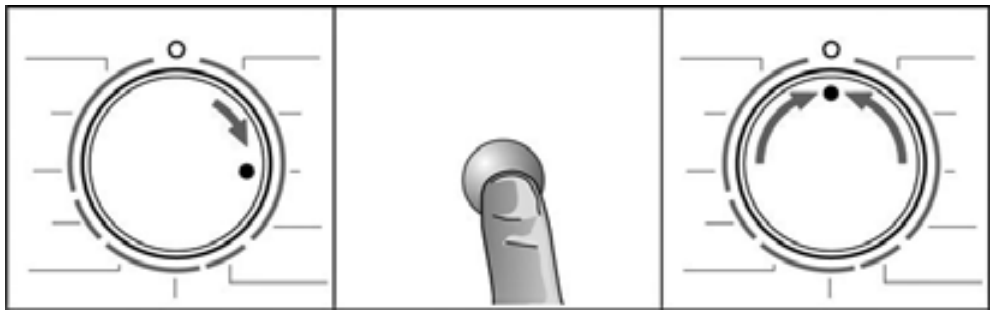
The signal volume can be adjusted 4X.

3.2.5 Adjusting the signal volume

- ► Set programme selector to the Off position
- ► Move programme selector one position to the right
- ► Press “Low heat” button until the function light comes on



- ► Move programme selector another two positions
- ► Press “Start/Stop” button until the required volume 0–4 has been set.
- ► The setting is saved by rotating the programme selector to the Off position



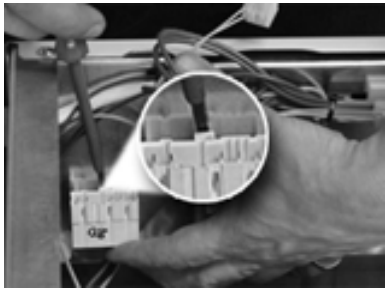
4 COMPONENTS

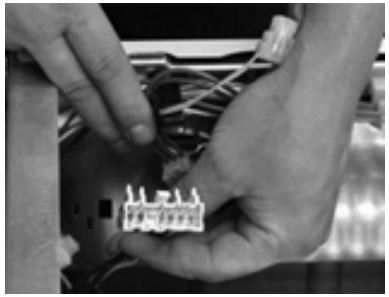
4.1 Heater

4.1.1 Removal

► Remove the worktop.

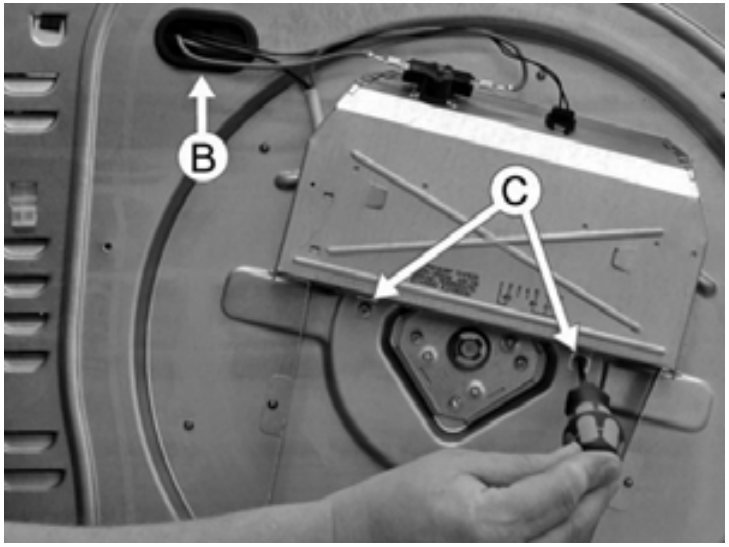
► Remove electrical connection





► Remove process air hood

► Remove electrical connection through the rear panel and remove the heater



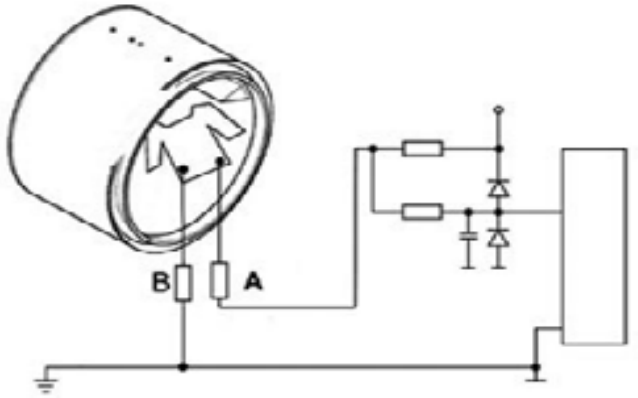
B Cable gland **C** Torx 15

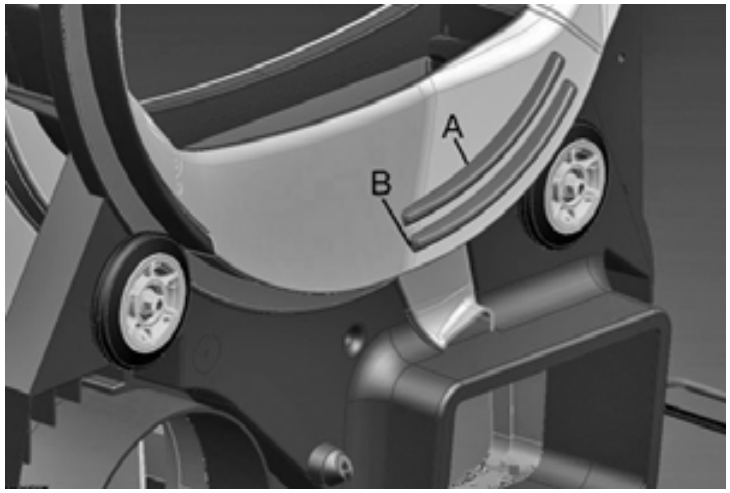
NTC and safety temperature controller can be changed separately.

5 FUNCTIONS

5.1 Conductivity measurement

The degree of dryness is determined by a conductivity measurement. The conductivity measurement of the washing is based on a voltage or resistance measurement.

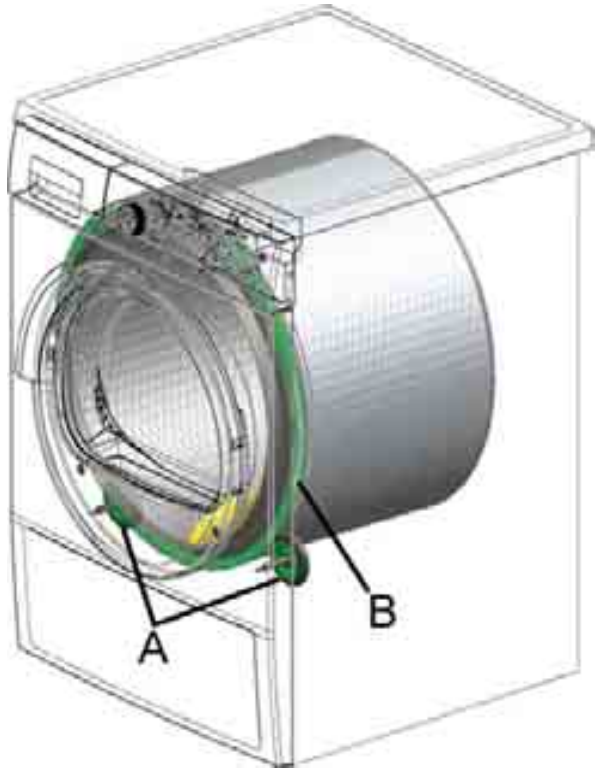




A Electrode **B** Counter-electrode

5.2 Drum bearings end shield

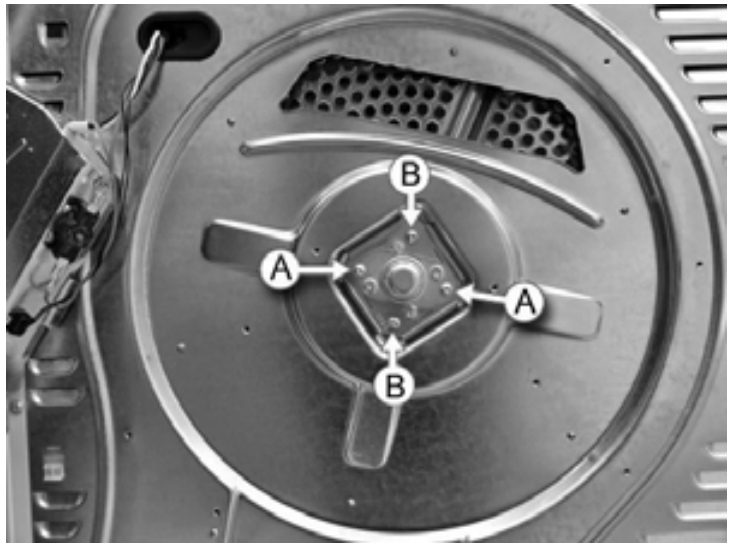
The drum bearings consist of two rollers (**A**) which are attached to the end plate. The only function of the sealing strip (felt) (**B**) is to provide a seal.



A Rollers **B** Sealing strip (felt)

5.3 Drum bearings rear panel

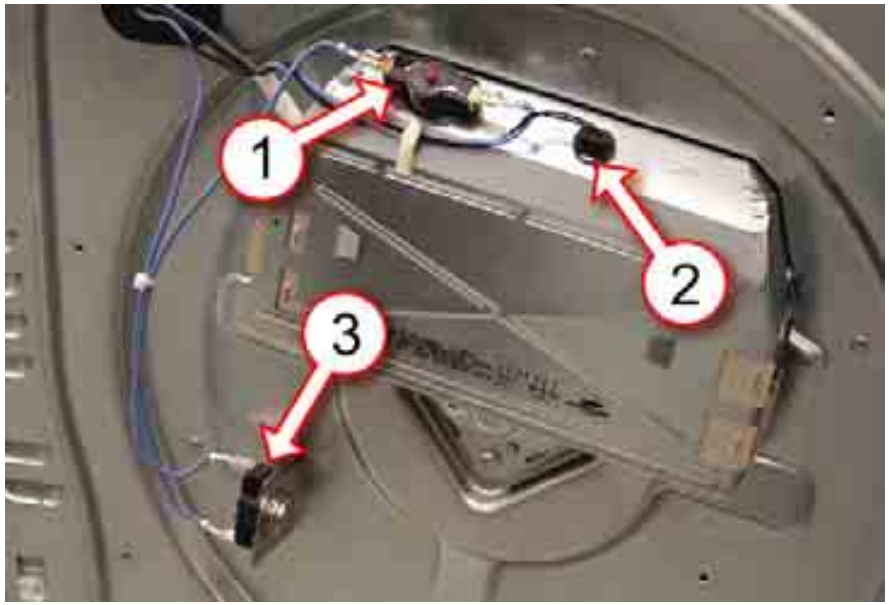
The drum is attached to the rear end plate by a ball bearing. The bearing can be removed without removing the drum.



A Cover screws **B** Bearing screws

5.4 Safety thermoregulator Overheat protection

The overheat protection cuts in if local overheating occurs, e.g. interruption of the flow of air.
(Trigger temperature approx. 170 °C)
Tip:
If the overheat protection has triggered it can only be switched back again manually by means of the red reset button.



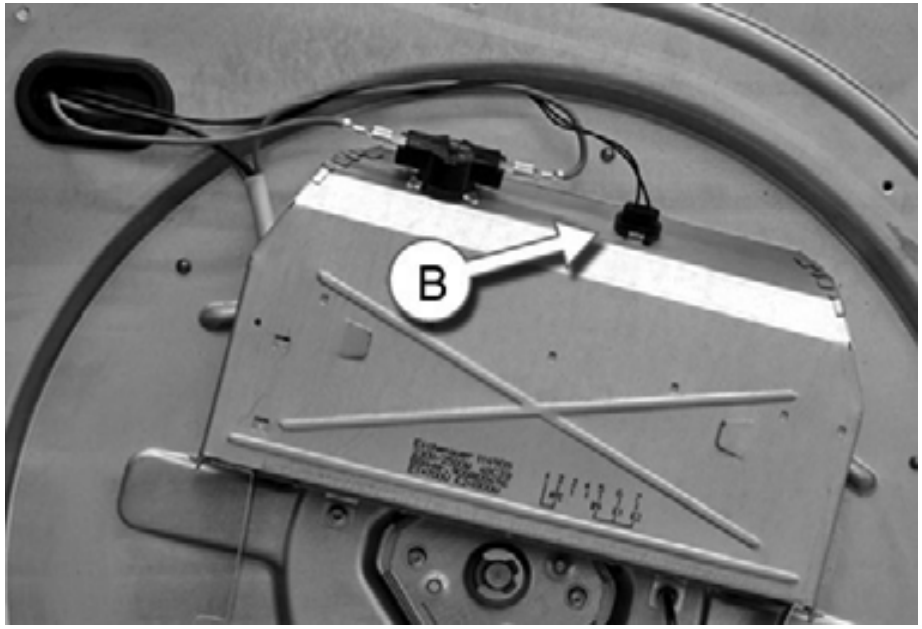
1 Safety thermoregulator (F35)

2 NTC

3 Safety thermoregulator for counter air

5.5 NTC R2 heater

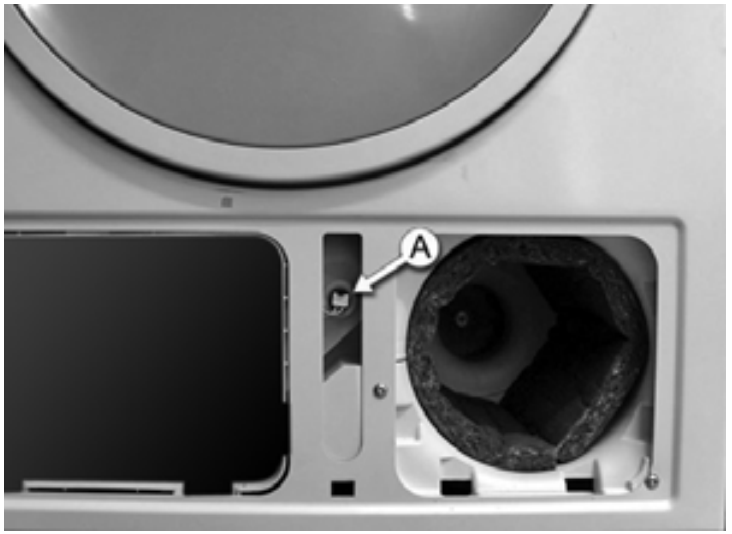
The NTC R2 is situated above the heater in the air flow and measures the heated process air. The permitted temperature range is between –12 and +185 °C.



TC R2 (heater B)	
Degrees in °C	Resistance values in KΩ
5	51.5
10	40.2
25	20.11
60	4.971
80	2.4
100	1.3
150	0.36

5.6 NTC R3 end shield

The NTC R3 is situated in the air duct to the air capacitor and measures the exhaust air. The temperature range is between –12 and +90 °C.

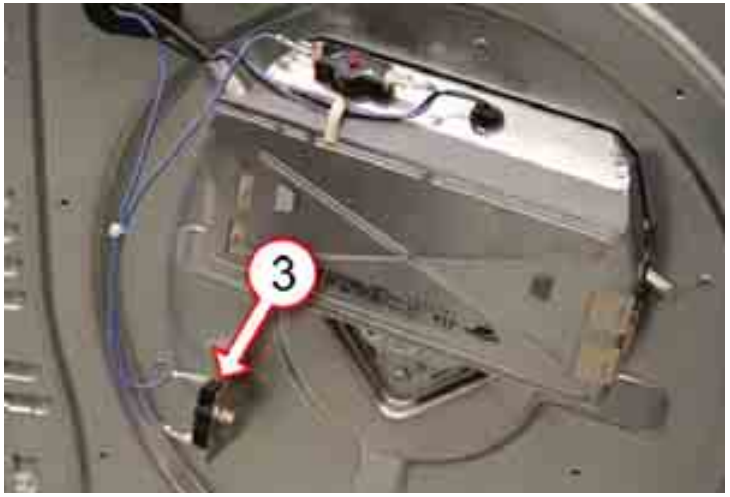


NTC R3 (end shield A)	
Degrees in °C	Resistance values in KΩ
0	32.6
5	25.3
10	19.9
25	10
60	2.48
100	0.68

5.7 Safety thermoregulator for counter-air

The thermoregulator for counter-air is situated in the process air duct between the process fan impeller and the heater. The temperature of the counter-air is measured here. When the counter-air temperature is 80 °C, the regulator switches off.

Tip:
If the overheat protection has triggered it can only be switched back again manually by means of the red reset button.
Before that to put back must the setting up conditions see instruction for setting up being examined

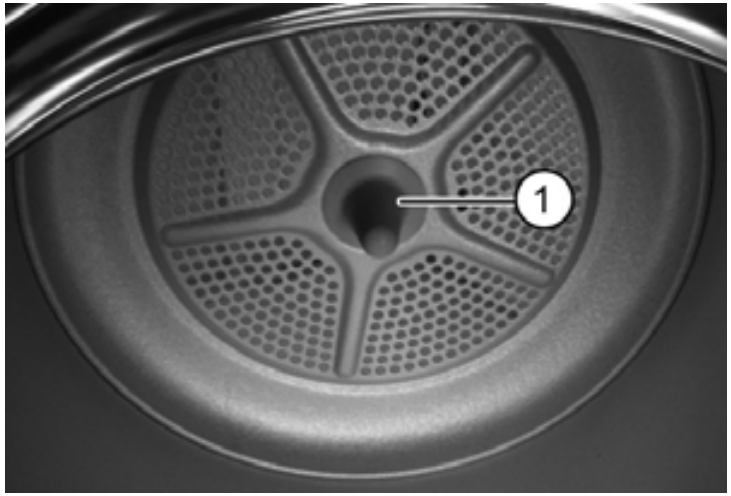


3 Safety thermoregulator for counter-air “clicking” safety device 80 °C

5.8 Tapered pin CSI08

The tapered pin is situated at the back of the inner drum.

The pin reduces tangling of the washing.



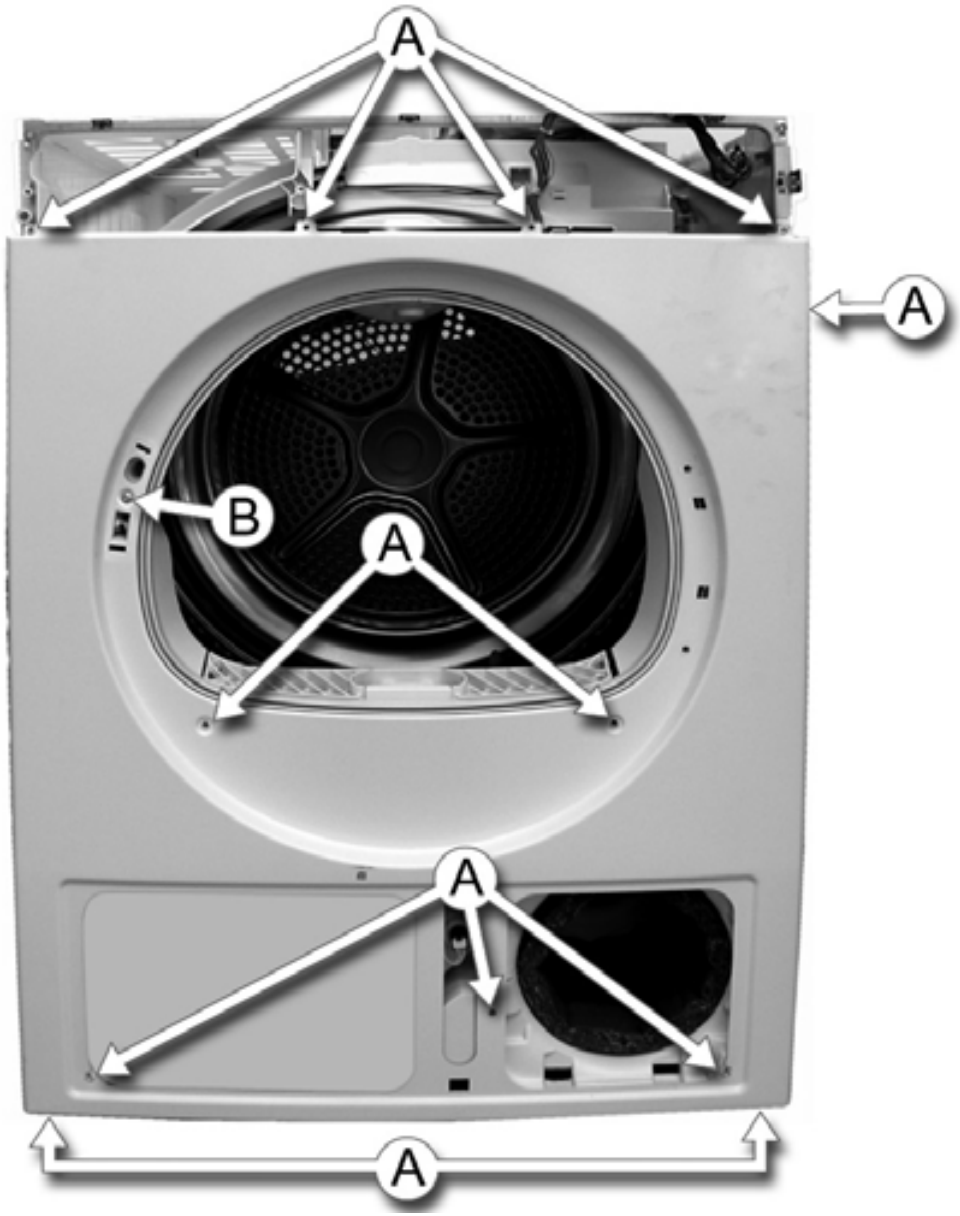
1 Pin

Removal:

6 REPAIR

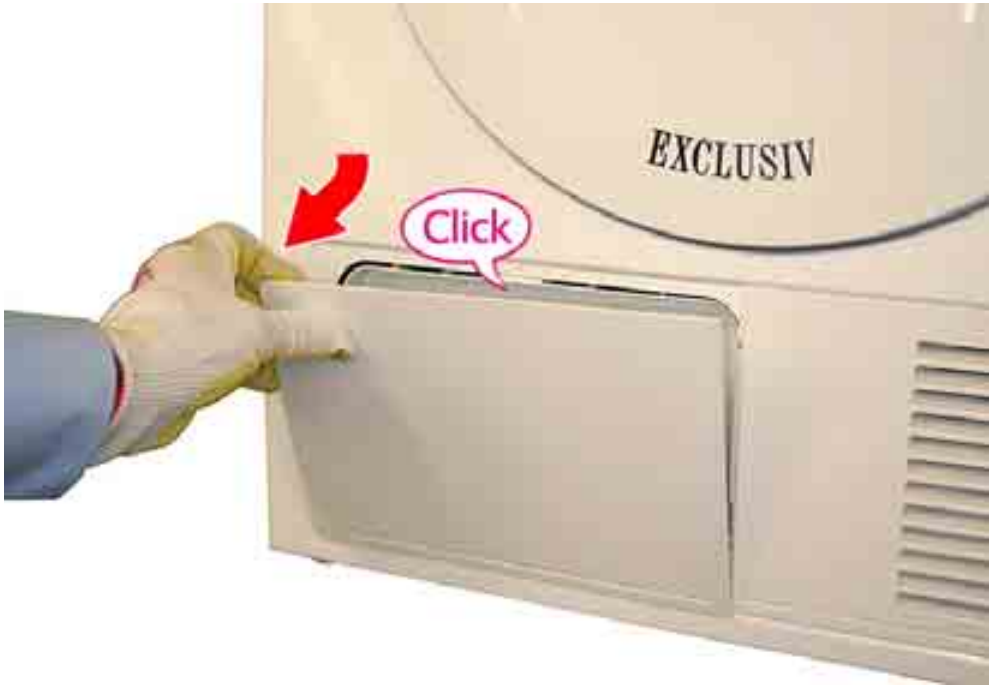
6.1 Removing the front panel

- ► Remove worktop.
- ► Remove fascia
- ► Remove left and right side panels
- ► Remove the door.
- ► Remove the door seal.
- ► Remove cooling-air panel
- ► Remove door lock
- ► Remove all screws **A**.
- ► Screw **B** see Removing door lock



6.2 Removing cover

► The cover is through pulls to release

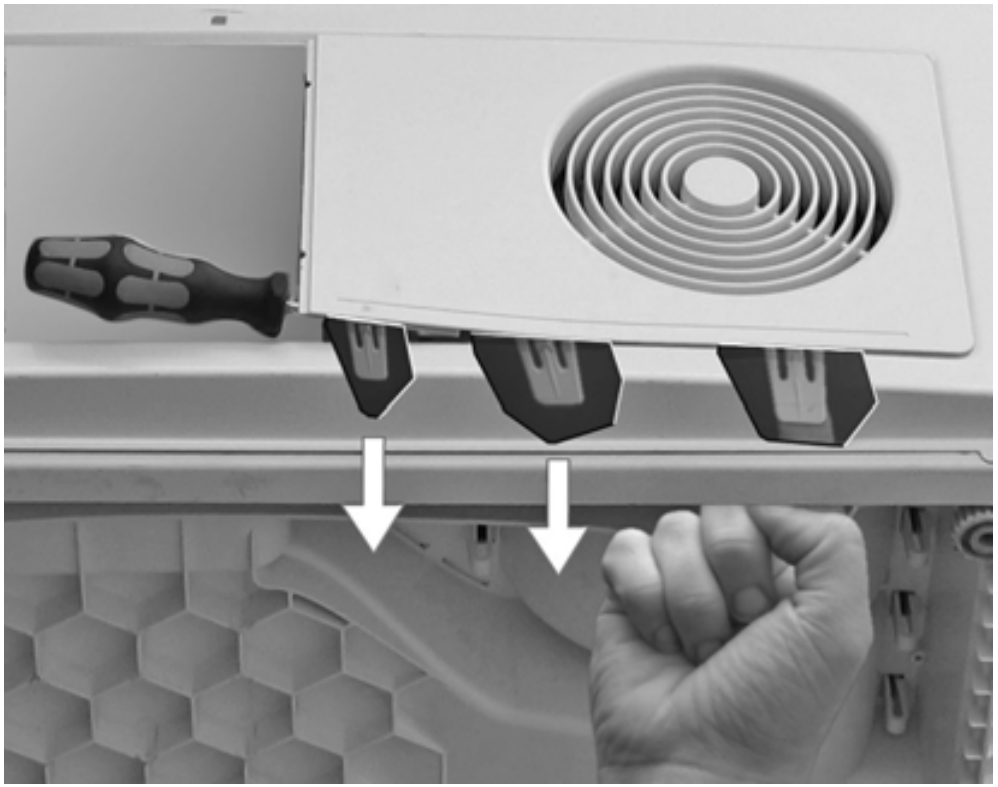


Removing the cooling-air panel

6.3 Removing the cooling-air panel

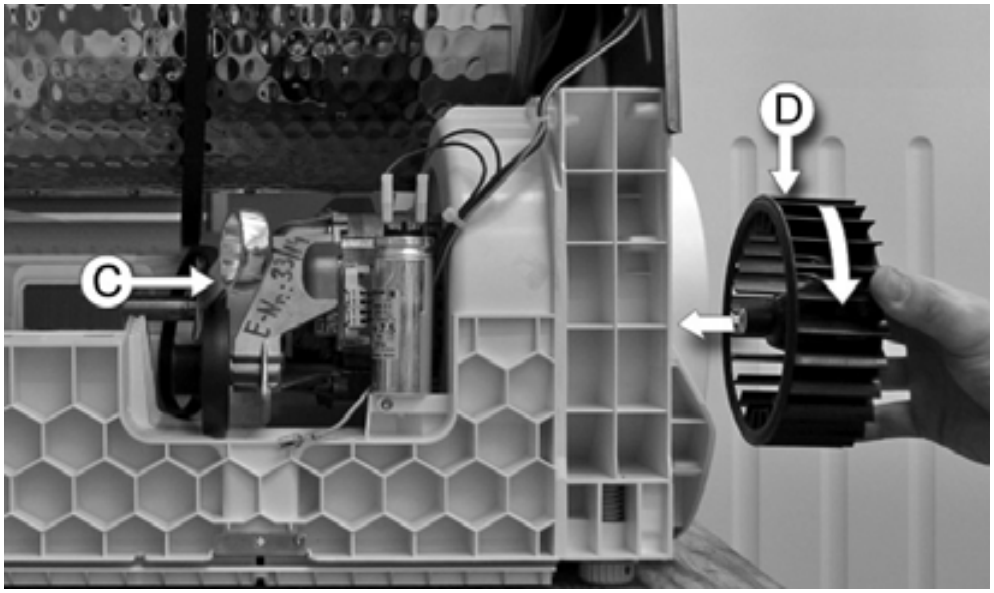
► Open the flap on the air cooler and detach.

► Tilt the appliance to the rear and pull down the catches. Prevent the catches from locking again by inserting a suitable object.



6.4 Removing fan impeller for process air

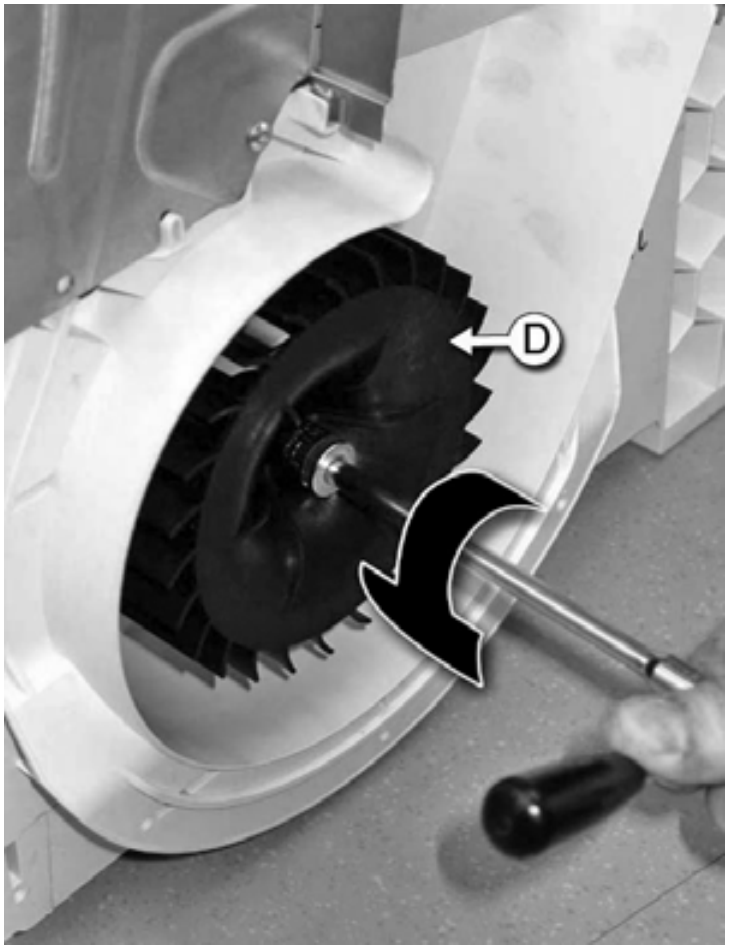
- ► Remove the worktop.
- ► Remove right side panel
- ► Remove rear panel (process air hood)
- ► Secure motor shaft with a 24 socket wrench **C**



C Socket wrench, size 24

D Fan impeller for process air

- ► Unscrew fan impeller for process air **D** anti-clockwise with a13 socket wrench.



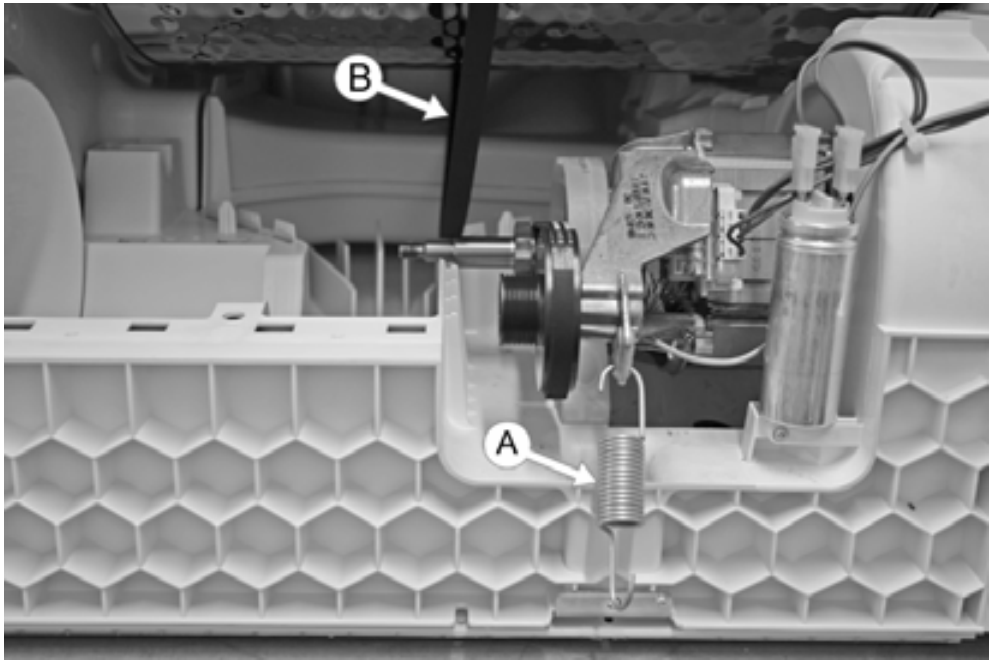
6.5 Removing the motor

Technical specifications

► Rated input when appliance empty:	250 W
► Current input when appliance empty:	0.8 A
► Motor capacitor, capacity:	7.5 µF
► Frequency:	50 Hz
► Operating voltage:	230 V
► Maximum switching voltage:	270 VAC
► Number of phases:	1 phase

6.5.1 Removing the motor

- ► Remove the worktop.
- ► Remove right side panel
- ► Remove rear panel.
- ► Remove fan impeller for process air.
- ► Remove the cooling-air duct.
- ► Remove electrical connections from the motor and protect against damage.
- ► Detach tension spring **A** from the base group.



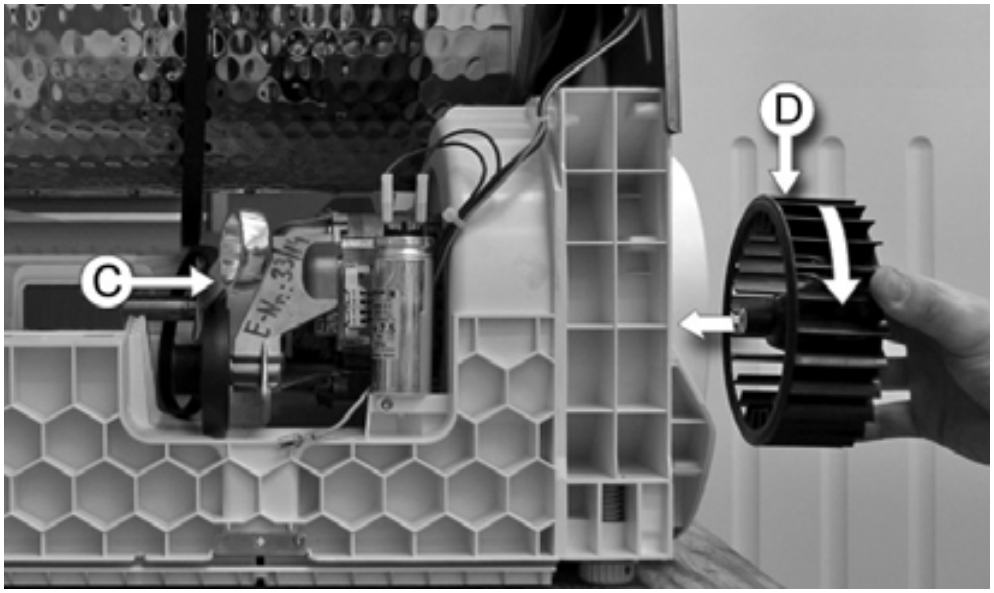
A Tension spring

- ► To remove V-belt **B**, press the motor upwards with a suitable tool

6.5.2 Removing the fan impeller for process air

► Secure motor shaft with a 24 socket wrench

C Socket wrench, size 24 Fan impeller for process air

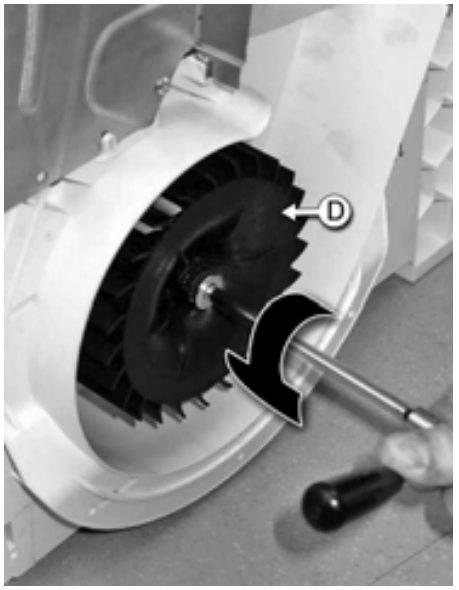


B Drive belt

C Socket wrench, size 24

D Fan impeller for process air

► Loosen and unscrew fan impeller **D** with a 13 socket wrench

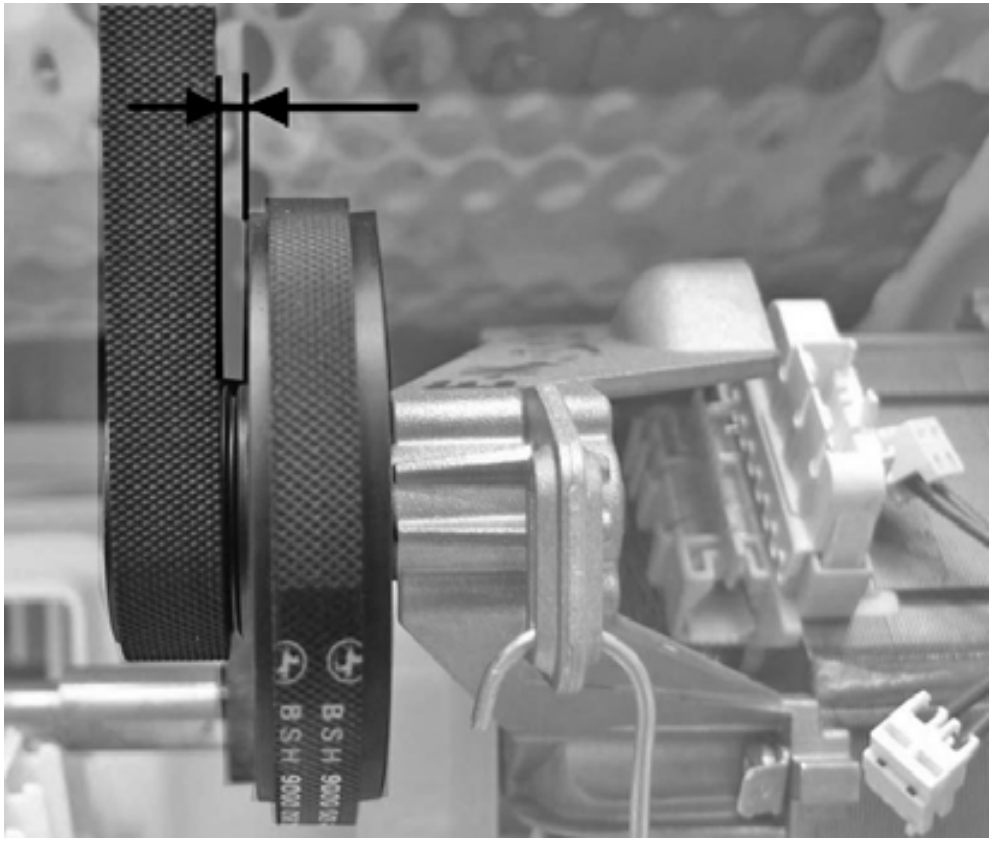


► Remove screws **A** (Torx 20) and remove motor.

6.6 Installing the motor / belt

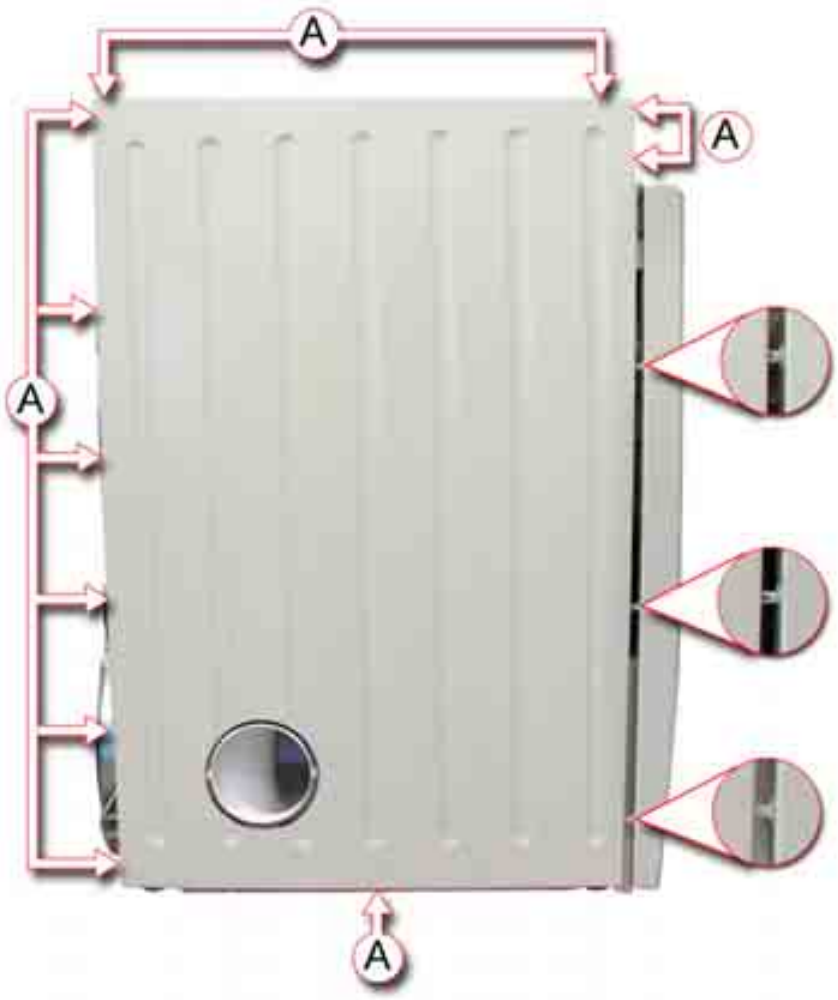
When installing the motor, proceed in reverse sequence as described in "Removing the motor".

Ensure that the V-belt is fitted correctly.Observe the gap between the belt pulleys.



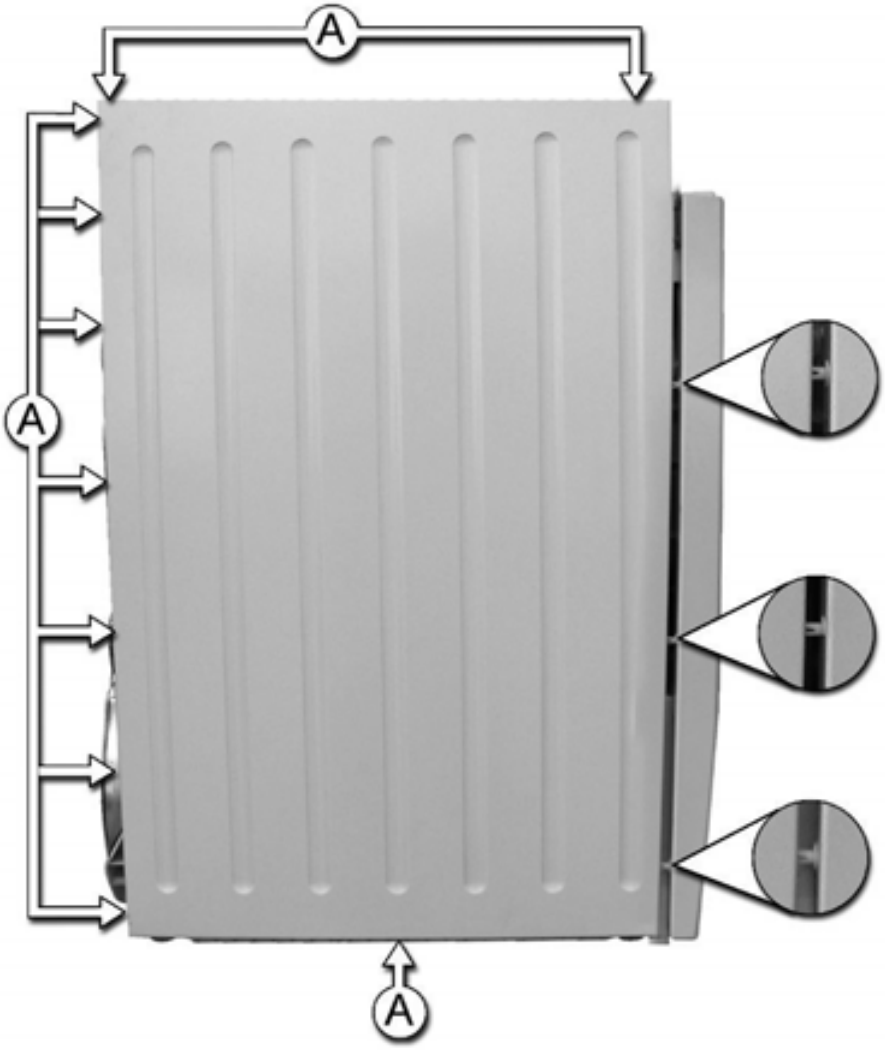
6.7 Removing the left side panel

- ► Remove worktop.
- ► Remove fascia
- ► Remove screws **A**
- ► Unlock side panel at the rear and pull out of the front holders.



6.8 Removing the right side panel

- ► Remove the worktop.
- ► Remove screws **A**
- ► Unlock side panel at the rear and pull out of the front holders.



6.9 Removing the door lock

- ► Remove the worktop
- ► Remove the fascia
- ► Remove left and right side panels
- ► Remove door
- ► Remove the cooling-air panel
- ► Remove the front panel

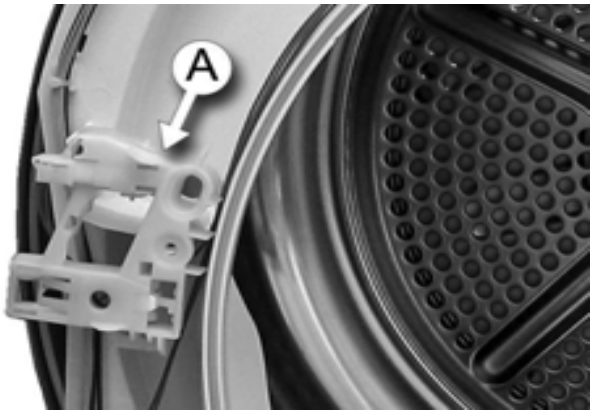
1. Remove door lock cover by undoing the catch **A**.

A Catches

2.

B Door lock screw

3.



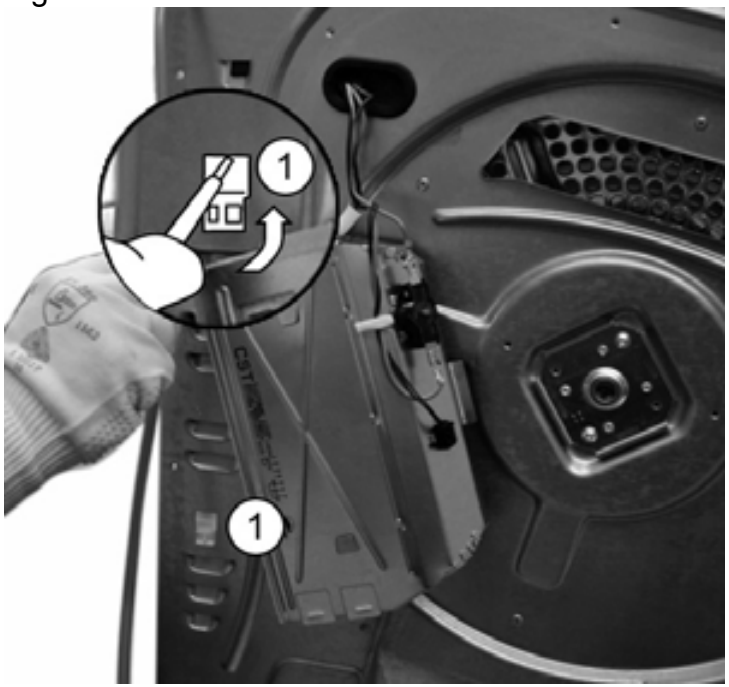
A Door lock

6.10 Repairing tapered pin

Removal:

- ► Remove the worktop
- ► Removing the panel
- ► Disconnect the power cord from the rear panel
- ► Remove left side panel and slacken belt
- ► Press through cable duct and remove as described above Fig. 1
- ► Loosen right side panel at the rear only. Fig. 2
- ► Disconnect hoses from the rear panel (1) and remove rear panel in the direction (2) Fig. 3.
- ► Remove process air duct
- ► Unscrew all retaining screws from the rear panel
- ► Remove heater with electrical connections
- ► Completely remove bearings
- ► Using a countersinking tool, unscrew 2 plastic rivets from the cover in the drum (341299). Fig. 4

Fig. 1



1 Catches

Fig. 2

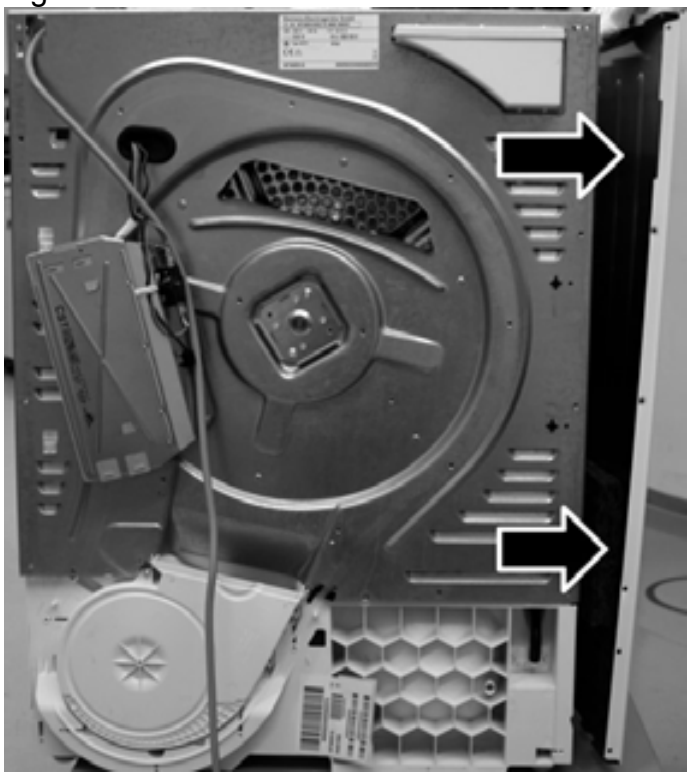
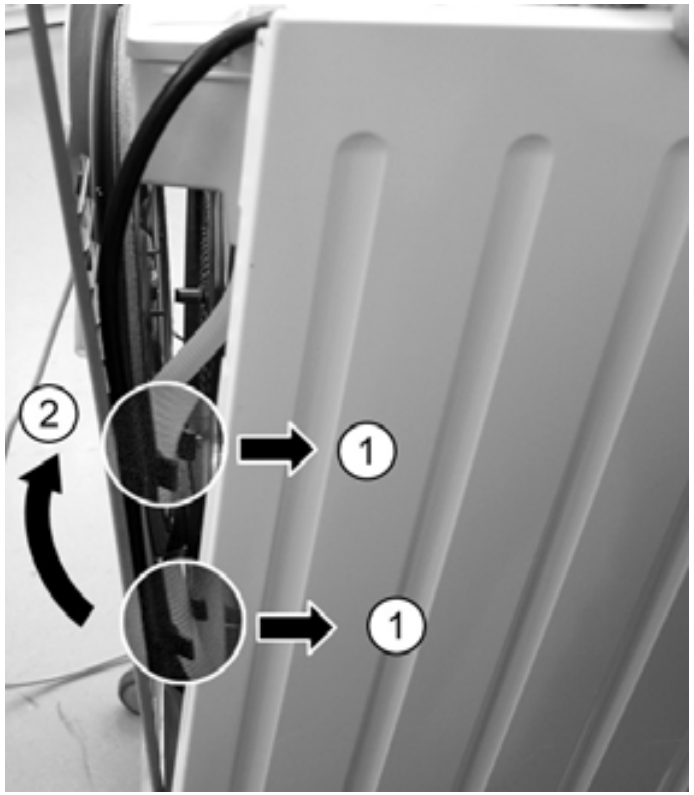
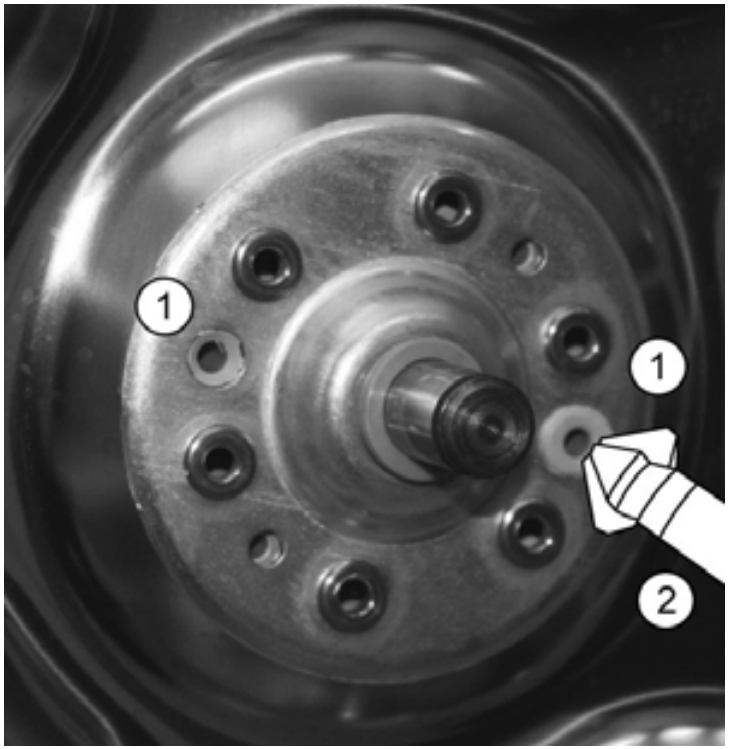


Fig. 3



1 Hose holder

Fig. 4



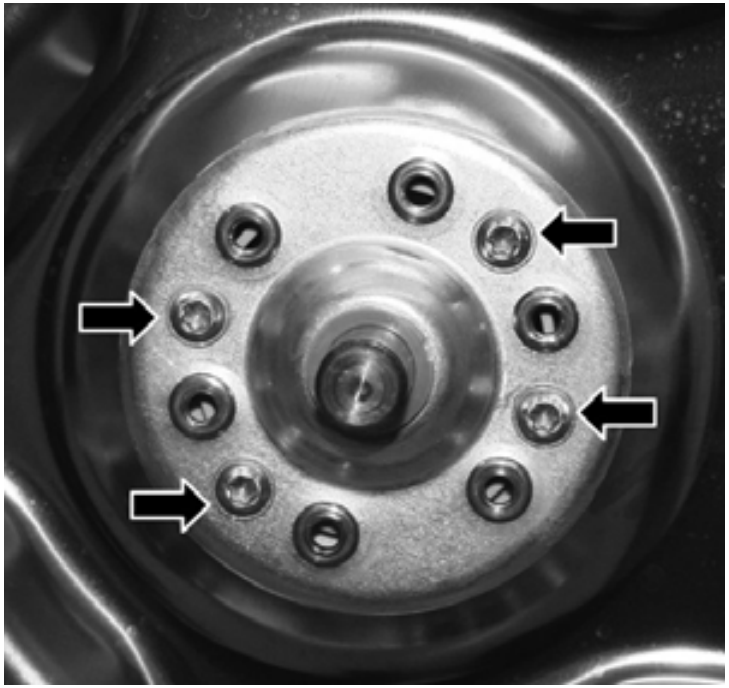
1 Plastic rivets unscrewed and original

2 Countersinking tool (341299)

6.11 Installing the pin

Fix the pin in the drum exactly over the extinguisher and tighten with 4 screws.

See diagrams



Correct attachment

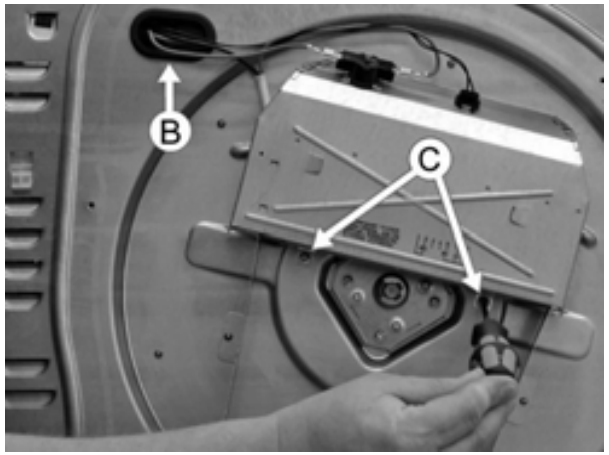
Do not attach pin through the rivets

Incorrect attachment

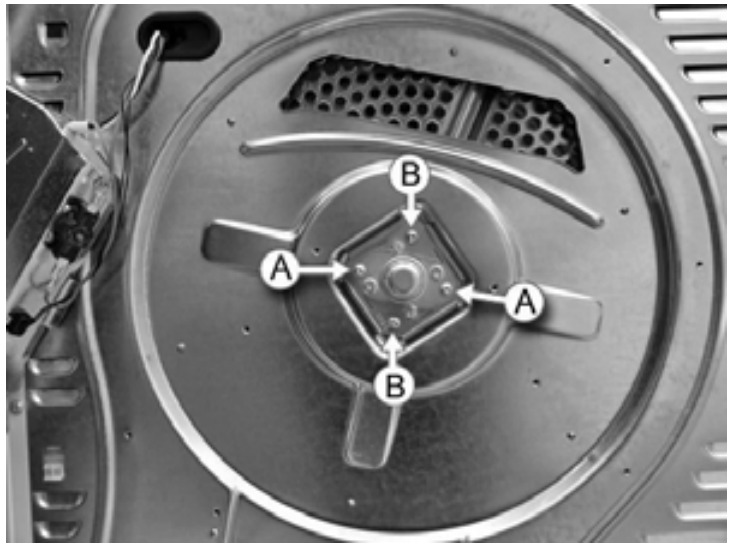
6.11.1 Removing the drum bearing

► Remove heating duct cover.

► Remove heater



► Remove cover (**A**)

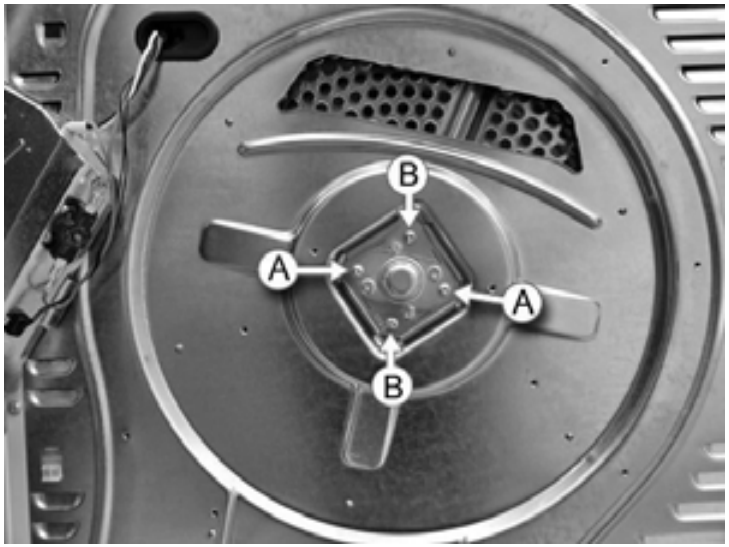


A Cover screws **B** Bearing screws

► Remove retaining ring

► Remove raceway

► Remove screws (**B**) from the bearing

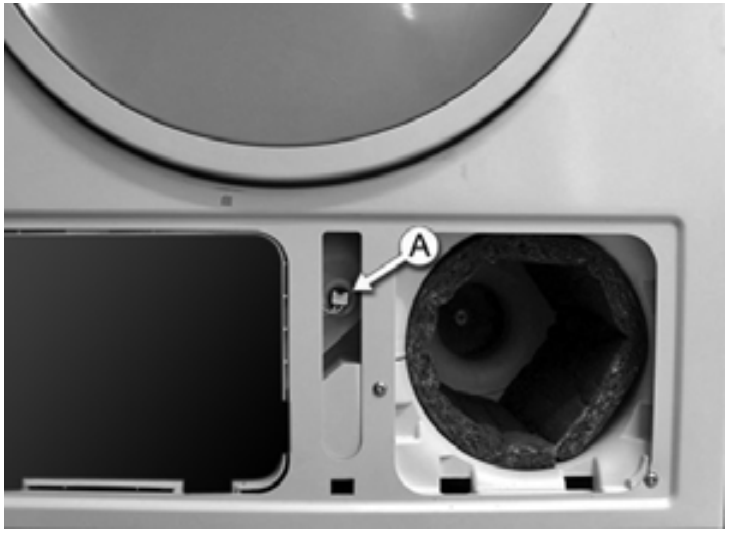


Attention:

► There is a second raceway on the inside of the drum shaft

6.12 Removing NTC

- ► remove the cooling -air panel
- ► Disconect electric connector NTC
- ► Remove the NTC **A**



A NTC

6.13 Diagnostic-repair tools

Universally valid

Before each repair and/or examination of the equipment the KD test program is to be started.

Probe tip

Probe tip material - No.: 340730 (with resistance tests absolutely the construction units on the module take off).

Probe Tipp Optional

Probe Tipp Mat.-Nr.:340951 for SAFETY off **KI02** for Relay plate heating

Ring spanner

Mat.Nr.: 341274

Socket key

Mat.Nr.: 340912

Adapter

Mat.Nr.: 340869

Protective glove

Material Nr.:	minimum	9	= 340728
	Maximum size	10	= 340729

7 FAULT DIAGNOSTICS

7.1 Fault displays

Customer complaint	Cause	Remedial action
End LED flashes (F:08 on the display)	Cable break or short-circuit NTC door	Check cable / plug contacts. Start test programme. Replace NTC door.
Drying and End LED flashes (F:09 on the display)	Cable break or short-circuit NTC heater.	Check cable / plug contacts. Start test programme. Replace NTC heater.
Iron-dry and Low heat (F:06 on the display)	Fluff strainer, air cooler, air circuit blocked (Overheating) Overloaded	Clean air circuits. Advise customer. Check heating function and, if required, replace parts. Advise customer. (max. 6 kg)
Cupboard-dry flashes (F:04 on the display)	Fluff strainer, air cooler, air circuit blocked Water passages and condensation tank blocked. Ambient temperature above 30 °C. Short-circuit or shunt in conductivity system. Time fault	Check air passages. Check and, if required, clean water passages Ensure that the cooling air circulation is adequate. Test programme conductivity measurement Max. running time of 240 min reached.
Further error displays see test program		

7.2 Controller

Customer complaint	Cause	Remedial action
Fuse was activated / released	Fuse overloaded. Adjustment of the connection power too high 10/16 A	Adjust 10 A variant (seesetting up / installation or instruction)
Start time delay (end time pre-election) jumps from 1 to 2 or more	Software calculated in dependence of the programme duration always on the next full hour (1:54=2h)	Give advice to customers

7.3 Time jumps

Customer complaint	Cause	Remedial action
Remaining running time jumps at the end of the programme Time jumps	Load too high, max. +100%	Observe max. load.
	Very high ambient temperature > 30 °C	Provide adequate ventilation.
	Initial moisture too high	Increase spin speed.
	Different types of washing. Residual humidity of the textiles differs.	Point out different types of washing to customer (cotton, synthetic fibres).

7.4 Odour

Customer complaint	Cause	Remedial action
Scorching odour	Drum overloaded.	Observe max. load (6 kg).
	Washing not suitable for drying.	Observe care symbol (see general repair instructions 58300000002975).
	Foreign objects in the appliance.	Remove foreign objects.
	Plug-in contacts / components.	Scorched plugs / replace components.
Chemical odour	Detergent / fabric softener / scented cloths.	Change detergent / fabric softener / scented cloths; if possible do without fabric softener / scented cloths.

7.5 Drive

Customer complaint	Cause	Remedial action
Drum does not rotate	Cable or plug-and-socket connection on the motor interrupted.	Check and, if required, replace according to circuit diagrams.
	Motor capacitor defective.	Check power of the motor capacitor and, if required, replace
	Belt tensioner defective.	Check and, if required, replace belt tensioner.
	Drum rollers defective.	Check the seat of the drum rollers and, if required, replace.
	Motor circuit-breaker has tripped.	Check motor for winding short-circuit and/or mechanical secure attachment and, if required, replace.
	Contact fault in the door switch.	Check door switch and, if required, replace
Pops	Asymmetry axis at drum	To check the axis at the drum. Change the drum if asymmetry

7.6 Heat

Fault details	Cause	Remedial action
High temperature on the side panels	Smaller gap between the drum and the side panels.	Advise customer. Temperature is within the specified tolerances.

7.7 Tangling

Customer complaint	Cause	Remedial action
Washing is very tangled	Bed linen not closed	
	Washing has gathered in the bed linen.	Always close bed linen.
	Drum overloaded	Observe load of 1 to 7 kg. G
		Install pin (643899) in the drum. In production as of KI 08.

7.8 Leakages

Customer complaint	Cause	Remedial action
Leaky at the door	Seal contaminated	Door seal with a damp cloth clean,
Water at the door seal	Normal water condensation at the seal	Customers advise
Water at the door glass		Principle condensation
Water at the door glass (water condensation)	By the printed on door glass it can come to a increased condensation formation.	New doors with double glazing. Improved isolation against cool air.
		Siemens Vollkunststoff **662930**
	Coldly/ Warmly bridge at the door glass.	Siemens with Glass **664526**
		Bosch Vollkunststoff **662931**
		Bosch with Glass **664527**

7.9 Heat

Fault details	Cause	Remedial action
High temperature on the side panels	Smaller gap between the drum and the side panels.	Advise customer. Temperature is within the specified tolerances.

8 TECHNICAL SPECIFICATIONS