SERVICE MANUAL

T3290 / T3530 / T3650

TD30 / TD50 / TD75

487 03 29 51.00
GB

Dryer type T3290 from serial number: 0310 / 0021709
Dryer type T3530 from serial number: 0310 / 0016692
Dryer type T3650 from serial number: 0310 / 0006062
Dryer type TD30 from serial number: 20300 / 0021709
Dryer type TD50 from serial number: 20500 / 0016692
Dryer type TD75 from serial number: 20750 / 0006062

NOTICE TO SERVICE PERSONNEL

INSTALLATION

Improper installation of Wascomat laundry and wet cleaning equipment can result in personal injury and severe damage to the machine.

REFER INSTALLATION TO QUALIFIED PERSONNEL!

RISK OF ELECTRIC SHOCK

The equipment utilizes high Voltages. Disconnect electric power before servicing.
The use of proper service tools and techniques, and the use of proper repair procedures, is essential to the safety of service personnel and equipment users.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

RISK OF PERSONAL INJURY

This equipment contains moving parts, and some components that may have sharp edges. Improper or careless service procedures may result in serious injury to service personnel.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

ABOUT THIS MANUAL

This manual is intended to provide service guidance to qualified service personnel. Wascomat and its authorized dealers make no determination regarding the qualification of individuals requesting this service manual. The service provider assumes all risks inherent to the servicing of this equipment and any risks that arise as result of the lack of knowledge or ability of any person servicing this equipment.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

NOTE:

Improper installation or servicing of Wascomat equipment will void the manufacturer's warranty!

WARNING

WARNING: For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

– Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

– WHAT TO DO IF YOU SMELL GAS:

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Clear the room, building or area of all occupants.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

– Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Service manual

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Safety rules

This machine is only intended for drying water-washed garments.

Clothes that have been cleaned with chemicals/flammable liquids, must NOT be dried in the machine.

Remove clothes from the tumble dryer as soon as they are dry. This prevents them from becoming creased, and reduces the risk of spontaneous ignition.

The machine must not be used for drying foam rubber or foam-like materials.

The machine must not be used for drying floor mops.
(This applies only to floor mops containing polypropylene).

The machine must not be used by children.

The machine must not be hosed down with water.

Mechanical, electrical and gas installations must only be carried out by qualified, licensed personnel.

Report machine malfunctions to qualified service personnel immediately. This is important for your own safety and for the safety of others.

Gas dryers only:

The machine is not to be installed in rooms containing cleaning machines with PERCHLORETHYLENE, TRICHLOROETHYLENE or CHLOROFLUOROCONTAINING HYDROCARBONS as cleaning agents.

What to do if you smell gas:

Do not try to light any appliance.

Do not touch any electrical switch; do not use any phone in your building.

Evacuate the room, building or area.

Contact appropriate authorities.

Servicing the dryer

Refer servicing to qualified personnel.
Improper servicing can result in hazardous conditions, fire, explosion, property damage, and personal injury.

Some components may have sharp edges!
Wear gloves when handling mechanical components.

Contents

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Technical data - type T3290

Heating		Electric	Steam	Gas
Drum volume:		286 litres	286 litres	286 litres
Weight:	Net	220 kg	220 kg	220 kg
Drum:	Diameter	680 mm	680 mm	680 mm
	Depth	790 mm	790 mm	790 mm
	Revolutions per minute	44 rpm	44 rpm	44 rpm
	G-factor	0.8	0.8	0.8
Capacity:		13.5 kg	13.5 kg	13.5 kg 30 lb
Motor:	Effect without reverse	0.37 kW	0.37 kW	0.37 kW
	Effect with reverse	2 x 0.37 kW	2 x 0.37 kW	2 x 0.37 kW
	Revolutions per minute:			
	Motor 50 Hz	1400 rpm	1400 rpm	1400 rpm
	Motor 60 Hz	1680 rpm	1680 rpm	1680 rpm
Heat effect:	Electric heating	13.5 kW	Variable, dependent upon steam pressure	
	Electric heating	18 kW		
	Gas heating			21 kW
Air consumption:	Electric 13.5 kW	430 m^3/h		
	Electric 18 kW	690 m^3/h		
	Steam		925 m^3/h	
	Gas			690 m^3/h
Pipe connection:	Evacuation	Ø 200	Ø 200	Ø 200
	Steam:		ISO 7/1-Rp1/2	
	Condensate outlet:		ISO 7/1-Rp1/2	
Steam:	Recommended pressure (absolute)		100-1000 kPa	
	Max. allowable pressure		1000 kPa	
Drop in pressure:	Evacuation	max. 80 Pa	max. 80 Pa	max. 80 Pa
Gas pipe connection:				ISO 7/1-R1/2
Gas pressure:	See page regarding pressure in the installation manual supplied with the dryer			
Noise level:		< 70 dB (A)	< 70 dB (A)	< 70 dB (A)

Technical data - type T3530

Heating		Electric	Steam	Gas
Drum volume:		528 litres	528 litres	528 litres
Weight:	Net	355 kg	355 kg	332 kg
Drum:	Diameter	913 mm	913 mm	913 mm
	Depth	812 mm	812 mm	812 mm
	Revolutions per minute	40 rpm	40 rpm	40 rpm
	G-factor	0.8	0.8	0.8
Capacity:		23 kg	23 kg	23 kg
Motor:	Effect	2 x 0.37 kW	2 x 0.37 kW	2 x 0.37 kW
	Revolutions per minute:			
	Motor 50 Hz	1400 rpm	1400 rpm	1400 rpm
	Motor 60 Hz	1680 rpm	1680 rpm	1680 rpm
Heat effect:	Electric heating	24 kW	Variable, dependent upon steam pressure	
	Electric heating	30 kW		
	Gas heating			40 kW
Air consumption:	Electric 24 kW	840 m^3/h		
	Electric 30 kW	1060 m^3/h		
	Steam		1380 m^3/h	
	Gas			1160 m^3/h
Pipe connection:	Evacuation	Ø 200	Ø 200	Ø 200
	Steam:		ISO 7/1-Rp 3/4	
	Condensate outlet:		ISO 7/1-Rp 3/4	
Steam:	Recommended pressure (absolute)		100-1000 kPa	
	Max. allowable pressure		1000 kPa	
Drop in pressure:	Evacuation	max. 200 Pa	max. 200 Pa	max. 60 Pa
Gas pipe connection:				ISO 7/1-R1/2
Gas pressure:	See page regarding pressure in the installation manual supplied with the dryer			
Noise level:		< 70 dB (A)	< 70 dB (A)	< 70 dB (A)

Technical data - type T3650

Heating		Electric	Steam	Gas
Drum volume:		650 litres	650 litres	650 litres
Weight:	Net	350 kg	355 kg	345 kg
Drum:	Diameter	913 mm	913 mm	913 mm
	Depth	998 mm	998 mm	998 mm
	Revolutions per minute	44 rpm	44 rpm	44 rpm
	G-factor	0.9	0.9	0.9
Capacity:		34 kg	34 kg	34 kg
Motor:	Effect of drum motor	0.37 kW	0.37 kW	0.37 kW
	Effect of fan motor	0.80 kW	0.80 kW	0.80 kW
	Revolutions per minute:			
	Motor 50 Hz, drum	1400 rpm	1400 rpm	1400 rpm
	Motor 60 Hz, drum	1680 rpm	1680 rpm	1680 rpm
	Motor 50 Hz, fan	2800 rpm	2800 rpm	2800 rpm
	Motor 60 Hz, fan	3300 rpm	3300 rpm	3300 rpm
Heat effect:	Electric heating	30 kW	Variable, dependent upon steam pressure	
	Electric heating	36 kW		
	Gas heating			57 kW
Air consumption:	Electric 30 kW	1500 m³/h		
	Electric 36 kW	1500 m³/h		
	Steam		1500 m³/h	
	Gas			1500 m³/h
Pipe connection:	Evacuation	Ø 200	Ø 200	Ø 200
	Steam:		ISO 7/1-Rp 3/4	
	Condensate outlet:		ISO 7/1-Rp 3/4	
Steam:	Recommended pressure (absolute)		100-1000 kPa	
	Max. allowable pressure		1000 kPa	
Drop in pressure:	Evacuation	max. 340 Pa	max. 340 Pa	max. 340 Pa
Gas pipe connection:				ISO 7/1-R3/4
Gas pressure:	See page regarding pressure in the installation manual supplied with the dryer			
Noise level:		< 70 dB (A)	< 70 dB (A)	< 70 dB (A)

Technical data - type TD30 (US and Canada only)

Heating			Gas
Cylinder volume:			10.1 cu.ft.
Weight:	Net		485 lbs
Cylinder:	Diameter		26 3/4”
	Depth		31”
	Revolutions per minute		44 rpm
	G-factor		0.8
Capacity:			30 lb
Motor single phase:	Effect of cylinder/vent motor		0.5hp
	Revolutions per minute 60 Hz		1680 rpm
Motor three phase:	Effect of cylinder/vent motor		0.5hp
	Effect with reverse:		
	Cylinder		0.5hp
	Blower		0.5hp
	Revolutions per minute 60 Hz		1680 rpm
Heat effect:	Gas heating		71700 BTU/h
Air consumption:	Gas		410 cu.ft./min
Pipe connection:	Evacuation:		Ø 8”
Drop in pressure:	Evacuation:		max. 0.1” W.C
Gas pipe connection:			1/2” NPT
Gas pressure:	**GNH** (Natural gas)	Minimum	3.5” W.C.
		Maximum	10” W.C.
	Propane	Minimum	8” W.C.
		Maximum	13” W.C.
Noise level:			< 70 dB (A)

Technical data - type TD50 (US and Canada only)

Heating			Gas
Cylinder volume:			18.6 cu.ft.
Weight: Net			730 lbs
Cylinder:	Diameter		36”
	Depth		32”
	Revolutions per minute		40 rpm
	G-factor		0.8
Capacity:			50 lb
Motor single phase:	Effect of cylinder/vent motor		1.5hp
	Revolutions per minute 60 Hz		1720 rpm
Motor three phase:	Effect of cylinder		0.5hp
	Effect of blower		0.5hp
	Revolutions per minute 60 Hz		1680 rpm
Heat effect:	Gas heating		136600 BTU/h
Air consumption:	Gas		680 cu.ft./min
Pipe connection:			Ø 8”
Drop in pressure:	Evacuation		max. 0.23” W.C.
Gas pipe connection:			1/2” NPT
Gas pressure:	**GNH** (Natural gas):	Minimum	3.5” W.C.
		Maximum	10” W.C.
	Propane:	Minimum	8” W.C.
		Maximum	13” W.C.
Noise level:			< 70 dB (A)

Technical data - type TD75 (US and Canada only)

Heating			Gas
Cylinder volume:			23 cu.ft.
Weight:	Net		760 lbs
Cylinder:	Diameter		36”
	Depth		39 1/4”
	Revolutions per minute		44 rpm
	G-factor		0.9
Capacity:			75 lb
Motor single phase:	Effect of cylinder motor		1.0hp
	Effect of blower motor		0.68hp
	Cylinder: Revolutions per minute 60 Hz		1700 rpm
	Ventilator: Revolutions per minute 60 Hz		3340 rpm
Motor three phase:	Effect of cylinder motor		0.5hp
	Effect of blower motor		1.0hp
	Cylinder: Revolutions per minute 60 Hz		1680 rpm
	Ventilator: Revolutions per minute 60 Hz		3400 rpm
Heat effect:	Gas heating		151200 BTU/h
Air consumption	Gas		650 cu.ft./min
Pipe connection:	Evacuation		Ø 8”
Drop in pressure:	Evacuation		max. 1.3” W.C.
Gas pipe connection:			3/4” NPT
Gas pressure:	**GNH** (Natural gas)	Minimum	3.5” W.C.
		Maximum	10” W.C.
	Propane	Minimum	8” W.C.
		Maximum	13” W.C.
Noise level:			< 70 dB (A)

Technical data - type TD30 (US and Canada only)

Heating		Electric	Steam
Cylinder volume:		10.1 cu.ft.	10.1 cu.ft.
Weight:	Net	485 lbs	485 lbs
Cylinder:	Diameter (680 mm)	26 3/4”	26 3/4”
	Depth (790 mm)	31”	31”
	Revolutions per minute	44 rpm	44 rpm
	G-factor	0.8	0.8
Capacity:		30 lb	30 lb
Motor single phase:	Effect of cylinder/vent motor		0.5hp
	Revolutions per minute 60 Hz		1680 rpm
Motor three phase:	Effect of cylinder/vent motor	0.5hp/	0.5hp
	Effect with reverse:		
	Cylinder	0.5hp	0.5hp
	Blower	0.5hp	0.5hp
	Revolutions per minute 60 Hz	1680 rpm	1680 rpm
Heat effect:	Electric heating	46100 BTU / h	Variable, dependent upon steam pressure
	Electric heating	61500 BTU / h	
Air consumption:	Electric 46100 BTU / h	253 cu.ft./min	
	Electric 61500 BTU / h	406 cu.ft./min	
	Steam		545 cu.ft./min
Pipe connection:	Evacuation	Ø 8”	Ø 8”
	Steam		1/2”NPT
	Condensate outlet		1/2”NPT
Steam:	Recommended pressure (absolute)		14.5 - 145 PSI
	Max. allowable pressure		145 PSI
Drop in pressure:	Evacuation	max. 0.32”W.C.	max. 0.32”W.C.
Noise level:		< 70 dB (A)	< 70 dB (A)

Technical data - type TD50 (US and Canada only)

Heating		Electric	Steam
Cylinder volume:		18.6 cu.ft.	18.6 cu.ft.
Weight:	Net	730 lbs	730 lbs
Cylinder:	Diameter	36”	36”
	Depth	32”	32”
	Revolutions per minute	40 rpm	40 rpm
	G-factor	0.8	0.8
Capacity:		50 lb	50lb
Motor single phase:	Effect of cylinder/vent motor		1.5hp/
	Revolutions per minute 60 Hz		1720 rpm
Motor three phase:	Effect of cylinder	0.5hp	0.5hp
	Effect of blower	0.5hp	0.5hp
	Revolutions per minute 60 Hz	1680 rpm	1680 rpm
Heat effect:	Electric heating	81900BTU / h	Variable, dependent upon steam pressure
	Electric heating	102400 BTU / h	
Air consumption:	Electric 81900 BTU / h	490 cu.ft./min	
	Electric 102400 BTU / h	625 cu.ft./min	
	Steam		810 cu.ft./min
Pipe connection:	Evacuation	Ø 8”	Ø 8”
	Steam		3/4”N.P.T.
	Condensate outlet		3/4”N.P.T.
Steam:	Recommended pressure (absolute)		14.5 - 145 PSI
	Max. allowable pressure		145 PSI
Drop in pressure:	Evacuation Maximum	max. 0.8”W.C.	max. 0.8”W.C.
Noise level:		< 70 dB (A)	< 70 dB (A)

Technical data - type TD75 (US and Canada only)

Heating		Electric	Steam
Cylinder volume:		23 cu.ft.	23 cu.ft.
Weight:	Net	760 lbs	760 lbs
Cylinder:	Diameter	36”	36”
	Depth	39 1/4”	39 1/4”
	Revolutions per minute	44 rpm	44 rpm
	G-factor	0.9	0.9
Capacity:		75 lb	75 lb
Motor single phase:	Effect of cylinder motor		1.0hp
	Effect of blower motor		0.68hp
	Cylinder: Revolutions per minute 60 Hz		1700 rpm
	Ventilator: Revolutions per minute 60 Hz		3340 rpm
Motor three phase:	Effect of cylinder motor	0.5hp	0.5hp
	Effect of blower motor	1.0hp	1.0hp
	Cylinder: Revolutions per minute 60 Hz	1680 rpm	1680 rpm
	Ventilator: Revolutions per minute 60 Hz	3400 rpm	3400 rpm
Heat effect:	Electric heating	102400 BTU / h	Variable, dependent upon steam pressure
	Electric heating	122900 BTU / h	
Air consumption:	Electric 102400 BTU / h	650 cu.ft./min	
	Electric 122900 BTU / h	650 cu.ft./min	
	Steam		650 cu.ft./min
Pipe connection:	Evacuation	Ø 8”	Ø 8”
	Steam		3/4” NPT
	Condensate outlet		3/4” NPT
Steam:	Recommended pressure (absolute)		14.5 - 145 PSI
	Max. allowable pressure		145 PSI
Drop in pressure:	Evacuation	max. 1.3” W.C.	max. 1.3” W.C.
Noise level:		< 70 dB (A)	< 70 dB (A)

Technical data - Town gas heating

Tumbler type		T3290	T3530
Drum volume:		286 litres	528 litres
Weight:	Net	220 kg	332 kg
Drum:	Diameter	680 mm	913 mm
	Depth	790 mm	812 mm
	Revolutions per minute	44 rpm	40 rpm
	G-factor	0.8	0.8
Capacity:		13.5 kg	23 kg
Motor:	Effect of drum motor	0.37 kW	0.37 kW
	Effect of fan motor	0.37 kW	0.37 kW
	Drum motor- revolutions 50 Hz	1400 rpm	1400 rpm
	Drum motor- revolutions 60 Hz	1680 rpm	1680 rpm
	Fan motor - revolutions 50 Hz	1400 rpm	1400 rpm
	Fan motor - revolutions 60 Hz	1680 rpm	1680 rpm
Heat effect:	Gas heating	21.0 kW	40.0 kW
Air consumption:	Gas	690 m^3/h	1160 m^3/h
Pipe connection:	Evacuation	Ø 200	Ø 200
Drop in pressure:	Evacuation	20 Pa	60 Pa
Gas pipe connection:		ISO 7/1-R3/4	ISO 7/1-R1
Gas pressure:	See page regarding pressure in the installation manual supplied with the dryer		
Noise level:		< 70 dB (A)	< 70 dB (A)

Technical data - T3290 Superheated water

Drum volume:		286 litres
Weight:	Netto	220 kg
Drum:	Diameter	680 mm
	Depth	790 mm
	Revolutions per minute	44 rpm
	G-Factor	0.8
Capacity		13.5 kg
Motor:	Effect with reverse	2 x 0.37 kW
Revolution:	Motor 50 Hz	1400 rpm
Heat effect:		dependent upon water temperature
Air consumption:		900 m^3/h
Pipe connection:	Evacuation	Ø 200
	Superheated water	ISO 228/1 - G 11/4”
Superheated water:	Recommended pressure (absolute)	1 - 2 bar
	Max. allowable pressure	2 bar
Drop in pressure:	Evacuation	Max. 80 Pa
Noise level:		< 70 dB (A)

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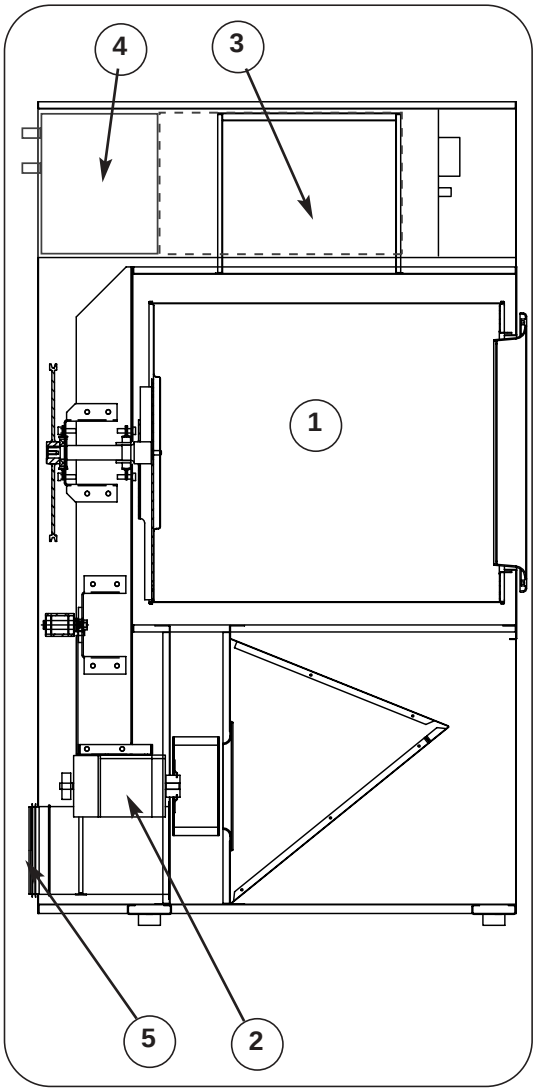
Principal components



Drum, pos. 1

The drum is suspended in a spider. The spider shaft is fastened to the back plate of the dryer. The drum is either made of stainless or galvanized steel.
An Aqua Clean dryer has a stainless drum.

See section 42.

Motor, pos. 2

The dryer has one or two motors.

If the dryer has one motor, this operates both drum and blower.

If the dryer has two motors, motor 1 operates the blower and motor 2 operates the drum.

See section 30.

Heating unit, pos. 3 and pos. 4

The heating unit is positioned in the top of the dryer.

Pos. 3: Electric heating unit and gas heating unit.

Pos. 4: Steam heating unit and superheated water unit.

Dryer types T3290/ T3530/ T3650 and TD30/ TD50/ TD75 are available as **electric heated, steam heated or gas heated.**

Dryer type T3290/ T3530 is available as **town gas heated.**

Dryer type T3290 is available as connectable to **superheated water**.

See section 40.

Exhaust duct, pos. 5

All dryer types have a vent into the open air.

See section 6

Microprocessor

All dryers have a microprocessor. The microprocessor control has different functions.

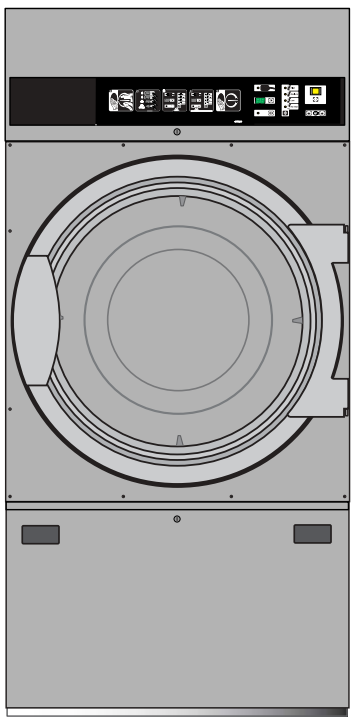
See next page.

Fig. 1 Dryer with a Basic- 3 microprocessor.

Fig. 2 Dryer with a Selecta Control microprocessor.

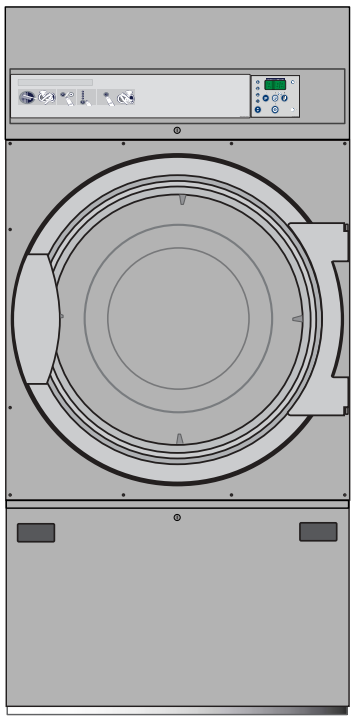
Dryer with Basic-3

1



Dryer with Selecta Control

2



Dryer with Basic-3

Programs

Anticrease function
An anticrease function engages after the end of the program sequence.

RMC (optional)
Residual Moisture Control - the dryer stops automatically when the clothes have reached the required residual moisture level.

Drum reversering
On dryers with drum reversing the control will switch on reversing during the program sequence. Reversing can be switched off in the panel on the front of the dryer.

Error codes
A safety system is constantly monitoring the dryer functions, and errors will be shown as flashing error codes in the dryer display.

Selectable programs
The dryers have selectable programs and drying time.

The programs are developed specially for use in communal laundries, industrial laundries, institutions and coin-operated laundries.

Dryers with payment for drying time (coin drop or central payment) have time controlled programs.

Dryers with manual operation have time controlled programs and as an option programs with residual moisture control (RMC).

Loading door

Normally the dryer has a right-hinged door.

However, the door swing direction can be changed, see section 43.

A door switch ensures that the dryer stops automatically if the door is opened during a program sequence, see section 29.

Dryer with Basic-3

Operating panel

The operating panel is equipped with:

- Buttons for setting programs, temperatures, and drying time.
- Start/stop button.
- Display showing program selection, remaining drying time and error code, if any.
- Heating indicator, lamp lights when heating is on.
- Filter lamp. When the lamp is lit, the filter must be cleaned.

Coin drop/card reader

The dryer is available with a factory-installed coin drop, a factory-installed card-start system, or it can be prepared for installation of a card start system.

On vending models, insertion of a coin or card vends an owner-programmed drying time.

Aqua Clean

Dryer types T3530AC/ T3650AC are dryers developed specially for wet cleaning.
Dryer types TD50RMC/TD75RMC are dryers developed specially for wet cleaning.

Dryer with Selecta Control

Programs

Anticrease function
An anticrease function engages after the end of a program sequence.

RMC (optional)
Residual Moisture Control - the dryer stops automatically when the clothes have reached the required residual moisture level.

Drum reversing (optional)
In Selecta Control drum reversing can be switched on/off.

Error code
Dryer functions monitoring - errors occurred during the program sequence are registered in the log. Some of the error codes are shown on the display at the same time.

Auto stop
The dryer stops automatically when the clothes are dry.

Selectable programs
The dryers have selectable programs and drying time.

The programs are developed specially for use in communal laundries, industrial laundries, institutions and coin-operated laundries.

Dryers with payment for drying time (coin drop or central payment) have time controlled programs.

Dryers with manual operation have time controlled programs and as an option programs with residual moisture control (RMC).

Loading door

Normally the dryer has a right-hinged door.

However, the door swing direction can be changed, see section 43.

A door switch ensures that the dryer stops automatically if the door is opened during the program sequence, see section 29.

Dryer with Selecta Control

Operating panel

The operating panel is equipped with:

- Buttons for setting programs, temperatures, and drying time.
- Start/stop button.
- Display showing program selection, remaining drying time and error code, if any.
- Heating indicator, lamp lights when heating is on.
- Filter lamp. Filter door open or filter needs cleaning.

Coin drop/card reader

The dryer is available with a factory-installed coin drop, a factory-installed card-start system, or it can be prepared for installation of a card start system.

On vending models, insertion of a coin or card vends an owner-programmed drying time.

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Adjusting the dryer

Nonreturn flap

In order to achieve the best result it is important that the dryer has the right air volume to work with.

From factory the nonreturn flap is set to be wide open.

Too small air volume

Dryer with Selecta Control

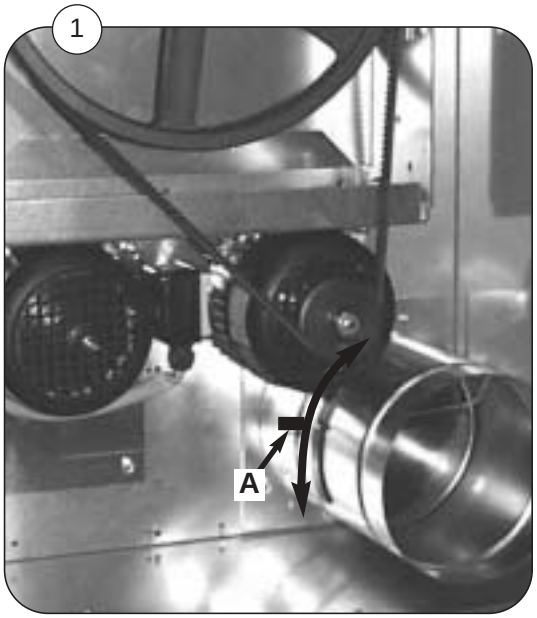
The dryer microprocessor reports an error and error code E15 is displayed if the released air volume is too smal, ie if the nonreturn flap closes too much.

Dryer with Basic 3 Control

The dryer microprocessor reports an error and the filter lamp is on if the released air volume is too smal, ie if the nonreturn flap closes too much.

Adjusting the dryer

1. Dismount the back plate.
2. Adjust the air volume by opening/closing the damper **A**, fig. 1.



Contents

Packing and dispatch 7.3

Returning defective parts

Packing and dispatch

Returned parts must be packed in such a way that they can resist the transportation without further damage. During transport mechanical parts must be unmovable. Electrical components and boards must be wrapped in ESD approved bags.

All dispatches must be marked in such a way that it is obvious to whom / which department they are sent.

Contents

Function check 11.3
Maintenance 11.4
Maintenance - internal wearing parts:
Cleaning around the drum 11.6
Motors 11.6
Lubrication of bearings 11.6
Checking belt tension 11.7
Tightening drive belt 11.8
The area surrounding the dryer 11.10
Safety and warnings signs (USA only) 11.10

Function check

Check that the drum is empty and the loading door is closed.

Checking the micro switches

Start the dryer.

Check if the micro switches are working properly:

• Dryer with Basic-3 / Selecta Control

The dryer must stop if the loading door is opened.

If the dryer operates with the loading door open, go to section 29.

• Dryer with Selecta Control only

The dryer **must** stop if the filter door is opened.

If the dryer operates with the filter door open, go to section 29.

Correct direction of rotation

For dryers with a 3-phase motor the direction of rotation must be checked.

Check the direction of rotation of the **fan motor:**

Fig. 1 Correct direction of rotation must be **clockwise** seen from the front.

If the direction of rotation is not correct, swap two phases on the power input connection terminal block.

Final test

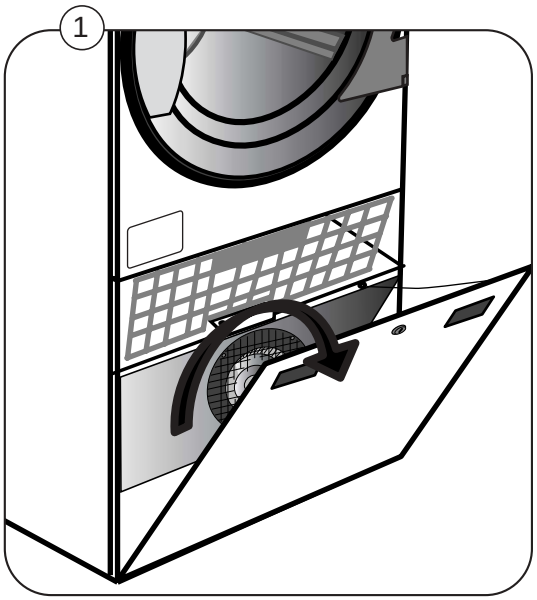
1. Start the dryer and allow it to operate for 5 minutes on a program that requires heat.

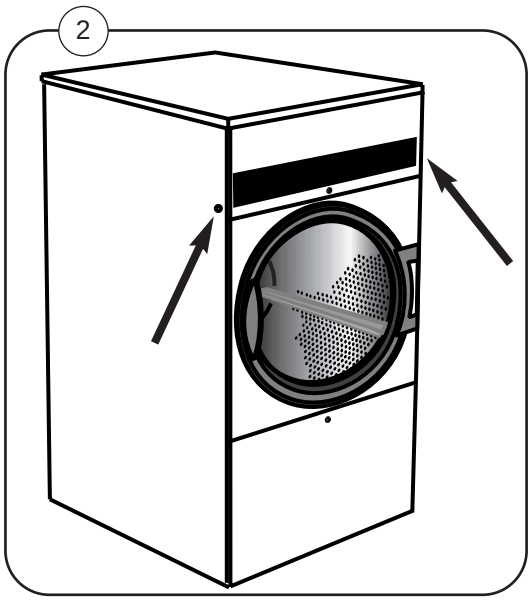
2. Check whether the heating is working by opening the loading door and feeling the heat.

If the above test points have been carried out and the dryer is operational, the dryer is ready for use.

Safety screws

Fig. 2 Remember to fit the screws on the sides of the front panel.





Maintenance

Exhaust duct

Check (after three months, then every three to six months, as required) that the exhaust duct on the back of the dryer has not become blocked with lint or other debris.

Nonreturn flap

At least once a year the nonreturn flap must be cleaned. See section 6.

Fan

Check (after three months, then every three to six months, as required) that the fan has not become blocked with lint or other debris.

Note Be careful not to damage the fan wheel.

Door gasket

Check that the loading door gasket is clean and in good condition. Use a suitable cleaner. Do not use solvents that may damage sensitive plastics or painted finish.

Micro switch

Vacuum clean the loading door switch.
Vacuum clean the filter door switch. Dryer with Selecta Control only.

Lint filter

Make a daily lint check. When maintaining the lint filter on a daily basis it does not have to be removed.

Dryer with RMC

To ensure that the moisture tracing is always working optimally it is important to clean the lifters.

Lack of cleaning the lifters can reduce the automatic residual moisture control in the clothes resulting in the clothes being moister than requested when the program has ended.

Cleaning

Wipe off/clean drum and lifters with citric acid (Acidum citricum). If soap/softener residue remains, it is recommended also to use a coarse sponge.

The frequency of cleaning should depend on the operating frequency - with a minimum of once a week.

Maintenance

Inlet filter, superheated water

Inlet filter must be cleaned once a week.

Clean the filter with a vacuum cleaner.

Maintenance - internal wearing parts

Maintenance should be conducted to an extent related to operation frequency and the conditions on the premises, or at least once a year.

Cleaning around the drum

1. Disconnect the power supply from the dryer.
2. Fig. 1 Dismount the front panel.
3. Remove the lint using a vacuum cleaner.
4. T3650 and TD75: Inspect the two support rollers and replace them if necessary, see section 42: **Replacing support rollers**.
5. Reassemble the dryer.
6. Connect the power supply
7. Test the dryer, see section 11: **Function check**.

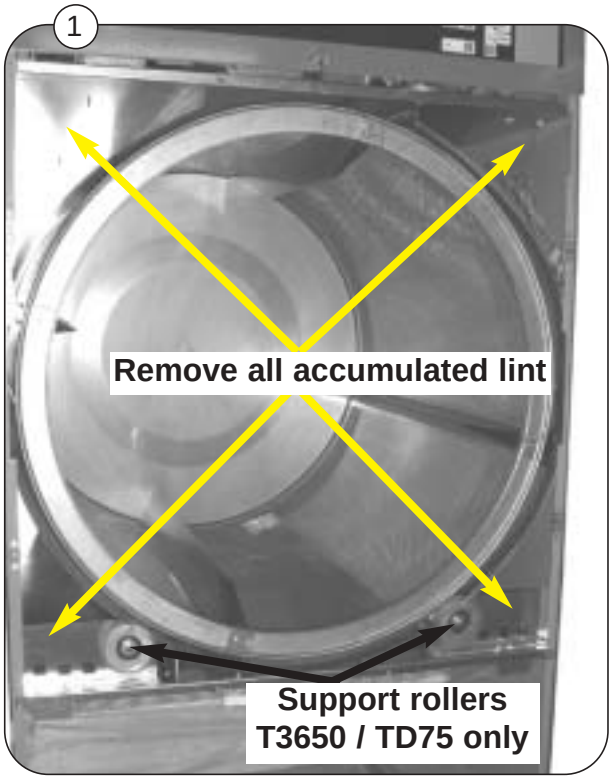
Motors

Fig. 2 Vacuum the fan covers. This is done at the annual belt tightening.

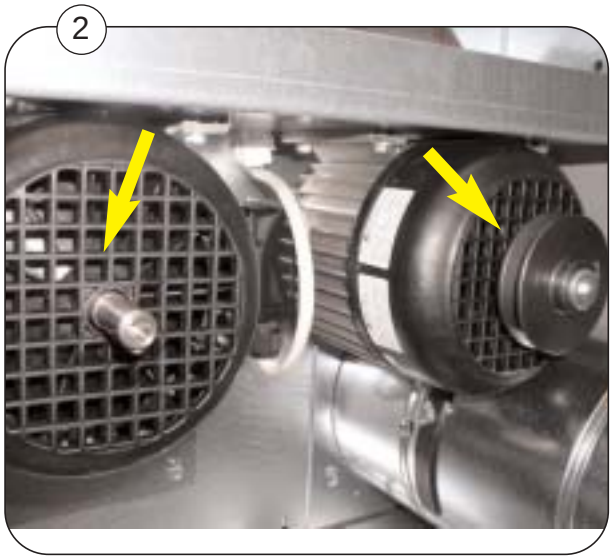
Lubrication of bearings

All bearings are maintenance free as they are permanently lubricated.

1



2



Maintenance - internal wearing parts

Checking the belt tension

Instructions in using the gauge from Optibelt:

1. Remove the back plate.
2. Fig. 1 Place the gauge in check point **1 / 2** as shown on fig. 1.

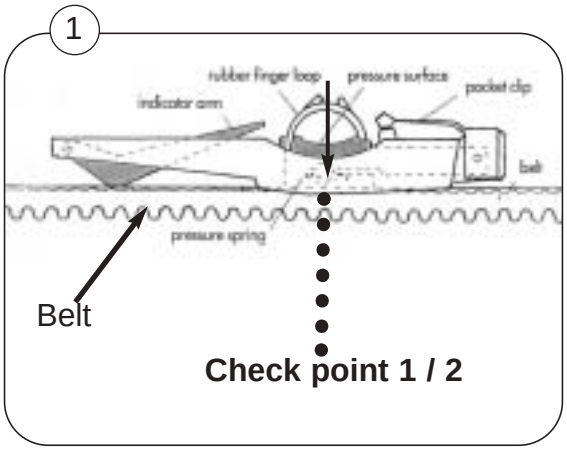
Check points 1 / 2 see fig. 4 and 5 next page.

3. Carefully press your finger till you hear a click.
4. Read the result as shown on fig. 3.
5. Compare the result with the numbers in the table below.

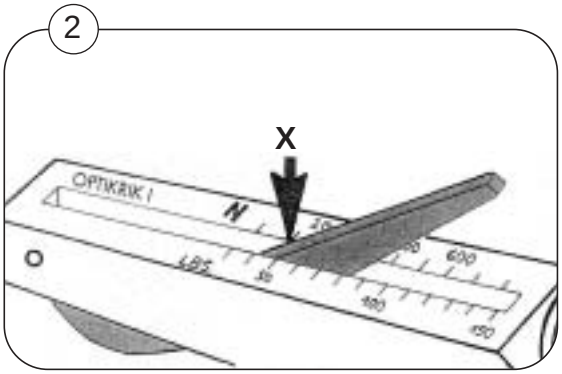
This must be done 3 times in order to make sure the readings are correct.

The last column in the table fig. 3 shows the measurings done with a frequency meter.

1



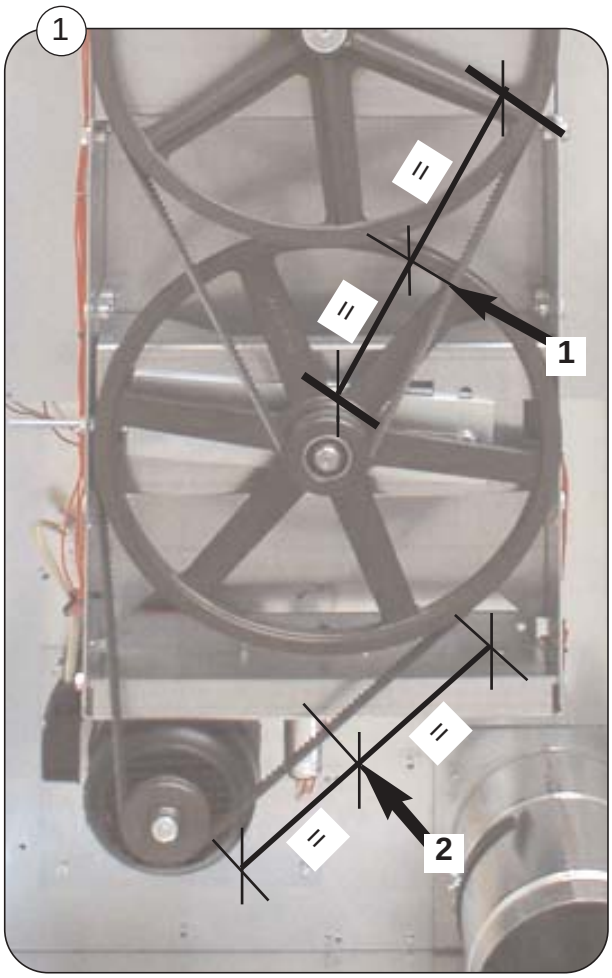
2

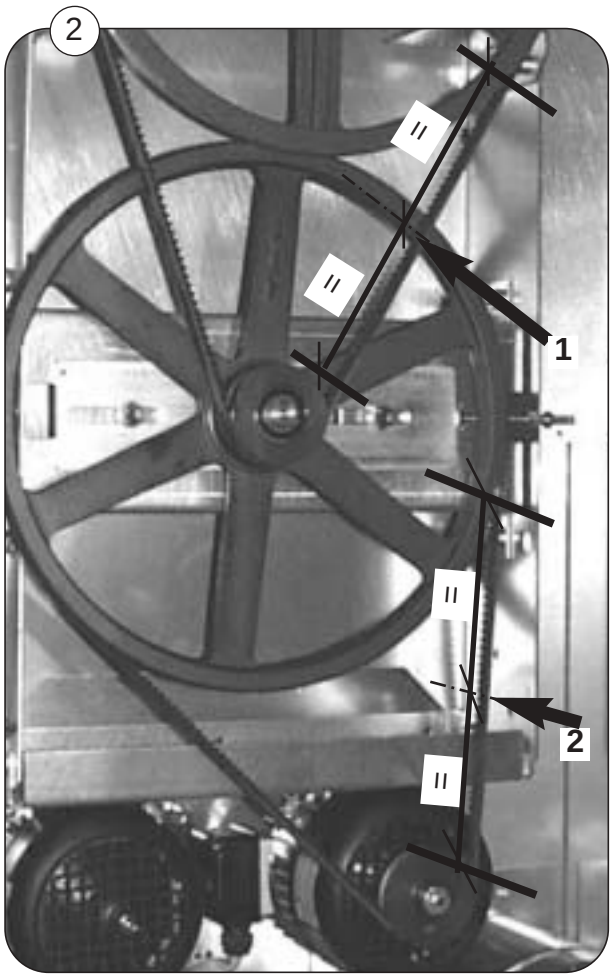


3

Dryer type	Check point	Reading X = N	Hz
T3290	**1** **2**	150N-275N 150N-275N	80-100Hz 80-100Hz
TD30	**1** **2**	150N-275N 150N-275N	80-100Hz 80-100Hz
T3530	**1** **2**	150N-275N 150N-275N	90±10Hz 90±10Hz
TD50	**1** **2**	150N-275N 150N-275N	90±10Hz 90±10Hz
T3650	**1** **2**	250N-325N 200N-250N	80±10Hz 80±10Hz
TD75	**1** **2**	250N-325N 200N-250N	80±10Hz 80±10Hz

Checking the belt tension - Check points 1 / 2





Maintenance - internal wearing parts

Tightening drive belt

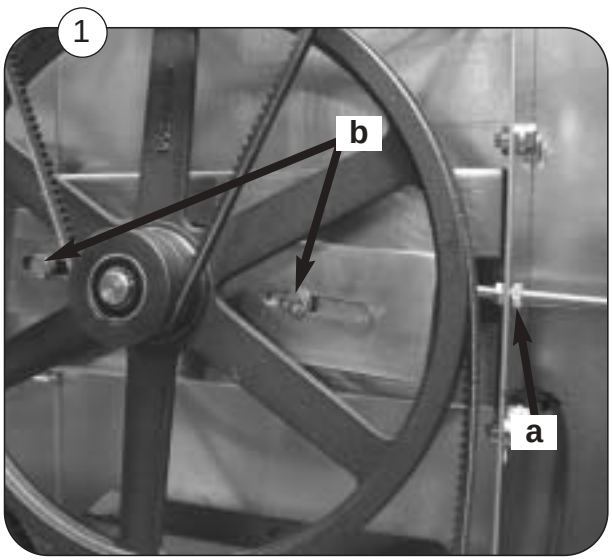
Fig. 1 Dryer type 3290, TD30.

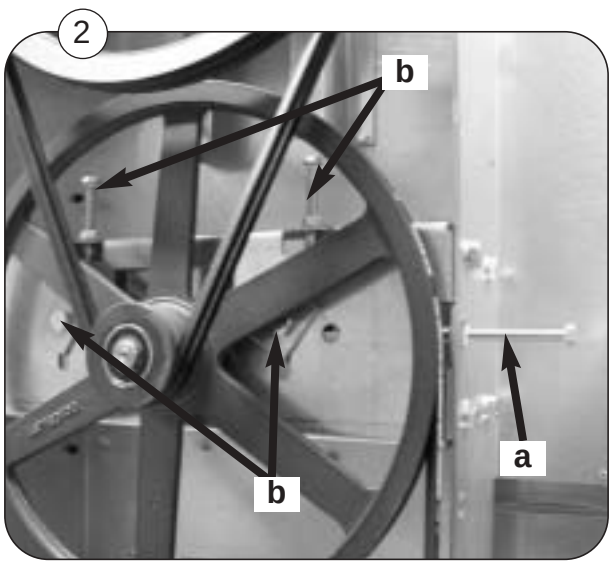
Fig. 2 Dryer type 3530, TD50, T3650, TD75.

1. Loosen belt tightener **a**.

2. Loosen the bolts **b**. If the plate is pulled away from the belt tightener **a** the belt is tightened and the belt is loosened if the plate is pulled towards belt tightener **a**.

3. Tighten bolts **b** and belt tightener **a** when the desired result has been achieved.





The area surrounding the dryer

Fresh-air intake to the room

Check that the fresh-air intake are not clogged by lint/dust or blocked in any other way.

Dryer area

Check that the dryer area is clear and free from combustible materials, gasoline and other flammable vapours and liquids.

Safety and warnings signs (USA only)

Product safety signs or labels should be replaced when they no longer meet the legibility requirements for safe viewing.

Check that all the safety and warning signs are located on the dryer as shown in the installation manual supplied with the dryer. A copy of this manual is available from your dealer.

Replacement of safety signs or labels should be in accordance with the installation manual.

Contents

Control locations, Basic-3 . . . . . 21.3
Programming the dryer 21.3
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Changing machine type 21.4
Changing parameters 21.5
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Running hours counter 21.9
Control locations, Selecta Control 21.11
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Replacement of main circuit board 21.13
Connecting accessory systems 21.14

Circuit boards MUST be protected from static electricity!

Remember!

- Always use an earthed wrist strap.
- Without the antistatic wrapping, the board is unprotected.
- Keep all items that can cause static discharge (such as plastic bags, fabric, and the like) away from the circuit board.
- Items like plastic, foam plastic, nylon, or cellophane wrapping are all big generators of static electricity.
- Static electricity can not be felt, heard or seen till the voltage reaches 2500V.
- Board components can be damaged by static electricity under 100V.

Control location, Basic-3 PCB

User module circuit board / main circuit board

Fig. 1 Basic-3 PCB is placed behind the operating panel.

Basic-3 PCB contains a circuit board with display, indicator lamps, a connector for the user keypad, and electronics to communicate commands to the main circuit board via a serial interface.

Switching to Programming mode

1. Open the loading door (the door must be kept open).
2. Open the door of the control panel.
3. Move the switch on the circuit-board to position SP.
4. Program the dryer as described on following pages.
5. End of programming. Move the switch back to normal mode.

Programming the dryer

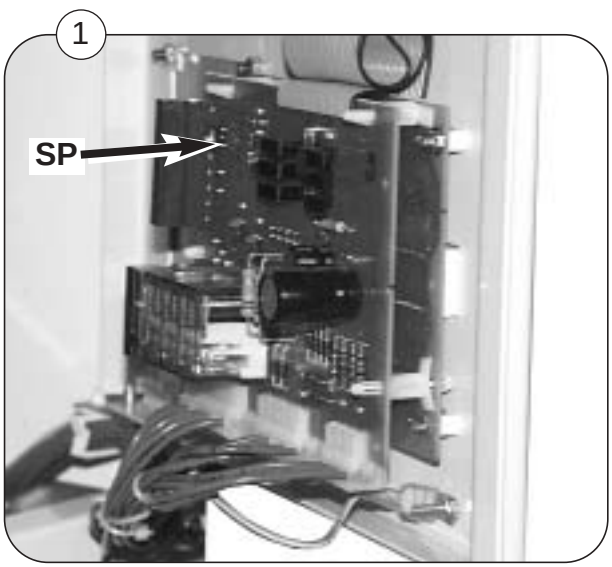
The circuit board contains a switch **SP** for changing to programming mode.

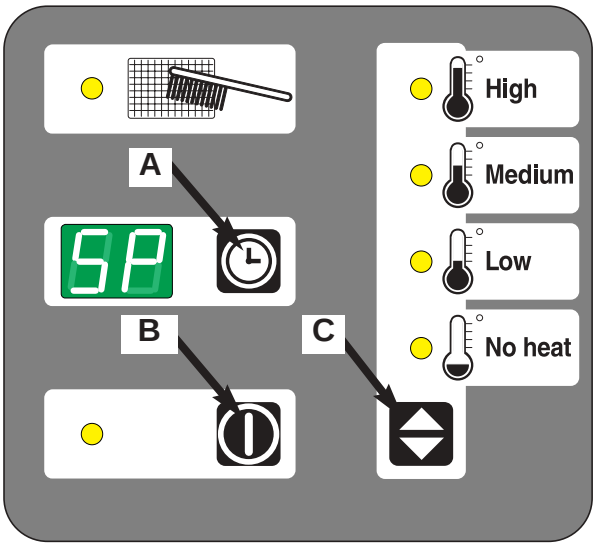
The display will then read **SP** and the 3 keys A B and C can now be used to change the parameters.

A = Shift between different parameters

B = Down

C = Up





Adjustable parameters

00. Machine type

01. - 03. Temperature

04. Temperature hysteresis

05. Time interval

06. Max. running time or “coin 2”

07. Running time between reversals

08. Cooling time

09. - 11. Residual moisture levels

12. - 14. Extra drying time

Changing of machine type

Press the clock button on the operating panel; the display will read **00.**

The first parameter **00.** = machine type.

The parameter numbers are shown for two seconds with a dot after the last digit.

After two seconds the machine type selected will be displayed.

Example:
10 corresponds to manual time control without reversing.

The machine type can be changed by using the buttons to count up or down.

Parameter 00. Machine types

Para-meter	Designation	Factory setting	Comments
00.	**Dryer without reversing**		
	Manual time control	10	
	Manual with RMC	50	
	Coin	11	
	Coin	51	Japan
	Central control panel	12	
	Dryer with reversing		
	Manual time control	30	
	Manual with RMC	70	
	Coin	31	
	Coin	71	Japan
	Central control panel	32	

Changing parameters

When the machine type has been selected, push the clock button; parameter **01.** will be displayed.

After two seconds a value is shown which can be changed by means of the count up/down buttons.

Now press the clock button again; the next parameter will be displayed.

After two seconds a value is shown which can be changed by means of the count up/down buttons, etc.

It is possible to scroll the parameters by pushing the clock button repeatedly.

Parameter 01.- 03. Temperature setting

Para-meter	Designation	Range	Step	Factory setting °C	Comments
01.	Temperature High	32 - 85°C	1°C	85	Air outlet temperature High.
	Temperature High US only	32 - 85°C	1°C	70	Air outlet temperature High (185°F)
02.	Temperature Medium	32 - 85°C	1°C	70	Air outlet temperature Medium.
	Temperature Medium US only	32 - 85°C	1°C	60	Air outlet temperature Medium (140°F)
03.	Temperature Low	32 - 85°C	1°C	50	Air outlet temperature Low (122°F)

Parameter 04. Temperature hysteresis

Para-meter	Designation	Range	Step	Factory setting °C	Comments
04.	Temperature hysteresis	01 - 10°C	1°C	02	Difference between heat on or off (3.6°F)

Parameter 05. - 06. Time setting

Para-meter	Designation	Range	Step min	Factory setting	Comments
05.	Time interval	0.1 - 9.9 min	1/10	- -	Running time per coin insert / push if time-controlled.
		10 - 90 min	1	15	
	Time interval US only	10 - 90 min	1	10	
06.	Max. running time or Time interval coin 2 (double coin inlet)	0.1 - 9.9 min	1/10	60	
		10 - 90 min	1		

**** Note!** If maximum running time on a manual machine is changed eg to 30 minutes, the machine cannot choose to run more than the maximum time, ie 30 minutes.

Parameter 07. Reversing

Para-meter	Designation	Range	Step min	Factory setting	Comments
07.	Running time between reversals	01 - 9,9 min	1/10	5.0	Change the setting by 1/10 minute per push.

Parameter 08. Cooling down time

Para-meter	Designation	Range	Step min	Factory setting	Comments
08.	Cooling down time	00 - 10 min	1	03	Running time without heat at end of cycle.

Parameter 09. - 11. Residual moisture level

The measurement of residual moisture level consists of a combined parameter set for residual moisture + a parameter for extra drying time.
The values for residual moisture are given in hexadecimals (05-F0).

Para-meter	Designation	Range	Step	Factory setting	Comments
09.	P1 extra dry	05 - F0	-	F0	Parameter 09. + parameter 12.
10.	P2 ready-to-put-away	05 - F0	-	F0	Parameter 10. + parameter 13.
11.	P3 ironing dry	05 - F0	-	30	Parameter 11. + parameter 14.

Parameter 12. - 14. Extra drying time

Para-meter	Designation	Range	Step min	Factory setting	Comments
12.	P1 extra dry	00 - 20 min	1	09	Parameter 09. + parameter 12.
13.	P2 ready-to-put-away	00 - 20 min	1	03	Parameter 10. + parameter 13.
14.	P3 ironing dry	00 - 20 min	1	00	Parameter 11. + parameter 14.

Replacement of Basic-3 PCB

The Basic-3 PCB is not serviceable. It must be replaced if it fails.

The Basic-3 PCB can be ordered as a spare part.

The spare part consists of: Basic-3 PCB in anti-static packing and instructions.

Follow the instructions when replacing the print board.

The new print board is pre-programmed with specific features and need to be “post-programmed” after installation.

Fig. 1 Basic-3 print board delievered as one unit.

Fig. 2 Break the print board before assembling.

1

2

Error codes

The machine has an automatic error report function displayed by means of error codes.

F1 = Setting of machine type is missing

The dryer has lost its set-up. Enter new machine parameters.

The power is connected to the machine while the service program is active.

F4 = The thermal sensor is disconnected

Loose or broken connection.

Running hours counter

The machine is equipped with a running hour counter to track the complete hours that the machine has been in operation.

The running hours read-out (a 6-digit number) is given in the display.

Running hours are shown each time the power is connected to the machine.

Example of machine having run for 12796 hours:

Switch the machine off and on again.

Time:

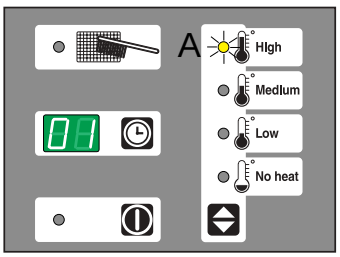
After approx. 10 seconds

10 sec.

4 sec.

the first two digits of a 6-digit number **01 — —** are shown, and at the same time, lamp **A** lights up.
After 4 seconds, the lamp and the two digits are turned off.

01 -- --



2 sec.

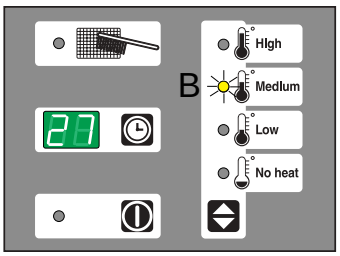
After a two-second pause

-- -- --

4 sec.

the next two digits **– 27 –** show while lamp **B** is lit. After 4 seconds, the lamp and the two digits are turned off.

-- 27 --



2 sec.

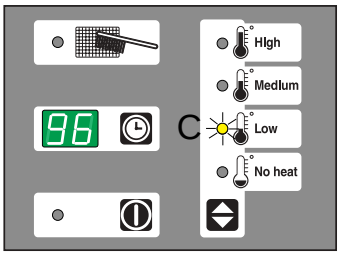
After a two-second pause

-- -- --

4 sec.

the last two digits, **— — 96** are shown, with lamp **C** lit, for 4 seconds.

-- -- 96



= 012796

Altogether, the machine has been in operation for 01-27-96 = 12796 hours.
The machine is now ready for use.

Control locations, Selecta Control

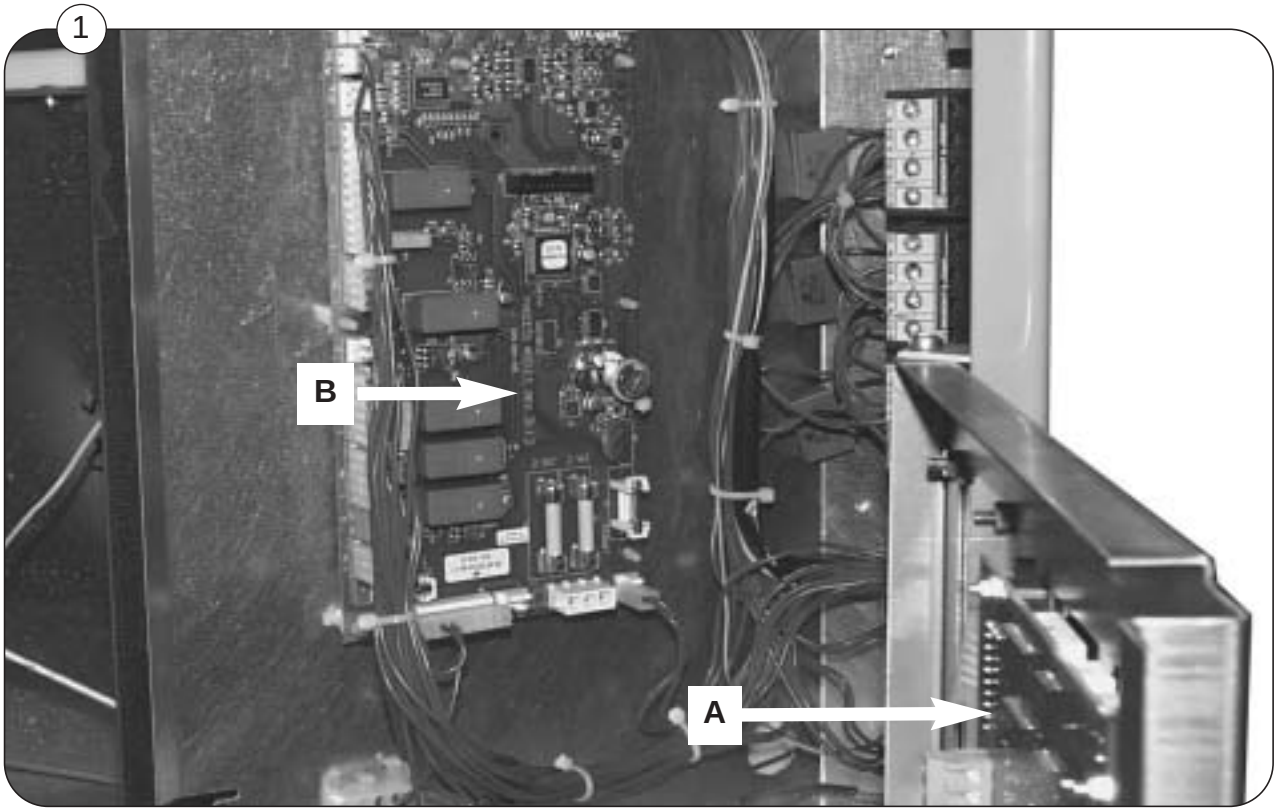
User module circuit board

Fig. 1 The user module **A** is placed behind the operating panel.

The user module contains a circuit board with display, indicator lamps, a connector for the user keypad, and electronics to communicate commands to the main circuit board via a serial interface.

Main circuit board

Fig. 1 The main circuit board **B** is placed behind the operating panel.



Programming the dryer

The circuit board contains a switch for changing to programming mode.

See Selecta Control Service Manual for programming the dryer.

To enter the programming mode on the user module:

1. Open the operating panel.
2. **Fig. 1** Move the mode switch on the board into the position indicated by the arrow.
3. **Fig. 2** The display shows **0** _ _ and is ready for programming.

Refer to Selecta Control Service Manual for programmming details.

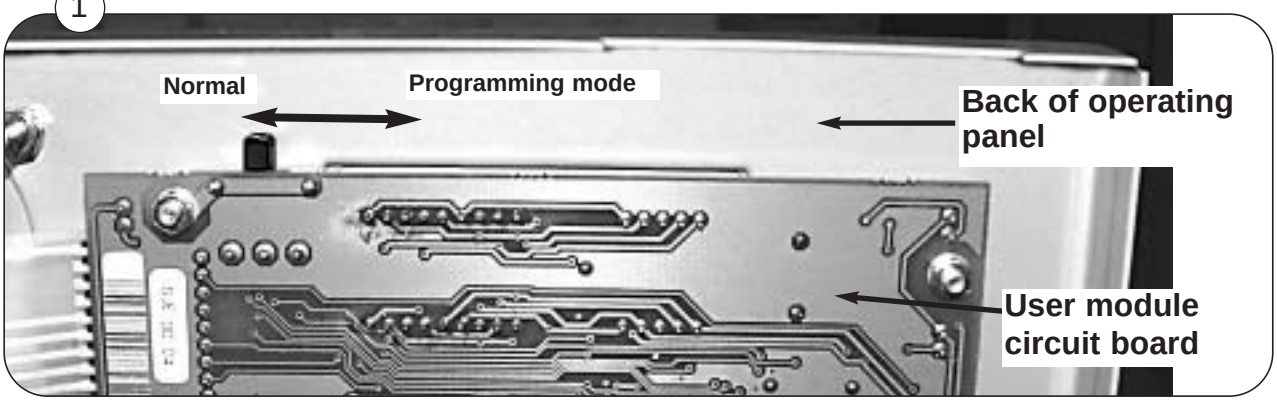
If you make a mistake while programming the dryer move the mode switch back to normal operating mode and start again.

Note! Remember to move the mode switch back to **normal position** after programming.

Function check

Test the dryer, see section 11: **Function check.**

1



2

Programming

Caution! Static-sensitive components!

Do not touch the circuit board.

Replacement of main circuit board

The main circuit board (Selecta Control) is not serviceable. It must be replaced if it fails.

The main circuit board can be ordered as a spare part.

The spare part consists of: Circuit board with fuses in anti-static packing and instructions.

Follow the instructions when replacing the main circuit board.

The new main circuit board (Selecta Control) is pre-programmed with specific features and need to be “post-programmed” after installation.

In order to start the programming, the programming mode has to be entered, see the following page.

Following settings must be programmed:

- Reversing
- Heating type
- Payment setting
- Control panel type
- Programme type

Selecta Control Service Manual

Certain main circuit board parameters need to be set after installation, according to the characteristics of the dryer and the preferences of the owner.

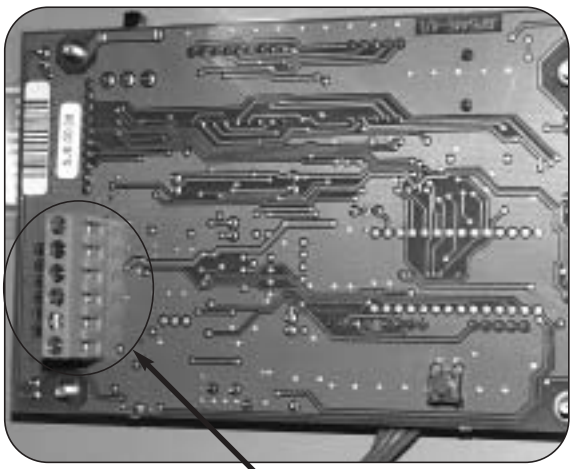
See Selecta Control Service Manual for further details.

Connecting accessory systems to the main circuit board

Different payment systems can be connected to the user module.

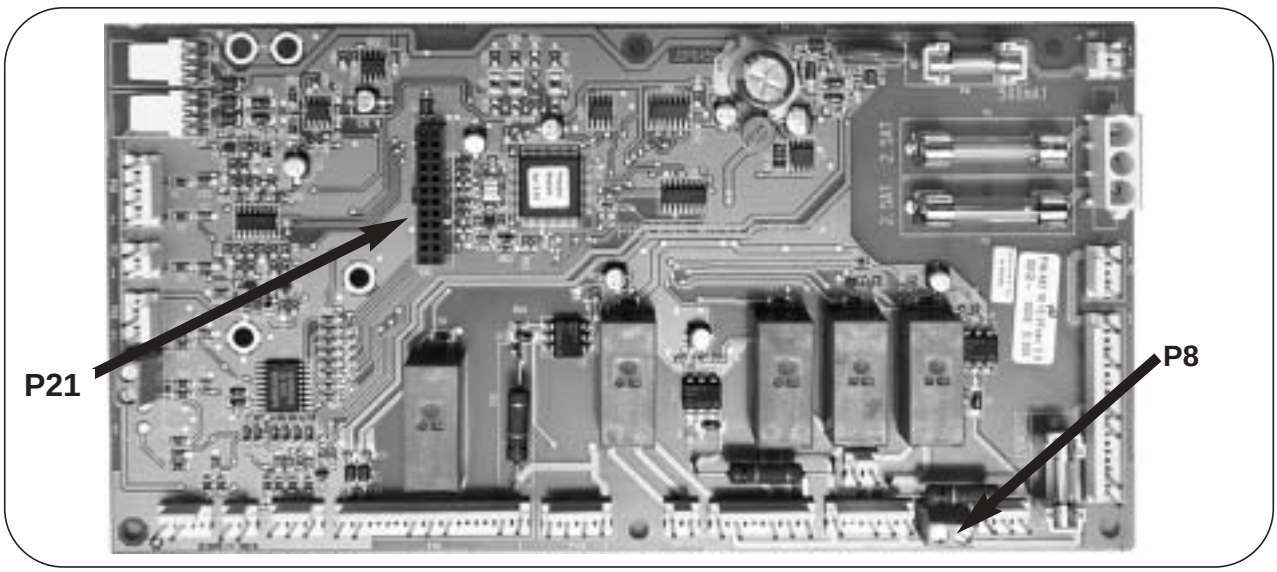
Please see the instructions enclosed with the particular payment system.

Features	User module	Main circuit board
Coin drop	x	
Single System	x	P8
CP time, (external time control)	x	
CP coin, (external payment)	x	
Gateway	x	
ELS - network	-	P21



User module **Connection terminal**

Warning!
High voltage is present on circuit board!



Main circuit board

Contents

Inlet air, overheating thermostat - electric heated 27.3
Inlet air, overheating thermostat - gas heated 27.5
Outlet air- overheating thermostat 27.6
Outlet air - thermistor element 27.6
Vacuum shutter and switch 27.8

Inlet air, overheating thermostat - electric heated dryer

Function

The inlet overheating thermostat opens in the event of overheating and shuts off the dryer.

The thermostat opens automatically and has to be reset manually.

Positioning

Dryer type:T3290, TD30, T3530, TD50, T3650, TD75 30kW Overheating thermostat **A** for inlet air is positioned behind the operating panel.

Dryer type 3650, TD 7536 kW Overheating thermostats **A** for inlet air are positioned behind the operating panel and behind the top back plate.

Resetting

In order to reset the thermostat.

1. Disconnect the power to the machine.

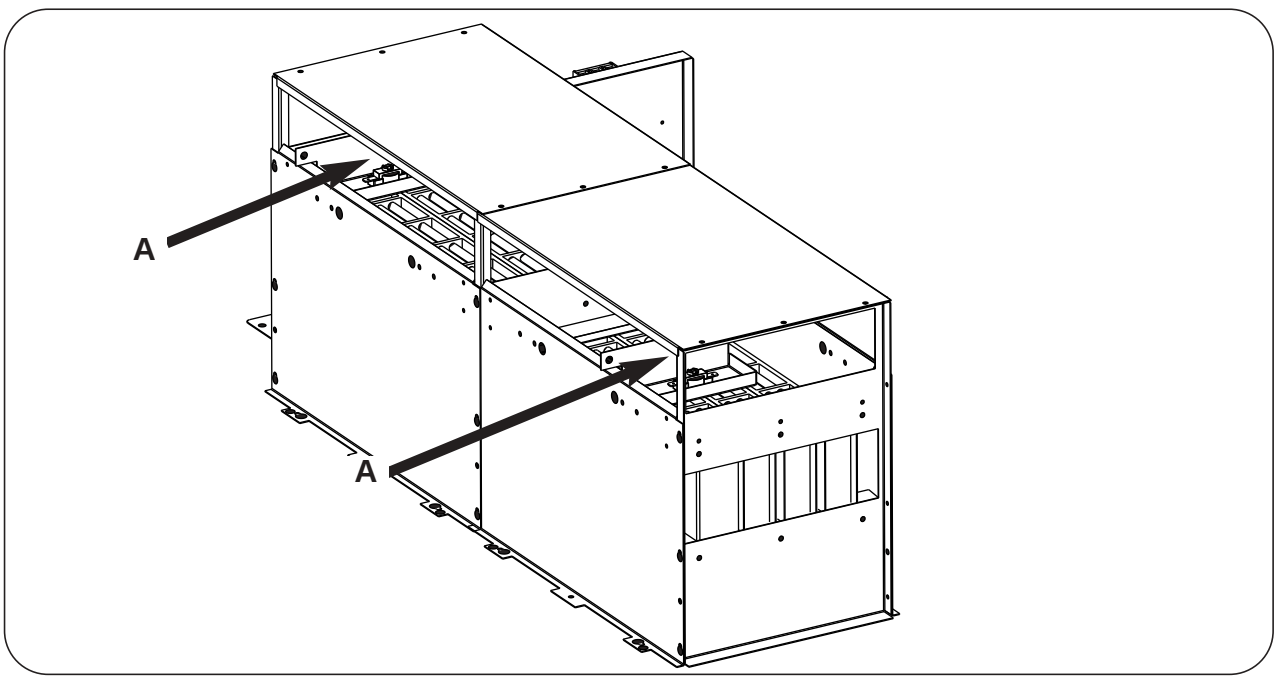
2. Open the operating panel (and the top back plate) and press the reset button **A** on the thermostat

Error code - dryer with Selecta Control only

The following error code is related to this section.

E08

Refer to Selecta Control Service Manual, section 12 for more information.



Inlet air, overheating thermostat - gas heated dryer

Function

The inlet overheating thermostat opens in the event of overheating and shuts off the dryer.

The thermostat opens automatically.

Has to be reset manually except Japan.

Positioning

Fig. 1. Overheating thermostat for inlet air is positioned behind the operating panel.

Resetting

In order to reset the thermostat:

1. Disconnect the power to the machine.
2. Open the operating panel and press the reset button **A** on the thermostat.

Resetting Japan only

In order to reset the thermostat:

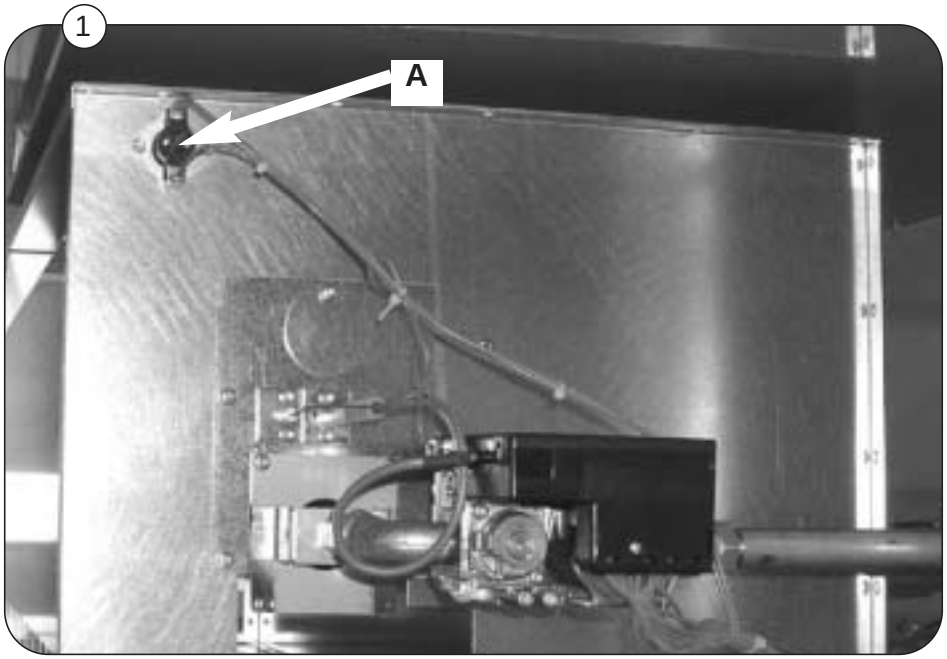
Wait till the dryer has cooled down and press the start/stop button again.

Error code - dryer with Selecta Control only

The following error code is related to this section.

E08

Refer to Selecta Control Service Manual, section 12 for more information.



Outlet air - overheating thermostat

Electric, steam and gas heated dryers

Function

The overheating thermostat ensures that the dryer does not overheat during program operation.

The thermostat opens automatically and has to be reset manually.

The outlet air overheating thermostat is located behind the lint filter next to the fan.

Resetting

1. Disconnect the power supply from the dryer.

2 Remove filter door.

3. Fig. 1 Remove the lint filter and dismount plate **A**.

4. Fig. 2 The thermostat can now be reset manually by pressing the reset button **B** on the thermostat.

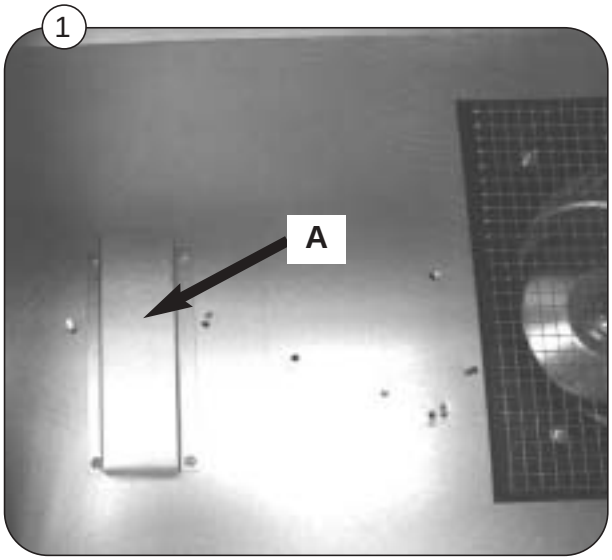
Error code

The following error code is related to this section:

E08

Refer to Selecta Control Service Manual for more information.

1



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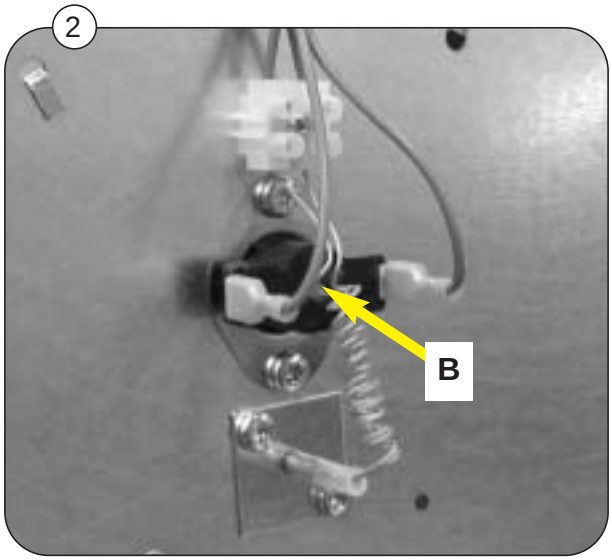


Outlet air - Thermistor element (NTC sensor)

Function

The sensor measures the temperature in the outlet air and the signal is returned to the main circuit board.
The main circuit board turns the heating unit off when the outlet air thermistor indicates that the required temperature has been reached.

The resistance of this device is normally 80 to 100 kOhms at 20°C and it drops as the temperature increases.

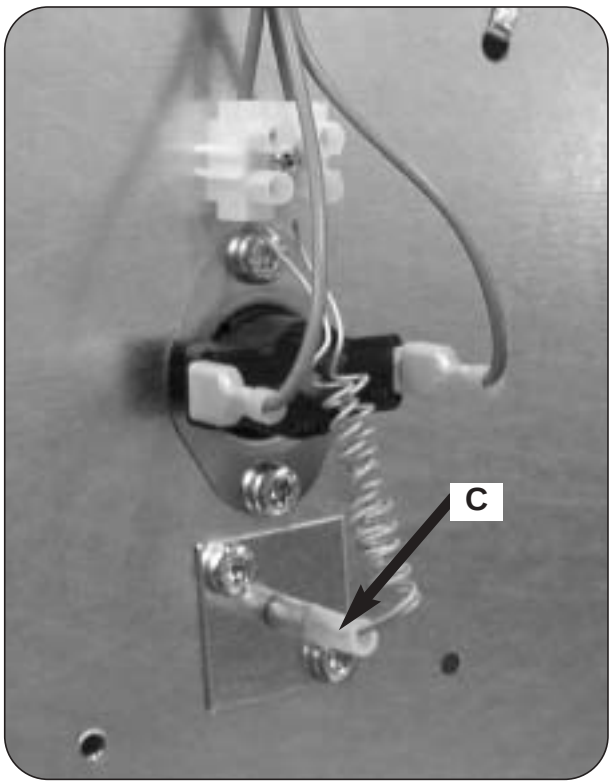
The sensor **C** is mounted on the same plate as the outlet air overheating thermostat.

Error codes - dryer with Selecta Control only

The following error codes are related to this section:

E02, E04, E18

Refer to Selecta Control Service Manual for more information.



Vacuum shutter and switch

Electric and gas heated dryers only

Function

The vacuum switch ensures the necessary airflow in the dryer.

Adjustment

The switch must click when the vacuum shutter arm is pressed.

Fig. 1 Vacuum shutter and shutter switch are located behind the back plate.

Error codes dryer with Selecta Control only

The following error codes are related to this section.

E15, E16

Refer to Selecta Control Service Manual for more information.

Contents

Loading door switch 29.2

Lint filtert switch 29.3

Loading door switch

A switch is mounted by the loading door hinge.

The switch ensures that the dryer stops automatically if the loading door is opened during operation.

If the dryer does not stop when the loading door is opened, the switch needs replacing.

Replacing door switch

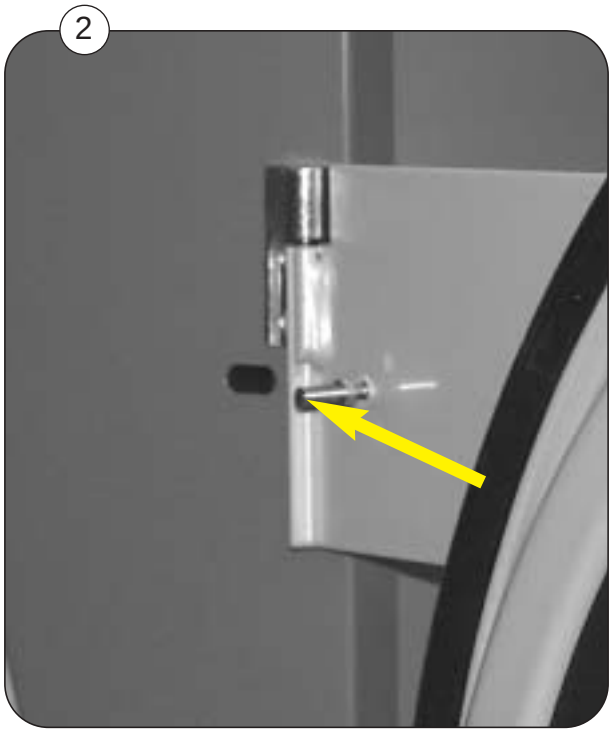
1. Disconnect the power supply from the dryer.
2. Remove the door and the front panel from the dryer.
3. Disconnect the wires from the door switch.
4. Dismount the door switch.
5. Mount the new switch.
6. Connect the wires.
7. Re-assemble and test the new door switch, as follows:

Testing door switch

1. Connect the power supply.
2. Start the dryer.
3. Fig. 1 Check that the fan, drum rotation and heat all stop when the door is opened max. 40 mm.
Fig. 2 If it is possible to open the door more than 40 mm before the dryer shuts off, it is necessary to adjust the activating pin on the door.

1

2



Testing door lock on loading door

It must be possible to open the door lock on the loading door from the inside with a force not exceeding 70N (7.138Kp).

The door must be strained with a force corresponding to the above 70N (7.138Kp).
The strain must be done as far from the door hinge as possible.

Fig. 1 The lock is adjustable.

Lint filter switch, dryer with Selecta Control only

Function

The lint filter switch ensures that the dryer will not operate when the filter door is open.

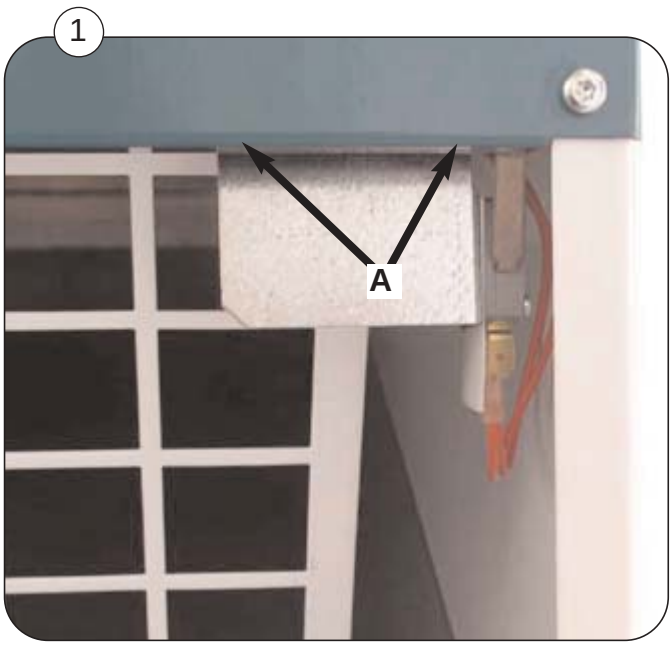
If the dryer does not operate with the lint filter door closed and locked, the lint filter switch may need to be replaced.

Replacement

1. Disconnect the power supply from the dryer.
2. Open the filter door.
3. Unscrew the 2 screws **A** in the switch mounting bracket and pull out the bracket with switch.
4. Disconnect the wires from the switch.
5. Mount the new switch on the bracket.
6. Connect wires to the new switch.
7. Remount the bracket with the new switch.
8. Close the filter door.

Testing the lint filter switch

1. Connect the power supply.
2. Start the dryer.
3. If the dryer does not start when the filter door is closed and the start button is pressed, check that the filter door is activating the lever on the lint filter switch.
4. Confirm that the fan, drum and heat all stop when the filter door is opened while the dryer is operating.



Contents

Motor and transmission 30.3
Dismounting 30.4
Mounting motor and fan wheel 30.6

Motor and transmission

Dryer with 1 motor

Fig. 1 The dryer has a combined motor which operates both blower and drum **pos. a**.

Dryer with 2 motors

Fig. 2 The dryer has a motor which operates blower **pos a** and a motor which operates the drum **pos. b**.

All motor types

All motor types are equipped with thermal overheat protection.

If the motor overheats, the control current is switched off and the control displays an error code.

The overheat protection switch inside the motor windings re-closes automatically when the motor cools sufficiently. The dryer can then be re-started.

Before replacing the motor

It is important to compare the data sign on the new motor with the one on the old motor regarding voltage and rpm.

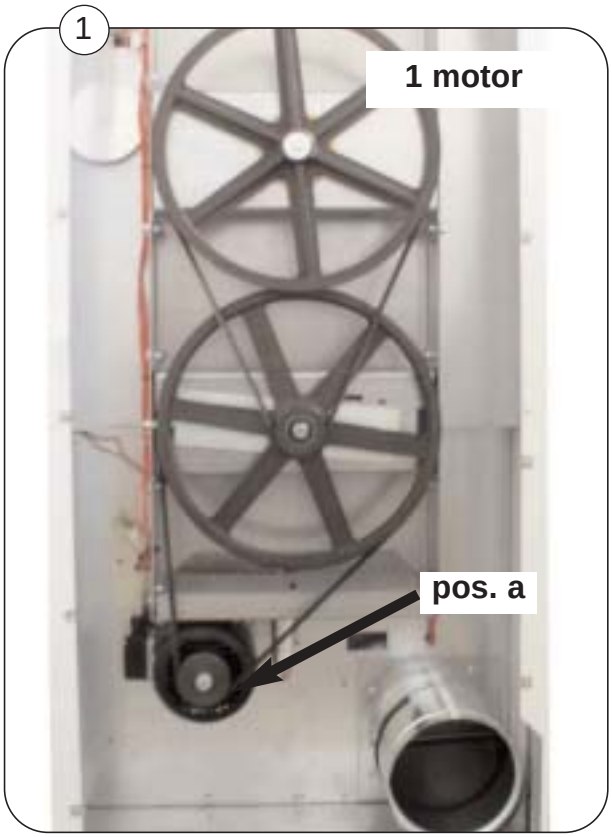
Error code - dryer with Selecta Control only

The following error codes are related to this section:

E05 or E06

Refer to Selecta Control Service Manual, section 12 for more information.

1



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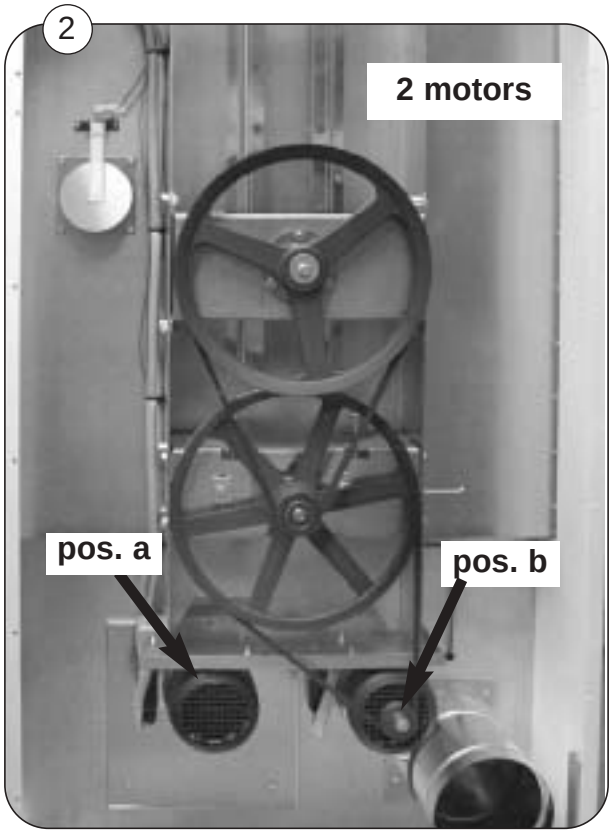
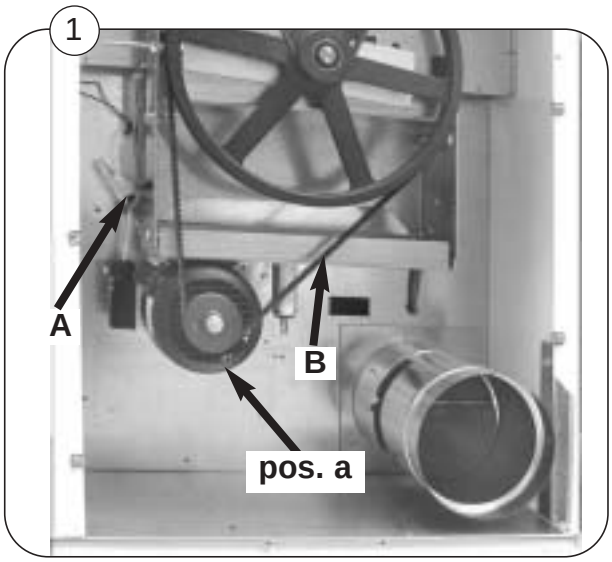


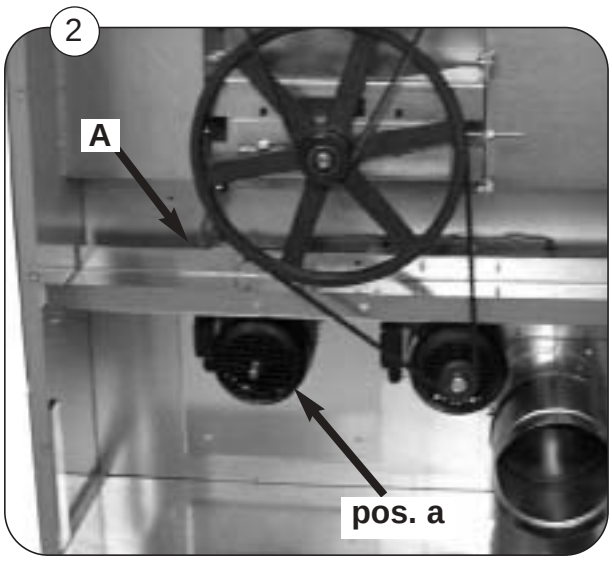
Dismounting

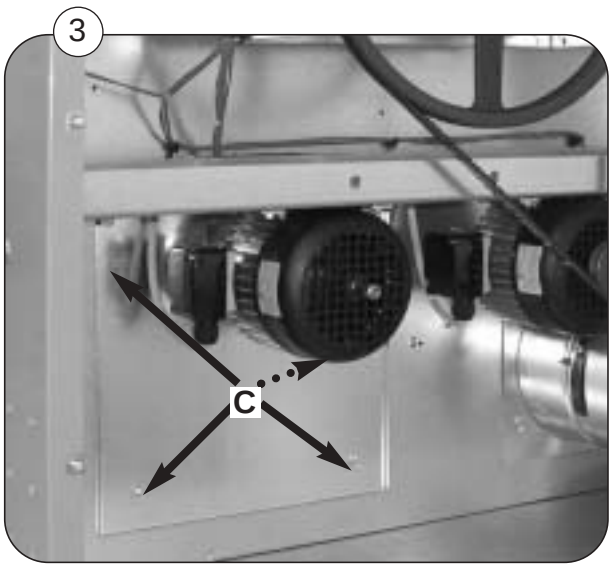
1. Disconnect the power supply from the dryer.
2. Remove the back plate.

Dismounting motor pos. a

1. Fig. 1 and 2 Disconnect the motor plug **A**.
2. Loosen the belt **B**, see section 11: **Tightening drive belt.**
3. Lift the belt **B** off the pulley, dryer with 1 motor only.
4. Remove the 4 screws for fastening motor on motor bridge.
5. Fig. 3 Loosen 4 screws **C**.
6. The motor with fan wheel can now be removed.
7. Fan wheel or motor can be replaced. Be careful not to damage the fan wheel.
8. Replaceing motor or fan wheel see "**Mounting motor / fan wheel**"



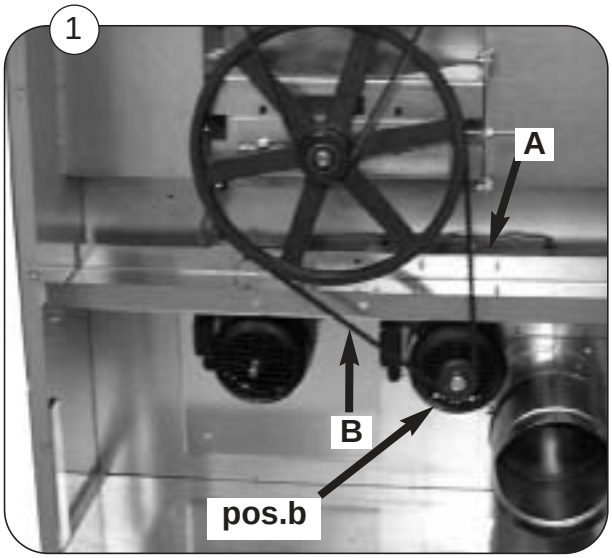




Dismounting motor pos. b

1. Fig. 1 Disconnect the motor plug **A**.
2. Loosen the belt **B**, see section 11 **Tightening drive belt.**
3. Lift the belt **B** off the pulley.
4. Remove the 4 screws for fastening motor on motor bridge.
5. The motor can be replaced.
6. Replaceing motor see "**Mounting motor / fan wheel**"

1



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Mounting motor / fan wheel

Fig.1 If a motor has been separated / replaced it is important to lubricate the motor shaft with an anti-fretting paste (Antifret LAGF 3 / 0.6 or similar quality).

Mounting motor

1. Mount motor on motor bridge with 4 screws and tighten the 4 screws with 20 Nm / 14.8 lbf·ft.
2. Mount the belt on the pulley, step 2 only on dryer with 1 motor.
3. Connect the motor plug.
4. Tighten the belt, see section 11: **Tightening drive belt.**

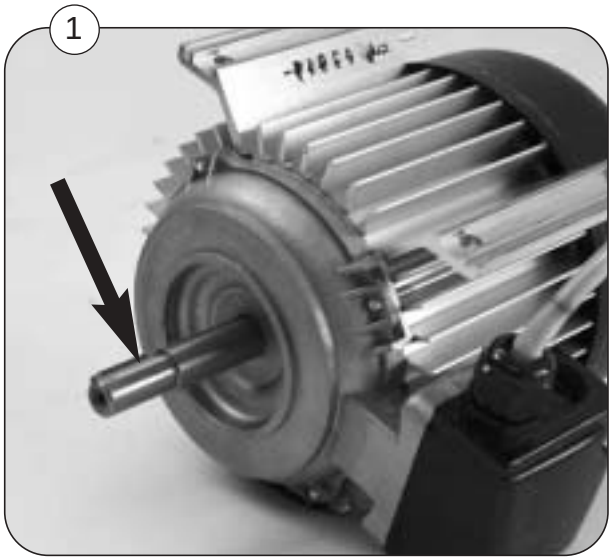
Mounting motor with fan wheel

1. Mount motor on motor bridge with 4 screws and tighten the 4 screws with 20 Nm / 14.8 lbf·ft.
2. **Fig. 2.** Mount fan wheel, lubricate screw **A** using a protection product such as Omnifit Seal 40M or similar quality and tighten with 5 Nm / 3.7 lbf·ft.
3. Fan module can now be mounted on the dryer.
4. Mount the belt on the pulley, dryer with 1 motor only.
5. Connect the motor plug.
6. Tighten the belt, see section 11: **Tightening drive belt.**

Finishing replacement

1. Assemble the dryer.
2. Connect the power supply.
3. Check the dryer, see section 11: **Function check.**

1



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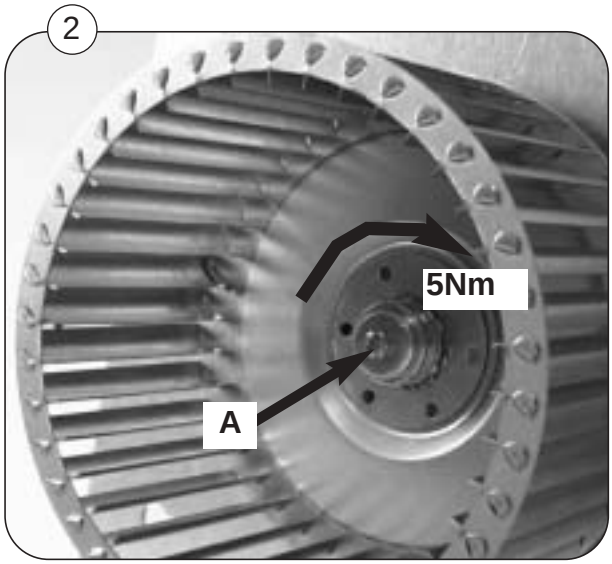

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Heating unit types

Dryer type T3290 / TD30

Heating effect	Number of elements
13.5 kW	3 x 4.5 kW
18 kW	3 x 6 kW

Dryer type T3530 / TD50

Heating effect	Number of elements
24 kW	4 x 6 kW + 1 dummy
30 kW	5 x 6 kW

Dryer type T3650 / TD75

Heating effect	Number of elements
30 kW	5 x 6 kW
36 kW	8 x 4.5 kW + 2 dummies

Before replacement

Spare part number, power, and voltage are printed on the heating element.

Check that effect and voltage on the new elements are corresponding with the old ones.

A defective element is replaced by dismounting the side plate on the heating box and by dismounting the elements which are not defective in order to gain access to the defective element.

Mark up the wires on the elements - this also applies to the elements which are to be dismounted in order to gain access to the defective elements.

Note! It is important to mount the dummy correctly. It must be positioned opposite the overheating thermostats.

Finishing replacement

1. Re-assemble the dryer.
2. Mount all wires as before, see diagram supplied with the dryer.
2. Connect the power supply.
3. Test the dryer, see section 11: **Function check**.

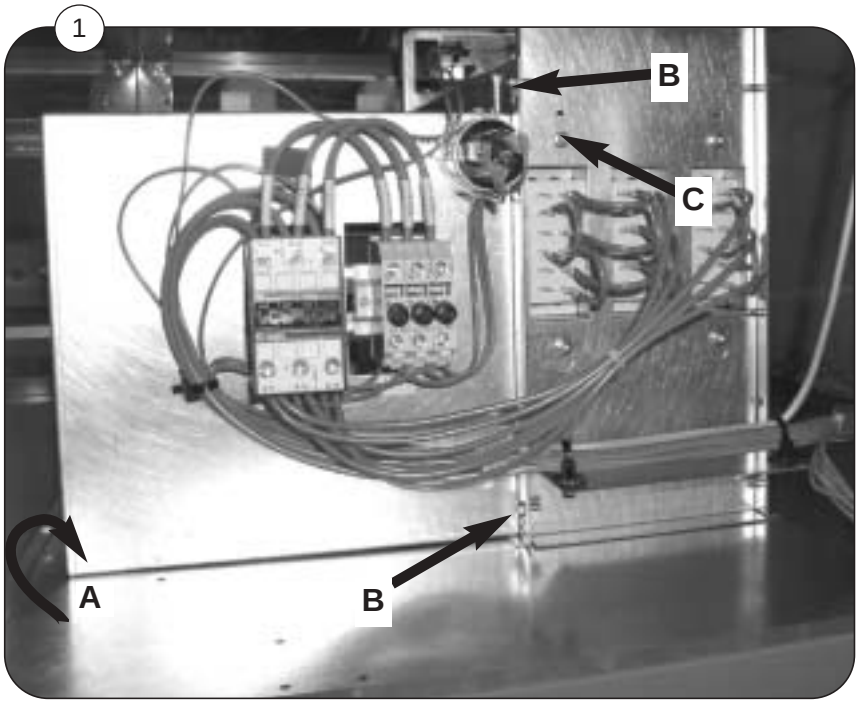
Replacing heating element

Dismounting applies to all dryer types except T3650, TD75 36kW

Before starting, read the section **Before replacement**.

1. Disconnect the electrical power supply from the dryer.
2. Open the operating panel and dismount the top back plate.
3. Remove screw **A** behind console.
4. Remove screws **B**.
5. Beslag med overheating thermostat demonteres.
6. Konsol og beslag med overheating thermostat lægges forsigtigt ved front.
7. Remove screws along side plate.
8. Remove side plate.
9. Remove 2 / 3 screws **C** at the front.
10. Disengage elements.
11. Return to: **Finishing replacement.**

1



Replacing heating element

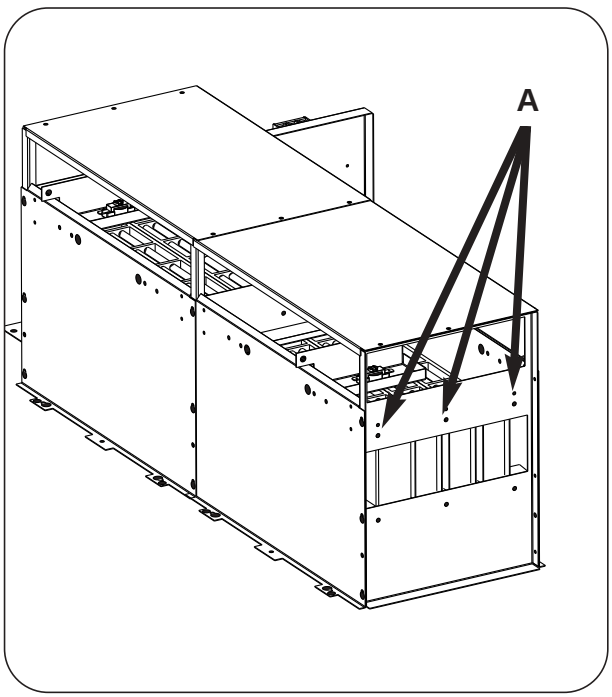
Dismounting applies to T3650, TD75 36kW only

If it is one of the front elements that needs replacing follow: **Dismounting applies to all dryer types**.

The below instructions apply to replacement in the back heating box.

Before starting read the section **Before replacement**.

1. Disconnect the electrical power supply from the dryer.
2. Dismount the top back plate.
3. Remove screws along side plate.
4. Remove side plate.
5. Remove 3 screws **A.**
6. Dismount dummy
7. Disengage elements
8. Return to: **Finishing replacement.**



Steam heated dryer

Description

A steam heated dryer has a steam calorifier which is positioned at the top of the dryer, fig. 1 next page.

If the clothes are not dry within the required time this can be due to the steam damper not opening or closing correctly.

Troubleshooting

- **Actuator error**

  Allen screws **A** at the end of the shaft must be tightened with 5Nm / 3.7 lbf·ft., fig. 2.

  Fig. 2 Voltage of screw terminal **B** CW + common must be 18V AC = open
  Voltage of screw terminal **B** CCW + common must be 18V AC = close

- **Leaking steam calorifier**

  Calorifier must be replaced.

- **Damper adjustment**

  Damper must be adjusted correctly, wide open or shut.

- **Defective steam trap in installation**
- **Missing signal from microprocessor**

Finishing replacement

1. Re-assemble the dryer.
2. Connect the power supply
3. Turn on the steam supply to the dryer and the condensate from the dryer, if it has been disconnected.
4. Test the dryer, see section 11: **Function check**.

Error code - dryer with Selecta Control only

E18

If error code E18 occurs on a steam heated dryer this can be due to steam not being present or the steam pressure not being high enough.

Replacing actuator

Dismounting actuator

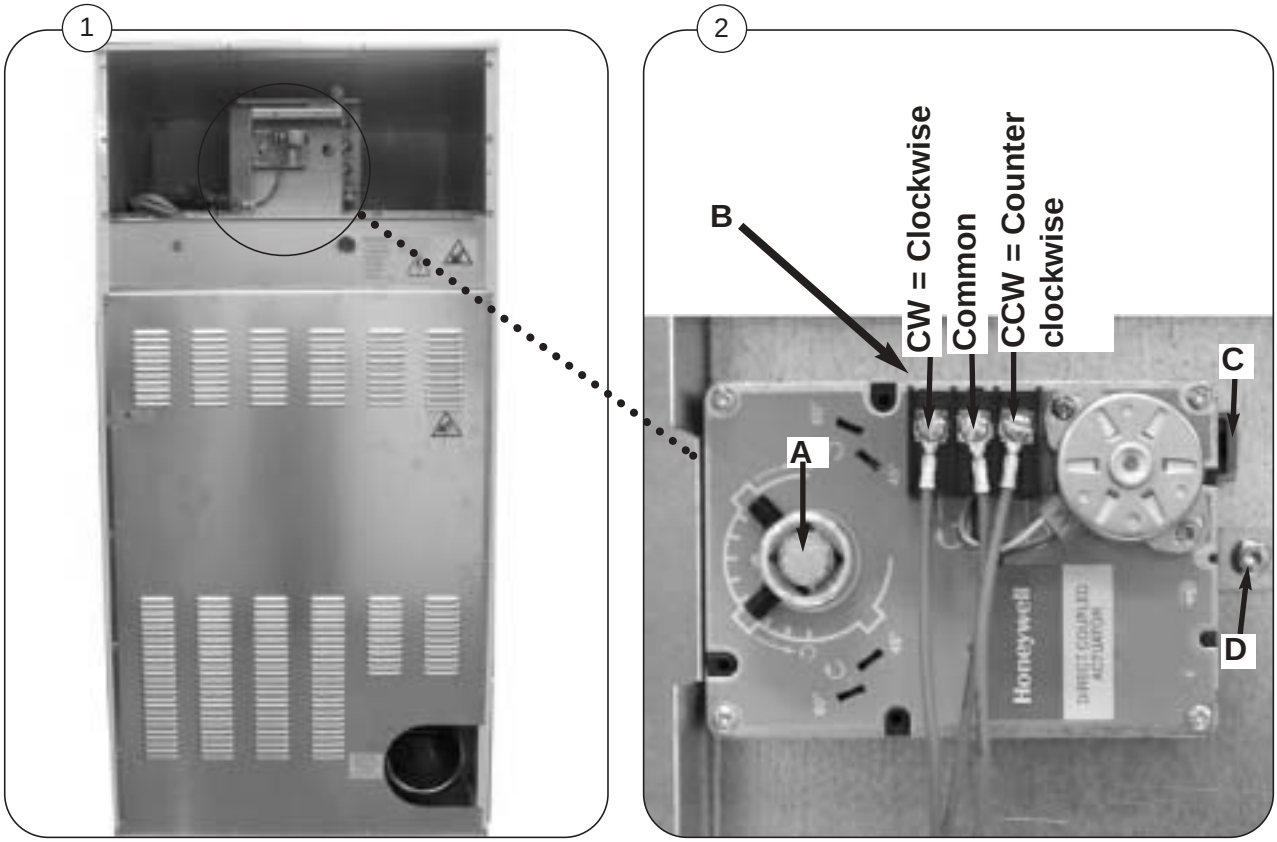
1. Disconnect the power from the dryer.
2. Loosen the Allen screws **A** - with a 1/8” spanner and the damper shaft is released.
3. Dismount the 3 wires in the screw terminals **B** (mark out the wiring positions).
4. Release manual declutch lever **C**.
5. Unscrew screw **D**.

The actuator is now dismountable.

Mounting new actuator

1. Turn the actuator as shown on fig. 2.
2. Stick the end of the shaft through the hub at the Allen screws **A**.
3. Release the declutch lever **C**.
4. With the actuator positioned in its final position, secure the mounting tab to the box with a sheet metal screw.
NOTE! Do not fully tighten the mounting, the actuator must be allowed to float.
5. Position the damper in the open position and securely tighten the Allen screws **A** with a 1/8” spanner into the damper shaft with 5Nm / 3.7 lbf·ft..
6. Mount the wires in screw terminals **B**.

If the replacement is done, return to section **Finishing replacement**.

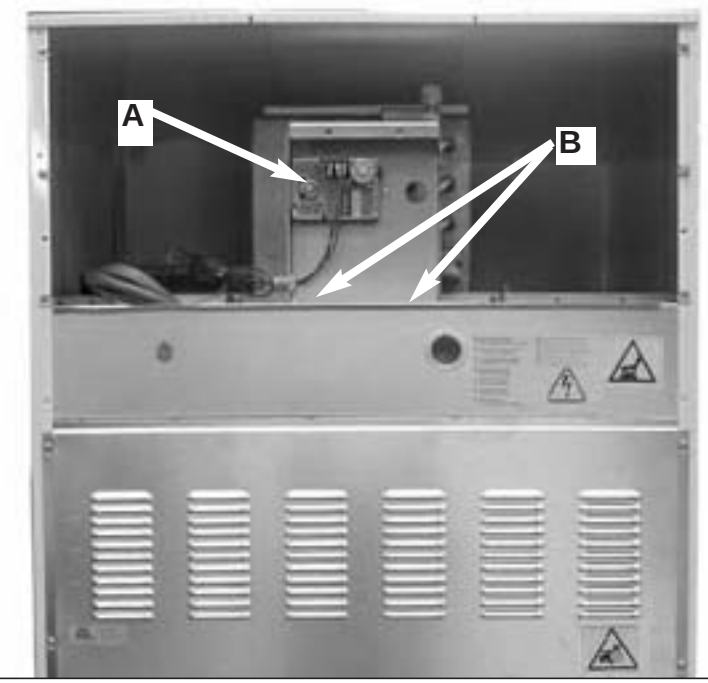


Replacing steam calorifier

1. Turn off the steam supply to the dryer and the condensate from the dryer.
2. Dismount tubes.
3. Loosen the Allen screws **A** - with a 1/8” spanner and the damper shaft is released.
4. Carefully place the actuator next to the calorifier.
5. Dismount screws **B** and remove actuator fittings.
6. Remove screws from both sides of the calorifier.
7. The calorifire can now be replaced.

If the replacement is done, return to section **Finishing replacement.**

1



Gas heated dryer

General

Gas burner, gas valve and nozzle are positioned behind the operating panel.

Regarding heating types see section 3: **Principal components, Heating unit pos. 3.**

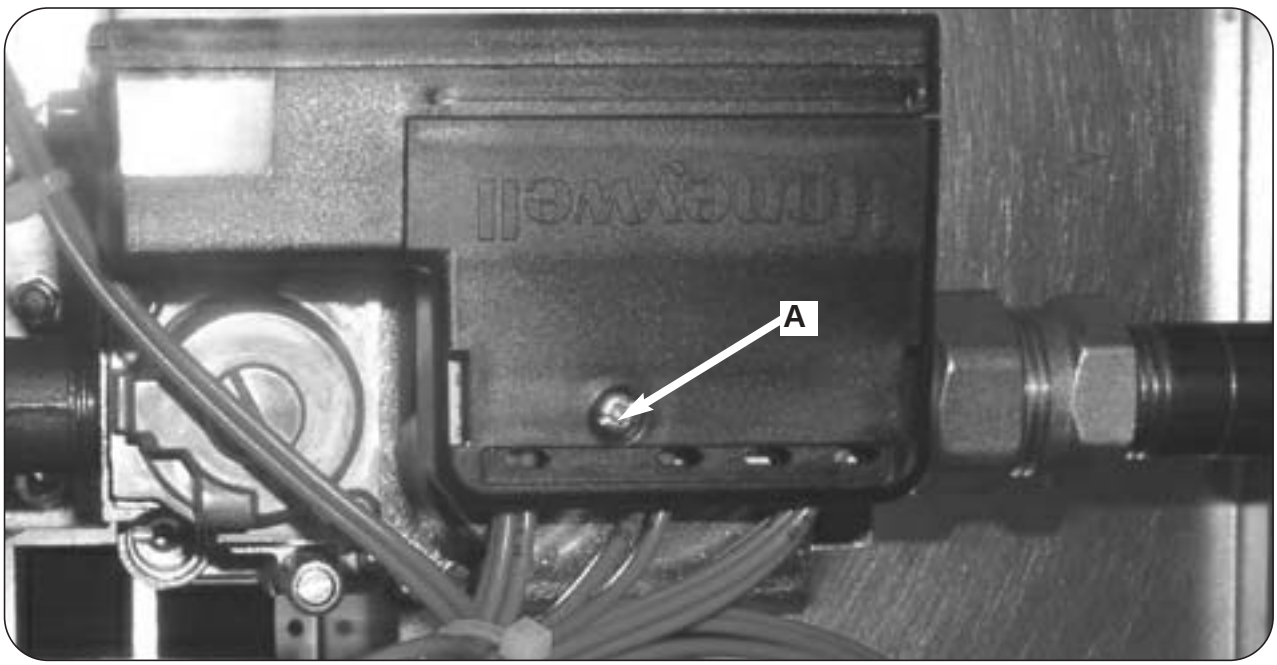
Before replacement

1. Shut off the manual gas valve.
2. Disconnect the electrical power supply from the dryer.
3. Open the operating panel.

Carry on to the specific dryer type and gas type on the following pages.

Finishing replacement

1. Re-assemble the dryer.
2. Turn on the manual gas valve.
3. Leak test all joints which are taken apart.
Use approved leak testing materials and techniques.
4. Check nozzle pressure if the valve has been replaced, see section 47
5. **IMPORTANT** Tighten self-tapping screw **A**, as necessary, to achieve a secure mounting.
6. Switch on the power to the dryer.
7. Test the dryer, see section 11: **Function check**.



Dismounting gas valve and burner- Dryer type T3290, TD30

Before starting follow step. 1-3, section **Before replacement.**

The gas valve is for **natural gas and LPG** heated dryers.

Dismounting gas valve

1. Dismount screw **A** in control box.
2. Carefully dismount control box.
3. Disconnect the gas pipe union **C**.
4. Unscrew the 2 screws **B** and remove the cover plate.
5. Gas valve can now be replaced.

Dismounting gas burner

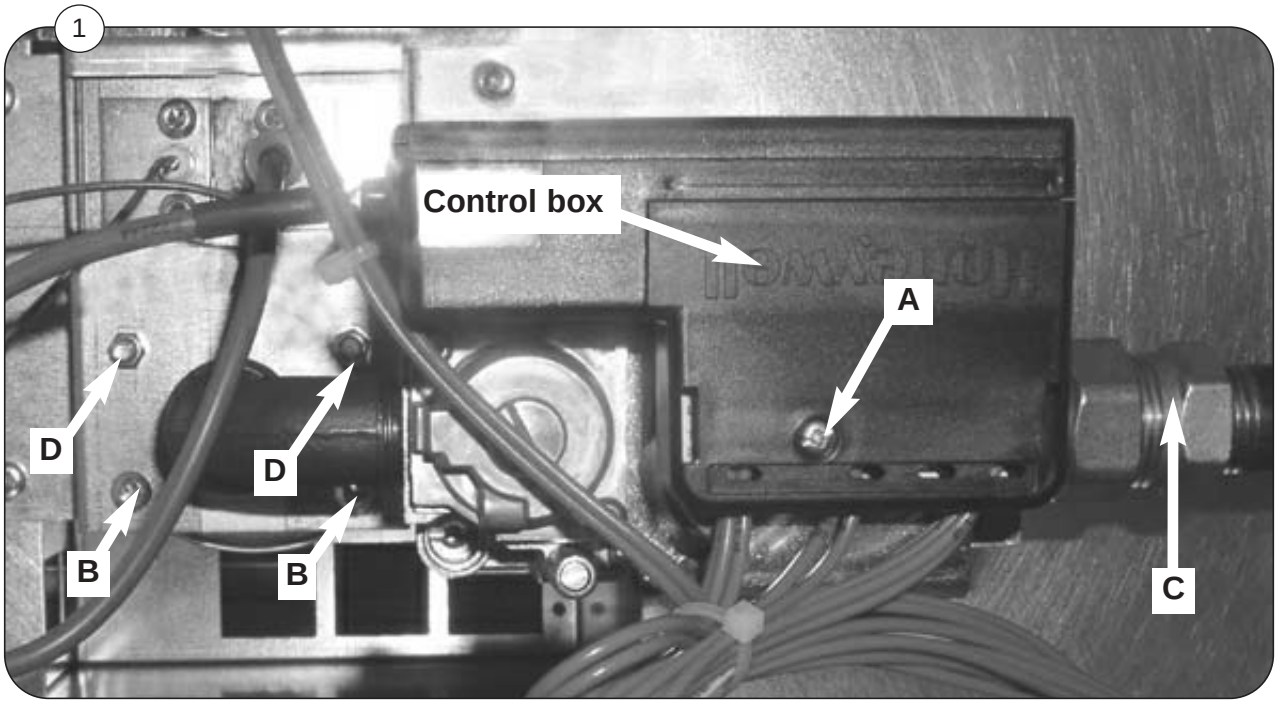
1. Remove nuts **D**.
2. Unscrew the 2 screws **B** and remove the cover plate.
3. Push the burner a little backward and release the burner.
4. Gas burner can now be replaced.

Mounting gas burner

1. Mount the new burner (burner is controlled by a fitting mounted in the back of the heating box).
2. After mounting the burner in the fitting pull the burner forward.

When the fastening of the burner is done, return to section **Finishing replacement.**

1



Dismounting gas valve - Dryer type T3290

Before starting follow step. 1-3, section **Before replacement.**

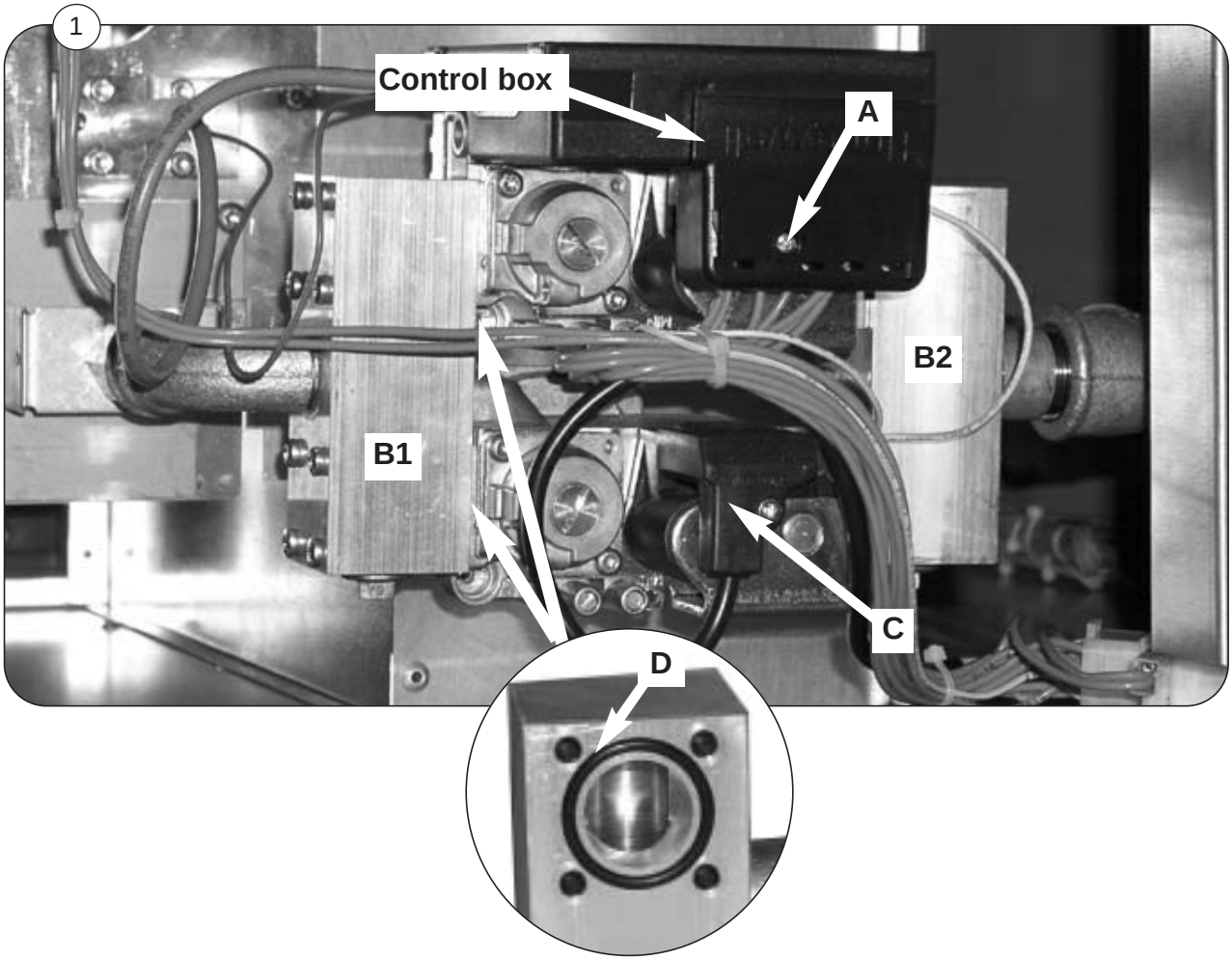
The gas valve is for **town gas** heated dryers.

Dismounting gas valve

1. Fig. 1 Dismount screw **A** in control box or screw **C** in adapter depending on which valve is defective.
2. Carefully dismount control box or adapter.
3. Remove the 4 screws in manifolds **B1** and **B2** at the defective valve.
4. Loosen the 2 x 4 screws in manifolds **B1** and **B2** at the intact valve.
5. Gas valve can now be replaced.
6. Before mounting the new gas valve it is important to ensure that the O-rings **D** in **both** manifolds are intact.
7. Mount new gas valve.
8. Tighten the 2 x 8 screws in both manifolds **B1** and **B2**.

If the replacement is done, return to section **Finishing replacement.**

1



Dismounting gas valve - Dryer type T3530, TD50

Before starting follow step. 1-3, section **Before replacement.**

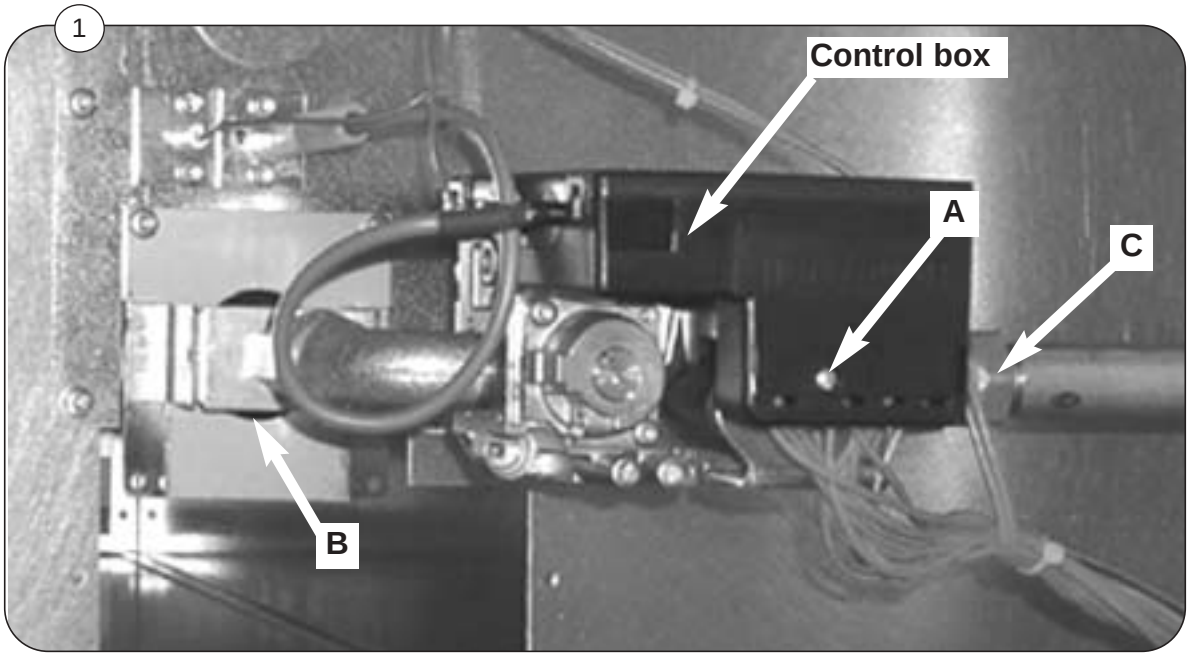
The gas valve is for **natural gas and LPG** heated dryers.

Dismounting gas valve

1. Fig. 1 Dismount screw **A** in control box.
2. Carefully dismount control box.
3. Dismount nozzle **B** and nut.
4. Disconnect the gas pipe union **C**.
5. Gas valve can now be replaced.

If the replacement is done, return to section **Finishing replacement**

1



Dismounting gas valve - Dryer type T3530

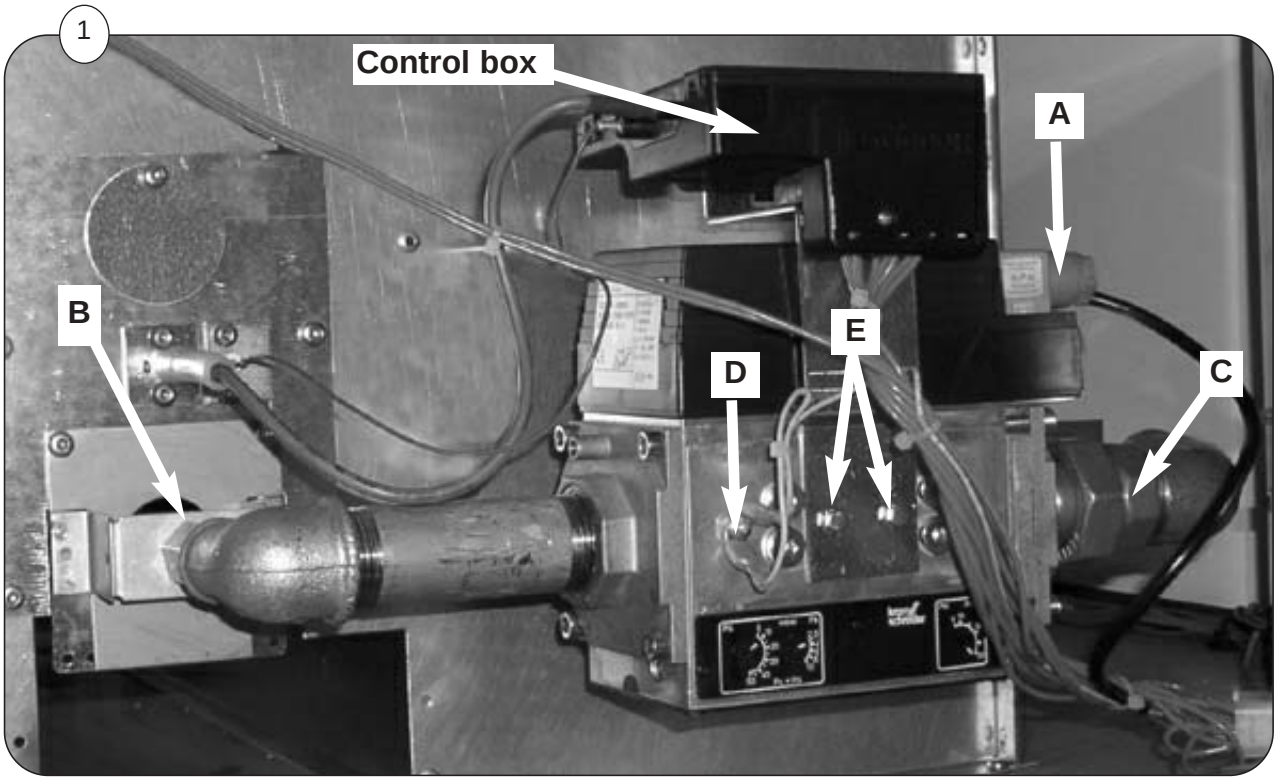
Before starting follow step. 1-3, section **Before replacement.**

The gas valve is for **town gas** heated dryers.

Dismounting gas valve

1. Dismount connector **A**.
2. Dismount earthing terminal **D.**
3. Dismount screws **E** in fitting and carefully place the control box next to the gas unit.
4. Dismount nozzle **B** and nut.
5. Disconnect the gas pipe union **C**.
6. Gas valve can now be replaced.

If the replacement is done, return to section **Finishing replacement**



Dismounting gas valve - Dryer type T3650, TD75

Before starting follow step. 1-3, section **Before replacement.**

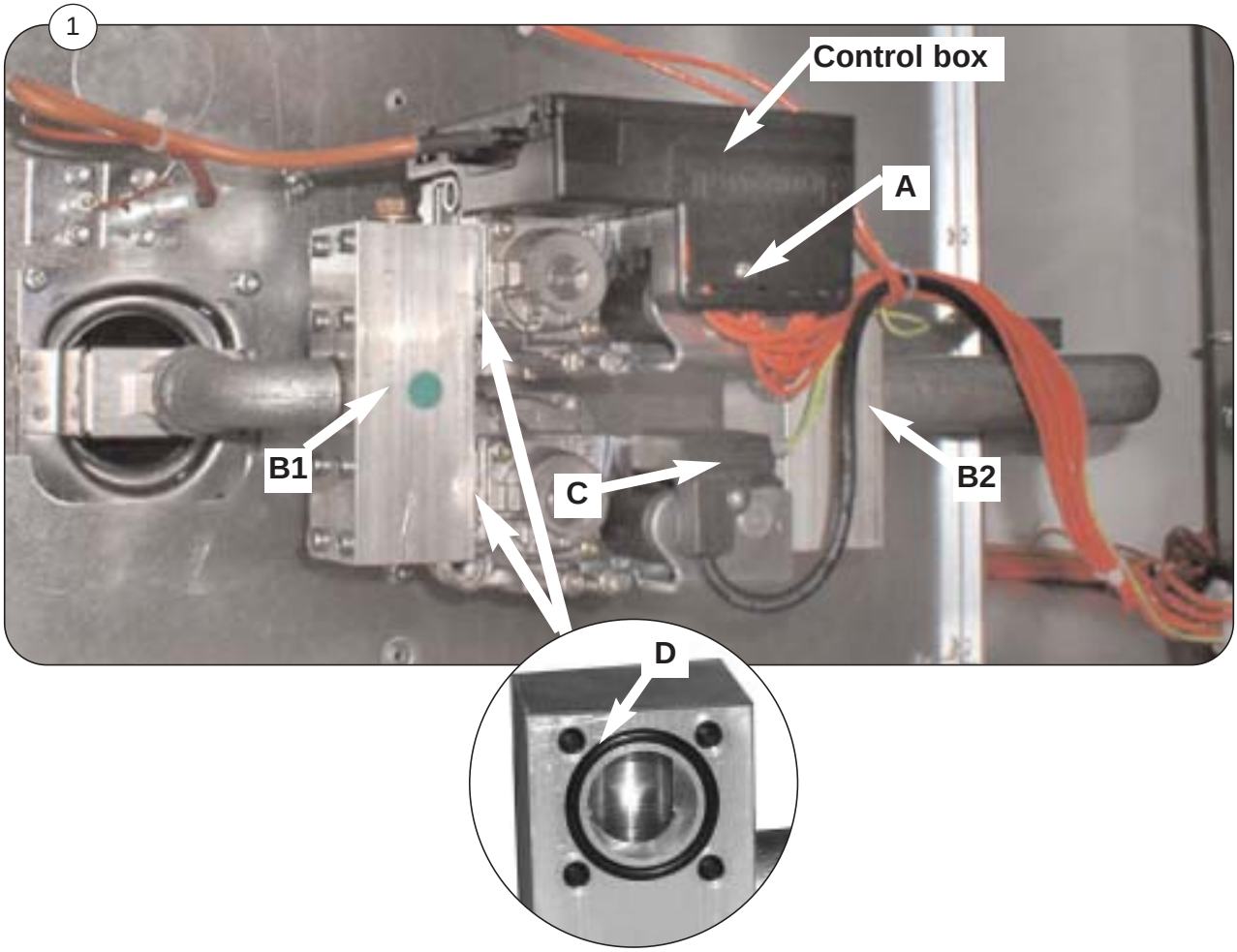
The gas valve is for **natural gas and LPG** heated dryers.

Dismounting gas valve

1. Fig. 1 Dismount screw **A** in control box or screw **C** in adapter depending on which valve is defective.
2. Carefully dismount control box or adapter.
3. Remove the 4 screws in manifolds **B1** and **B2** at the defective valve.
4. Loosen the 2 x 4 screws in manifolds **B1** and **B2** at the intact valve.
5. Gas valve can now be replaced.
6. Before mounting the new gas valve it is important to ensure that the O-rings **D** in **both** manifolds are intact.
7. Mount new gas valve.
8. Tighten the 2 x 8 screws in both manifolds **B1** and **B2**.

If the replacement is done, return to section **Finishing replacement**

1



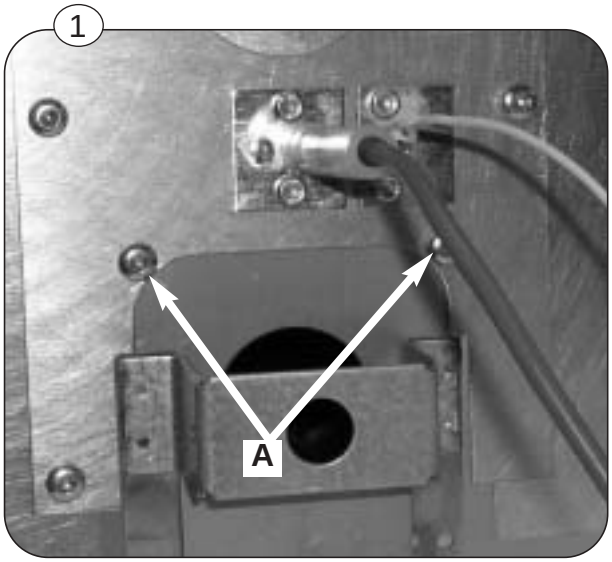
Dismounting gas burner T3530, TD50, T3650, TD75

When the gas valve is dismounted it is possible to replace the gas burner.

1. Fig. 1 Dismount the 2 screws **A**.
2. Dismount burner.
3. Remove cover plate from burner.
4. Mount cover plate on the new burner.
5. Fig. 2 Install the new burner tube. The burner is mounted correctly when it is controlled by the hole in the back plate in the heating unit.
6. Mount the 2 screws **A**.
7. Mount the gas valve.

If the replacement is done, return to section **Finishing replacement**

1



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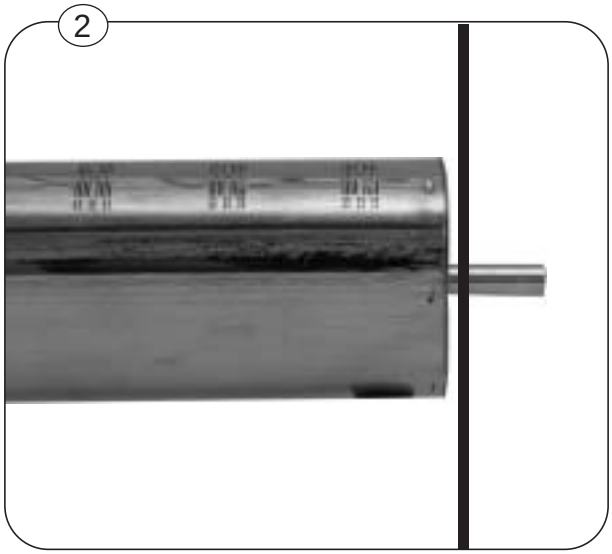


Adjusting ignition electrode

Fig. 1 Dryer type T3290/TD30.

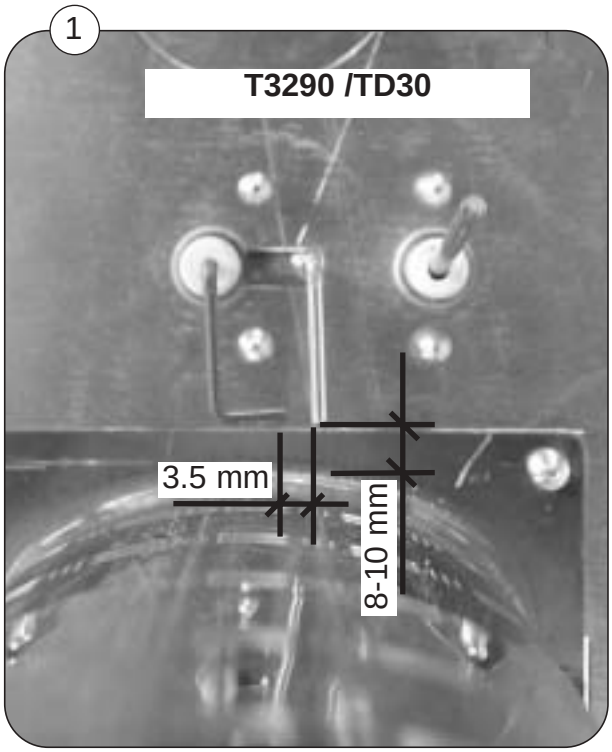
Fig. 2 Dryer type T3530/TD50, TD3650/TD75.

Fig. 1 and fig. 2 illustrate proper ignition electrode adjustment.

The distance from the electrode to the burner tube must be 8-10 mm.

The spark gap must be 3.5 mm.

1



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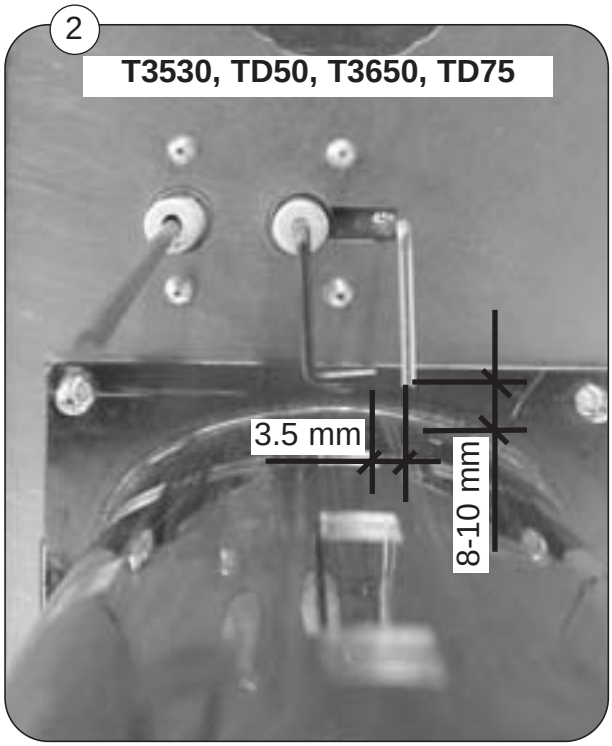


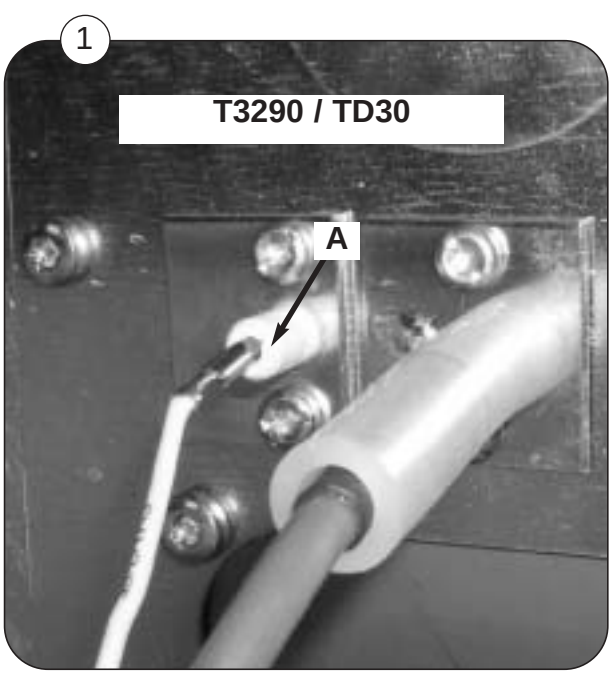
Control measuring the ionization current

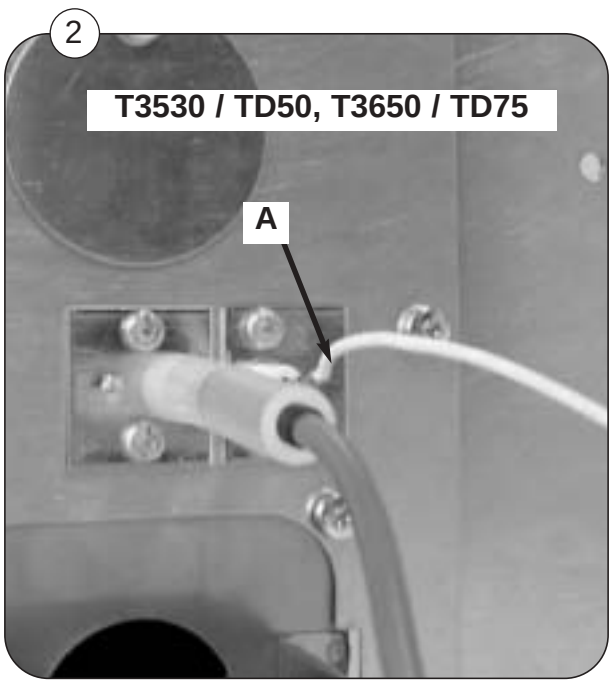
Fig. 1 Dryer type T3290/TD30.

Fig. 2 Dryer type T3530/TD50, T3650/TD75.

1. Dismount wire with quick connector **A**.
2. Measure the current between the quick connector and the ionization connector.

The current must be at least 0.9 µA DC.





Resetting gas error - Dryer with Selecta Control

When the ignition control fails to detect a flame, a signal is sent to the main circuit board, and error code E14 is displayed.

When this condition occurs, the gas valve is shut off and the ignition control must be reset manually.

Resetting

Fig. 1 Open the operating panel and press the gas reset button **A** on the back of the user module board for one second.

Fig. 2 OPL: Press the reset button **B** next to the operating panel.

NOTE! When resetting the system the dryer **must** operate on a program with heat and the heat indicator must be on.

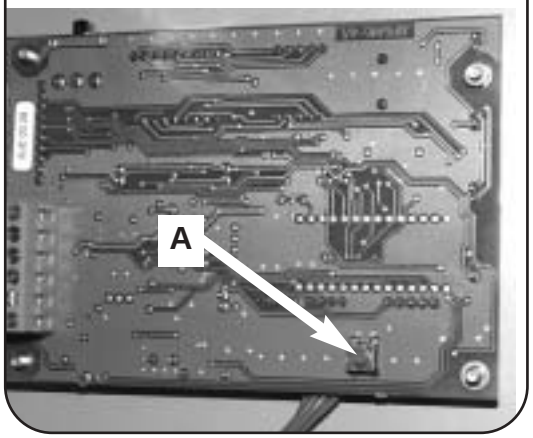
Japan only :By opening and closeing the door (coin operated dryers only).

Error code

It is normal that error code 14 occurs when first starting up a dryer, since air in the gas line must be purged.

If the problem persists, refer to **Error code 14** in the Selecta Control service manual for more information.

1



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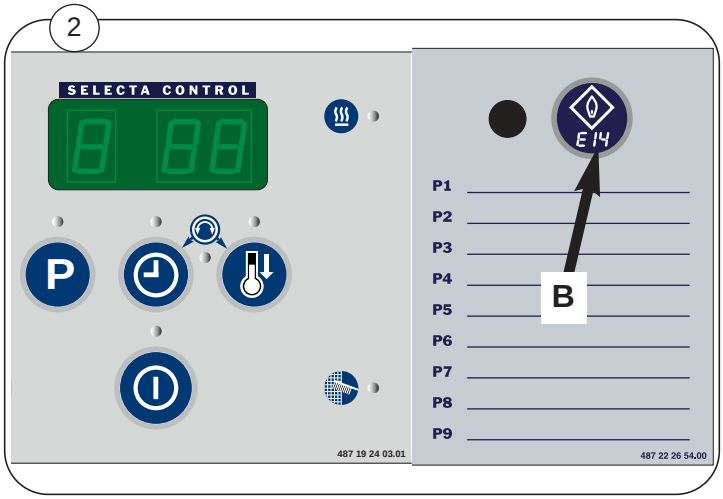


Resetting gas error - Dryer with Basic-3 Control

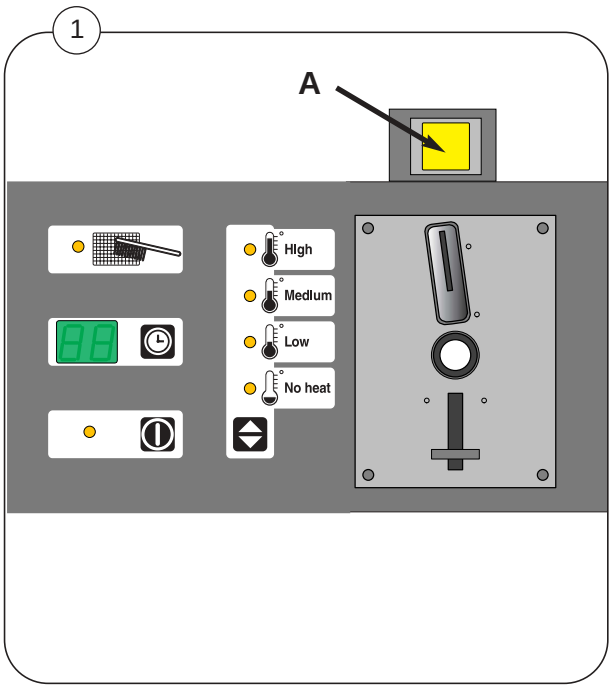
If the gas flame is not ignited within 10 seconds after starting the dryer the gas control will automatically turn off the gas and report an error.

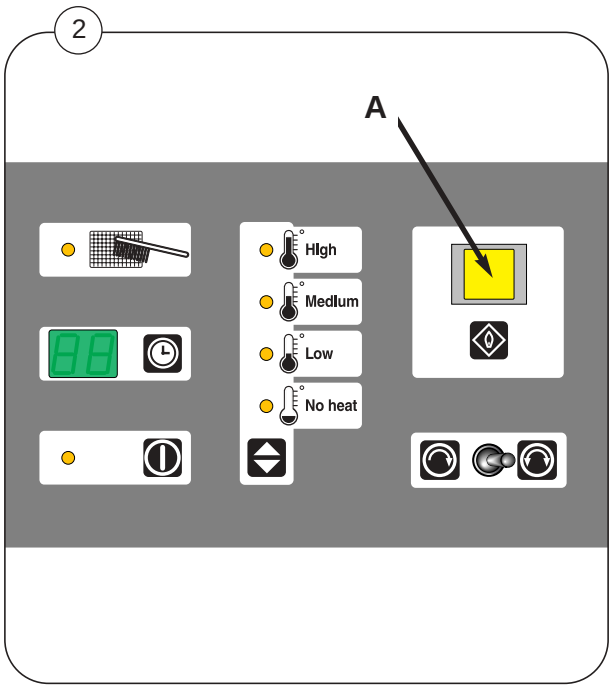
After 15 seconds it is possible to reset the error by pressing the button (**A**).

It is important to wait 15 seconds before pressing the reset button. If the button is pressed before the 15 seconds are up, a new 15 seconds will start again.

Fig. 1 The reset button is positioned behind the operating panel. In connection with gas errors it is necessary to open the panel in order to reset.

Fig. 2 Only on dryers in OPL laundries the reset button is positioned on the panel.





Dryer heated by superheated water, T3290 only

Description

A dryer heated by superheated water has a calorifier which is positioned at the top of the dryer behind the inlet filter, see fig. 1.

If the calorifier is leaking it must be replaced.

Before replacement

1. Disconnect the superheated water supply from the dryer.
2. Disconnect the electrical power supply from the dryer.
3. Open the operating panel and dismount the top back plate.
4. Dismount top plate.

From the front of the dryer:

5. Remove screws along air duct at the bottom and at flange towards the calorifier.
6. Dismount air duct.
7. Remove the 4 screws in flange at the bottom towards the calorifier.

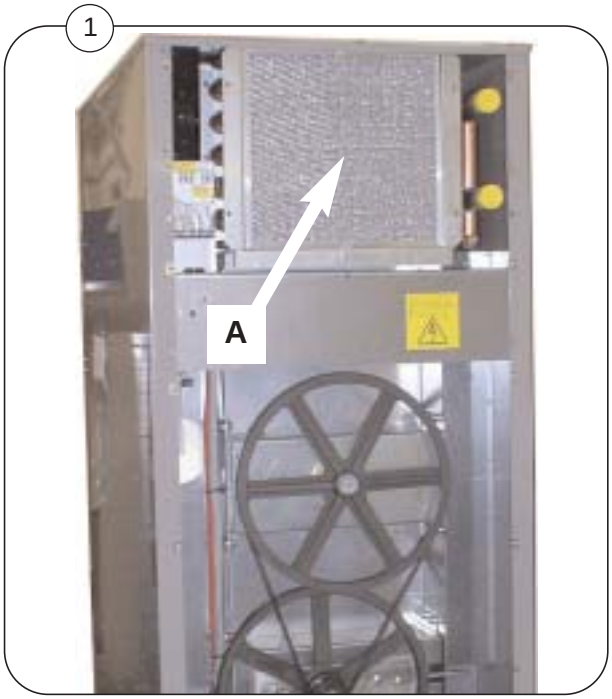
From the back of the dryer:

8. Remove the 2 screws at the calorifier.
9. The calorifier can now be removed.

Finishing replacement

1. Re-assemble the dryer.
2. Connect the power supply.
3. Test the dryer, see section 11: **Function check**.

1



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Replacement of inner bearing, dryer without RMC 42.4
Replacement of drum without RMC 42.7
Replacement of drum with RMC 42.10
Replacement of support rollers 42.12
Centering drum and spider 42.13

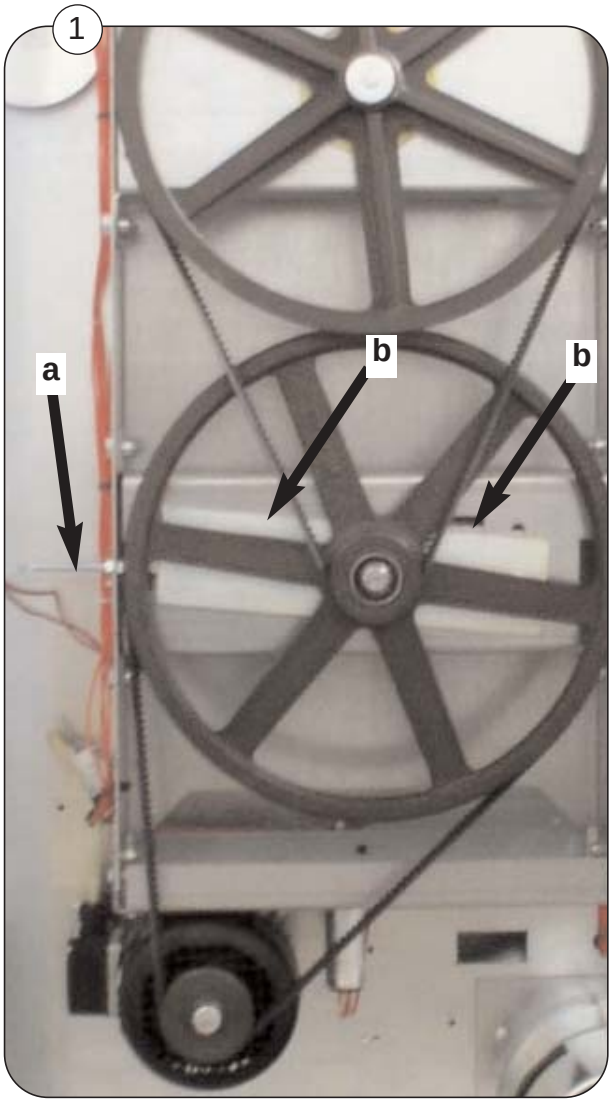
Replacement of transmission belt

1. Disconnect the power supply from the dryer.
2. Dismount bottom rear plate.
3. Loosen the defective belt
see arrows fig. 1 **a** = T3290, TD30, **b** = T3530, TD50.
see arrows fig. 2 **c** = T3650, TD75
4. Replace the defective belt.
5. See section 11 **Tightening drive belt**.
6. See **Finishing replacement.**

Finishing replacement

1. Re-assemble the dryer.
2. Connect the power supply to the dryer.
3. Test the dryer, see section 11: **Function check**.

1



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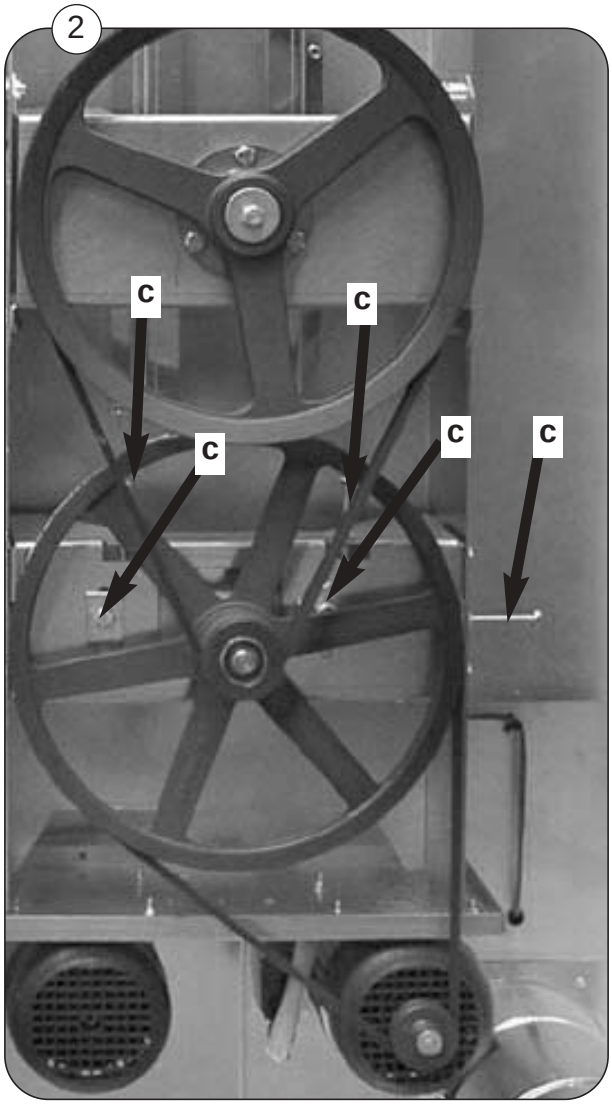

Replacement of outer bearing

1. Disconnect the power supply from the dryer.
2. Dismount bottom rear plate.
3. Loosen the belt, see **Replacement of transmission belt.**
4. Fig. 1 type T3290, T3530 TD30, TD50: Dismount bolt and washer on shaft end **A**.
   Fig. 2 type T3650, TD75: Dismount bolt and washer on shaft end **B**.
5. Dismount pulley and parallel key using a puller with 3 legs.
6. Dismount outer bearing with bearing discs.
7. Place the new bearing in the bearing discs.
8. Re-assemble the dryer.
9. Tighten the belt, see section 11: **Tightening drive belt.**
10. See **Finishing replacement.**

Replacement of inner bearing, dryer without RMC

First carry out step 1 - 6 **Replacement of outer bearing**

1. Fig. 3 and fig. 4 Remove the 2 x 4 bolts **C** in the shaft bridge.
2. Fig. 3 Remove 2 x 3 bolts in the 2 strengthening profiles **D** T3650, TD75 only.
3. Fig. 5 and fig. 6 Loosen the 2 slotted set screws **E** on the inner bearing
4. Fig. 5 and fig. 6 Dismount the nuts with washer **D** and remove the bearing discs with bearing.
5. Fig. 7 type T3290, T3530 TD30, TD50 Place the new bearing in the bearing discs.
   Fig. 8 type T3650, TD75 Place the complete bearing housing.
6. Push the drum upwards and place 3 wedges between drum and front.
Be careful not to damage the felt. See mounting drum step 11.
7. Mount bearing.
8. Remove the 3 wedges.
9. Re-assemble the dryer.
10. Tighten the belt, see section 11: **Tightening drive belt.**
11. See **Finishing replacement.**

Replacement of outer bearing or inner bearing, without RMC

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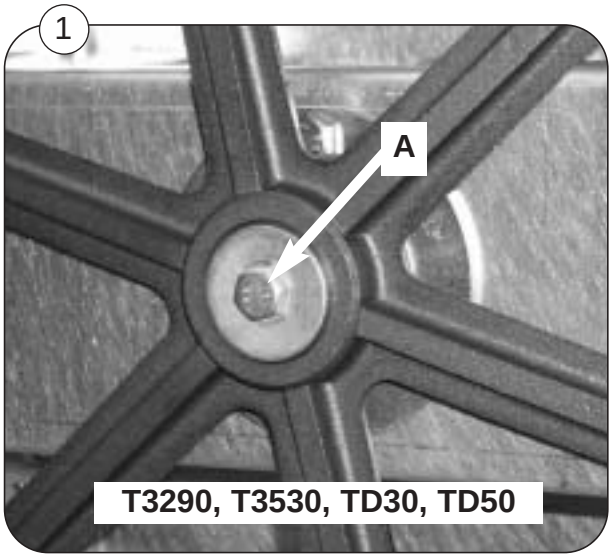

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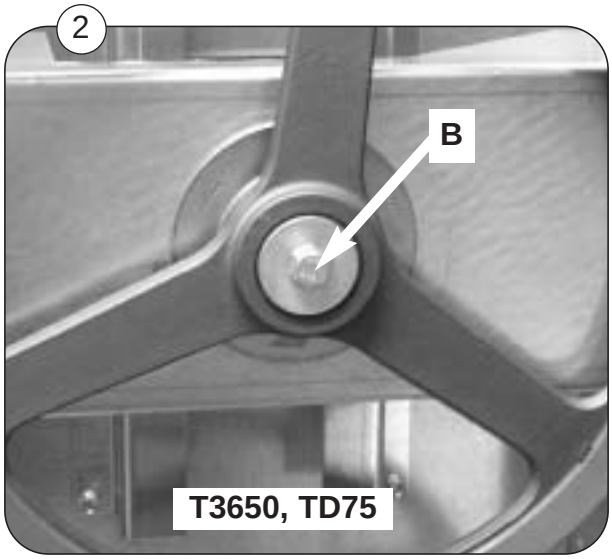

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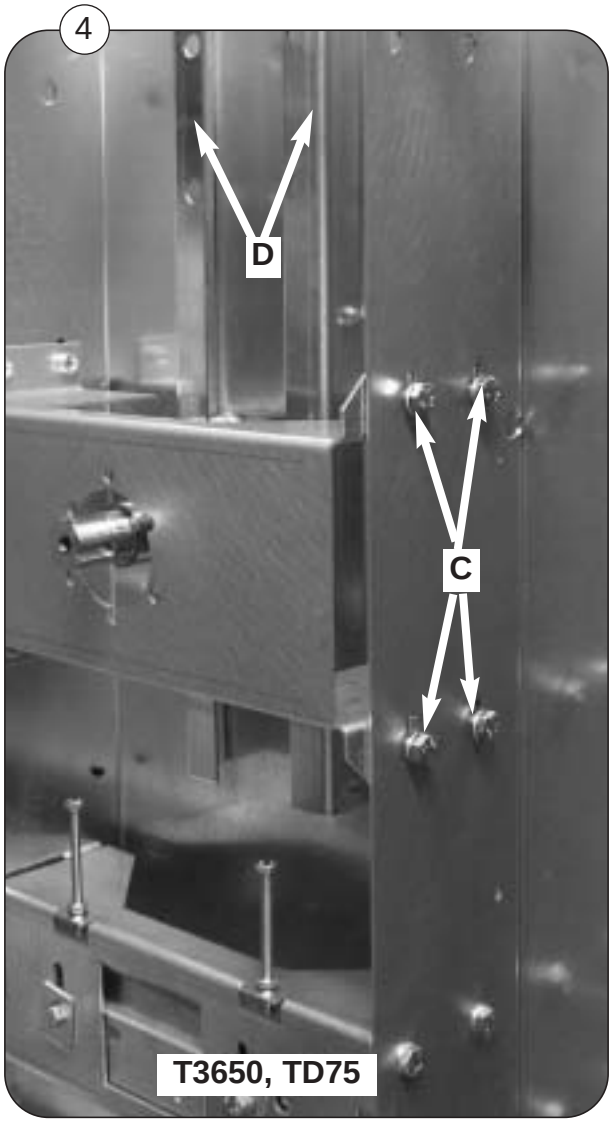

Replacement of inner bearing, dryer without RMC

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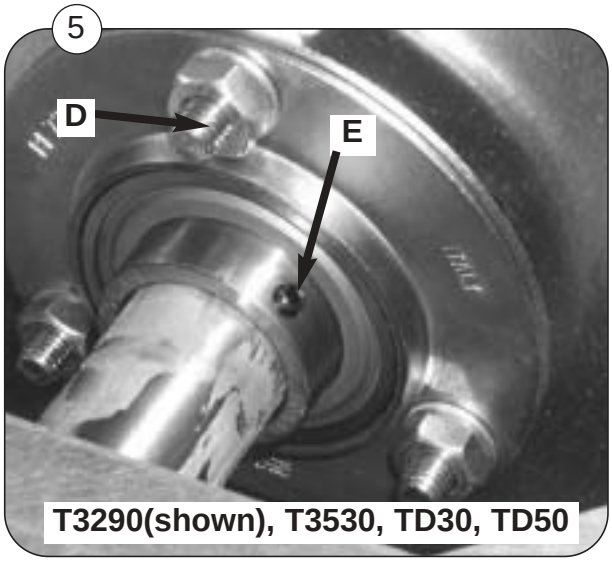
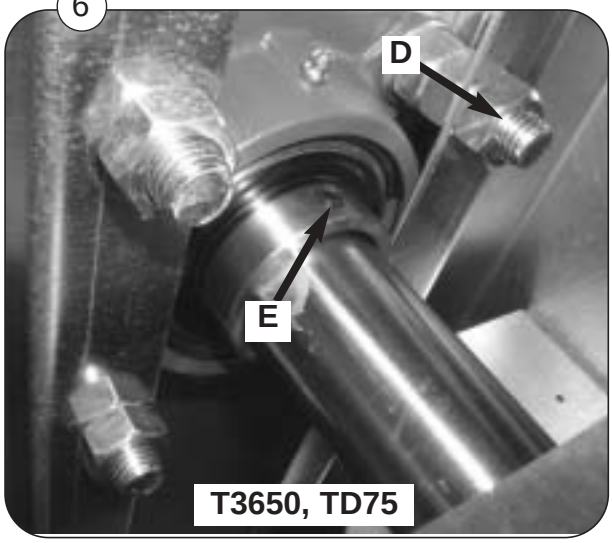


T3290(shown), T3530, TD30, TD50

6



T3650, TD75

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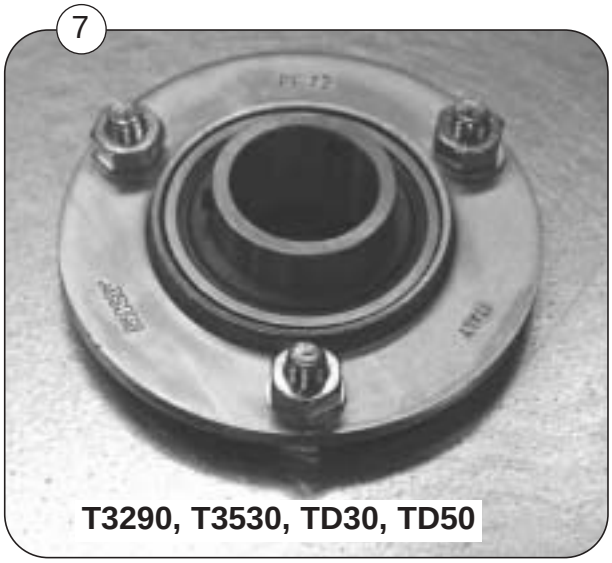

T3290, T3530, TD30, TD50

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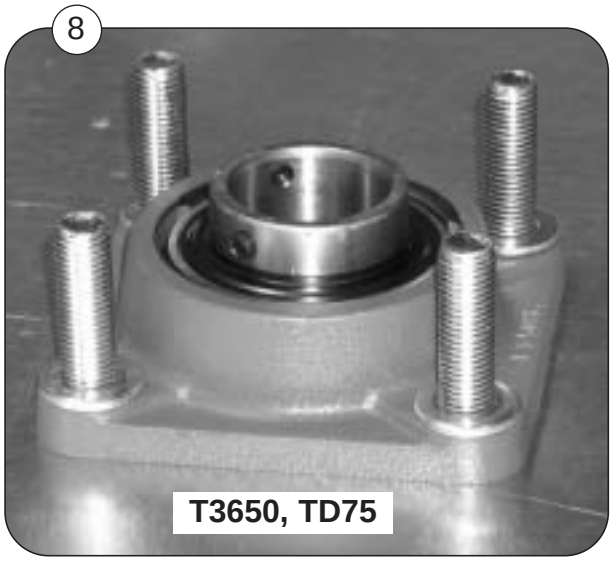


T3650, TD75

Replacement of drum without RMC

Demounting drum

1. Disconnect the power supply from the dryer.
2. Dismount the lint screen door.
3. Dismount top door hinge.
4. Lift off the door.
5. Dismount bottom door hinge and front panel.
6. Fig. 1 Remove the 4 plastic strips from the casing and keep them for later use.
7. Dismount bottom rear plate.
8. Loosen and dismount the belt, see **Replacement of transmission belt.**
9. Dismount bolt and washer **A** or **B** on shaft end, see fig. 1 or 2 **Replacement of outher bearing.**
10. Dismount pulley and parallel key using a puller with 3 legs.
11. Dismount outer bearing with bearing discs.
12. Loosen the 2 x 4 bolts **C** in the shaft bridge, see fig. 3 and fig. 4 **Replacement of outer and inner bearing, without RMC**.
13. Loosen the slotted set screws **E** on the inner bearing, see fig 5 and 6 **Replacement of inner bearing**.
14. Pull out the drum from the front. If the drum is stuck use a puller on the shaft.

Mounting drum

1. Fig. 2 Lubricate Antifret on the shaft as shown **a**.
2. Place the drum in the machine. Push the drum all the way back in the dryer.
3. Mount the 4 plastic strips on the casing shown on fig. 1.
4. Make sure that the felt on the front panel is in correct position and in good condition. Replace the felt if damaged.
5. Mount the front.
6. Pull the drum as much forward as possible.
7. Fasten the outer bearing.
8. Mount the pulley on the shaft.
9. Fig. 3 Mount the parallel key.
10. Mount a new screw and washer. Use a hex flange locking screw, type Eslok or use a screw with Loctite and fasten: T3290, TD30 with 20Nm
T3530, T3650, TD50, TD75 with 30Nm.
11. Fig. 4 Push the drum upwards and place 3 wedges between drum and front.
Be careful not to damage the felt.
12. Fig. 5 Fasten the shaft bridge.
13. Remove the wedges shown on fig. 3.

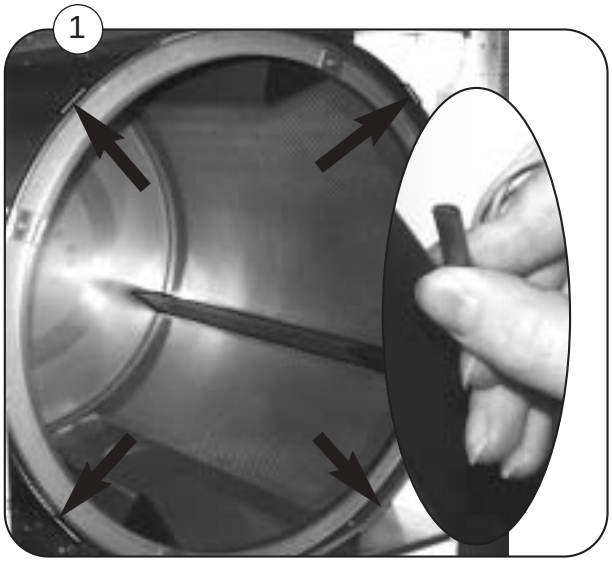
To be continued on the following page.

Mounting drum, continued

14. Fig. 5 Lubricate safety glue on the slotted set screws **E** and fasten:
T3290 TD30 with 4Nm / 3 lbf·ft.
T3530, T3650, TD50, TD75 with 6.5 Nm / 4.8 lbf·ft.
15. Mount the transmission belt, see **Replacement of transmission belt.**
16. Tighten the belt, see section 11: **Tightening drive belt.**
17. Return to: **Finishing replacement.**

Replacement of drum without RMC

1



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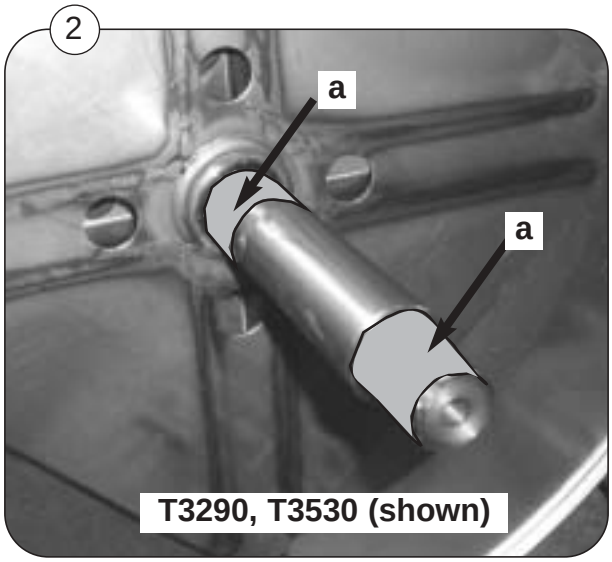

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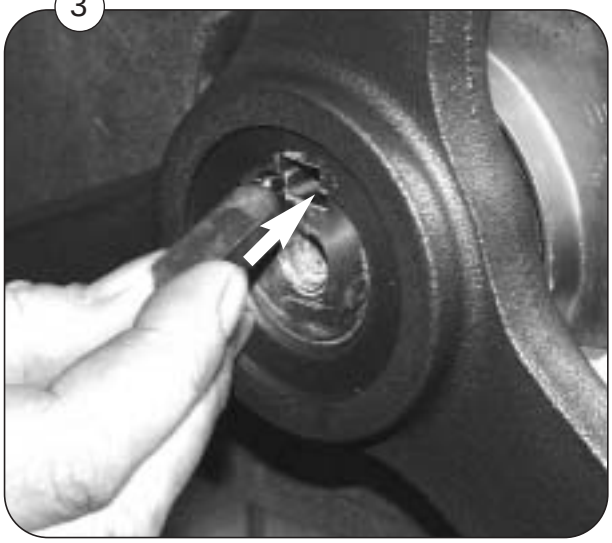

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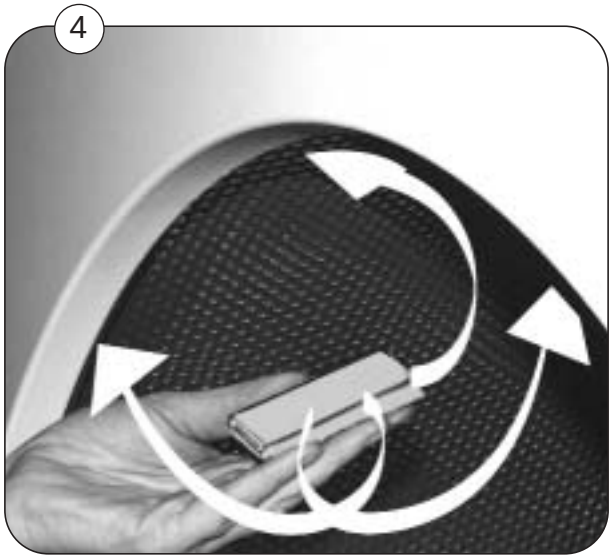

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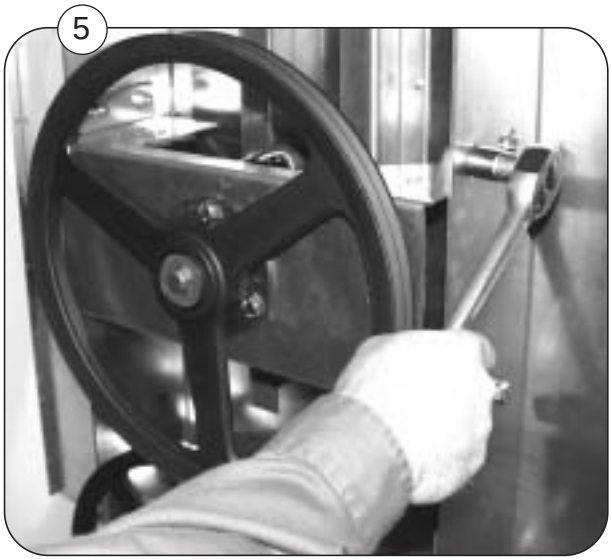

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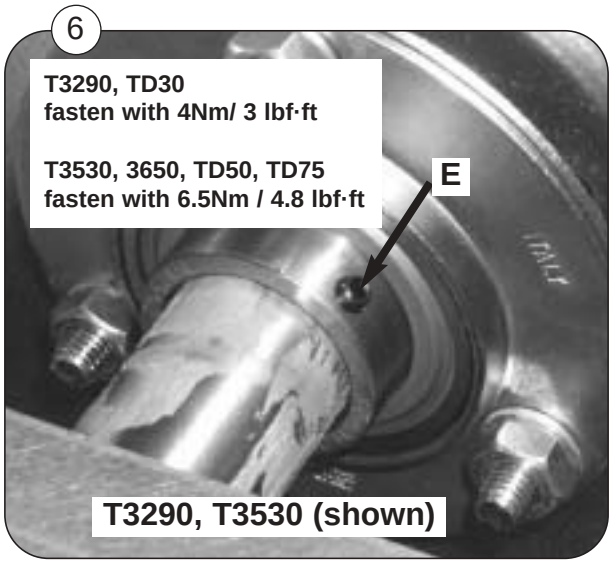


Replacement of drum with RMC

Demounting drum

First carry out step 1-13 **Demounting drum, Replacement of drum without RMC**.

1. Fig. 1 Fasten the connectors so they are clear of the shaft.

2. Fig. 2 Loosen the 3 set screws on the RMC bushing.

3. Fig. 3 Cut the wire from the shaft to the RMC bushing as close to the cable terminal as possible.

4. Push the wire back in the shaft.

5. Pull out the drum from the front. If the drum is stuck use a puller on the shaft.

6. RMC bushing must be re-used. Remove the terminal from RMC bushing.

Mounting drum

1. Fig. 4 Lubricate Antifret on the shaft as shown **a**. Carefully push the wire back as shown on fig. 5.

2. Fig. 5 Make sure that the wire is placed in the shaft on the new drum as shown.

3. Mount outer bearing with bearing discs.

4. Carry on from step 2 - 14 **Mounting drum, Replacement of drum without RMC**

5. Carefully pull the wire 15-20 cm/ 6-8 inch out of the shaft.

6. Mount terminal in the wire.

7. Turn the notch in the RMC bushing towards the groove in the shaft.
Carefully push excess wire back in the shaft. Avoid damaging the insulation.

8. Fasten terminal to the RMC bushing.

9. Place the RMC connectors on the RMC bushing. The carbon must touch the metal rings.

10. Fasten the slotted set screws on the RMC bushing.

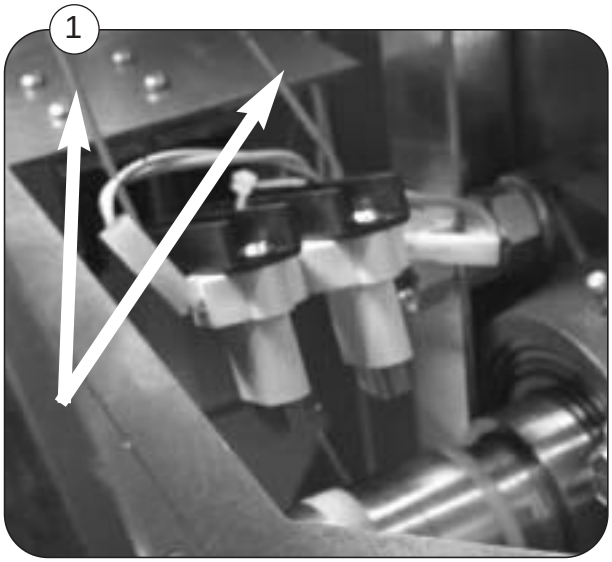
11. Carefully disengage the connectors.

12. Tighten the belt, see section 11: **Tightening drive belt.**

13. Return to: **Finishing replacement.**

Replacement of drum with RMC

1



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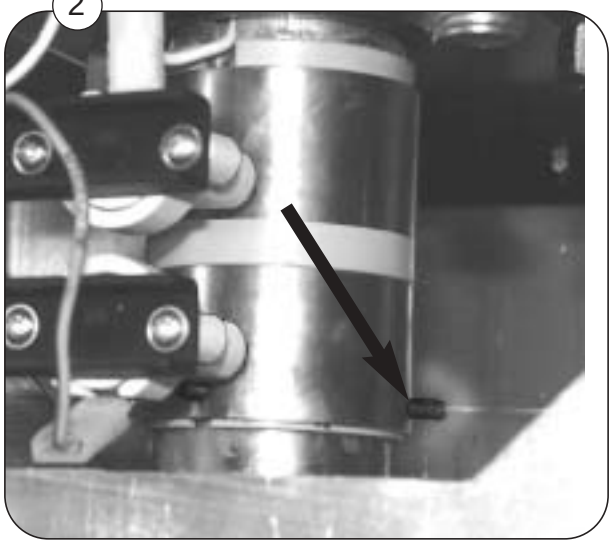

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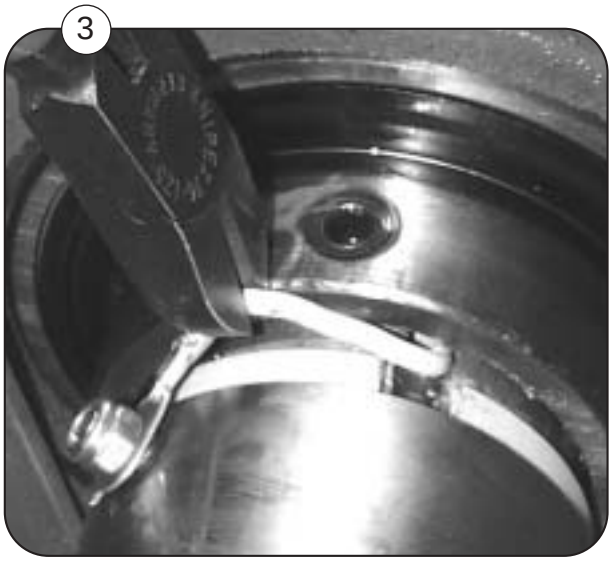

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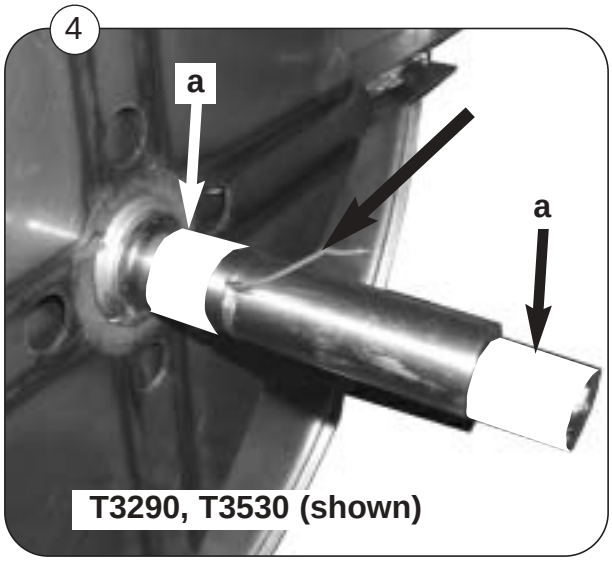

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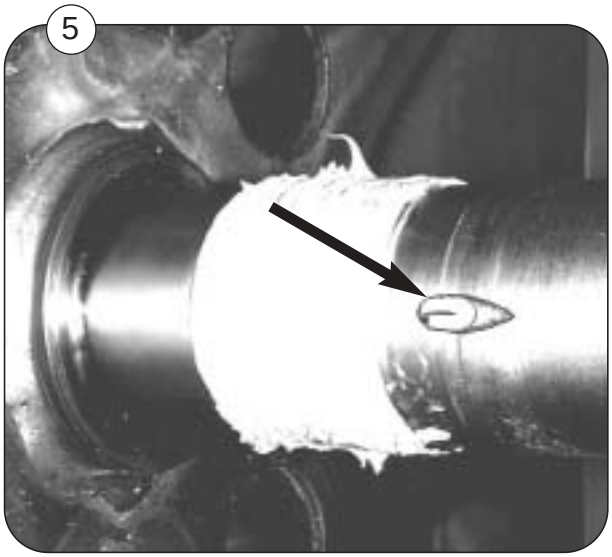


Replacement of support rollers, T3650 and TD75 only

At the front of the dryer, the support rollers are replaced as follows:

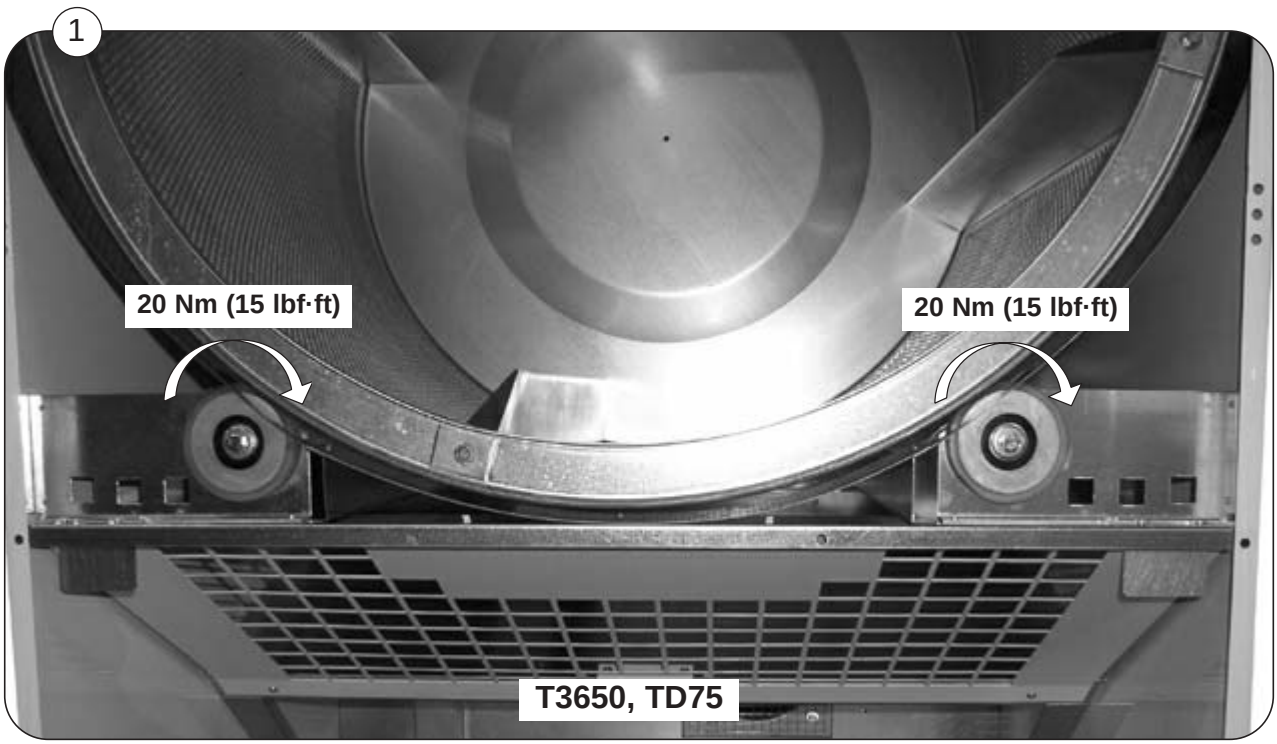
1. Disconnect the power from the dryer.
2. Remove the top door hinge.
3. Lift the door off the bottom hinge; remove bottom hinge.
4. Fig. 1 Remove the screws holding the front panel on the dryer and remove the panel.
5. Unscrew bolts at support rollers.
6. Replace support rollers and tighten with 20 Nm / 15 lbf·ft.

Finishing replacement

1. Re-assemble the front panel, door hinges, and door.
2. Connect the power supply.

Function check

Test the dryer, see section 11: **Function check**.



Centering drum and spider

General

It might be necessary to adjust drum and spider in proportion to each other. This might be the case if it is established that the felt seal on the back of the front is worn in several places all the way round.

Before starting

Fig. 1 Before removing the spider from the drum, note the number and location of the shims directly on the drum.

Fig. 2 Shims are used between the spider and the rear drum surface for creating balance.

The necessary fixture

Fig. 3 and 4 You will need a fixture in which it is possible to rotate spider and drum.

It does not have to be an advanced fixture as long as it can rotate the assembly without damaging the surface of the shaft.

If drum and spider have been separated

Fig. 5 From the front of the drum, insert one threaded rod through each drum lifter so that it passes completely through and protrudes from the rear.

Use a short piece of wire with a hook bent on its end to reach into the hole in the side of the drum and guide the threaded rod through the rear hole.

Drum with spider in fixture

Fig. 6 Place the drum with spider in the fixture and place shims as before.

Adjusting the drum

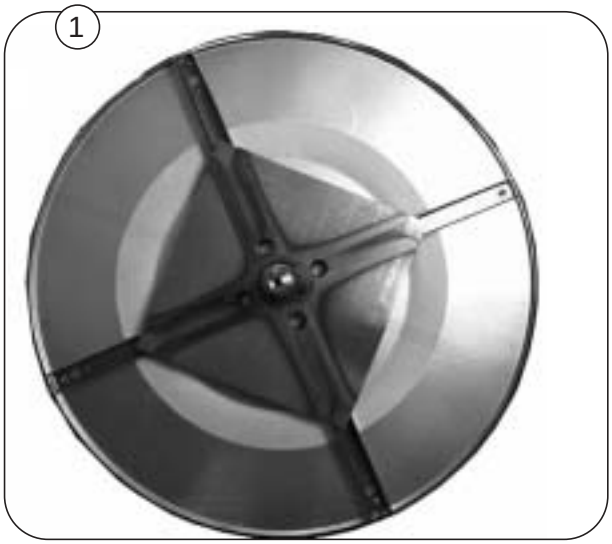
1. Fig. 7. Set up a fixed measuring point **x** approximately 4mm / 1/8 inch from the flange of the drum.

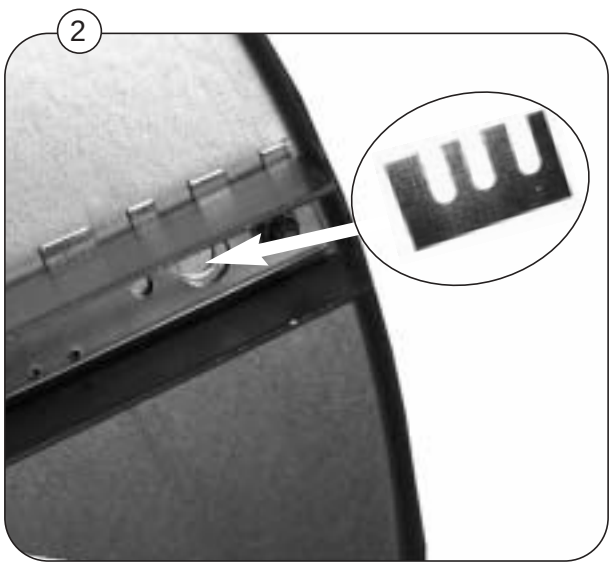
2. Rotate the drum and observe the distance variation.

3. Adjust the number and placement of shims until the variation is only ±1.6 mm / ±1/16 inch.

Tightening

Fig. 8. Tighten the 4 bolts with 9 Nm / 7 lbf·ft torque.





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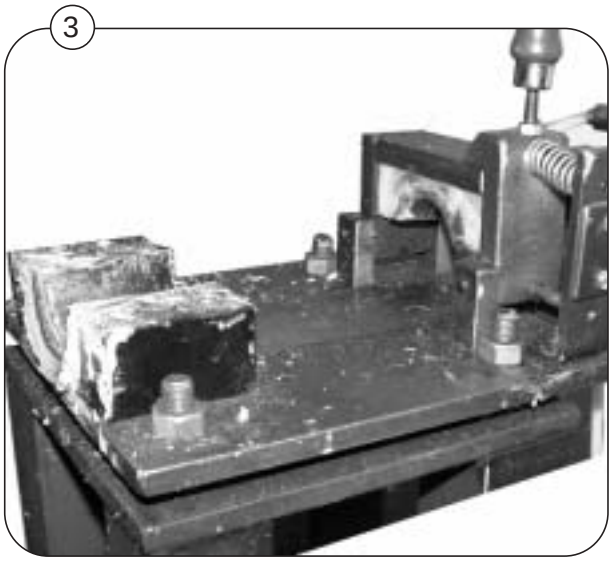

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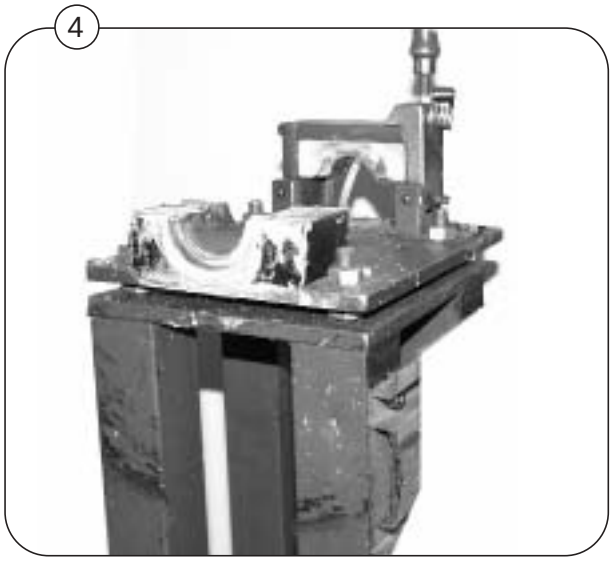

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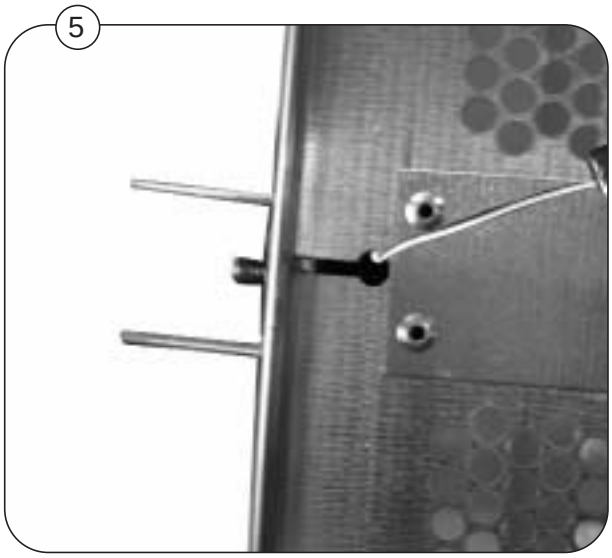

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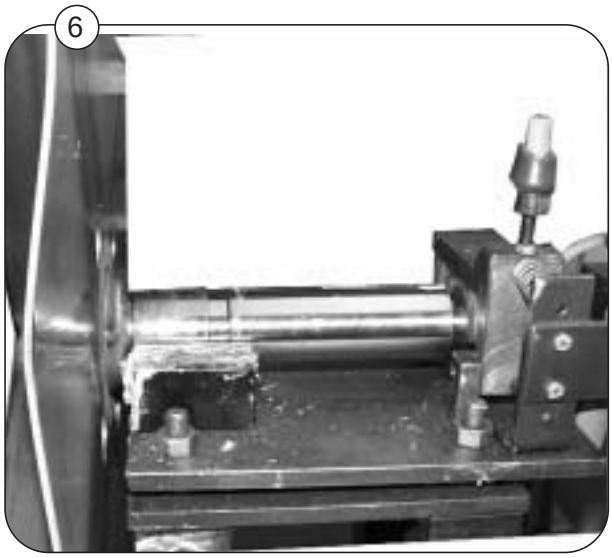

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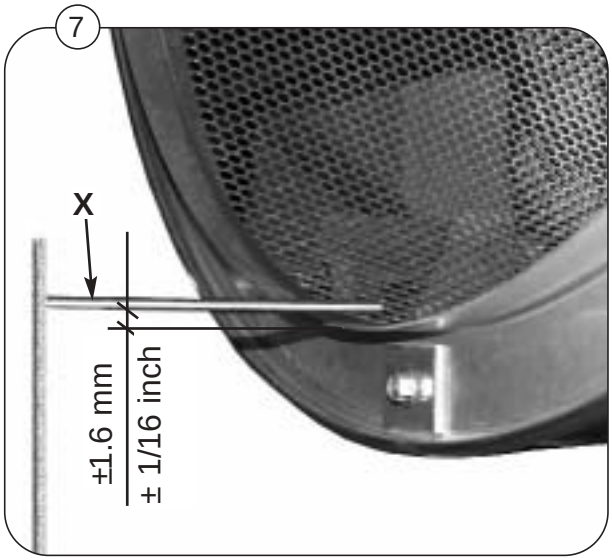

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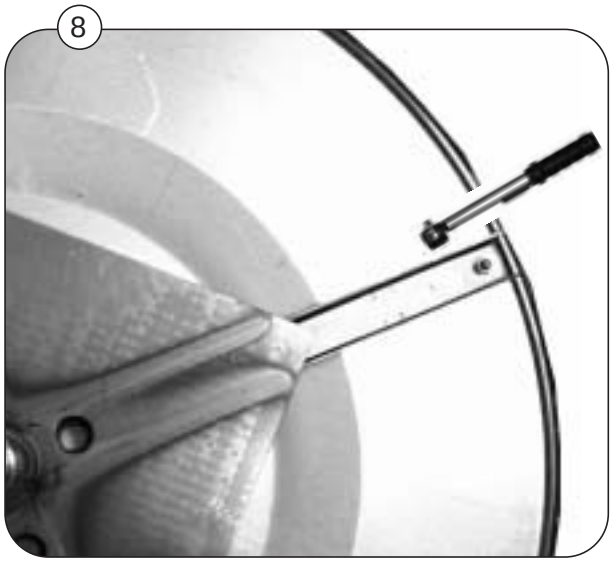


Contents

Reversing door 43.3

Reversing the door

The dryer is usually delivered with a right hinged door but the door can be changed to left hinged position.

Door reversal instructions

1. Disconnect the power supply to the machine.

2. Dismount the door.

3. Remove the screws that secure the center front panel to the machine and remove the entire panel.

4. Fig. 1 Disconnect the door switch wires and move them to the opposite side of the dryer. Remember to move the bushing as well (**1a**).

5. Fig. 2 Dismount the bracket with door switch and turn it 180°. Unscrew the switch from the bracket. Turn switch and insulation 180° and re-mount them as before.

6. Mount the bracket with switch on the left side and connect the wires, as before (**1b**).

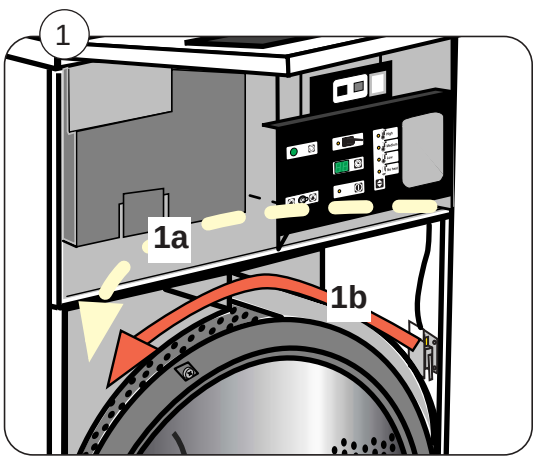
7. Note that the 4 plastic strips on the casing are installed before the front is mounted.

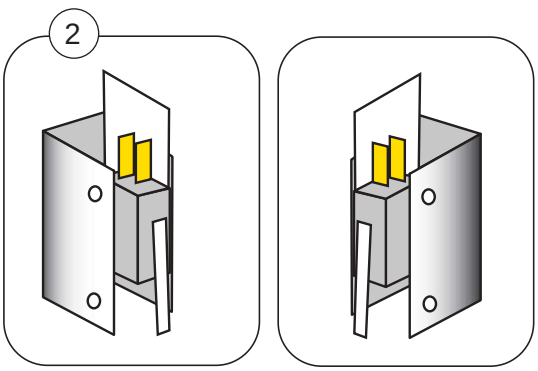
8. Turn the front panel up side down and re-mount it.

9. Turn the door up side down and re-mount it.

10. Mount door pin on screw at door hinge. The new pin location must correspond with the new position of the door switch.

11. Test the dryer, see section 11: **Function check**.





Left hinged door switch.

Right hinged door switch.

Contents

Natural gas and LPG:

Gas valve 47.2

Measuring, nozzle pressure 47.3

Measuring, supply pressure 47.4

Test run 47.5

Tables of pressure and adjustments 47.6

WARNING !
FIRE AND / OR EXPLOSION HAZARD!

Gas heating system service procedures must be carried out by qualified service personnel!

DO NOT OPERATE THIS MACHINE WITH IMPROPER SUPPLY OR NOZZLE PRESSURES, AS THIS CAN CAUSE FIRE AND/OR EXPLOSION!

Improper installation, adjustment or operation of this gas-heated appliance may result in the risk of fire and/or explosion, damage to property, serious injury, or death.

Gas valve - Natural gas and LPG

Pos. 1. Nozzle

The nozzle orifice size must be correct for the installation altitude (US only) and the type of gas being used.

Refer to the installation manual to determine proper orifice size.

Pos. 2. Measuring tap, nozzle pressure

Measuring see page 47.4.

Pos. 3 + 4. Nozzle pressure adjustment screw and cap

Set the nozzle pressure by using adjusting screw (4) found behind cover screw (3).
Clockwise higher pressure.
Counter-clockwise lower pressure.

Pos. 5. Control box, gas valve

Pos. 6. Measuring tap, supply pressure

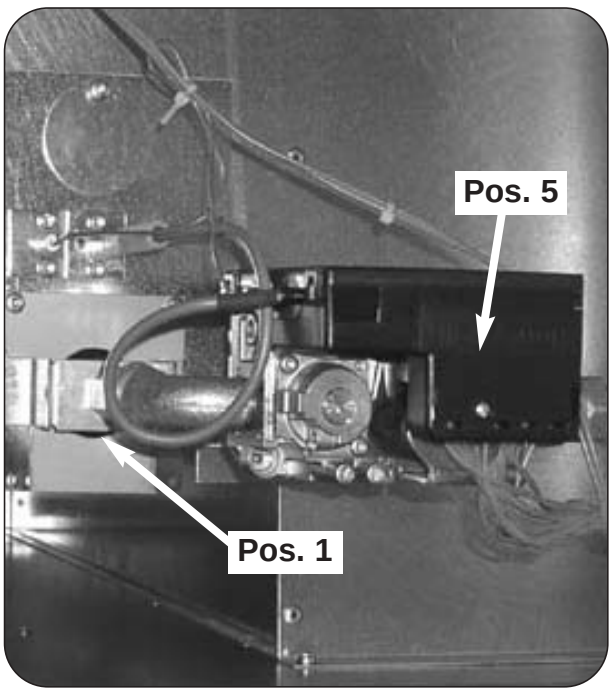
Measuring see page 47.4.

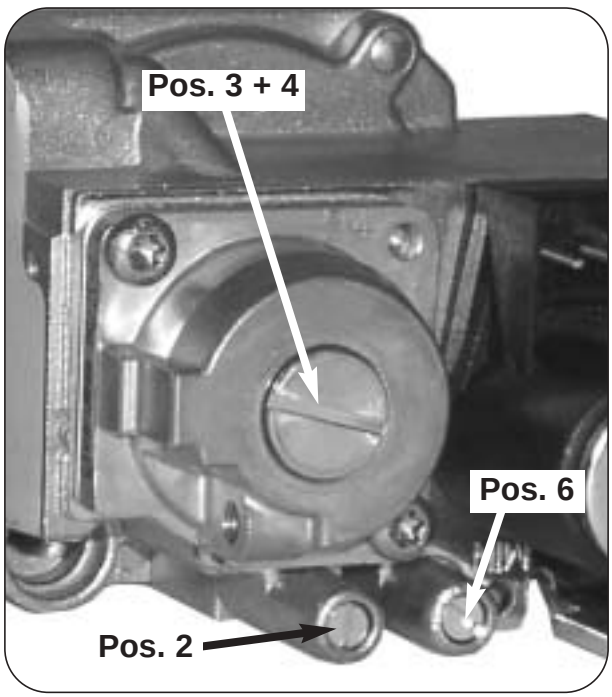
Supply pressure see installation manual.

NOTE that the gas supply MUST be turned off before loosening tap pos. 6 (SUPPLY) or gas will escape.

Pos. 7. Primary air flow reducing plate.

An air reducing plate has been installed in all dryers exept T3290 / TD30 .





Measuring tap, nozzle pressure (pos. 2)

1. With the dryer switched off, loosen the gas pressure tap (pos. 2) one-quarter of a turn and connect a manometer to the tap.

2. Remove the ignition cable from the ignition electrode and position it so the end of the cable is at least 2 inches from any metal surface and away from any area into which you must reach to carry out this procedure.

This prevents the burner from lighting.

3. Start the dryer with High heat selected.

After a few seconds, the ignition control will energize the gas valve.

Check that the nozzle pressure reading on the manometer is within the allowable range specified in the installation manual for the gas type being used.

Too high nozzle pressure

If the nozzle pressure is too high, adjust it by removing the cap (pos. 3) and turning the screw (pos. 4) beneath this cap counter-clockwise until the nozzle pressure is correct.

Too low nozzle pressure

If the nozzle pressure is too low, it may be due to a limited gas flow (and pressure) on the supply side of the valve.

1. Turn off the dryer

2. Close the nozzle pressure measuring tap (pos. 2) and measure the supply pressure tap (as described in section Measuring tap, supply pressure below).

The supply pressure must remain AT LEAST:

1.5 inches WC / 3.7 mbar / 374 pa above the desired nozzle pressure.

If it does not, corrective action must be taken on the gas supply system to the dryer.

If the supply side pressure remains at least 1.5 inches WC / 3.7 mba / 374 pa above the desired nozzle pressure, the nozzle pressure can be increased as described above with the manometer connected to pressure tap (pos. 2) by turning screw (pos. 4) beneath cap (pos. 3) clockwise.

Measuring tap, supply pressure (pos. 6)

> **NOTE** that the gas supply **MUST** be turned off before loosening tap pos. 6 (SUPPLY) or gas will escape.

Refer to the installation manual for the proper supply pressure for the type of gas being used.

1. Turn off the manual gas valve to the machine and start the dryer on High heat.

2. Loosen the gas pressure tap (pos. 6) one-quarter of a turn and connect a manometer to the tap.

3. Turn on the manual gas supply valve.

4. Start the dryer on High heat and check that the supply pressure is within the allowable range.

Note: If the pressure is not within the range specified in the below gas tables :

DO NOT OPERATE THE DRYER.

Contact your gas supplier.

Test run

Test all joints for leaks.

Use approved leak testing materials and techniques.

Before operating the dryer with a flame, check the supply and nozzle pressures as described earlier in this section.

Check that the gas is burning evenly and with a bluish flame.

After testing, prepare the dryer for use.

Gas installation

Table of pressure and adjustments

T3290 heat effect: 21 kW

T3290	a	b mbar	c mbar	d mm
Denmark Norway Sveden Finland	LPG GNH GNL	30 20	30 10.5	2.20 3.80
Italy England Spain Portugal Ireland Greece	LPG GNH GNL	28 / 37 20	28 / 37 10.5	2.20 3.80
France Belgium	LPG GNH GNL	28 / 37 20 / 25 20 / 25	28 / 37 20 / 25 20 / 25	2.20 3.30 3.30
Germany	LPG GNH GNL	30 , 50 20 20	30 10.5 15.2	2.20 3.80 3.80
Holland	LPG GNH GNL	30 25	30 15.2	2.20 3.80
Austria	LPG GNH GNL	50 20	30 10.5	2.20 3.80
Japan	LPG	28	28	2.30
Australia New Zealand	Propane GN	3.0 kPa 1.8 kPa	2.57 kPa 0.8 kPa	2.40 4.00
The rest of the world except: USA	LPG GNH GNL	30 18 18	30 10.5 15.2	2.20 3.80 3.80

a **Gas type** **c** **Nozzle pressure**

b **Connection pressure** **d** **Nozzle**

Gas installation

Table of pressure and adjustments

T3530 heat effect: 40 kW

T3530	a	b mbar	c mbar	d mm
Denmark Norway Sveden Finland	LPG GNH GNL	30 20	30 8.0	3.20 5.60
Italy England Spain Portugal Ireland Greece	LPG GNH GNL	28 / 37 20	28 / 37 8.0	3.20 5.60
France Belgium	LPG GNH GNL	28 / 37 20 / 25 20 / 25	28 / 37 20 / 25 20 / 25	3.20 4.70 4.70
Germany	LPG GNH GNL	30 , 50 20 20	30 8.0 8.0	3.20 5.60 6.20
Holland	LPG GNH GNL	30 25	30 8.0	3.20 6.20
Austria	LPG GNH GNL	50 20	30 8.0	3.20 5.60
Japan	LPG	28	28	3.20
Australia New Zealand	Propane GN	3,0 kPa 1.8 kPa	2.44 kPa 0.8 kPa	3.50 5.60
The rest of the world except: USA	LPG GNH GNL	30 18 18	30 8.0 8.0	3.20 5.60 6.20

a **Gas type**
b **Connection pressure**
c **Nozzle pressure**
d **Nozzle**

Gas installation

Table of pressure and adjustments

T3650 heat effect: 57 kW

T3650	a	b mbar	c mbar	d mm
Denmark Norway Sveden Finland	LPG GNH GNL	30 20	30 9.5	3.80 6.50
Italy England Spain Portugal Ireland Greece	LPG GNH GNL	28 / 37 20	28 / 37 9.5	3.80 6.50
France	LPG GNH GNL	28 / 37 20 25	28 / 37 9.5 14	3.80 6.50 6.50
Belgium	LPG GNH GNL	28 / 37 20 / 25 20 / 25	28 / 37 20 / 25 20 / 25	3.80 5.40 5.40
Germany	LPG GNH GNL	30 , 50 20 20	30 9.5 14.0	3.80 6.50 6.50
Holland	LPG GNH GNL	30 25	30 14.0	3.80 6.50
Austria	LPG GNH GNL	50 20	30 9.5	3.80 6.50
Japan	LPG	28	28	3.80
Australia New Zealand	Propane GN	2.75 kPa 1.15 kPa	2.75 kPa 0.8 kPa	3.80 6.50
The rest of the world except: USA	LPG GNH GNL	30 18 18	30 9.5 14.0	3.80 6.50 6.50

a **Gas type**
b **Connection pressure**
c **Nozzle pressure**
d **Nozzle**

Gas installation TD30, TD50 and TD75

Table of pressure and adjustments

Dryer type	Heating power Btu/h	Gas type	Upper calorific value MJ/m3	Gas pressure Inlet 2 inch W.C.	Gas pressure Nozzle pressure (Outlet pressure tap) 5 inch W.C.	Ø Nozzle 1 **mm
30	71600	Propane	93.7	11.0	11.0	2.4
		Natural gas	37.78	7.0	4.2	3.8
50	136400	Propane	93.7	11.0	11.0	3.4
		Natural gas	37.78	7.0	3.2	5.6
75	151200	Propane	93.7	11.0	11.0	3.5
		Natural gas	37.78	7.0	3.2	5.8

****** Nozzle dimension at altitude up to 1999 ft.

Contents

RMC, general 51.3
Replacing the collector graphite 51.3

RMC, general

The purpose of RMC is to be able to stop the dryer when a pre-selected moisture level has been reached in the clothes.

Also see section 11, **Dryer with RMC**

Replacing the collector graphite

If the dryer stops almost straight away without the clothes being dry this is because the measuring system has been disconnected without a signal being sent to the control, ie. no error code is displayed.

If this happens it could be due to the collector graphite needing cleaning or being defective in which case it must be replaced.

To replace the collector graphite:

1. Disconnect the power supply from the dryer.
2. Remove the back plate
3. Fig. 1 illustrates collector graphite which either needs cleaning or replacing.
4. Assemble the dryer.
5. Connect the power and test the dryer.

Function check

Check the dryer, see section 11: **Function check**

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