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Appendix: Timer diagram

This service manual describes tumble dryer type TD60 and is a supplement to the general service manual for the 600 series.

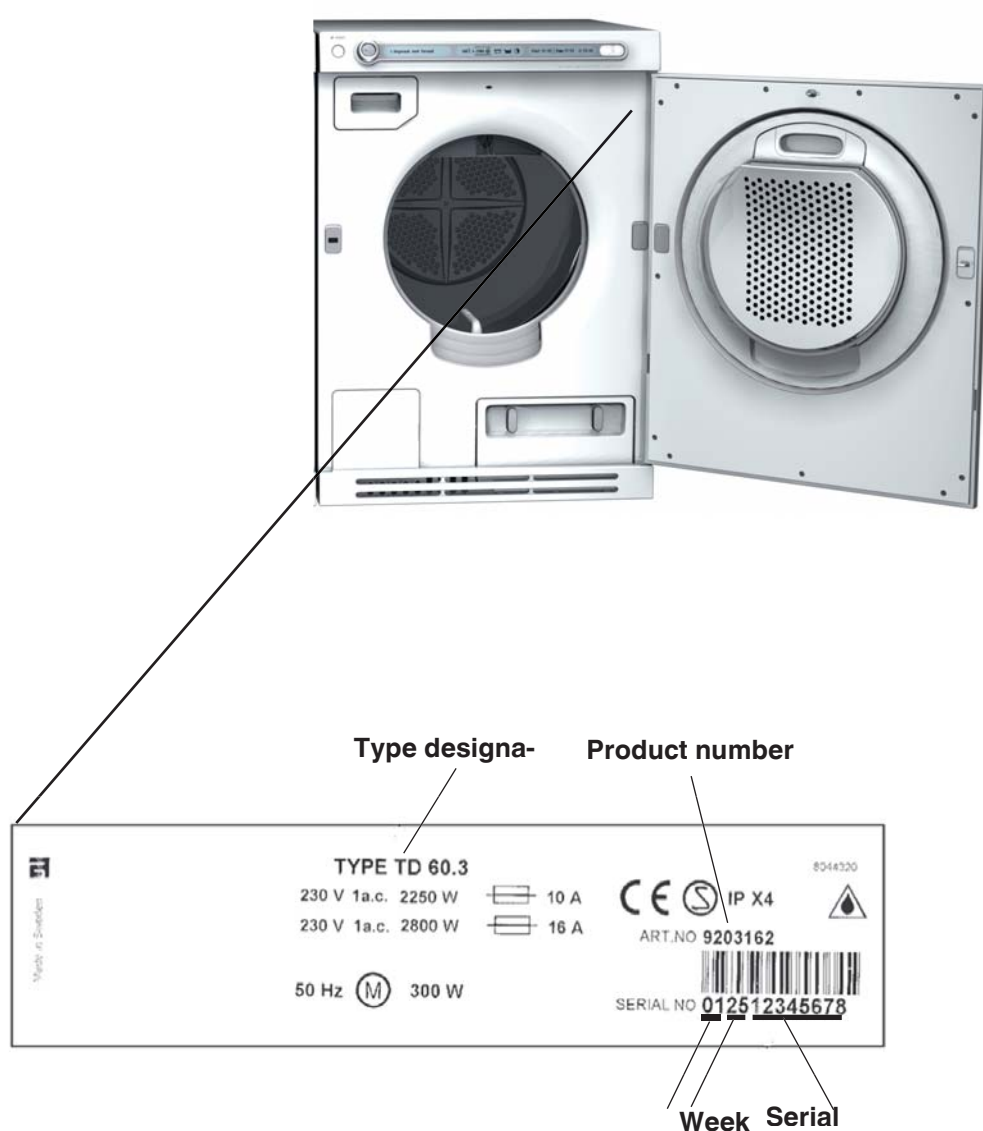


Introduction

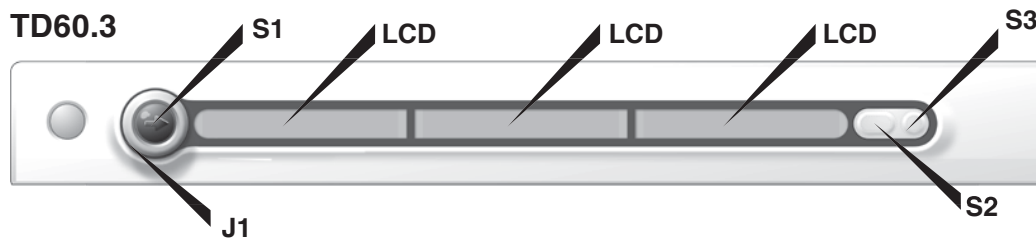
You are holding the service manual for TD60 type tumble dryers.

It should be easy to service a tumble dryer. It is important that you, as a service technician, are given the conditions to be able to carry out work in an efficient and satisfactory way. Our hope is that this service manual is a useful tool for your daily work.

The type designation can be found on the machine plate located by the door catch on the inside of the front plate. (see image below)



Product overview

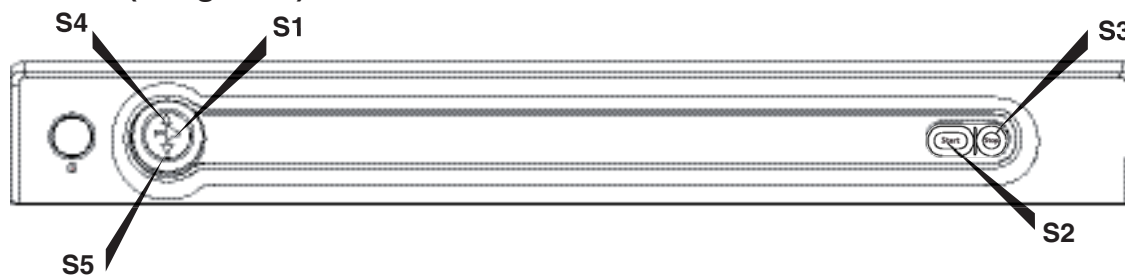


Positions: 7, where one consists of the menu for settings (Position 7)

Options: 5

Settings: 4

TD60.3 (Integrated)

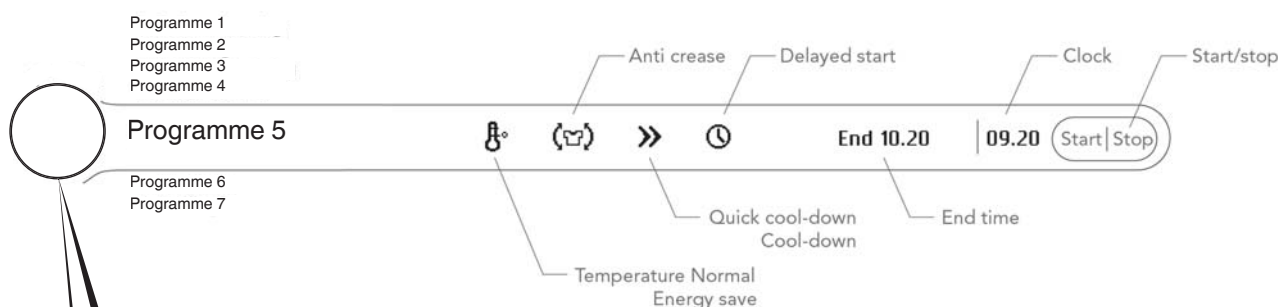


Positions: 7, where one consists of the menu for settings (Position 7)

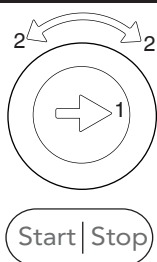
Options: 5

Settings: 4

Programme selection, options and making settings

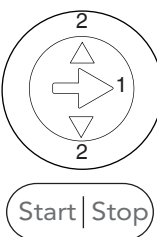


Programme selector



1. Press the programme selector button to navigate between the different menus (e.g. to go from temperature menu to Anti Crease menu).
2. Turn the programme selector button to make a selection in the menus (e.g. select normal temp.). Confirm the selection and go to the next menu by pressing the programme selector button.
3. Press Start to start. Hold Stop in for 3 seconds to exit the current programme.







Programme selector button for integrated machines



1. Press the programme selector button to navigate between the different menus (e.g. to go from temperature menu to Anti crease menu).
2. Press the small arrows to make a selection in the menus (e.g. select normal temp.). Confirm the selection and go to the next menu by pressing the programme selector button.
3. Press Start to start. Hold Stop in for 3 seconds to exit the current programme.






















Programme selection





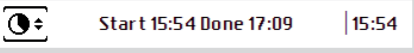
The programmes are displayed in the order they occur in LCD1. All display text language versions are displayed.

Press/ turn	LCD 1	Comments/instructions	
		Turn on the main power supply	
 	1	Extra Dry, Heavy, Auto extra dry, Auto extratorrt, Ekstra tørt, Auto ekstra tørt, Erittäin kuiva, Séchage intensif, Extra droog, Perfett. asc. autom., Secado pesado auto, Экстра сушка, Extratrocken	This programme is for items that are particularly difficult to dry, e.g. jeans with very thick seams.
	2	Dry, Normal, Auto dry, Auto skåptorrt, Skabstørt, Auto tørt, Kaappikuiva, Séchage armoire, Kastdroog, Asc. da riporre autom., Sec. para armario auto, Нормальная сушка, Schranktrocken	This programme shut off the heat once the load is dry but before it is "bone-dry". The programme on position 2 shuts off the heat slightly later than the program on position 3. Use trial and error to find out what works best. Use these programmes when you want items to be completely dry.
	3	Normal Dry, Delicate, Auto normal dry, Auto normaltorrt, Normalt tørt, Auto nesten tørt, Normaalkuiva, Séchage normal, Normaal droog, Asciutto norm. autom., Secado liviano auto, Деликатная сушка, Normaltrocken	This programme shut off the heat once the load is dry but before it is "bone-dry". The programme on position 3 shuts off the heat slightly later than the program on position 4. Use trial and error to find out what works best. Use these programmes when you want items to be completely dry.
	4	Iron Dry, Iron Dry, Auto Iron dry, Auto stryketørt, Strygetørt, Auto stryketørt, Silityskuiva, Repassage, Strijkdroog, Asc. da stirare autom., Sec. para plancha auto, Сушка "под утюг", Bügeltrocken	This programme shuts off the heat once the load is just damp enough for ironing or pressing.
 	5	Timed Dry, Timed Dry , Timed dry , Tidsprogram, Tidsprogram, Tidsprogram, Aikaohjelma, Programme minute, Tijdprogramma, Progr. del tempo , Prog. de secado, Сушка по времени, Zeitprogramm	<p>The programme length you choose depends on what you intend to do with the items after drying them. Use trial and error to find out what works best. When you use Timed dry to tumble-dry a load of mixed fabrics, some of the garments may remain damp. Tumble-dry any damp garments for a further 30 minutes or so using the Timed dry programme</p> <p>When using the Timed dry programme, garments can become "over-dry" if you have selected too long a drying time. This can cause the items to shrink or crease and become rough. Synthetic materials can also become charged with static electricity.</p> <p>Set the number of minutes incrementally. The selected time is shown on the display. Try out different drying times.</p>
	6	Air Fluff, Air Fluff , Revitalise, Luftningsprogram, Koldluftprogram, Kald luft, Tuuletus, Ventilation, Ventilieren, Arieggiamento, Aireado, Проветривание, Lüften	Use the Revitalise programme when you just want to refresh, air or soften up items Set the number of minutes incrementally. The selected time is shown on the display. Try out different drying times.
	7	Settings, Settings, Settings, Inställningar, Indstillinger, Instillinger, Asetukset, Réglage, Instellingen, Impostazioni, Ajustes, Настройки, Einstellungen	
		Exits the programme menu and advances to options or the menu for Settings.	

Selecting Options
















The options are displayed in the order they occur in LCD2 and LCD3. All display text language versions are














Press/ turn	LCD 2	LCD 3	Comments/instructions
 		Temperature Normal, Temperature normal, Temperatur normal, Temperatur normal, Lämpötila normaali, Temp. normal, Normale temperatuur, Temp. normale, Temperatura normal, Норм.температура, Temp. normal	Two possible choices of temperature. Not available for programme at programme 6 ("Air Fluff")
		Temperature Low, Energy Save, Temperatur låg, Temperatur lav, Temperatur lav, Lämpötila matala, Temp. faible, Lage temperatuur, Temp. bassa, Baja temperatura, Низкая температура, Temp. niedrig	
			
 		Anti Wrinkle On, Anti crease On, Skrynkelfritt På , Anti-krøl Til , Antikrøll På , Rypistymisen esto Päällä, Antifroissage On, Anti-kreuk Aan, Antisgualcit. On, Antiarrugas encendido , Против сминания Вкл., Knitterschutz An	This is a useful feature if you cannot take the washing out as soon as the tumble dryer has finished. The function prevents the clothes from remaining in the same position and becoming creased. The drum will rotate for three seconds per minute for two hours once the drying programme has finished
		Anti Wrinkle Off, Anti crease Off, Skrynkelfritt Av, Anti-krøl Fra , Antikrøll Av , Rypistymisen esto Poissa, Antifroissage Off, Anti-kreuk Uit, Antisgualcit. Off, Antiarrugas aragado, Против сминания Выкл., Knitterschutz Aus	Not available for programme at position 6 ("Air Fluff")
			
 		Quick Cool-down, Quick cool-down, Kort kylning, Hurtig køling, Hurtig kjøling, Lyhyt jäähdytys, Refroid.rapide, Snel afkoelen, Raffr. rapido, Enfri. rapido, Быстрое охлаждение, Schnell abkühlen	The load cools in 3 minutes. The option cannot be selected for the Air fluff programme.
		Cool-down, Cool-down, Normal kylning, Normal køling, Normal kjøling, Normaali jäähdytys, Refroid. normal, Normal afkoelen, Raffr. normale, Enfri. normal, Норм. охлаждение, Normal abkühlen	The machine cools the load in 15 minutes. The option cannot be selected for the Air fluff programme.
			
 		Start, Start, Start, Start, Start, Start, Start, Démarrer, Start, Avvio, Inicio, Старт, Start	Delayed start (when setting: "No Real time") The start of the selected programme can be delayed for up to 24 hours (in half an hour intervals). The delay and programme time is shown in the display.
		(Option for all programs except Timed dry)	 Delayed start (when setting: "24 Hour Clock " or "12 Hour Clock") The start of the selected programme can be delayed for up to 24 hours (in half an hour intervals). Start and end times are shown in the display. 

 		<p>Start - Done, Start-End, Start-Done, Start-Klar, Start-Færdig, Start-Ferdig, Start-Valmis, Démarrer-Fin, Start-Fertig, Avvio-Fine, Inicio-Fin, Старт-Конец, Start-Gereed</p> <p>(Option only for Timed dry)</p>	<p>Time program (when setting: "No Real time") Desired programme time can be set. Selections up to 3 hours in units of 15 minutes can be made. The selected programme time is shown in the display.</p>  <p>Time program (when setting: "24 Hour Clock " or "12 Hour Clock") Desired programme time can be set. Selections up to 3 hours in units of 15 minutes can be made. Start and end times are shown in the display.</p> 
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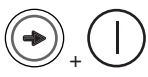

Making settings

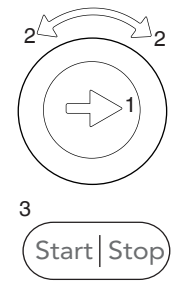
The setting options below are shown in the order they occur in LCD2 (Position 7 under the programme menu is, however, shown in LCD1). All display text language versions are displayed.

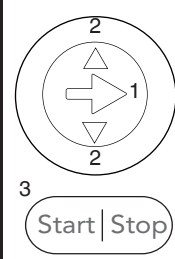
Press/ turn	LCD 2	Press/ turn	LCD3	Comments/instruc- tions	
 	Settings, Settings, Settings, Inställningar, Indstillinger, Innstillinger, Asetukset, Réglage, Einstellungen, Impostazioni, Ajustes, Настройки, Instellingen			In the programme menu: Scroll to programme 7 (Settings)	
	You will now enter the Settings menu.				
 	1 Clock/Auto Start, 1 Clock, 1 Klocka, 1 Ur, 1 Klokke, 1 Kello, 1 Horloge, 1 Klok, 1 Orologio, 1 Reloj, Часы, 1 Uhr				
			24hr Realtime, 24 Hour Clock, 24hr Realtime, 24 timmarsvisning, 24 timers ur, 24t realtid, 24 h aika, Horloge 24 h, 24 Std. Echtzeit, 24h Tempo reale, Reloj 24 horas, Формат времени 24-ч., 24 uur weergave	Three O'clock is displayed as "15.00". Press S1 to access a sub-menu where you can set the correct current time. Press S1 again to store and exit the sub-menu.	
			12hr Realtime, 12 Hour Clock, 12hr Realtime, 12 timmarsvisning, 12 timers ur, 12t realtid, 12 h aika, Horloge 12 h, 12 Std. Echtzeit, 12h Tempo reale, Reloj 12 horas, Формат времени 12-ч., 12 uur weergave	Three O'clock is displayed as "03.00". Press S1 to access a sub-menu where you can set the correct current time. Press S1 again to store and exit the sub-menu.	
			No Real time, No Real Time, No Real time, Ej realtid, Intet ur, Ingen realtid, Ei aikaa, Pas d'horloge, Keine Echtzeit, No tempo reale, Sin hora real, Время не установлено, Geen tijdsweergave	No Real Time. Press S1 to return to programme menu.	
			Saves the setting and returns to the programme menu.		
	2 Buzzer Volume, 2 Audible Volume, 2 Ljudsignal, 2 Lydsignal, 2 Lydsignal, 2 Hälytysääni, 2 Volume buzzer, 2 Volume eindsignaal, 2 Volume allarme, 2 Volumen timbre, Громкость сигнала, 2 Tonsignal				
			Off, Off, Off, Av, Fra, Av, Poissa, Off, Aus, Off, apagado, Выкл., Uit	No buzzer	
			Low, Low, Low, Låg, Lav, Lav, Matala, Faible, Niedrig, Bassa, Bajo, Низкая, Laag	Buzzer that indicates the end of a programme or error.	
			Normal, Normal, Normal, Normal, Normal, Normal, Normaali, Normal, Normal, Normale, Normal, Нормальная, Normaal	Buzzer that indicates the end of a programme or error.	
			High, High, High, Hög, Høj, Høy, Korkea, Elevé, Hoch, Alta, Alto, В?о?а?, Hoog	Buzzer that indicates the end of a programme or error.	
		Saves the setting and returns to the programme menu.			

 	<p>3 Language, 3 Language, 3 Språk, 3 Sprog, 3 Språk, 3 Kieli, 3 Langue, 3 Taal, 3 Lingua, 3 Idioma, Язык, 3 Sprache</p>					
			 	US English		
				AU English	Default	
				svenska		
				dansk		
				norsk		
				Suomi		
				Français		
				Nederlands		
				Italiano		
				Espanol		
				Русский		
			Deutsch			
 	<p>4 Child-safe, 4 Child-safe, 4 Barnsäker, 4 Børnesikker, 4 Barnesikring, 4 Lapsilukko, 4 Sécurité enfant, 4 Kindveilige, 4 Avvio sicurezza, 4 Int. de seguridad, 4 Блокировка от детей, 4 Kindersicherung</p>					
			 	On, On, On, På, Til, På, Päällä, On, An, On, encendido, Вкл., Aan	If S1, S2, S3 or J1 are pressed or turned, Start S2 + S1 must be pressed to temporarily deactivate the child-safe start (is deactivated for 3 minutes after).	
				Off, Off, Off, Av, Fra, Av, Poissa, Off, Aus, Off, apagado, Выкл., Uit	Setting deactivated.	
			 		Saves the setting and returns to the programme menu.	

Service menu




This is how to enter the service menu	
	<p>If the machine is on: First turn off the power at the main power switch. Press and hold the Program Selector while turning on the main power switch.</p>
	<p>Press the programme selector button 3 times within 5 seconds. You are now in the service menu. See instructions below for navigating the service menu.</p>




Programme selector	
	<ol style="list-style-type: none"> 1. Press the programme selector button to scroll between the various service menus. 2. Turn the programme selector button to make a selection between the menus. Confirm the selection and go to the next menu by pressing the programme selector button (1). 3. Press the Start/Stop button to confirm the settings and exit the service menu.

Programme selector button for integrated machines	
	<ol style="list-style-type: none"> 1. Press the programme selector button to scroll between the various options. 2. Press the small arrows to make a selection between the options. Confirm the selection and go to the next option by pressing the programme selector button (1). 3. Press the Start/Stop button to confirm the settings and exit the service menu.

Service menu

The options below are displayed in the order they occur in LCD 2. All display text language versions are displayed.

Press/ turn	LCD 2	Comments/instructions
	DataSerialNo, Data Ser Num, DataSerialNo, DataSerialNo, Serienummer, Serienummer, Dataversio Nro, N° de série, Seriennummer, Num. di serie, N° de serie, Серийный номер, Serienummer	Date for programming the software (Year_Week)
	CU date code, CU Date Code, CU date code, CU datum kod, CU dato kode, Styrekort prod dato, CU pvm koodi, Code date CU, CU Datumscode, Codice data CU, Código fecha CU, Код даты БУ, CU datacode	Control unit's date of manufacture (Year_Week)
	Software, Software, Software, Mjukvara, Software, Software ver., Ohjelmisto, Logiciel, Software, Software, Software, Версия прог., Software	Software version number.
	No. of cycles, Number of Cycles, No. of cycles, Antal cykler, Antal cyklusser, Antall bruk, Syklien lkm, Nb. de cycles, Anzahl der Zyklen, Numero cicli, N° de ciclos, Кол-во циклов, Aantal cycli	Number of cycles/programmes run
	Press  to exit the service menu.	
	"Error_Number of cycles"	Last three errors and number of cycles (when the error occurred) shown. Total reset deletes the error indications from the system. If the same error recurs at different times, this is shown, but only once in the list.
	"Error_Number of cycles"	
	"Error_Number of cycles"	
	Press  to exit the service menu.	
	Testing, Test, Test, Tester, Test, Testaus, Essai, Test, Test, Test, Тестирование, Testen	
	Testing Motor, Test motor, Motortest, Tester motor, Test av motor, Moottoritest, Essai moteur, Test motor, Test motore, Test motor, Тест мотора, Motor testen	Normal action: The motor will run continuously.
	Testing Heater 1, Test heater 1, Elementtest 1, Tester varmelegeme 1, Test av element 1, Vastustesti 1, Essai él. chauf 1, Test verw. element 1, Test el. risc. 1, Test elem calef 1, Тест ТЭНа 1, Heizungstest 1	<p>Motor runs continuously. Heater 1 runs regulated on and off by CU regarding to measured thermistor values. Total consumption is app. 9A in this mode. If value differs, do the following:</p> <ol style="list-style-type: none"> 1. Detach the panel 2. Disconnect electrical connections at the CU. 3. Measure DC Ω for heaters and related wires. For values and measure points, see chapter "Components and measurement values" and "Wiring diagram". <p>IF THE VALUES ARE INCORRECT: Check the electrical function for connections and heater. Change parts if needed.</p> <p>IF THE VALUES ARE CORRECT:</p> <ol style="list-style-type: none"> a) Start the component test ("Test heater 1") b) Measure AC voltage directly on the CU (see wiring diagram for measuring points). Voltage should be the same as power supply net. c) If values are out of range: Replace the CU. <p>LCD shows "_____ : XX°C YY°C ZZ °C". XX = temperature values for thermistor 1 YY = temperature values for thermistor 2 ZZ = temperature values for thermistor 3</p> <p>>100°C (XX) = short-circuit in thermistor 1 (heating element does not start) 10°C (XX) = thermistor 1 faulty (heating element heats but is only regulated by the overheating protection). >100°C (YY) = short-circuit in thermistor 2 (heating element does not start) 10°C? \pm 2°C (YY) = thermistor 2 faulty (functions as vented dryer). 150°C (ZZ) = thermistor 3 short-circuited 25°C (ZZ) = thermistor 3 faulty</p>
		CONTINUE ON NEXT PAGE

	<p>To verify indication on faulty thermistor, do the following:</p> <ol style="list-style-type: none"> 1. Detach the panel 2. Disconnect electrical connections at the CU. 3. Measure DC Ω for thermistor and related wires. For values and measure points, see chapter "Components and measurement values" and "Wiring diagram". <p>IF THE VALUES ARE INCORRECT: Check the electrical function for connections and thermistor. Change parts if needed.</p> <p>IF THE VALUES ARE CORRECT:</p> <ol style="list-style-type: none"> a) Start the component test ("Test heater X") b) Measure AC voltage directly on the CU (see wiring diagram for measuring points). Voltage should be 5VDC. c) If values are out of range: Replace the CU. <p>Thermistor 2 has no affect in the component test.</p>
<p>Testing Heater 2, Test heater 2, Elementtest 2, Tester varmelegeme 2, Test av element 2, Vastustesti 2, Essai él. chauf 2, Test verw. element 2, Test el. risc. 2, Test elem calef 2, Тест ТЭНа 2, Heizungstest 2</p>	<p>Motor runs continuously. Heater 2 runs regulated on and off by CU regarding to measured thermistor values. Total consumption is app. 2A in this mode. If value differs, follow the instructions for "Testing heater 1"</p>
<p>Testing Drain, Test drain, Tömningstest, Tester udpumpning, Test av tømning, Tyhjennystesti, Essai essorage, Test afvoerpomp, Test scarico, Test drenaje, Тест слива, Abflusstest</p>	<p>Drain pump runs. If no action:</p> <ol style="list-style-type: none"> 1. Detach the panel 2. Disconnect electrical connections at the CU. 3. Measure DC Ω for drain pump and related wires. For values and measure points, see chapter "Components and measurement values" and "Wiring diagram". <p>IF THE VALUES ARE INCORRECT: Check the electrical function for connections and drain pump. Change parts if needed.</p> <p>IF THE VALUES ARE CORRECT:</p> <ol style="list-style-type: none"> a) Start the component test ("Testing drain") b) Measure AC voltage directly on the CU (see wiring diagram for measuring points). Voltage should be the same as power supply net. c) If values are out of range: Replace the CU. d) If the values are correct: Check drain pump for mechanical disturbance. Change pump if necessary.
<p>Testing Buzzer, Test buzzer, Signaltest, Tester lydsignal, Test av lydsignal, Äänimerkkitesti, Test signal sonore, Test eindsignaal, Test allarme, Test timbre, Тест звук. сигнала, Summertest</p>	<p>Buzzer is on continuously.</p>
<p>Press  to exit the service menu.</p>	
<p>0 +3 +2 +1 -1 -2 -3</p>	<p>Adjust LCD contrast (0 = default)</p>
<p>Press  to exit the service menu.</p>	
<p>0 +5 +10 +15 +20</p>	<p>Adjustment of drying time</p> <p>Dry level: 0 (no extension, default level), +5 (5 minutes extension), +10 (10 minutes extension), +15 (15 minutes extension), +20 (20 minutes extension).</p>
<p>Press  to exit the service menu.</p>	



Production test

The entire production test is run in a sequence as follows. You can cancel the test programme at any time during the programme by opening the door or pressing the main power switch.

Starting the production test

1. Press the Stop button (S3), then press the main power switch. Hold the two buttons until the LCD1-3 is light up. Then release. the buttons
2. Press Start (S2) 5 times.
The following is shown:
 - LCD 1: Production test
 - LCD 2: Software 1
 - LCD 3: Software 2

Testing the motor and condensing waterpump

3. Press the Start button (S2).
 - Airing dryer: AVLUF is shown in LCD 3
 - Condenser dryer: KONDENSE is shown in LCD 3
 - The motor and condensing waterpump starts (for airing dryer: only motor is running throughout the sequence).
 - Then fill water in the water tank until the machine stops (check that the switch for condensation water works).
4. Press the Stop button (S3) to start the motor and pump out the condensation water.

Indication of faults:

Fault indication/ symptom	Cause
Avluft (is shown even in the case of condense dryer)	Short or open circuit in thermistor 2 which also includes bad connections etc.

Testing the heater, thermistor and temperature regulation

5. Press the Programme selector button (S1).
 - Heater 1 starts
6. Press the Programme selector button (S1).
 - Heater 2 starts
 - LCD 1: Timer
 - LCD 2: NTC1
 - LCD 3: NTC2, NTC3
 - LCD 1-3 lights continuously and the machine runs temperature regulation for 15 minutes.
 - LCD 1-3 starts flashing, which means that temperature regulation is finished.
 - Cooling runs for 5 minutes.
 - The machine stops.

Testing the interval time and buzzer tone

7. Press the Programme selector button (S1).
 - The motor starts and runs at intervals at the same time as a buzzer sounds.

Cancel the test programme.

8. Press the Programme selector button (S1).
 - The production test stops.

Fault indications

The below faults are indicated in plaintext in LCD 2. The table shows the indication in all languages and language variations.

LCD 2	Cause	Action
Overflow, Over Flow, Överfyllnad, Overfyldning, Overfylling, Ylitulviminen, Trop-plein, Reservoir legen, Traboccamiento, Desbordamiento, Перелив воды, Überfüllt	A micro switch, opening, for detection of full, condensing water container. Detection shall start 30 sec after a program is started. If the micro switch is opened > 30 sec the program cycle should be stopped and cleared.	<p>Check if the customer has:</p> <ul style="list-style-type: none"> Emptied the tank and restarted the machine <p>Service action:</p> <ul style="list-style-type: none"> Clean hoses and check voltage and resistance in the drain pump. Check that the float has not got "stuck" and check the function of the micro-switch.
Max Program Time, Max program time, Maximal programtid, Maksimal programtid, Maks programtid, Max ohjelma-aika, Durée maxi prog., Tijd overschreden, Tempo max. progr., Duración máx prog, Превышение времени, Max. Programmzeit	<p>The cycle time exceeds 200 minutes. The cycle interrupts and the programme is cleared.</p> <p>High ambient temperature combined with low element output and low drying temperature leads to condensation formation.</p> <p>Poor condensation due to blocked external air</p>	<p>Check if the customer has:</p> <ul style="list-style-type: none"> Tried spinning at a higher speed Has the machine switched off for 30 minutes before restarting Good ventilation in the room <p>Service action:</p> <ul style="list-style-type: none"> Ensure that the external air has free passage.
Thermistor fault, Thermistor Fault, Thermistor fault, Termistorfel, Termostat fejl, Termistor, Termistorivika, Défaut, Termistorfehler, Termistore, Fallo, Термистор, Temp. sensor fout	<ol style="list-style-type: none"> The circuit for the thermistor is open. The thermistor is faulty 	<p>Service action:</p> <p>Check the thermistors function. If needed, replace it.</p>
Clean condenser, Rengör kondensator, Rens kon.sator, Rens kon.sator, Puhdista lauhdutin, Nettoyage condenseur, Reinigen kondensator, Pulizia condensatore, Limpiar condensador, Очистить конденсатор, Kondenser reinigen	<ol style="list-style-type: none"> Indicated for each 100 cycle. Indicated if the machine has indicated "Clean lint filter" 2 times. 	<p>Check if the customer has:</p> <ul style="list-style-type: none"> Cleaned the condenser and filter Cleaned other air ducts
Clean Lint Filter, Clean Lint Filter, Rengör filtret, Rengør fnugfilter, Rens filter, Puhdista sihti, Nettoyage filtre, Reing filter, Pulizia filtro, Limpie el filtro, Очистить фильтр, Sieb reinigen	Indicated when air circulation and temperature are incorrect	<p>Check if the customer has:</p> <ul style="list-style-type: none"> Cleaned the filter

After carrying out corrective actions as above, reset the fault indications by switching off the machine using the main power switch.

Other faults

Fault symptom	Cause	Action
The machine will not start	The outer door is not properly closed.	<ul style="list-style-type: none"> Check that the door pin is activating the door switch.
	The machine is not supplied with power.	<ul style="list-style-type: none"> Check the fuses and connections.
The machine stops	The automatic overheating protection has tripped.	<p>Check if the customer has:</p> <ul style="list-style-type: none"> Opened the door and cleaned the filter and condenser unit Left the door open long enough for the overheating protection to be reset and the display and LEDs to light up Attempted to restart the programme <p>Service action:</p> <ul style="list-style-type: none"> Clean internal fan wheel, condenser, air ducts and element. Check the seals.
	The overheat protection in the motor has been tripped.	<ul style="list-style-type: none"> Clean and check the motor. If necessary, replace the motor.
	Defective control unit	<ul style="list-style-type: none"> Replace control unit.
The washing does not get dry	Air leakage at the door seals is affecting the drying results.	<ul style="list-style-type: none"> Check the sealing strips.
	Air leakage around the motor shaft affects the drying result.	<ul style="list-style-type: none"> Check the seal around the motor shaft.
	Defective rear thermistor	<ul style="list-style-type: none"> Replace the thermistor.
	Defective control unit	<ul style="list-style-type: none"> Replace control unit.
The washing does not get dry.	Mixing of various types of items can lead to uneven drying results.	<p>Customer information:</p> <ul style="list-style-type: none"> Check that different types of items are not mixed in the same machine. Remove the dry items.
	How full the machine is affects the drying results.	<p>Customer information:</p> <ul style="list-style-type: none"> Check that the machine is not overfilled. Remove some of the washing if necessary.
Tumble-drying takes too long.	The lint filter is blocked.	<p>Customer information:</p> <ul style="list-style-type: none"> Cleaning the lint filter.
	The condenser unit is blocked.	<p>Customer information:</p> <ul style="list-style-type: none"> Clean the condenser.
	The washing machine's spinning affects drying.	<p>Customer information:</p> <ul style="list-style-type: none"> Spin at a minimum of 800 rpm.
	The machine is in a room with poor ventilation.	<p>Customer information:</p> <ul style="list-style-type: none"> Open doors to adjacent rooms.
	The evacuation hose is too long, blocked or bent.	<p>Customer information:</p> <ul style="list-style-type: none"> Try to make the hose length as short as possible with as gentle bends as possible.

Total reset

By pressing STOP (S3) + MAIN POWER SWITCH when power on the machine shall total reset. All settings is returned to default values).

Heater 2 activation

Heater 2 can be programmed active or inactive.

Do the following:

1. Press STOP (S3) + MAIN POWER SWITCH
2. Press STOP (S3) five times (within 10 sec.)
3. Turn the Programme selector (J1), choose "Heater 2 On" or "Heater 2 Off".

Press the Programme selector (S1) to store the settings.

Show room program mode

Show room program mode shall be activated/deactivated by:

Pressing START (S2) + MAIN POWER SWITCH

Components and measurement values¹

Item number	Component	Measurement value	Comments
80 618 24	Motor 50 Hz, 220/240 V	Main winding: 23.8 Ω Auxiliary winding: 28.1 Ω Current: 1.1 A; 270 W; 2850 rpm	
80 618 95	Motor 60 Hz, 220/240 V	Winding resistance: cable colour grey-blue 25.5 Ω cable colour grey-red 16.0 Ω Current: 0.9 A; 200 W; 3300 rpm	The motor is a 2-pin motor and is directly connected to the fan for internal air and gearing for driving the cylinder. The fan for external air is also driven on condenser dryers.
73 829 92	Capacitor 6 μ F		The capacitor is mounted on the motor.
80 546 40	Capacitor 4 μ F		
88 011 94	Condensing waterpump 25W	111 Ω	
80 762 02	EMC filter with inductor		The filter eliminates interference to and from the machine.
80 762 24	Thermistor	4 – 6 k Ω (at room temperature 20 – 30°C)	The thermistor controls temperature regulation. If the thermistor is short-circuited or detaches from the control unit, the programme is cancelled.
80 792 91	Thermistor	8 - 12 k Ω (at room temperature 20 – 30°C)	
80 773 85	Thermostat/Overheating protection (150°C automatic)		The thermostat /overheating protection interrupts the programme at too high temperatures.
80 761 04	Door switch		The front door affects a door switch, which interrupts the programme when the door is opened. If the door has been opened and closed during the programme the machine must be restarted using the start/stop button.
80 761 03	Microswitch float		If both containers are overfilled the programme is interrupted by a float switch located on the lower holder. Overfilling is indicated in the display.
	Electrical connection		The machine is delivered as single phase and can be switched between 1950 W, 10 A and 2500 W, 16 A. Adjustment between 1950 W / 10 A and 2500 W / 16 A is carried out using software via buttons.
88 013 27	Control Unit compl. TD60.3		The control unit contains microprocessors for controlling programmes, motor, element etc.
80 792 87	Heating Element 2500W	Heater 1: 1950W, 24,5 Ω Heater 2: 550W, 91,4 Ω	
80 792 88	Heating Element 3000W	Heater 1: 1950W, 24,5 Ω Heater 2: 1050W, 45,3 Ω	

¹ All resistances shown in the table have tolerances of +/- 10%

Technical data

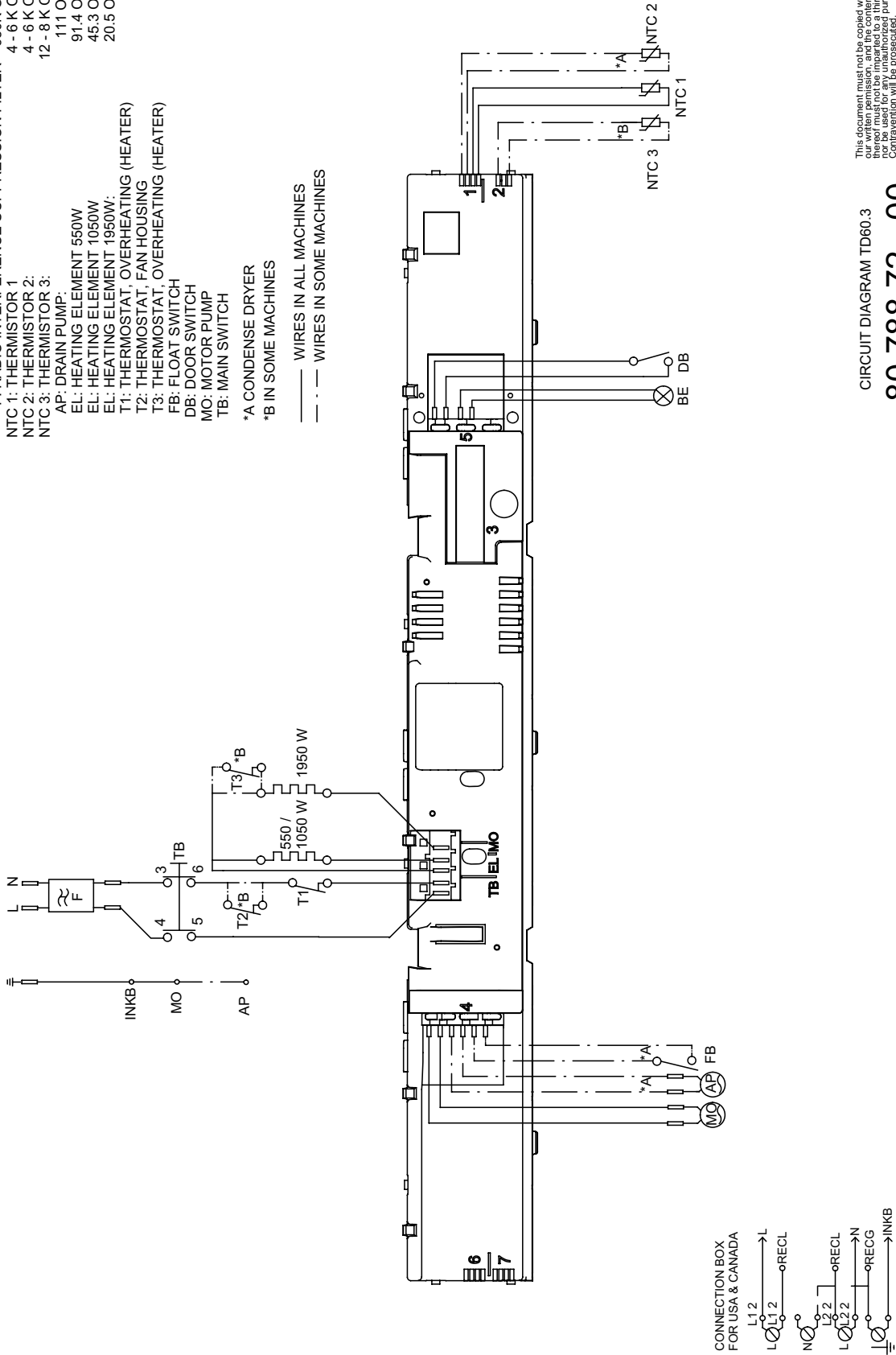
Height:	850 mm
Width:	595 mm
Depth:	585 mm
Weight:	39kg (vented) 47 kg (condenser)
Cylinder volume:	111 l
Max. loading capacity:	6.0 kg
RPM:	52 rpm
Rated power:	1950 W = 10 A 2500 W = 16 A Adjustment between 10 and 16 A is carried out using software via buttons.
Drying drum material:	Stainless steel
Outer casing material:	Powder-coated and hot-galvanized sheet steel or stainless steel
Set-up:	Stacking or freestanding
Protection class:	IP X4

Wiring diagram

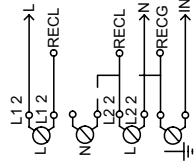
RESISTANCES AT ROOM TEMPERATURE (CA. 20°C/68°F)
VALUES WITH +/-10% ARE REGARDED AS NORMAL
COMPONENT

- F: RADIO INTERFERENCE SUPPRESSION FILTER 680K Ohm
- NTC 1: THERMISTOR 1 4 - 6 K Ohm
- NTC 2: THERMISTOR 2 4 - 6 K Ohm
- NTC 3: THERMISTOR 3 12 - 8 K Ohm
- AP: DRAIN PUMP 111 Ohm
- EL: HEATING ELEMENT 550W 91.4 Ohm
- EL: HEATING ELEMENT 1050W 45.3 Ohm
- EL: HEATING ELEMENT 1950W 20.5 Ohm
- T1: THERMOSTAT, OVERHEATING (HEATER)
- T2: THERMOSTAT, FAN HOUSING
- T3: THERMOSTAT, OVERHEATING (HEATER)
- FB: FLOAT SWITCH
- DB: DOOR SWITCH
- MO: MOTOR PUMP
- TB: MAIN SWITCH
- *A CONDENSE DRYER
- *B IN SOME MACHINES

— WIRES IN ALL MACHINES
- - - WIRES IN SOME MACHINES



CONNECTION BOX
FOR USA & CANADA



CIRCUIT DIAGRAM TD60.3

80 788 72 - 00

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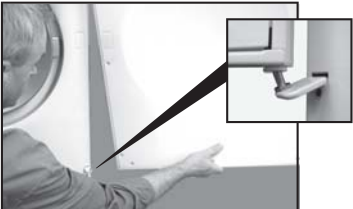

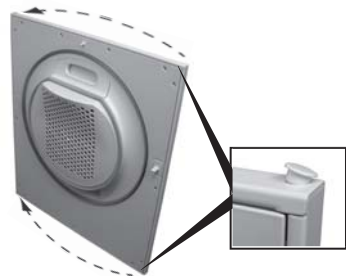
FORMAT A3



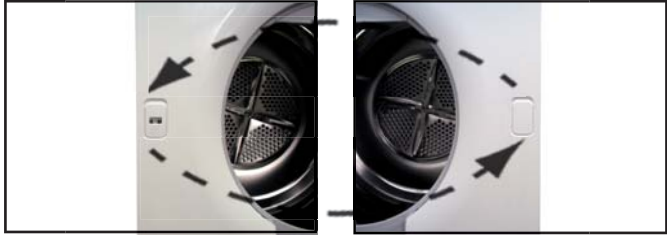

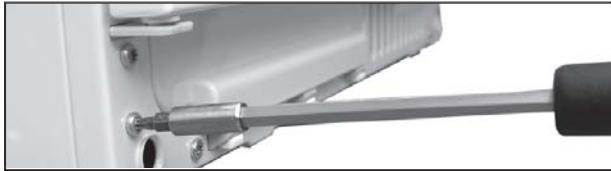
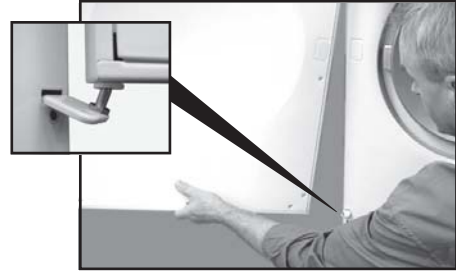
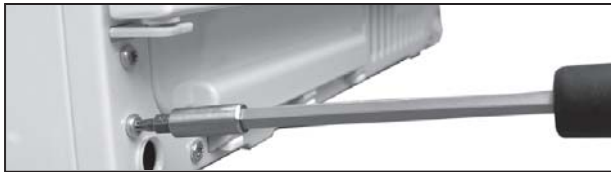
Rehanging the door

The tumble dryer (only certain models) is supplied with the door hung on the right-hand side. It is, however, possible to re-hang it according to the instructions below. Take care not to damage the paint when carrying out work with tools.

Required tools	
Flathead screwdriver	
Torx size 20	
Fixed spanner size 8	



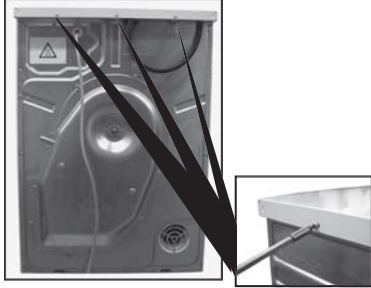

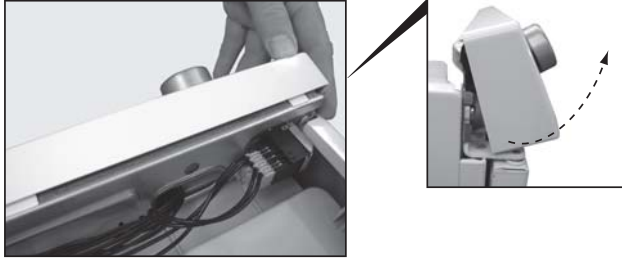

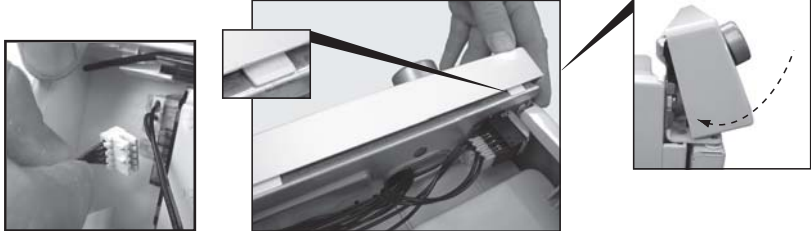

Instructions	Image
1. Remove the plinth by carefully pulling it out.	
2. Remove both screws for the lower hinge. Use Torx.	
3. Push the door upwards with care and angle outwards. If necessary, carefully press the lower hinge to detach the door.	
4. Slacken off the lower and upper hinge pins using a fixed spanner.	
5. Remove the plastic plugs covering the holes for the hinge pins and switch location	

<p>Method for removing plastic plugs, lock and catch located on the machine and the door: Carefully push the plug, catch or lock upwards with a flat screwdriver. as the picture shows.</p>	
<p>6. Carefully remove the catch and plastic plug on the door and switch location.</p>	
<p>7. Carefully remove the lock and plastic plug on the machine and switch location.</p>	
<p>8. Screw the hinge pins securely into place on the corresponding side of the machine.</p>	
<p>9. Slacken off the screws for the lower hinge on the corresponding side of the machine. This must be done to hang the door.</p>	
<p>10. Align the door in the upper hinge. Carefully push the lower hinge down if necessary and align the door.</p>	
<p>11. Screw the lower hinge into place securely. Use Torx.</p>	

12 Press the plinth into place. The door has now been re-hung.



Replacing panel


Instructions	Image
<p>1. Unscrew the top cover.</p>	
<p>2. First, remove the main push switch. Carefully press the catches that secure the panel at the front beam. Release the catches from the front member by working the panel outwards.</p>	
<p>3. Detach the panel by angling and pulling it carefully outwards at the lower edge.</p> <p>Note: Do not damage the wiring!</p>	
<p>4. Carefully disconnect the wiring from the control unit.</p>	
<p>11. When installing the panel: First install all wiring in the relevant locations on the control card.</p> <p>Then angle the panel outwards and place the mounting plates in the relevant grooves in the front frame. Angle the panel downwards and secure it with the catches</p>	
<p>12. Screw the top cover into place.</p>	

Notes

Timer diagram (description of program flow) TD60

Components	Start						Cool-down	
Motor	█	█	█	█	█	█	█	
Drain pump (30 sec. on, 210 sec. off)	█	█	█	█	█	█	█	
Heater	█	█	█	█	█	█	█	
Buzzer							█	
							█	
							█	
							█	
Program	2'	Drying sequence (max 3 hours)			20 minutes - 2 hours	5 minutes - 2 hours	3' - 15'	3"
Air fluff							█	
Auto program	█	█	█	█	█	█	█	
Time program	█	█	█	█	█	█	█	
Option								
Anti crease							█	
Buzzer							█	

Table explanation

	Option
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