ASKO

Service manual

Type: TD30 TD40

Product: Dryer	**Overview of new/modified types of tumble dryers introduced to the market in 2001**	Group: 22	
Date: 11.1.2002			
Reference: N-Å Carlsson			Page: 1(9)

ASKO Cylinda's range of tumble dryers was modified during the autumn of 2001, and a brief overview of the modifications that were made is given below.

Further information can be obtained in the service manuals given below.

New type	Replaces old type	Main differences	Product info
TD11	TD11	New panel graphic.	
TD22	TD22	New panel graphic.	
TD30	NEW	Air vent. Electronic control with knob and 7-segment LED display	E
TD40	NEW	Condensor. Electronic control with knob and 7-segment LED display.	E
TD33A	TD33	New control card. New menu logic. Among other things, 1-24 hour delayed start. New panel graphic. Shop program as shown in the display.	F
TD44A	TD44	See TD33A	F

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Service manual

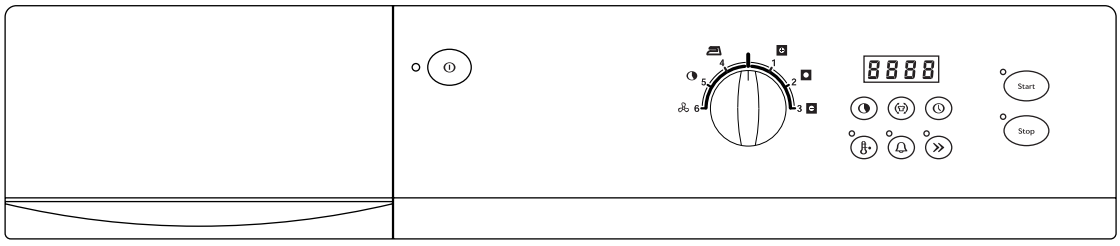
Type: TD30 TD40

Product: Dryer	**New types of tumble dryers**	Group: 22	
Date: 11.1.2002	**TD30/40**	**E**	
Reference: N-Å Carlsson			Page: 2(9)

Contents

This service manual is intended as a supplement to the T700-series service manual.

Example of TD30/40 Panel



General

Mechanically the TD30/40 is based on TD33/44 (T760/T780), except for the panel and control unit. For more information, see the service manual for the T700 series.

TD30	Air vent dryer
TD40	Condensed dryer

Handling

1. Sort the textiles.
2. Turn on the main switch, ⏻.
3. Open the door, load the textiles, then close the door again.
4. Select program with the knob. The programs you may choose from are:
    1. Extra dry
    2. Dry
    3. Normal dry
    4. Iron dry
    5. Timed dry. program
    6. Air fluff. program

    If you select timed drying program or air fluff. program, adjust the time with ◑ if necessary.

    For a description of the program types, see the T700 service manual.
5. Select options required, see next page.

    Selected option is indicated by a lit LED next to the appropriate button.
6. Start the program by pressing the Start- button.
7. Drying program finished. The text End on the display shows that the program has finished.

After each tumble drying the fluff filter must be cleaned and the condensation tank (TD40 only) must be drained.

8. When you have finished tumble drying, turnoff the main switch, ⏻, and close the door.

Display indications

The display shows	Explanation	
00	No program selected	
24h	One or two digits, followed by an h. Delayed start is selected and the program has started. The display shows the number of hours left until the program starts.	
2h35 18	One digit, an h followed by two digits or 1-2 digits only, means that a program is running. The display indicates in steps of five minutes how much time remains in the program in hours and minutes.	Time indication for air vents is only indicated in the cooling phase.
End	Program finished. Remove washing.	
C	The program is in the cooling sequence. Wait until the program has finished.	
AC	When the Non-Crease option has been activated the drum is rotated once a minute. Meanwhile this text is shown in the display. You can interrupt the program at any time by opening the door.	
P1	When programs P1 – P4 are selected, P1 for example is shown on the display.	

Options and settings

Settings are shown on the display or on an LED next to the appropriate button. The machine remembers the settings and options you make for each program and starts from them next time you select the program concerned.

Anti-crease

You may choose to have the option active for 1-3 hours. 0h means that the option has been switched off. This option means that the drum will rotate for three seconds a minute after the drying program has finished. If the Signal option is switched on a signal will sound whenever the drum rotates during this program as a reminder that the drying program has ended.

Delayed start

You may select a delay of between 1-24 hours. 0h means that the option has been switched off and the program will start immediately as usual.

Low temperature

Switch Low temperature on or off by pressing the - button. No temperature selection can be made in the airing program = cold program.

Signal

The option means that a signal three seconds long will sound when the drying program has finished.

Quick cooling

Normally cooling runs for 20 minutes (USA, 15 minutes). Quick cooling reduces the cooling to 5 minutes. Short cooling cannot be used on the airing program.

Error messages

If an error or fault occurs in the course of the program this is indicated on the display.
N.B.

To reset the error message the main switch ⏻ must be turned off.

The display shows	Description	Explanation / proposed measure
F1	Over flow Means that the condensation tank is full. If the condensation is pumped directly out via the drain hose, check that there are no kinks or blockages in the hose.	Drain the condensation tank and restart. If the error message reappears this may mean that the lower water reservoir is full because the pump or hoses are blocked or worn.
F2	Maximum program time	When the machine has run for the maximum time (3 hours), the machine stops. Check and replace any fuses that have blown in the house distribution box. To quit the error message switch off the machine or open the door. If this does not help call service.
F3	Thermistor fault	The machine indicates whether there is an interruption in supply or short-circuit in the thermistor.
F4	Heat protection (not provided on all machines)	A thermostat in the rear section has indicated that the heat has risen, which indicates that too much fluff is building up in the filter and condensation package. Clean the filter and condensor
F5	Sensor fault	Fault in the moisture sensor. The moisture value is unreasonable, <0V or > 6V for 300 seconds. This error message may also appear if you are drying clothing that is already dry or if the machine is empty. Open the door and the message will disappear.

Consumption values TD30

The following conditions apply to the consumption values indicated below:
Temperature of the supply air: 20 °C.
Moisture content of the supply air: 65 %.
Drying temperature: Normal (), Låg ().
Element power: 2620 W (2500 W, USA)
Before tumble drying, cotton textiles are spun at 800 and 1600 rpm (long spin).
All other textiles (non-iron and acryl) are spun at 800 rpm (short spin) before tumble drying.

PROGRAM	MATERIAL	DEGREE OF FILLING	ENERGY CONSUMPTION (approx. kWh) 800 rpm - 1600 rpm	PROGRAMTIME (approx. minutes) 800 rpm - 1600 rpm
Extra dry	Cotton, linen	Max. (5,0 kg)	3,2 - 2,5	95 - 85
Dry	Cotton, linen,	Max. (5,0 kg)	3,0 - 2,3	85 - 75
	Non-iron, poly-ester / cotton,	Max. (2,5kg)	1,3 ---	70 ---
Normal dry	Cotton, linen,	Max. (5,0 kg)	2,8 - 2,2	80 - 70
	Non-iron, poly-ester / cotton,	Max. (2,5kg)	1,2 ---	50 --
	Acryl, rayon, acetate,	Max. (2,5 kg)	1,4 ---	55 ---
Irondry	Cotton, linen,	Max. (5,0 kg)	2,5 - 1,8	110 - 85

Consumption values TD40

The following conditions apply to the consumption values indicated below:
Temperature of the supply air: 20 °C.
Moisture content of the supply air: 65 %.
Drying temperature: Normal (), Låg ().
Element power: 2500 W
Before tumble drying, cotton textiles are spun at 800 and 1600 rpm (long spin).
All other textiles (non-iron and acryl) are spun at 800 rpm (short spin) before tumble drying.

PROGRAM	MATERIAL	DEGREE OF FILLING	ENERGY CONSUMPTION (approx. kWh) 800 rpm - 1600 rpm	PROGRAMTIME (approx. minutes) 800 rpm - 1600 rpm
Extra dry	Cotton, linen	Max. (5,0 kg)	3,8 - 3,1	120 - 105
Dry	Cotton, linen,	Max. (5,0 kg)	3,5 - 2,8	110 - 95
	Non-iron, poly-ester/cotton,	Max. (2,5kg)	1,3 ---	55 ---
Normal dry	Cotton, linen,	Max. (5,0 kg)	3,2 - 2,4	95 - 80
	Non-iron, poly-ester/cotton,	Max. (2,5kg)	1,1 ---	50 --
	Acryl, rayon, acetate,	Max. (2,5 kg)	1,5 ---	75 ---
Irondry	Cotton, linen,	Max. (5,0 kg)	2,5 - 1,5	95 - 65

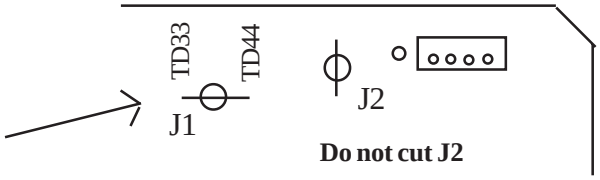
Loops on control card

Loops and their function

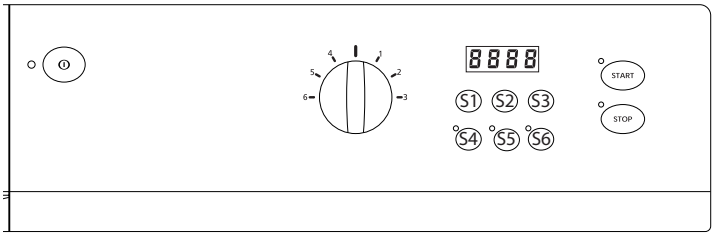
J1 loop = selection of machine type

Cut J1 on all condensed machines

Control unit art. no. 8064259 / 8065042



Reprogramming display and button functions:



Machine type TD30/40
No program selected. Program in 0 position

Change power to obtain "right" time indication on TD40
5 x Start + 5 x S1 (selection of time in time program).
Press S1 to select high or low element power.

Setting child-safe Start and Menu.
5 x Start + 5 x S2 (anti-crease).
Change setting with S2 (anti-crease)

Setting of Europe / USA - program (Only Control Unite art. no. 80 650 42)
5 x Start + 5 x S3
Change settings with S3, 50 (Europe), 60 (USA)

COMPONENTS AND MEASURED VALUES

MOTOR

Art. no. 80618 24 (50 Hz)
Winding resistance
Cable colour white-blue: 24.5 Ω
Cable colour white-red: 26.5 Ω
Voltage: 220/240 V
Current: 1.1 A, 270 W, 2850 rpm

Art. no. 80618 95 (60 Hz)
Winding resistance
Cable colour white-blue: 25.5 Ω
Cable colour white-red: 16.0 Ω
Voltage: 220/240 V
Current: 0.9 A, 200 W, 3300 rpm

The motor is 2-pole and directly connected to the internal air fan and the reduction gear for driving the cylinder. On capacitor machines (T720/780) it also drives the external air fan. All resistance values have tolerances of + 7%.

CAPACITOR

Art. no. 80 542 68
Capacitor mounted on the motor and with a frequency of 8µF.

CONDENSATION PUMP

Art. no. 80 638 09
Voltage: 230 V, 50/60 Hz 25W
Resistance: 111 Ω

RADIO SUPPRESSION FILTER

Art. no. 80 585 58
Leakage current: 240V/50/60Hz 0.3-0.4 mA

The filter eliminates radio interferences in the machine.

INDICATING LAMP

Art. no. 80 070 73 EU
Current: 1.68 mA, 230 V, 509 Hz

Art. no. 80 604 78 USA
Current: 1.68 mA, 240 V, 50 Hz

The lamp indicates that the main switch is on.

THERMISTOR

Art. no. 80 619 00
Resistance: 60-35 kΩ at 20-30°C
The thermistor controls the temperature regulation. If thermistor shorts or becomes detached from the control unit the program is interrupted.

RELAY (CONTACTOR)

50 Hz
Art. no. 80 091 48
60 Hz
Art. no. 80 603 79 **(TD11)**
Art. no. 80 603 80 **(TD11/33A/44A)**
The contact breaks in the event of overheating when the door is opened and at the end of the program.

COMPONENTS AND MEASURED VALUES

MOISTURE SENSOR

Art. no. 80 618 55
The moisture sensor is used to control the drying process. During operation the sensor must have an output signal of between 1 – 16 m VDC. Other values will cause the program to be interrupted.

DOOR SWITCH

Art. no. 80 531 07
The front door activates a door switch which interrupts the program in the open position. If the door has been opened and closed in the course of the program the machine must be restarted with the start button.

INTERIOR LIGHTING

Art. no. 80 618 62
Interior lighting. N.B. 10 W, controlled by the door switch.

BUZZER

Art. no. 80 618 83
The buzzer indicates program end with an acoustic signal.

OVER FLOW PROTECTION (CONDENSATION MACHINES)

Art. no. 80 526 43
If both tanks of the tumbler are overfilled, the program is interrupted by means of a switch mounted on the lower tank. Over flow is indicated on the display.

PROGRAM CONTROL (TD30/40/33A/44A)

Art. no.: 80 650 42
The control unit contains microprocessors for controlling programs, motor, elements etc.
gram, motor, element m.

PANEL CARD

The display contains pushbuttons and indications.

TD30/40 (Small display) LED
Art. no. 80 642 60 ASKO
Art. no. 80 644 71 OEM

HEATING ELEMENT

TD 11/22/30 (US)/33A (US)/40/44A
Art. no. 80 638 08 **(2500 W)**