

ASKO WASHER

**SERVICE MANUAL SUPPLEMENT
W6441 & W6461**

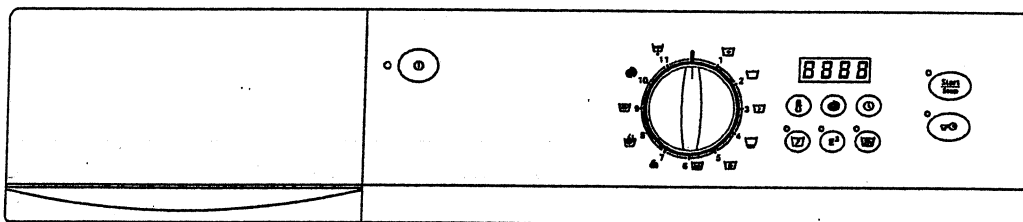
Product: Front-loading washing machine	New type of washing machine WM50	Group: 21
Date: 11.1.2002		B
Reference: N-Å Carlsson		Page: 2(10)

Contents

- Example of panel
- General
- Handling
- Display indications
- Options and settings
- Error messages
- Faultfinding
- Consumption values
- Test program
- Loops on control card
- Settings
- Programs
- Wiring diagram Article no. 8064394

This service information is intended as a supplement to the W600 series Service Manual.

Example of WM50 Panel



General

Mechanically the machine is based on the WM55 (W640/W650), with the exception of the panel and control unit. For more information see the service manual for the W600-series.

The machine is available with different pushbutton options, thus the pushbuttons may vary from one market to another. See also loops on the control card below.

Options and settings (not all options are provided on all machines):

Settings are shown on the display or on LED's alongside the respective buttons. The machine remembers the settings and options you make for each program and start from them (with one or two exceptions – temperatures over 60°C and delayed start) next time you select the program concerned.

ⓑ Temperature 30-95°C or C

For certain programs it is not possible to select a temperature higher than 40°C, (see program table).

[[[F when setting for Fahrenheit) means that the washing temperature will be equal to the temperature of the incoming water.

ⓐ Spin 400-1600 rpm. No spin (ⓐ) or No drain (no d).

For certain programs it is not possible to select a speed higher than 800 rpm, see the table.

Speed 400-800 rpm means short spin.

Speed 1000-1600 rpm always means long final spin.

ⓐ Delayed start (1-24 hours)

ⓐ means that the option has been switched off and the program will start immediately as usual.

ⓐ Super rinse

Super rinse means that extra rinses are added to the program (see program table).

E² E2 Economy and efficiency

The option means that the main wash is extended by 22 minutes. E2 can only be used on Heavy wash, Normal wash and Light wash.

ⓐ High water level

High water level means that an extra amount of water is used in the main wash and rinses. This option may be used for all wash programs except Wool wash and Hand wash. These programs always have high water level.

ⓐ Pre-soak

Pre-soak means that the wash is left to soak two hours before the program starts.

ⓐ Anti-crease

Anti-crease means that the machine rotates the drum one or two seconds per minute for two hours after the end of the program. Anti-crease does not operate together with No spin and No spin/No drain.

Handling

1. Sort the wash
2. Press the main switch, (⊙), open the door, (⊙), and place the wash in the machine.
3. Pour in the washing powder and also the rinsing aid if necessary.
4. Select program, adjust temperature, spin speed and option if necessary. Settings appear on the display. Options appear as a lit LED alongside each button.
5. Close the door and start the program with the (⊙)- button.
To interrupt a program hold down the (⊙)- button for 3 seconds.
6. At the end of the wash program open the door with (⊙).
7. After the wash turn off the main switch (⊙) and close the wash door.


Display indications


The display shows	Explanation	
00	No program selected	
24h	One or two digits, followed by an h. Delayed start has been 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 only 1-2 digits, means that a program is running. The display shows the remaining time in the program in hours and minutes.	
95C 205F CC CF	Appears when temperature is selected. The temperature can be indicated either in degrees Celsius (C) or Fahrenheit (F). CC and CF respectively mean that the machine is set to the temperature of the incoming water. To change the display see the section Washing temperature – Celsius or Fahrenheit in the instructions for use.	
End	Program ready. Remove the wash.	
no d	Can be displayed when selecting spin speed. Indicates No spin/No drain. The programme will then be run without spins and will be completed with the final rinse water still in the machine.	
0	Can be displayed when selecting spin speed. Indicates No spin. The programme will then be run without spins.	
--	May appear instead of temperature when the setting is not appropriate. For example temperature cannot be selected for Rinse program.	
AC	When the Anti-crease option has been activated the drum rotates a few times/min. for 2 hours after the program has ended. In the mean time AC appears on the display. You can end and open the door at any time by pressing the door opening button.	

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	The sensor receives the first signal that Over flow has taken place if, for example, an inlet valve has jammed or if the machine has taken in water for a reason which the sensor cannot control. Machines with a float also receive the indication when there is water at the bottom of the machine.
F2	Wash motor fault	Interruption in any cables to the motor gives rise to this fault, which means that an interruption in the power to the motor may also produce the fault. Locking of the motor also results in an error indication.
F3	Draining fault	The machine indicates that it has not succeeded in pumping out the water within 3 minutes. Where there is a draining fault check: - that no object has caught in the drain hose outlet - that the drain pump is not blocked by foreign objects. Clean the pump, see Chapter 11, Maintenance and cleaning, in the instructions for use. - that there are no kinks in the drain hose. After the fault has been remedied run the Drain program. If this does not help, call service.
F4	Water inlet fault	The indicates that it does not reach the water level within 5 minutes. Where there is a fault in the water supply, check: - that the cock on the water pipe is open. - that the screen in the machine water intake is not blocked. 1. Close the water cock. 2. Unscrew the hose. 3. Clean the screen in the inlet valve on the machine. 4. Retighten the hose. 5. Open the water cock. 6. Run the program again to check whether the fault has been remedied.
F5	Thermistor fault	The machine indicates whether there is an interruption or short-circuit in the thermistor.
F6	Temperature stop fault	Indicates whether the temperature is not reached within 80 mins., 30 mins. For wool and hand wash.
F7	Foaming (this function is not provided on all machines).	The fault indication appears at the end of the program, but foaming is checked after the main wash. Run the rinse program once. Check the washing powder dose. Use low lather washing powder.
F8	Door opening fault	A fault has occurred on the control card, which must be replaced to ensure complete safety.
0000 Flashing	The machine has not spun.	1. The machine has a built-in imbalance sensor which causes the speed to be reduced or the spin to be jumped if there is major imbalance in the load. Turn off the main switch and turn it on again. Open the door and redistribute the wash. 2. After the fault is remedied run the Spin program.
 Flashing	You have tried to start a program with the door open.	Close the door and try again.

Faultfinding

The machine does not start

1. Is the washing door properly closed?
2. Check that the Delayed start option has been switched on. The time remaining until start will then appear in whole hours on the display, e.g. **24h**. To change: stop the program, change the setting and restart.
3. Is there a break in the power supply? Check the house fuses (plugs).
4. Has the child lock been switched on? If so hold down the  button for three seconds.

Consumption values

The following conditions apply to the consumption values indicated below:

Temperature of the incoming water: 15°C. Element power: 2000W. Options: none.

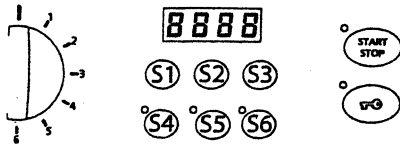
PROGRAMME	MATERIAL/WASHING TEMPERATURE(1)	LOAD (2)	WATER CONSUMPTION (approx. litre)	POWER CONSUMPTION (approx. kWh)	PROGRAMME TIME (approx. minutes)
Heavy wash	Cotton, linen, 60°C	5,0 kg	5-rinse: 62	1,20	140
			3-rinse: 52		135
Normal wash	Cotton, linen, 60°C	5,0 kg	59	0,95	125
			49		120
Light wash	Cotton, linen, 60°C	5,0 kg	59	0,90	85
			49		80
Synthetic wash	Polyester, cotton / polyester, nylon, 40 C	3,0 kg	28	0,35	65
Quick wash	Cotton, linen, 60°C	5,0 kg	35	0,90	58
Super quick wash	Polyester, cotton / polyester, nylon, 40 C	3,0 kg	22	0,30	35
Wool wash	Wool/Hand wash, IWS, Superwash, 30 °C	2,0 kg	54	0,30	40
Hand wash	Wool/Hand wash, IWS Superwash, 30 °C	2,0 kg	54	0,30	40
Rinse programme	Cotton, linen	5,0 kg	7-12	0,05	Varies according to model
Spin	Cotton, linen	5,0 kg	---	0,05	Varies according to model
Drain	Cotton, linen	5,0 kg	---	---	1


(1) All programmes are set to the highest available spin speed.

(2) The machine can handle a maximum load of 6.0 kg.

Test program - W6441 / W6461


The machine control unit incorporates a built-in test program which can be used for faultfinding. The machine can be provided with various silicon chips for different markets, which is why we have numbered the buttons as shown in the figure below:



Hold down  and at the same time press S5 5 times in 15 seconds to start level 1 of the test program (see below).

Press S6 once to reach level 2.

Press S6 again to return to level 1.

 ends the test program.

Select level 1

- S1 Inlet valve 1 (pre-wash compartment)
- S2 Inlet valve 2 (main wash compartment)
- S3 Inlet valve 3 (hot water)
- S4 Inlet valve 4 (washing powder compartment)
- S5 Door pull magnet

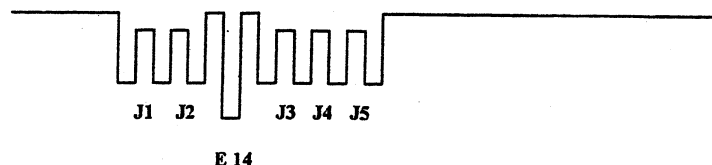
Select level 2

- S1 Heating relay (clicking sound from relay on control unit).
- S2 Drain pump
- S3 Motor, normal running
- S4 Motor, economy running
- S5 Long spin

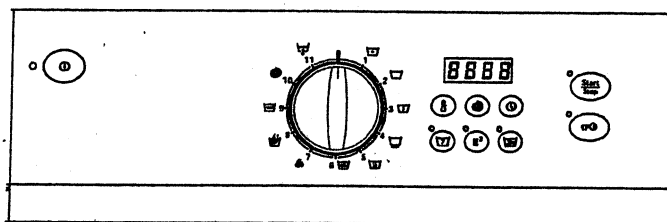
Loops on WM 50 control card

Loops and their function.

Control unit Art.no. 8064257



Loop	Option	Not broken / Closed	Broken / Open
J1	Eco/High water level (S5)	Eco	High water level
J2	Pre-soak/Anti-crease (S6)	Pre-soak	Anti-crease
J3	Number of rinses	3 rinses	5 rinses
J4	Foaming	Off	On
J5	Not used		



Reprogramming display and button functions.

Change from Celsius to Fahrenheit.

Program knob in 0 position 5 x Start + 5 x Temperature.
Change setting with Temperature button.

Setting child-safe Start.

Program knob in 0 position 5 x Start + 5 x Spin.
Change setting with the Spin button, 0 or 3 seconds.

Setting of water intake.

Program knob in 0 position 5 x Start + 5 x Later start.
Change setting with Later start button. C=cold E=mix H=hot

Setting of spin speed.

Program knob in 0 position. Hold down the Start button+ press 5 x Super rinse.
Release the Start button and change setting with Super rinse.
1300, 1400, 1500 or 1600 rpm.

Program WM50 5 -rinse

Programme information				Programme content						Other		
Programme No.	Programme	Max. quantity	Temperature °C (A)	Max. spin speed rev/min	Pre-wash	Main wash	Spin	Rinse (B)	Spin	Rinse (B)	Spin	
1	Heavy wash	●	C,30-95	1500	■	■	⊙	☼☼☼	⊙	☼☼☼	⊙	
2	Normal wash	●	C,30-95	1500		■	⊙	☼☼☼	⊙	☼☼☼	⊙	
3	Light wash	●	C,30-95	1500		■	⊙	☼☼☼	⊙	☼☼☼	⊙	Shorter main wash than for Normal wash.
4	Synthetic wash	◐	C,30-95	800		■		☼☼☼			⊙	
5	Quick wash	●	C,30-95	1500		■		☼☼☼			⊙	
6	Super quick wash	◐	C,30-95	1500		■		☼☼			⊙	
7	Wool wash (C)	○	C,30-40	800		■		☼☼☼			⊙	
8	Hand wash (C)	○	C,30-40	800		■		☼☼☼			⊙	Slightly more gentle than Wool wash.
9	Rinse programme	●		1500				☼			⊙	
10	Spin	●		1500							⊙	
11	Drain	●	Pumping only									

● 1/1 (6,0 kg)

■ Wash

⊙ Short spin
(max. 800 rev/min)

(A) C in the display denotes the temperature of the incoming water.

◐ 1/2 (3,0 kg)

☼ Rinse

⊙ Long spin

(B) The Super Rinse On option provides two extra rinses before the final normal rinse.

○ 1/3 (2,0 kg)

(C) Delicate wash – high water level.

WM505566-5

Program WM50 3 -rinse

Programme information				Programme content						Other		
Programme No.	Programme	Max. quantity	Temperature °C (A)	Max. spin speed rev/min	Pre-wash	Main wash	Spin	Rinse (B)	Spin	Rinse (B)	Spin	
1	Heavy wash	●	C,30-95	1500	■	■	⊙	☼☼☼	⊙	☼☼☼	⊙	
2	Normal wash	●	C,30-95	1500		■	⊙	☼☼☼	⊙	☼☼☼	⊙	
3	Light wash	●	C,30-95	1500		■	⊙	☼☼☼	⊙	☼☼☼	⊙	Shorter main wash than for Normal wash.
4	Synthetic wash	◐	C,30-95	800		■		☼☼		☼☼	⊙	
5	Quick wash	●	C,30-95	1500		■		☼☼		☼☼	⊙	
6	Super quick wash	◐	C,30-95	1500		■		☼☼			⊙	
7	Wool wash (C)	○	C,30-40	800		■		☼☼		☼☼	⊙	
8	Hand wash (C)	○	C,30-40	800		■		☼☼		☼☼	⊙	Slightly more gentle than Wool wash.
9	Rinse programme	●		1500				☼			⊙	
10	Spin	●		1500							⊙	
11	Drain	●	Pumping only									

● 1/1 (6,0 kg)

■ Wash

⊙ Short spin
(max. 800 rev/min)

(A) C in the display denotes the temperature of the incoming water.

◐ 1/2 (3,0 kg)

☼ Rinse

⊙ Long spin

(B) With the Super Rinse On option:
For programmes 1-3, four extra rinses will be included, and one spin will be omitted.

For programmes 4-8: two extra rinses will be included before the final ordinary rinse.

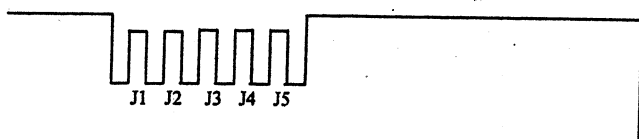
(C) Delicate wash – high water level.

WM505566-3

Loops on control card for WM33A/WM44A

Control unit Art.no. 8064361

Loops and their function.



Loops	J1	J2	J3	J4	J5
3 Rinses	0	-	-	-	-
5 Rinses	X	-	-	-	-
WM33A 1000 rpm	-	X	0	X	-
WM33A 1100 rpm	-	0	0	X	-
WM33A 1200 rpm	-	X	X	X	-
WM44A 1200 rpm	-	0	0	0	-

0 = Not broken

X = Broken