Service-Information

Geschirrspüler
ADP 995 WHM

8542 995 10410
Letzte Änderung: 07.06.2008
Anlagedatum: 07.06.2008

Die vorliegenden Serviceunterlagen sind ausschließlich für technisch qualifizierte Fachkräfte bestimmt, welche mit den entsprechenden einschlägigen Sicherheitsvorschriften vertraut sind.
Änderungen vorbehalten

Ersatzteilliste

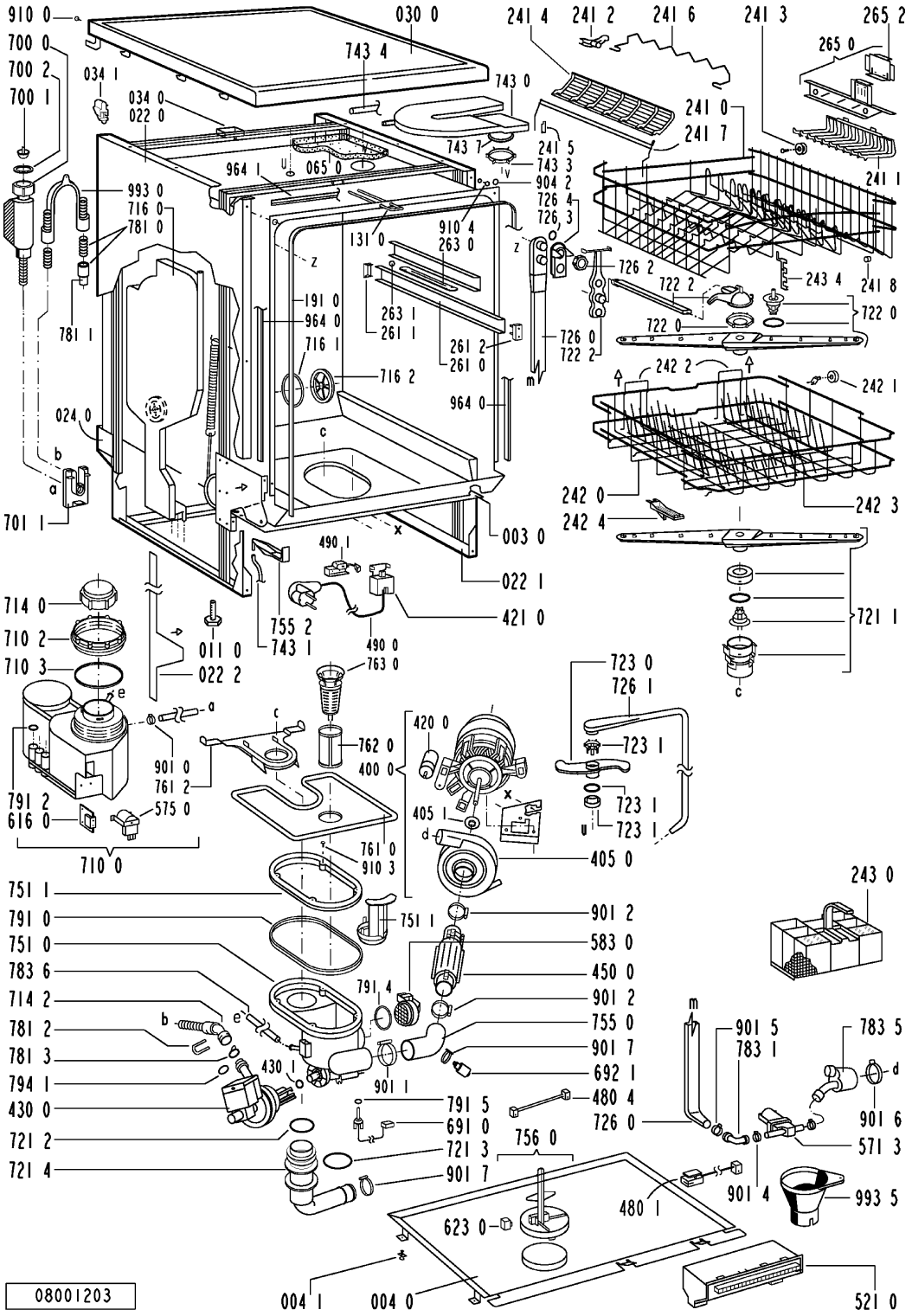
Pos-Nr.	12NC	Beschreibung
003 0	**4812 440 19594**	Traverse Quer **Ab: 27/99**
003 0	**4812 440 19382**	Traverse Quer
004 0	**4812 440 18952**	Bodenwanne
004 1	**4812 401 18402**	Halter Bodenwanne
011 0	**4812 505 18357**	Fuss kurz
022 0	**4812 440 18951**	Seitenwand links
022 1	**4812 440 18949**	Seitenwand rechts
022 2	**4812 440 18953**	Distanzstueck Daemmstreifen
024 0	**4812 440 19463**	Rueckwand Blende
030 0	**4812 310 18428**	Arbeitsplatte AMH4000WH
034 0	**4812 404 78237**	Distanzstueck f.Arbeitspl.
034 1	**4812 404 78242**	Befestigung f.Arbeitspl.ws
040 1	**4812 417 18774**	Scharnier links
040 2	**4812 417 18773**	Scharnier rechts
040 3	**4812 417 18784**	Schutz f.Tuer (Set)
044 0	**4812 492 38358**	Feder f.Tuer
044 1	**4812 492 38364**	Feder f.Taste
047 0	**4812 404 48591**	Bremse Tuer
047 1	**4812 401 18397**	Bremsband an Tuerschar
047 2	**4812 404 68023**	Haken
053 0	**4812 440 88887**	Sockelblende o.Loch WS
053 4	**4812 440 88891**	Sockelblende rund o.L. WS
065 0	**4812 466 48052**	Isolation
103 0	**4812 440 18956**	Tuer aussen SD WS
120 0	**4812 440 19456**	Innentuer ged. KDTL
120 1	**4812 440 18969**	Leiste
130 0	**4812 417 58361**	Kippschloss kpl. ws
131 0	**4812 401 18416**	Haken Verschluss
175 0	**4812 310 18295**	Dekorleiste links WS
175 1	**4812 310 18294**	Dekorleiste rechts WS
175 2	**4812 310 18296**	Dekorleiste unten WS
191 0	**4812 466 68564**	Dichtung Tuer, Rahmen
191 3	**4812 466 68533**	Dichtung Sockel
192 0	**4812 466 68467**	Tuerdichtung unten
241 0	**4812 458 18914**	Korb oben ger. WP
241 1	**4812 458 18324**	Halter Tassen rechts w
241 2	**4812 535 78036**	Lager Glaeserhalter ws
241 3	**4812 528 88068**	Korbrolle Set O-Korb (4 Rollen)
241 4	**4812 458 18288**	Besteckfach WS
241 5	**4812 458 18921**	Halter Besteckfach
241 6	**4812 458 18333**	Halter Glaeser links w
241 7	**4812 404 48639**	Buegel
241 8	**4812 466 68553**	Distanzstueck Set O-Ko
242 0	**4812 458 18923**	Korb unten kpl. 3Einsaetze
242 1	**4812 528 88069**	Korbrolle U-Korb ws, einzeln
242 2	**4812 458 18262**	Einsatz f.U-Korb Stachel
242 3	**4812 458 18275**	Einsatz f.U-Korb Stachel kurz
242 4	**4812 466 48059**	Anschlag Sperre mech. ws
243 0	**4812 458 18272**	Korb Besteck
243 4	**4812 458 18317**	Halterung WP-ZW

Pos-Nr.	12NC	Beschreibung
261 0	**4819 462 38271**	Schiene Teleskop, innen
261 1	**4819 404 48819**	Kappe Teleskopsch. hinten
261 2	**4812 462 78995**	Kappe Teleskopsch. vorne
263 0	**4819 520 18013**	Kugelkaefig KDTL
263 1	**4812 520 48001**	Kugel Plastik
265 0	**4812 404 48637**	Korbverstellung kpl. b
265 2	**4812 404 48638**	Griff Korbverstellg. b
301 0	**4812 453 70053**	Schalterleiste WS m.Multizone
303 1	**4812 460 38055**	Griffplatte WS
305 0	**4812 440 18964**	Leiste Abschluss WS
322 0	**4812 453 70429**	Einlage bed. WS
322 1	**4812 440 19468**	Aufkleber Multizone blau
331 0	**4812 413 58953**	Knopf Programmwahl kpl. WS
332 0	**4812 410 28564**	Drucktaste Kappe WS
350 0	**4819 310 39832**	Anzeige Elektr. (DB)
400 0	**4812 361 58126**	Motor +UP 220-240V/50Hz BK16
405 0	**4812 360 18371**	Umwaelzpumpe kpl.o.Motor
405 1	**4819 515 28158**	Dichtung
420 0	**4812 121 18132**	Kondensator Betrieb 4mF
421 0	**4812 121 18161**	Entstoerfilter
430 0	**4812 360 18357**	Laugenpumpe kpl. DOLPH
430 1	**4812 466 68506**	Wellendichtring KDTL
450 0	**4812 259 28684**	Heizelement 2100W
480 0	**4812 321 28386**	Kabelbaum Set (WP/IG)
480 1	**4812 321 28371**	Kabel WI-CB
480 2	**4812 321 28383**	Kabel UB-DB 6polig
480 3	**4812 401 18418**	Schutz f.Verdrahtung
480 4	**4812 321 28387**	Kabel (SENSOR)
490 0	**4819 321 18136**	Netzkabel 2m SA
490 1	**4812 321 28367**	Zugentlastung
521 0	**4812 214 78273**	Steuerung (CB) Sensor
531 0	**4812 273 18055**	Schalter Wasserhaerte
531 1	**4812 273 18056**	Einstellrad Wasserhaerte
571 3	**4812 281 28363**	Ventil f.Zone-Washing
575 0	**4812 281 28361**	Regeneriervent. KDTL
583 0	**4812 271 28355**	Schalter Membran
616 0	**4812 281 18047**	Reedkontakt ELSA KDTL
616 1	**4812 271 58161**	Reedkontakt KSMA
620 0	**4812 218 38082**	Eingabe Electr. (UB)
623 0	**4812 271 38356**	Mikroschalter Schwimmer KDTL
633 0	**4812 271 38355**	Mikroschalter Tuer KDT
680 0	**4812 418 68155**	Kombidosierung m.KSM
680 1	**4812 466 68495**	Dichtung Kombidosierung
681 1	**4812 466 68497**	Dichtung Deckel KSM SK 5244.04.04
681 2	**4812 440 18975**	Klappe Kombidosierung
682 0	**4812 466 68496**	Dichtung Deckel RMG
691 0	**4812 282 68012**	Fuehler NTC
692 1	**4812 209 88001**	Sensor kpl. (Truebung)
700 0	**4812 530 28848**	Zulaufschlauch 2 Ventile 2m
700 0	**4812 530 28804**	Zulaufschlauch 2 Ventile 4,2m

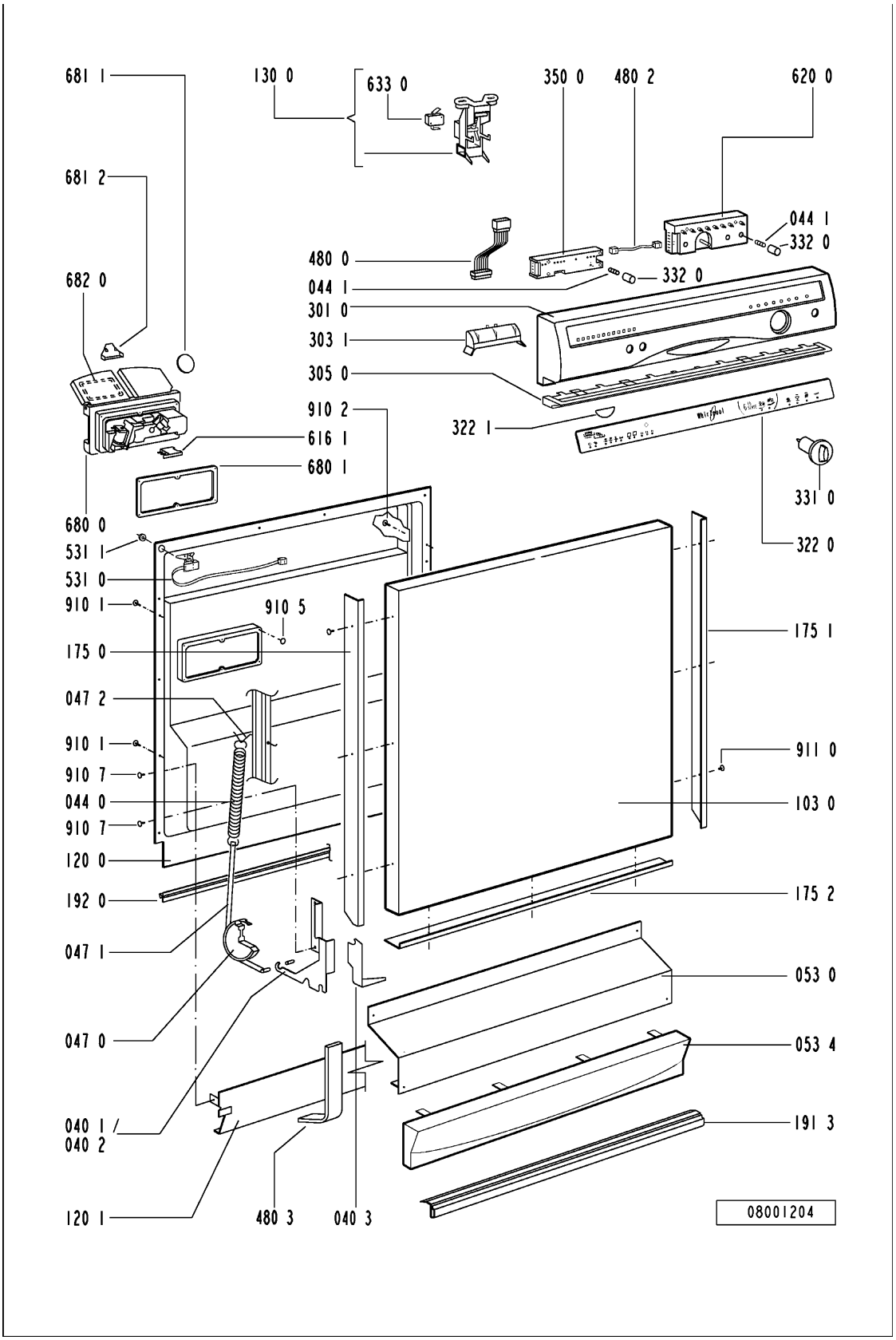
Pos-Nr.	12NC	Beschreibung
700 1	**4812 480 48019**	Sieb
700 2	**4812 520 58002**	Dichtung KDTL
701 1	**4812 310 18153**	Schlauchsich. Set KDTL
710 0	**4812 418 68151**	Monoblock kpl. el.Anz.
710 2	**4819 310 38536**	Gewindering grau
710 3	**4819 466 69562**	Dichtung KDTL
714 0	**4812 462 78993**	Verschlusskappe o.Anzeige
714 2	**4812 440 18963**	Gehaeuse Rueckschlagkappe
716 0	**4812 418 68147**	Regenerierdos. m.WE
716 1	**4812 466 68475**	Dichtung Regenerierdos.
716 2	**4812 462 78994**	Abdeckung Regenerierdos. gr.10809
721 1	**4812 360 68061**	Sprueharm unten kpl. 2-armig
721 2	**4812 466 68491**	Dichtung 25x2,3B
721 3	**4812 466 68558**	Dichtung 30x3,0
721 4	**4812 440 19455**	Flansch Anschluss
722 0	**4812 360 68044**	Sprueharm oben kpl.
722 2	**4812 360 68056**	Nabe Sprueharm ob./ger.kpl.
723 0	**4812 360 68049**	Sprueharm Decke
723 1	**4819 310 39831**	Kit Verschraubung
726 0	**4812 530 28786**	Rohr Zufuhr 2.Spruehebene
726 1	**4812 530 28787**	Rohr Zufuhr 3.Spruehebene
726 2	**4812 505 18358**	Mutter
726 3	**4812 466 68512**	Dichtung f.Andockflansch
726 4	**4812 462 79633**	Zentrierung f.Andocksystem
743 0	**4812 511 48171**	Verfluessiger
743 1	**4812 530 28102**	Zulaufschlauch 9x1,5x250
743 3	**4812 505 18364**	Mutter Kondens./Luftfu
743 4	**4812 530 28807**	Schlauch Zufuhr 9x1,5x270+10
743 7	**4812 466 68514**	Dichtung
751 0	**4812 418 18205**	Ablaufschacht
751 1	**4819 310 39826**	Wasserfuehrung Service Kit
755 0	**4812 530 28868**	Kruemmer (SENSOR)
755 2	**4812 530 48148**	Auffangschale
756 0	**4812 360 58099**	Schwimmer
761 0	**4812 480 58082**	Sieb fein Niro
761 2	**4812 418 18204**	Abdeckung Sieb
762 0	**4812 480 58084**	Mikrofilter
763 0	**4812 480 58083**	Sieb grob
781 0	**4812 530 28737**	Ablaufschlauch
781 1	**4819 530 28286**	Schlauchmuffe
781 2	**4819 492 68405**	Klammer Rueckschlagventil
781 3	**4812 281 28364**	Klappe Rueckschlag KDTL
783 1	**4812 530 28806**	Schlauch Verbindung
783 5	**4812 530 28851**	Verteiler Schlauch+ZW
783 6	**4812 530 28796**	Schlauch 10x3x180+10
791 0	**4812 532 68067**	Dichtung Schacht
791 2	**4812 530 58093**	Dichtung SK 5199 01 4, 1 St
791 4	**4812 466 68503**	Dichtung
791 5	**4812 466 68504**	Dichtung
794 1	**4819 530 58032**	Dichtung 20x2,5

Pos-Nr.	12NC	Beschreibung
901 0	**4822 401 10492**	Schlauchschelle 14-24 mm
901 1	**4812 401 18424**	Schelle 050,0
901 2	**4812 401 18157**	Schlauchschelle 32-50/9 C61
901 4	**4812 401 18426**	Schelle 025,6
901 5	**4812 401 48573**	Schelle 028,6
901 6	**4812 401 48574**	Schelle 038,1
901 7	**4812 401 18427**	Schelle 031,6
904 2	**4812 462 79635**	Abdeckung WS 3,5x5
910 0	**4812 502 18384**	Schraube A2F 4x35-H
910 1	**4812 502 18394**	Schraube 3,5x17-H
910 2	**4812 502 18363**	Schraube 4,0x12-H
910 3	**4812 502 18389**	Schraube 5x20 T20
910 4	**4812 502 18385**	Schraube M3,5x8-T15M
910 5	**4812 502 18393**	Schraube 3,5x9-1 Tx15
910 7	**4812 502 18397**	Schraube INOX A2 M 5X12
911 0	**4812 502 38134**	Schraube Dekor ST3,5x9,5-C-H
964 0	**4812 466 68536**	Dichtung Gehaeuse re/l
964 1	**4812 466 68469**	Dichtung Gehaeuse oben
993 0	**4819 530 29028**	Einhaengebogen
993 5	**4822 532 80216**	Fuelltrichter Salz

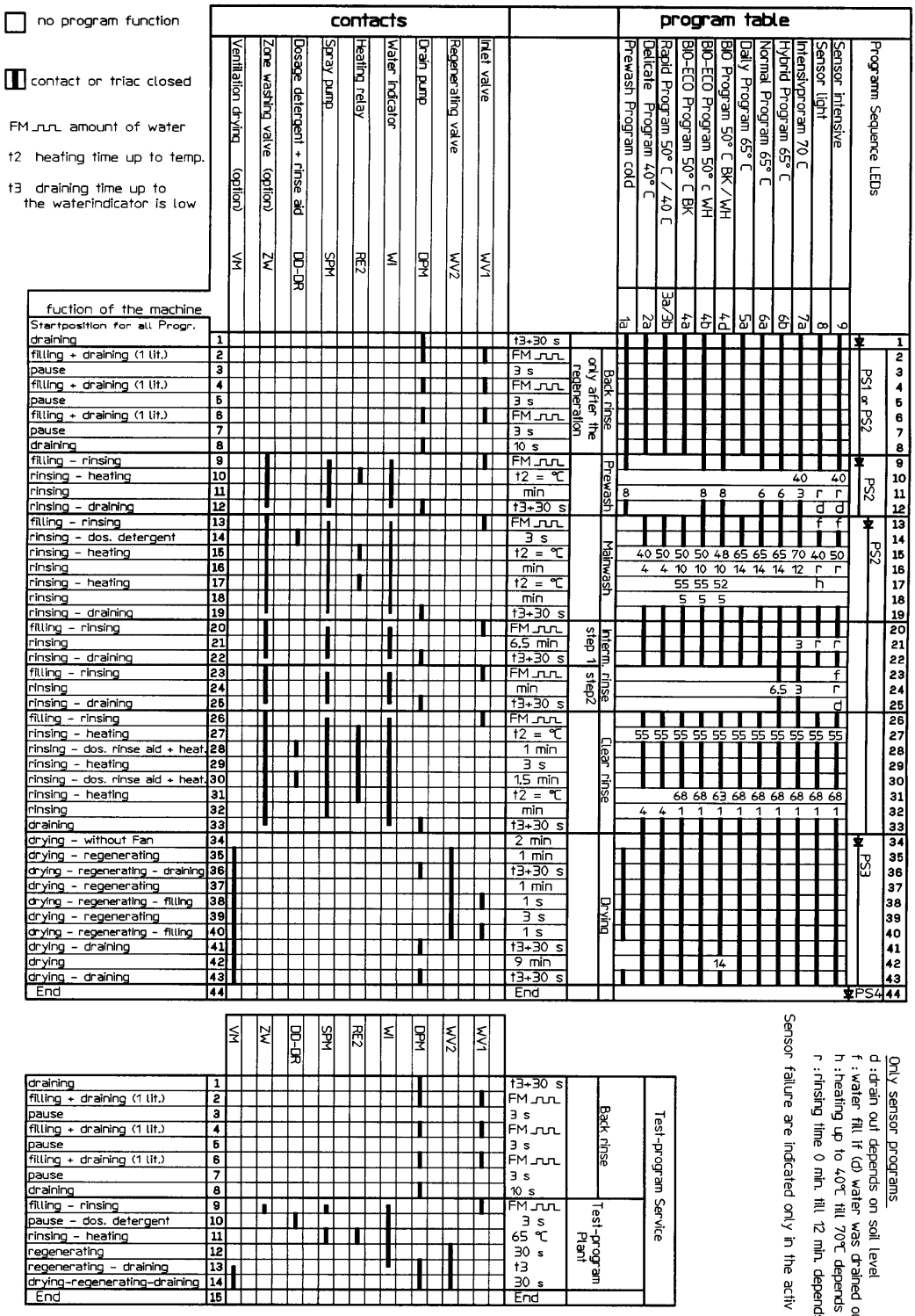
Explosionszeichnung



Explosionszeichnung



Schließschema



4619 720 87632-1

Text /Legende

Test procedure for SERVICE-TEST-PROGRAM DOLPHIN dishwashers (Global)

1. Start the passive test program.
   If there is a defective component indicated, open the plinth and take out the control board (CB).

2. Check the component.
   Unplug the indicated component from the control board (CB) and check it by using an Ohm-measure equipment.
   If the ohms are not correct, check the cables to the component and check the component itself.

3. Check the control board (CB).

4. Only if there is no reaction when pushing a push button or turning the rotary switch, then test the control board (CB) and the user board (UB) with the test points.

5. At the end of the repair start the appliance and delete the stored failure. After this, start the test program again to see that the failure is solved.

More details: s. following pages.

Attention:

First unplug the appliance, then set the connection clamps of the volt measurement on the test points.
Danger for short circuit. Short circuits on components can damage the control board (CB).
If electronic boards are wet, do not switch the appliance on.
For check the appliance, plug in the appliance.
Failures, which occurred during the program will store and indicate by flashing start LED.
Then start the test program without erase the failure before. The failure will indicate.
To erase the failures, you must push the start button longer than 3 seconds.
The failures F1 NTC break
F2 water leakage
F9 continuous water inlet
are checked and indicated immediately after start of the program.
Therefore these failures have to be solved before starting the active test program.

When these failures are not solved, the active test program does not run.

The electrical components get their voltage via triac from the control board (CB). For testing the volume of voltage the volt meter must be parallel to the component (the component must be connected). If the component is disconnected, then the outcomed voltage from the control board (CB) is reduced.

For appliances with no program indicator or 7-segment-display you can use for testing a display board (DB) in addition. More details : see chapter active test program.

After starting a program this program is locked. That means neither by unplugging/switching of the appliance nor by setting an other program, the first setted program can be changed. Changing of the program is only possible by pushing the start button again for longer than 3 sec.. The programs end with draining out. After that start again.
On appliances with separate On-Off button the last used program is stored. That means if the customer wants to use the same program again he has only to press the On-button and the Start-button.

Attention: On new service control boards the first service test program is without back rinsing. Dangerous for overfilling the appliance, in case the appliance is not empty. By running the test program a second time the back rinsing will be carried out as usual.

4619 720 87721-1

Text /Legende

Handling of failures

F0 Sensor failure
Will not indicate for the customer. The programs will finish even there is a failure. The Failure is indicated only in the active test program after 10 – 30 second's. The active test program will finish as well, even there is a failure.
If the failure in a sensorprogram appear, the machine will always choose the highest consumption (best cleaning result).
- None or wrong output from the sensor
- Unlocical or unreal measurement results

Reason:
- Defective electronic of the sensor
- Optoelectronical parts in the sensor defect
- Case of the sensor is very dirty
- Connection between sensor and control board (CB) interrupted

Attention: The failure code will not store.

F1. NTC break
Temperature out of the normal value (-3°C till +85°C)
- temperature inside higher than +85°C
- NTC defective
- dishwasher is frozen, less than -3°C

Fill in the appliance a cup of warm water to warm it up before you start it, if the temperature is less than -3°C

F2. water leakage
- water is in the drip tray

floater (LS6) switches off the WV1 and the electronic switches on the DPM till WI reports empty

F3. heating system defective
Indicated after app. 11 minutes (1. check after 5 min., after that follow 2 more checks, before the failure is indicate)
- too less heating speed (lower 1,5 °C in 3 min.)
- heating (HEW) defective
- relays (RE2) on control board (CB) is defective
- NTC - resistance fluctuation
- water indicator (WI) defective (is switched off) - spray pump (SPM) is not working

F4. draining failure
drain pump starts and after 4 min. the WI detects not empty
- drain pump (DPM) defective
- siphon closed
- control board (CB) defective
- water indicator (WI) defective (is switched on)

F5. spray arm blocked (leads not to stop the appliance)
SAB sensor sends less than 10 impulses/min.
- spray arm blocked or not fixed well
- spray pump (SPM) does not work well
- SAB sensor defective

Text /Legende

F6. water tap closed (only indicated after start of the active test program)
water valve (WV1) is switched on but flow meter (FM) sends no impulses (less than 10 imp. in 10 sec.) and the water indicator (WI) is off (empty)
- water tap closed
- water inlet hose blocked
- water inlet valve (WV1) defective
- flow meter (FM) defective (leads to FM failure)

F7. flow meter failure
water inlet valve (WV1) is switched on and the water indicator (WI) is on (full).
- flow meter (FM) sends to less impulses (less than 10 imp. in 10 sec.)
- water tap closed
- water inlet hose blocked
- water inlet valve (WV1) defective
- flow meter (FM) defective

F8. water level failure
failure monitored during spray pump is on and the water indicator switches back more than 20 times in 2 min.
- water indicator defective (should switch on after app. 1 litre)
- sieve blocked
- water strongly foams
- pot has turned off and is filled with spray water
- no stable spray pump (SPM) working

F9. continuous water inlet
water inlet valve (WV1) is switched off, water indicator (WI) on, flow meter (FM) sends impulses (more than 10 imp. in 10 sec.)
- water inlet valve (WV1) mechanically not closed
- triac (CB) permanently switched on. (short circuit)

reaction: interval 30 sec. draining / 20 sec. tracing

For salt, rinse aid, zone wash valve, sieve valve failure see active test program.

Text /Legende

Appliances FAILURE AND ALARM DISPLAYING CODES

Alarm / Failure	Indication for customer		Indication whitin test program after a failure has occurred	
Sensor-break F 0	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ○		◍ ◍ ○ ○ PS1 PS2 PS3 PS4 START ○ (only indicated after start of the active t.p.)	
NTC-break F 1	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		◍ ○ ○ ○ PS1 PS2 PS3 PS4 START ○	
Water Leakage F 2	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ◍ ○ ○ PS1 PS2 PS3 PS4 START ○	
Heating System Failure F 3	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ○ ◍ ○ PS1 PS2 PS3 PS4 START ○	
Draining Failure F 4	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ○ ○ ◍ PS1 PS2 PS3 PS4 START ○	
Spray Arm Blocked F 5	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ○		◍ ○ ○ ◍ PS1 PS2 PS3 PS4 START ○	
Water Tap Closed F 6	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ◍ ○ ◍ PS1 PS2 PS3 PS4 START ○ (only indicated after start of the active t.p. Start LED flashed in passive t.p.)	
Flow Meter Failure F 7	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ○ ◍ ◍ PS1 PS2 PS3 PS4 START ○	
Water Level Failure F 8	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		○ ◍ ◍ ○ PS1 PS2 PS3 PS4 START ○	
Water Continuously On F 9	○ ○ ○ ○ PS1 PS2 PS3 PS4 START ◍		◍ ○ ◍ ○ PS1 PS2 PS3 PS4 START ○	

◍ **Led Flashing** **PS 1 till PS 4 : Program sequence LED**
○ **Led OFF**

Text /Legende

With the passive test program, you can check all LED's and buttons. If there is no failure the passive test program runs normal.

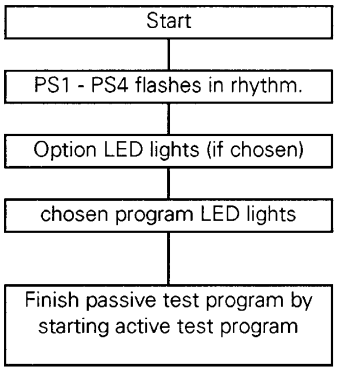
Attention:
If you can't start the active test program (Start button don't flash), normally there is one of the following failures detected: F1, F2 or F9

When these failures are not solved before, the active test program will not run. After solving the failure you must "sign" (erase) the failure.

Start procedure

Passive test program

The passive test program shows the stored failure. If there is no failure the passive test program runs normal.



1. Switch off the appliance
2. Push start button and hold it.
3. Choose position 1 of the turning knob turning right side (program 1).
4. Finish pushing the start button when the start LED flashes.
5. Failure indication.
6. Repair the failure
7. Solve the failure by pushing the start button for longer than 3 sec.
8. Start the passive test program again. If there is no failure detected, test all LED's and after that choose program 1.
9. Finish the passive test program by pushing the start button for shorter than 3 sec.

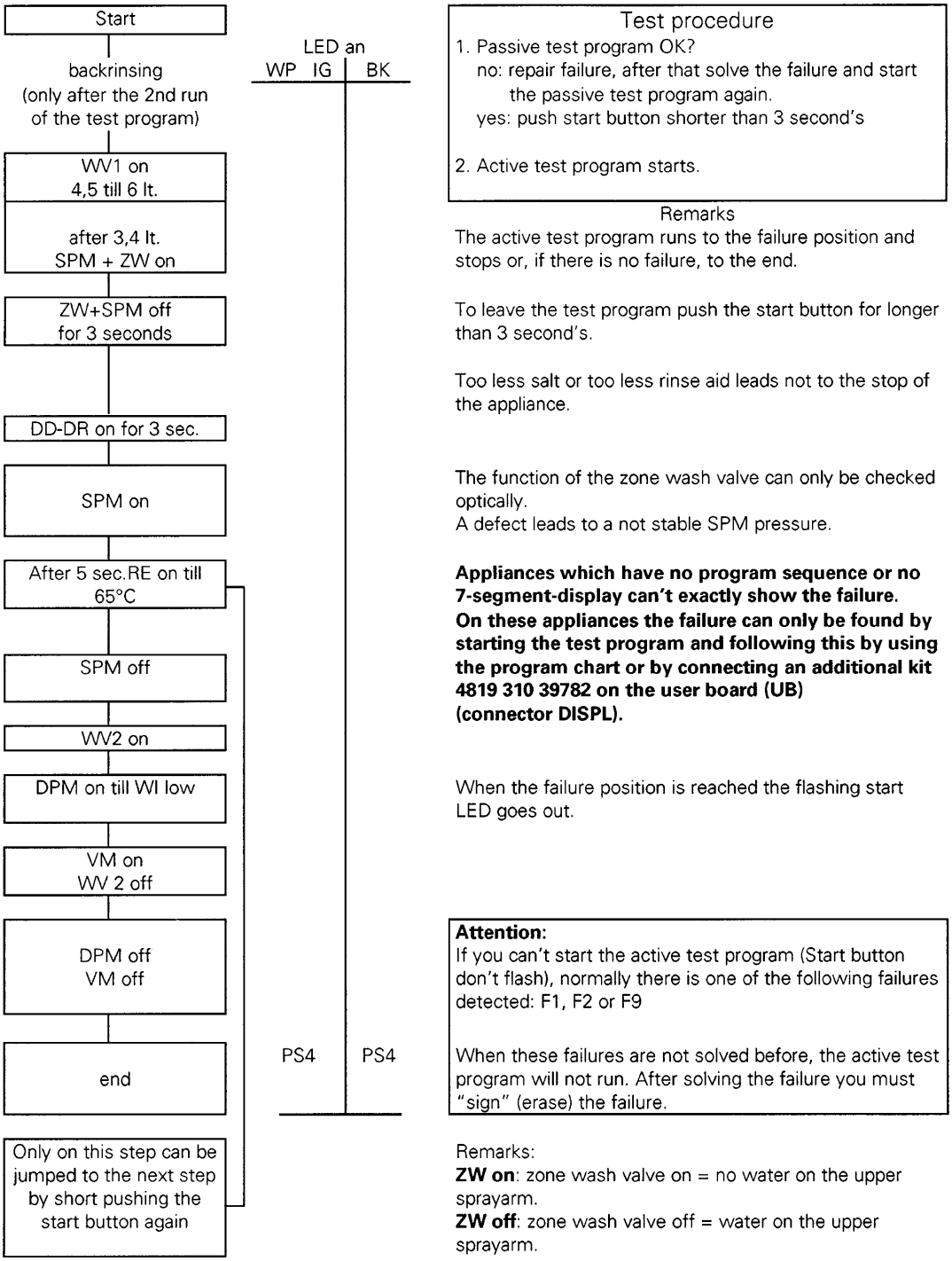
Active test program starts (see next page)

Program sequence LED

PS1	1. LED	prewash		
PS2	2. LED	mainwash		
		intermediate rinse final rinse		
PS3	3. LED	drying (regeneration)		
PS4	4. LED	end	goes off if any button is pushed	goes off after 30 min progr. is finished

Text /Legende

Active test program



Test procedure

1. Passive test program OK?
   no: repair failure, after that solve the failure and start the passive test program again.
   yes: push start button shorter than 3 second's

2. Active test program starts.

Remarks

The active test program runs to the failure position and stops or, if there is no failure, to the end.

To leave the test program push the start button for longer than 3 second's.

Too less salt or too less rinse aid leads not to the stop of the appliance.

The function of the zone wash valve can only be checked optically.
A defect leads to a not stable SPM pressure.

Appliances which have no program sequence or no 7-segment-display can't exactly show the failure. On these appliances the failure can only be found by starting the test program and following this by using the program chart or by connecting an additional kit 4819 310 39782 on the user board (UB) (connector DISPL).

When the failure position is reached the flashing start LED goes out.

Attention:
If you can't start the active test program (Start button don't flash), normally there is one of the following failures detected: F1, F2 or F9

When these failures are not solved before, the active test program will not run. After solving the failure you must "sign" (erase) the failure.

Remarks:
ZW on: zone wash valve on = no water on the upper sprayarm.
ZW off: zone wash valve off = water on the upper sprayarm.

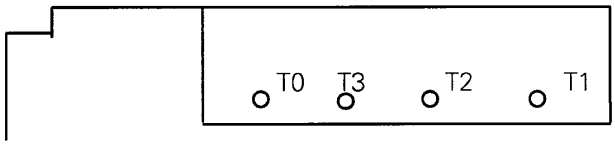
Text /Legende

Testpoints on the control board (CB)

With these test points the function of the buttons and the rotary switch can be checked.
The test points are in the service window on the control board.
For the test fine clamps, cables and volt meter with high input resistance are necessary.
Before setting the clamps on the test points, switch off the appliance.

Testpoints: T0: common line T2: analogue value
T1: analogue value T3: digital signal

Service window



Check: T0 to T1

Communication between control board (CB) and display board (DB) measured over user board (UB)

pushed button	voltage	from	to
no button pushed	ca. - 5.24 V DC	Control board (CB)	Display board (DB)
ZW (1 or 2 LED)	ca. - 3.43 V DC	Display board (DB)	Control board (CB)
Delay	ca. - 2.88 V DC	Display board (DB)	Control board (CB)
ZW + Delay start	ca. - 2.88 V DC	Display board (DB)	Control board (CB)

Check: T0 to T2

Communication between Control board (CB), User board (UB)

	voltage	from	to
Programplace 1	ca. - 1.32 V DC	User board (UB)	Control board (CB)
Programplace 2	ca. - 1.75 V DC	User board (UB)	Control board (CB)
Programplace 3	ca. - 2.20 V DC	User board (UB)	Control board (CB)
Programplace 4	ca. - 2.90 V DC	User board (UB)	Control board (CB)
Programplace 5	ca. - 3.36 V DC	User board (UB)	Control board (CB)
Programplace 6	ca. - 3.80 V DC	User board (UB)	Control board (CB)
Programplace 7	ca. - 4.27 V DC	User board (UB)	Control board (CB)
start button	ca. - 0.00 V DC	User board (UB)	Control board (CB)

Check: T0 to T3:

Communication between Control board (CB) and User board (UB). Check of the 'Start' function
Select any program.

before start (start LED off)	- 5.24 V DC
after start (start LED on)	- 3.87 V DC

How exact the data are, depends on the measure equipment.

Text /Legende

3. TEST DES LIAISONS ENTRE LA PLATINE DE PROGRAMMATION (UB) ET LA PLATINE DE CONTROLE (CB)

Test pour la vérification de la touche Départ. **Sélectionner** auparavant n'importe quel **programme**.

Test entre T0 et T3	
Touche Départ	Tensions
Avant sélection (led Départ off)	- 5,24 V DC
Après sélection (led Départ on)	- 3,87 V DC

Attention : La précision des mesures dépend entièrement de l'appareil de mesure utilisé, c'est pourquoi nous vous conseillons un appareil à haute impédance interne.