09/2013

# **Mod: OX-MS**

**Production code: OX-MS** 



# **USER MANUAL**



**SELF LEVELLING DISPENSERS** 

FOR CROCKERY

**MOBILE UNITS** 

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### **REGISTRATION FILE**

(First read the instructions in chapter 2)

Туре	serial number first	last

### MANUAL MOBILE UNITS

#### 1. bout this manual

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This manual informs you about the function, the operation and the use of your self levelling dispenser, further to be called dispenser.

This manual is for those who.

- receive and check the product (Chapter 4),
- place, adjust and connect the product (Chapter 5),
- use the product (Chapter 6),
- clean the product (Chapter 7),
- service the product (Chapter 8).

Please read the for you relevant chapters carefully.

In any case you should read the chapters 2 en 3; this gives you a good understanding (in the parts of) the dispenser and working of the dispenser. This is necessary for the right operating and good working with the dispenser.

In this manual some texts are framed; these are warnings. If you neglect these warnings, you may take the risk the unit does not work well or does not work or that you might be injured.

In that case we accept no liability.

Your dispenser, depending on the type, is meant to be used for:

- 1) storage of one or more stac crockery with the dimensions as defined for this dispenser,
- 2) issue of the crockery at a constant leve
- 3) heating of heat-resistan crockery, when the dispenser is provided with a heating.
- 4) transport of crocker

Crockery is:

- 1) plates, saucers, bowls, cups, glasses,
- 2) trav
- 3) baskets filled with crockery as mentioned at point

The crockery is clean and empty and filled with solid substance or else properly sealed.

Damages and defects on the goods should be reported within 8 days upon receipt of the goods.

For all electrical parts (cable, wiring, thermostat, switch, heatingelement) there is a warranty-term of 6 months. For all moving, mechanical parts (stacking-unit with guiderolls, swivel-castors) there is a warranty-term of 12

months.

This warranty is only valid.

- when the dispenser has been used for it's purpose,
- for the parts and not for costs of labour.

The dispensers, equiped with heating (electricity), are:

- are in conformity with the EN 60335-1 and 60335-2-50 following the provisions of the VEM directive,
- are in conformity with the EN 50081-1 and 50082-1 following the provisions of the EMC directive.

#### 2. Des iption of the dispenser.

Depending on the type and model the dispenser is built from the following parts.

- 1) Cabinet:
- a) closed, half open (type ORT-MS) or completely open (type OX-MS) construction,
- b) with or without heatingunit and operating-panel,
- c) with or without push-bar.
- 2) Stacking uni
- a) with or without flange,
- b) with frame-guidance or extra adjustable guiding-rods,
- c) with spring-ring.
- arrier-frame:

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- a) rollers.
- b) as a frame with or without platform,
- c) with spring-ring.
- 4) Springs, between acking-unit and platform.
- 5) Electrical heating-installatio
- a) spiralc
- b) switch,
- c) thermo
- d) heating element with or without fan.

On the front-side of the cabinet an identification-label is placed. On this identification-label you will find the model and type.

The appendix A gives a listing with:

- dimensions of the crockery,
- dimensions of the dispenser,
- power supply of the heating.

The description tells you whether your model is equiped with platform, fix or adjustable guiding-rods and/or heating. Whether the instructions further on are applicable for you, depends on the model you own.

Just aside the identification-label you will find a second label with a serialnumber on it.

Write down the type(s) and serialnumber(s) on page 1 (registration file).

#### 3. Operating of the dispense

When the upward spring-strength has been adjusted correctly to the weight of the crockery, the upper crockerypart of the stack is at the same level as the end of the guiding-rods. When the upper crockerypart is taken away, the next crockerypart replaces it. The total number of springs determines the total spring-strength of the disipenser. Too much springs and the crockeryparts are above the guiding-rods and the cover does not fit properly. Not enough springs, the upper crockerypart cannot or is difficult to be reached.

When you have a unit with heating, you have the possibility to warm the crockery.

The heating-element warms the air in the dispenser; this air gives its warmth to the crockery. A cover locks the dispenser, so that less warm air (energy) is wasted. We advise you to use a cover. The brakes on the 2 castors are operated with the feet and block turning and swivelling of the castors.

#### 4. Checking at arriva

During production and preparation for transport every dispenser is checked on:

- 1) damages,
- 2) complete deliver
- 3) operating of the stacking-mechanis
- 4) operating of the switch, the themostat and the heating-element and the electrical safety.

Check directly upon arrival of the goods:

- 1) is the package undamaged,
- 2) is the dispenser undamaged,
- 3) is the dispenser mplete; have all accessories been provided.

#### REPORT DAMAGES ON THE DISPENSER WITHIN 8 DAYS TO YOUR SUPPLIER

#### 5. Installation of the dispense

- 1) Remove the packag
- 2) Remove the plastic foliage om the cabinet and the platform.
- 3) Adjust the spring.stren h with a stack of crockery:
- a) remove one or more of the following parts:
- removable platform form the carrier-frame,
- removable panel (only OX-MS),

- partly detachable inside-panel (only types with stacking unit with all 4 sides closed and without flange), by unlocking 2 panels on the upper-side,
- removable stacking-unit (only types with stacking-unit with all 4 sides closed and with flange), by taking out the stacking-unit itself out of the cabinet, the springs can now be reached.
- b) loosen springs (less spring-strength) or fasten springs (more spring-strength) until the upper part of the stack is at the same level as the end of the guiding-rods.
- All delivered springs are fastened during production of the dispenser.

DO NOT PUSH THE PLATFORM DOWNWARD DURING ADJUSTING OF THE SPRING STRENGTH: THERE SHOULD BE NO TENSION ON THE SPRINGS

LOOSEN THE SPRING AT THE UNDERSIDE, THERE WHERE THE SPRINGS ARE FASTENED TO THE SPRING-RING OF THE PLATFORM

DIVIDE THE SPRING-STRENGTH EQUALLY ON THE SPRING-RING; NOT ALL SPRINGS ON ONE SIDE AND ON THE OTHER SIDE NO SPRINGS

4) Place the adjustable guidin rods in the right position:

MANUAL MOBILE UNITS

- a) lift up the guiding-rod and turn it in the required position,
- b) lower the guiding-rod and search for the nearest fixation-hole.

BE CERTAIN THAT THERE IS ENOUGH SPACE FOR THE CROCKERY BETWEEN THE GUIDING-RODS SO THAT THE CROCKERY WILL NOT BE TIGHTENED

5) Plug the cable into the power supply.

SWITCH TO "0" BEFORE YOU PLUG INTO THE SOCKET

ONLY USE A PLUG-SOCKET WITH EARTH CONNECTION

HANG THE CABLE AT THE PANELSIDE IN THE BRACKET, WHEN TAKING THE PLUG FROM THE POWER-SUPPLY

#### 6. Using the dispens .

- 1) Use the brakes of the castors wh filling and emptying and during heating of the crockery.
- 2) Do not use the brake when moving the dispenser.

BE CAREFUL WITH DOORSTEPS; DO NOT DRIVE TOO FAST NEITHER WITH LOADED OR UNLOADED DISPENSER

BE CAREFUL WITH SLOPING FLOORS; LET SOMEONE HELP YOU

3) Place the crockery only with smal stacks at a time in the dispenser.

#### AVOID DAMAGE TO CROCKERY AND/OR INJURIES TO PERSONS

4) Swich to "1"; th pilot-light will light.

Turn the thermostatknob to the desired temperature; the heating element gets warm.

The level of adjustment, the space of time, the crockery and the use or no use of a cover can influence the temperature of the crockery.

Find for your situation the best temperature-level and space of time.

Start heating up about 2-3 hours before issue and meanwhile use a cover on the

dispenser. Use the cover - also during issue - as much as possible against loss of energy. Place the cover on the dispenser if it's not in use; the dispenser and the plates will stay clean and dustfree.

A cover is not standard on the dispenser, but can be obtained, - when ordered - as an accessory. A cover can be ordered seperatly; inform at your supplier.

THE HEATING-ELEMENT AUTOMATICALLY SWITCHES OFF AT A TEMPERATURE OF MAX  $\pm$  120 °C AT THE TOP OF THE UNIT AT THE BOTTOM, JUST ABOVE THE ELEMENT THE TEMPERATURE WILL BE ABOUT  $\pm$  10 TO 20 °C HIGHER

AFTER A FEW HOURS OF HEATING THE TOPSIDE OF THE CABINET GETS VERY WARM: USE A PUSH-BAR OR SPECIAL GLOVES WHEN MOVING THE UNIT

#### 7. Cleaning of the dispenser.

- 1) Remove dust/dirt from the cover and the cabinet of the dispenser daily with a moist cloth.
- 2) Remove dust/dirt in the dispenser a least twice a year:
- a) Switch to "0".
- b) Take the plug form the power-supply.
- c) Remove the crockery and the platform from the dispenser.
- d) Dust or vacuumclean the inside.
- e) Clean the inside with a moist cloth.

DO NOT USE A WET, BUT A MOIST CLOTH OR SPONGE WHILE CLEANING THE DISPENSER WITH HEATING

DO NOT USE A HIGH-PRESSURE SQUIRT WHILE CLEANING THE DISPENSER WITH HEATING

DO NOT USE AGGRESSIVE DETERGENTS WHILE CLEANING THE PC COVERS (IN A DISHWASHING-MACHINE)

Put the plug into the power-supply, the platform and the crockery back into the dispenser.

#### 8. Maintenance of the dispenser.

In appendix B all the parts are listed.

- 1) Check the right spring-strength at least twice a year.
- As the result of permanent stretching and under influence of constant heating the spring-strength is reduced.
- Hang in all available, but not yet used, springs in or replace (all) springs by new ones:
- a) Switch to "0".
- b) Take the plug from the power-supply.
- c) Remove the crockery and the platform from the dispenser.
- d) Hang not yet used springs onto the spring-ring of the platform or repace the old springs by new ones.

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DO NOT PUSH THE PLATFORM DOWNWARD WHILE ADJUSTING THE SPRING- STRENGTH; THERE SHOULD BE NO TENSION ON THE SPRINGS

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DIVIDE THE SPRING-STRENGTH EQUALLY ON THE SPRING-RING; NOT ALL SPRINGS ON ONE SIDE AND ON THE OTHER SIDE NO SPRINGS

2) Check all fastening bolts and nuts of the castors twice a year.

Check if all castors roll and swivel well, if not:

- a) take the wheel out of the fork.
- b) clean the wheel and pivot-joint with a moist cloth with cleaner.

REPLACE WORN WHEELS IN TIME AND LOST NUTS DIRECTLY

DO FIX THE BOLTS OF THE CASTORPLATE IN A CROSS AND NOT TOO TIGHT (FIXED IS OK)

USE A SAFETY-NUT OR A NUT IN COMBINATION WITH A RING

- 3) Check the the condition of the electrical parts 1 or 2 times a year.
- a) Switch to "0".
- b) Take the plug form the power-supply.
- c) Remove the heating-drawer and the operating-panel.

All electrical parts are now visible and can be reached.

MAINTENANCE AND REPARATION SHOULD ONLY BE DONE BY - IN THE FIELD OF ELECTRICITY - QUALIFIED PERSONNEL

ONLY USE ORIGINAL PARTS OR PARTS WITH EXACT THE SAME SPECIFICATIONS, OR PARTS WITH A CERTIFICATION

CHECK THE FAN SEVERAL TIMES A YEAR, THE FAN SUCKS IN EXTRA DIRT AND DUST, THIS CAUSES REDUCED FUNCTIONING OR DAMAGE TO THE FAN

- 4) Replace parts in bad condition or defective parts:
- a) Read the apendixes A en B of this manual or inform at your supplier or servicedesk.
- b) Place all new parts in the same way as the old parts.
- c) Place the heating-drawer and the operating-panel back into the dispenser.
- 5) Put the plug into the power-supply, the platform and the crockery into the dispenser.

TYPE	CROCKERY DIMENSIONS	DIMENSIONS DISPENSER IN MM	HEATING-
ITPE	IN MM MINIMUM MAXIMUM	L[1] x B[2] x H[3 ]	INSTALLATION FOR H
N-MS/TH	N-MS/THNU-MS FOR ROUND PLA	ATES IN 1, 2, STACKING-UNITS, WITH 4 FIXED GUIDING-RODS	
210	160 210	1T(H)N-MS: 470 x 435 x 900	230 V 600 W
240	190 240	2T(H)N-MS: 870 x 435 x 900	230 V 1600 W
280	230 280		
310	260 310	2THNU-MS: 850 x 520 x 900	230 V 1750 W
	/IS/THU-MS FOR ROUND PLATES DJUSTABLE GUIDING-RODS	IN 1, 2 OR 4 STACKING-UNITS WITH FLANGE,	
245	140 220	1T(H)N-MS: 470 x 435 x 900	230 V 600 W
280	185 255	2T(H)N-MS: 870 x 435 x 900	230 V 1600 W
310	210 285	2THNU-MS: 850 x 520 x 900	230 V 1750 W
	X-MS/THXU-MS FOR ROUND, RE -UNITS WITH 4 CORNER-GUIDES	CTANGULAR OR OVAL PLATES AND DISHES IN 1, 2	
ound rect	angular and oval	1 T(H)X-MS: 470 x 435 x 900	230 V 600 W
180 - 295		2 T(H)X-MS: 470 x 435 x 900	230 V 1600 W
	- 295 x 295 mm	2 101/7 INC. 575 A 755 A 550	200
		LAR PLATES AND DISHES IN 1, 2 OPEN STACKING-UNITS TACKS CROCKERY IN 1, 2 CLOSED STACKING-UNITS	
	adapted to plate	1 T(H)S-MS: 470 x 435 x 900	230 V 600 W
or dish	R 1 STACK OF TRAYS, WITH 4 F	2 T(H)S-MS: 870 x 435 x 900	230 V 1600 W
DE-IVIS FOR	1 1 3 IACK OF TRATS, WITH 4 P	IXED CONNEN-GOIDES	
4	530 x 325	650 x 450 x 900	
3	530 x 370		
:	480 x 370		
3	[4]	[4]	
2S-MS FOR	R 2 STACKS OF TRAYS IN 2 STA	CKING-UNITS, WITH 4 FIXED CORNER-GUIDES	
Α .	370 x 530	650 x 450 x 900	
3	370 x 480	030 X 430 X 300	
Ċ	325 x 530	745 x 645 x 900	
S	[4]	[4]	
S-MS FOR	1 STACK OF BASKETS FOR CRO	CKERY, WITH 4 FIXED CORNER-GUIDES	
Α .	650 x 530	745 x 645 x 900	
3	500 x 500		
)	580 x 580		
3	[4]	[4]	
H-MS/SH	U-MS FOR 1 STACK OF BASKETS	S FOR CROCKERY, WITH 4 FIXED CORNER-GUIDES	
	650 x 530	835 x 645 x 900	SH-MS:230 V 1600 W
3	500 x 500	670 x 645 x 900	SHU-MS: 230 V 1750 W
,	580 x 580	835 x 645 x 900	0110-1010. 200 V 1700 W
		R 1 STACK OF BASKETS FOR CROCKERY, WITH 1	
4	530 x 740	740 x 635 x 910/870	
3	530 x 650		
;	370 x 480	740 x 510 x 910/870	
)	370 x 530		
	500 x 500		
:	325 x 530		
ORT-MS FO	[4] OR 1 OR 2 STACKS OF TRAYS O	[4] R 1 STACK OF BASKETS FOR CROCKERY, WITH 4	
IXED COF	RNER-GUIDES (HALF OPEN DISPE	NSER WITH EMPTY-BASKET-BOTTOM	
A	650 x 530	750 x 600 x 900	
3	500 x 500	600 x 570 x 900	
	370 x 530	470 x 605 x 900	
n .	370 × 480	470 x 520 x 900	

EXPL		

SAUCER BASKETS 370 x 480

325 x 530

500 x 500

- [1] LENGHT WITHOUT BUMPERS (WITH=LENGTH+50 MM
- [2] WIDHT WITHOUT BUMPERS (WITH = WIDHT + 50 MM)

2TOS-MS/2THOUS-MS FOR 2 STACKS OF SAUCERS IN 2 STACKING-UNITS, WITH 3 FIXED GUIDES AND 1 STACK OF BASKETS FOR CUPS, WITH 4 FIXED CORNER-GUIDES

- [3] HEIGHT TOPCOVER WITHOUT EXTENDED GUIDES OR PUSH BAR
- [4] DIMENSIONS STACKING UNIT ADAPTED TO CROCKERY AND DISPENSER WHEN NECCEARY

470 x 520 x 900

425 x 605 x 900

230 V 1750

2TOS-MS: 865 x 600 x 900 THOUS-MS: 925 x 645 x 900

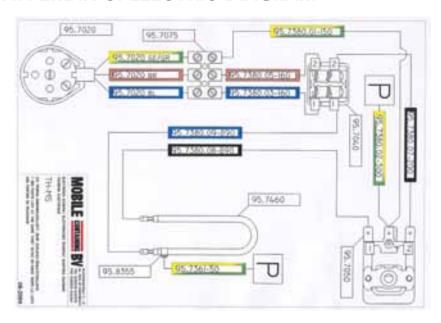
# **MANUAL MOBILE UNITS**

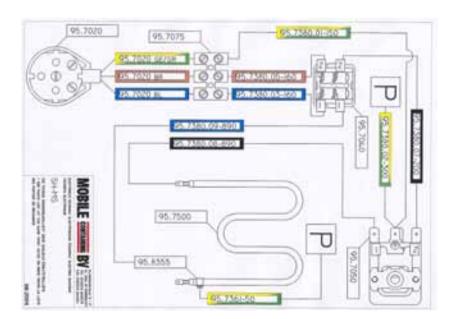
NDIX B: PARTSLIST

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Art.code	Descriptionused in	
ALL TYPES		
95.7602	STST PULL-SPRING 8 g/mm	T(H)-MS
95.7610	STST PULL-SPRING 6 g/mm	ALL TYPES EXCEPT T(H)-MS
95.7630	STST PULL-SPRING 15 g/mm	OX-MS
95.7640	STST PUSH SPRING FOR GUIDING ROD	T(H)-MS
95.7650	STST PUSH SPRING FOR GUIDING ROD	T(H)X-MS
95.7700	ADJUSTABLE GUIDING ROD	T(H)-MS
95.7720	ADJUSTABLE GUIDING ROD	T(H)X-MS
95.7740	SCREWBOLT M5 X 10 FOR GUIDING ROD	T(H)-MS
95.8000	PLASTIC PUSHCORNER	ALL TYPES
95.8050	SWIVELWHEEL WITHOUT BRAKE (5")	ALL TYPES
95.8060	SWIVELWHEEL WITH BRAKE (5")	ALL TYPES
95.8150	PTFE BEARING FOR CARRIER-FRAME	T(H)X-MS/T(H)S-MS/S(H)-MS/ORT-MS/2T(H)OS-MS
95.8160	BRASS AXLE FOR CARRIER-FRAME	T(H)X-MS/T(H)S-MS/S(H)-MS/ORT-MS/2T(H)OS-MS
95.8170	BLOCK FOR PUSHBAR WITH M10	ALL TYPES (WITH PUSBAR)
95.8200	KNOB FOR SMAL STST COVER	ALL TYPES (WITH COVER)
95.8210	GRIP FOR BIG STST COVER	ALL TYPES (WITH COVER)
95.8260	BEARING FOR CARRIER-FRAME	OX-MS
95.8270	PSU GUIDING-WHEEL FOR CARRIER-FRAME	OX-MS
95.8310	BRASS AXLE FOR CARRIER-FRAME	T(H)-MS/T(H)N-MS
95.8320	PTFE BEARING FOR CARRIER-FRAME	T(H)-MS/T(H)N-MS
95.8343	PLASTIC GUIDE FOR DFE	T(H)N-MS
95.8050	SKIFFY FOR PUSHCORNER 95.8000	T(H)N-MS/ALL TYPES
95.8051	SKIFFY FOR GUIDE FOR DFE 95.8343	T(H)N-MS
	H HEATING	
95.7000	OPERATING PANEL COMPLETE	ALL TYPES
95.7010	OPERATING PANEL WITHOUT PARTS	ALL TYPES
95.7014	HINGE FOR OPERATING PANEL	ALL TYPES
95.7015	GUIDINGSTRIP FOR CONTACT WIRES	ALL TYPES
95.7016	TIEWRAP FOR CONTACT WIRES	ALL TYPES
95.7020	SPIRALCABLE WITH PLUG 3 x 1mm2	ALL TYPES (CONT. VERSION)
95.7023	SPIRALCABLE 3 X 1mm2	ALL TYPES (UK VERSION)
95.7032	PULLDISCHARGE FOR SPIRALCABLE	ALL TYPES
95.7040	SWITCH/PILOTLIGHT WHITE	ALL TYPES
95.7042	PLASTIC CAP FOR SWITCH/PILOTLIGHT	ALL TYPES
95.7050	THERMOSTAT 30 - 120 °C	ALL TYPES
95.7055	TEMPERATURE-BLOCK UP SET	ALL TYPES (OPTIONAL)
95.7060	THERMOSTATKNOB	ALL TYPES
95.7075	CONNECTING BLOCK 3-WAY	ALL TYPES
95.7085	PLUG FOR SPIRALCABLE UK	ALL TYPES (UK VERSION)
95.7214	BUSHING	FAN HEATING DRAWER
95.7225	FAN	FAN HEATED TYPES
95.7226	FAN HEATING ELEMENT 1750 W	FAN HEATED TYPES
95.7364	ELECT. WIRE BLUE 150 MM	FAN HEATED TYPES
95.7368 95.7380.0	ELECT. WIRE BLACK 170 MM  1 ELECT. WIRE YELLOW/GREEN L = 150 MM	FAN HEATED TYPES ALL TYPES
95.7380.0		ALL TYPES ALL TYPES
95.7380.0		ALL TYPES ALL TYPES
95.7380.0		ALL TYPES ALL TYPES
95.7380.0		ALL TYPES ALL TYPES
95.7 38 U. 95.7 38 U.		ALL TYPES ALL TYPES
95.7 38 0.0		FAN HEATED TYPES
95.74 20	HEATING ELEMENT 230 V - 600 W	1TH-MS/1THN-MS/1THS-MS/1THX-MS
95.74 60	HEATING ELEMENT 230 V - 1600 W	2TH-MS/2THN-MS/2THS-MS/2THX-MS
95.7500	HEATING ELEMENT 230 V - 1000 W	SH-MS
30.7000		311-WO

# APPENDIX C: ELECTRIC DIAGRAM





## MANUAL MOBILE UNITS

#### **APPENDIX D: DETATCH SPRINGS** 10

Verklaring tekening/Assembly drawing/Zeichenerklärung/Explication du dessin/Explicanión al

esquema
A=vooraanzicht/front view/Vorderansicht/vue d'en face/vista de frente

B=zijaanzicht/side view/Seitenansicht/vue d'en profil/vista de perfil C=B, losmaken veer/detatch spring//Lösen der Federn/décrochage du ressort/desenganche del muelle

#### Onderdelenlijst/List of parts/Unterteilungs-Liste/Liste des parties de rechange/Lista de

recambios
1=verenbeugel boven/upper spring ring/Federring oben/anneau à ressorts supérieur/aro

2=gat in verenbeugel/hole in spring ring/Loch in Federring/trou à l'anneau/agujero en aro portamuelles

3=veer/spring/Feder/ressort/muelle

superior muelle

4=open oog veer/spring hook/offenes Auge der Feder/oeil ouvert du ressort/gancho del muelle 5=verenbeugel onder/lower spring ring/Federring unten/anneau à ressorts inférieur/aro inferior

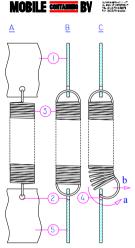
# Beschrijving losmaken veer/Instruction to detatch spring/Beschreibung Lösen der\_ Fedem/Instrucciones para desencanchar el muelle 1-alle servies verwijderen en platform/remove all crockery and platform/alle Geschirr und

Plattform wegnehmen/eloignez toute la vaisselle et la plate forme/quitar toda vajilla y 2=veeroog onderaan draaien (a) en uit verenbeugel onderzijde trekken (b)/open lower spring

hook (a) and detatch from lower spring ring (b)/Auge der Feder unten drehen (a) und ziehen aus Federring unten (b)/tournez l'oeil du ressort inférieur (a) et tirez-le de l'anneau à ressorts inférieur (b)/abrir el gancho inferior del muelle (a) y desenganchar del aro inferior (b) 3=veer laten hangen in verenbeugel boven/leave spring attatched to upper spring ring only/Federn an Federring oben h\u00e4ngen lassen/laissez pendre le ressort dans l'anneau \u00e0 ressort supérieur/dejar el muelle enganchado sólo al aro superior

#### Let op/Attention/Achtung/Attention/Atención

Ingehaakte veren gelijkmatig verdelen over verenbeugel/Ensure connected springs are evenly distributed around the spring ring/Federn gleichmäßig verteilen über Federring/Distribuez les ressorts en fonction uniformément sur l'anneau/Asegurarse que de los muelles que queden



03/2000

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