

Service manual

WW - 33

hydraulic press

(3 or 4 flasks)



Figure 1: WW – 33 (1 – 3 caps)

WASSERMANN
DENTAL-MASCHINEN

Dear customer,

Thank you for choosing a product from the Wassermann range. Wassermann dental equipment incorporates the highest standards of quality and the latest technology.

In order to enjoy maximum performance and years of trouble-free operation, please read this service manual carefully before you connect this device and start work, and operate the device according to the recommended guidelines. The operation safety and the functionality of this device can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this service manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this device.



Make sure that anyone using this device has read and understood this service manual.

Keep this service manual in a safe place where it can be referred to as required at any time.

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1 Features

The **WW-33** hydraulic press, with continuous pressure up to 6 tonnes, presses caps individually and appropriately for the material used. After ending one pressing, it is immediately ready for further use as its solid plastic piston returns automatically once the valve has been opened. A quality pressure gauge which shows the pressure achieved with great accuracy, is recessed into the housing and is thus protected from dirt. The **WW-33**'s oxidation-free piston (plastic), tensile steel construction (no risk of breaking), and sturdy plastic-coated housing all contribute to the unit's long service life. As the distance between supports is 152 mm, the press is also suitable for larger caps (IVOCAP) and stirrup pieces.

SPECIAL DESIGN:

The **WW-33** hydraulic press is also available with longer supports for 4 caps.

2 For your safety

Your service manual

Configuring and operating this equipment requires precise knowledge and observance of the instructions in this service manual. The equipment is designed only for its intended application.

Very important features are indicated as follows in this manual:



Warning!

This is a warning of risk situations and dangers. Failure to observe this warning could be life-threatening. These warnings must be observed.



Information!

This symbol draws your attention to specific features, which should be noted.

1.1 Safety guidelines



- none

Responsibility for operation and damage

The responsibility for operating the unit lies exclusively with the owner or user if the said unit is incorrectly serviced, maintained or altered by persons not employed by an accredited dealer or if the unit is used in a manner contrary to its specified purpose.

The unit must be maintained and operated in accordance with this service manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the ***non-observance*** of these instructions.

Guarantee and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.



Ensure that this service manual is accessible at all times and has been read and understood.



3 Applications

With a continuous working pressure of up to 6 tonnes, the **WW-33** hydraulic press is used to press caps individually and in accordance with the material used.

Only use the device for this type of application.

4 Before you start

4.1 Unpacking / Transport

- Open the cartons, remove the packing materials, and carefully lift out the instrument and accessories. Check that the accessories are correct (see 8.4).
- When transporting the unit, use appropriate packing materials to avoid accidental damage.

4.2 Set-up/Storage

i The press must be at room temperature *before you use it*.

- Set the unit up on a flat surface.
 - Always ensure that the work area is sufficiently large (take the unit's dimensions into account). **Do not set it up out of doors.**
 - If the unit is to be stored for an extended period, protect it from moisture and dust.
 - **Before** you start the press:
 1. Take the pump lever out of the union piece.
 2. Undo the bolt and remove the safety packing. Insert the lever and secure it with the bolt.
 3. Screw the ball on the end of the lever.
-

5 Start-up

- Centre the cap on the piston to guarantee even pressure distribution.
- Bring down the piston on the cap.

i

The usual pressure is between 2.5 and 5 tonnes. This is shown in the green area on the pressure gauge. To avoid damage to the cap and the press, do not pump beyond the zone on the pressure gauge.

6 Operation

i

All instructions for using the unit, whether verbal, written or in the form of practical guidance, are based on individual experience and experimentation and can only be regarded as guidelines.

1. Prepare cap as per Point 5.
 2. Turn the pressure valve (black knob on housing) to CLOSED.
 3. Now increase pressure with the lever, staying within the permissible zone on the pressure gauge.
 4. If necessary, increase the pressure to the maximum.
 5. Once the pressure remains steady, it can be released (valve opened).
 6. Raise the piston and remove the cap.
-

i The gauge will not be accurate while the pressure is being distributed through the plastic. *Full* pressure can only be achieved by pumping on the lever *several* times with appropriate pauses in between. Once the cap is fully enclosed, the pressure remains steady.

i The return spring on the piston takes it back *automatically* to its zero position. It has a stroke of about 12 mm. As soon as it reaches this level, it is limited *automatically*. No more pressure is possible.

i The oil level should be monitored on the gauge when the piston is *down*. If necessary, add hydraulic oil. A black vent screw is provided for this purpose.

To remove (oil filler nozzle). This is located behind the left-hand support at the top of the housing. No damage can result from overfilling as the surplus oil merely flows out into the nozzle.

Note: Use only SHELL TELLUS 32 hydraulic oil.

7 Troubleshooting / Correcting errors

Fault	Likely cause	Likely solution
Little or no pressure builds	Oil level below minimum and air bubble has entered system during filling	Vent press as explained below
Pressure drops to zero despite enclosed cap or piston rises under pressure	Dirty pressure valve	Pump strongly with newly filled oil (recommended oil)



GUIDELINES FOR VENTING:

1. Turn press on right side and pump.
2. **Nothing?** – then remove piston as described below and fill with oil up to top edge of cylinder:
 - Undo set screw in U-piece
 - Pull lever forwards
 - Pull piston up and out of cylinder
 - Fill with oil (recommended oil)
 - Re-install in reverse order, watching out for two points:
 - a) Do not tip the piston
 - b) Do not damage the square ring



If the above recommendations do not solve the problem, contact your dental depot or our Service department.

8 Maintenance

8.1 Cleaning

The unit should be cleaned at regular intervals to ensure trouble-free operation. Use normal cleaning products (sponge, soft cloth, mild detergent), but no chemical additives.

The piston track should be cleaned *daily* with a clean linen cloth and then lightly lubricated with the *recommended* hydraulic oil.

The **model plate** must always be legible and should not be removed.

8.2 Maintenance

Your Wassermann hydraulic press is maintenance-free. Just make sure that it is kept clean.

8.3 Warranty

The warranty period for our instruments is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our Service department.

Your hydraulic press should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorized persons.

8.4 Spare parts and accessories

Spare parts	
Item number	Description
125011	Lever
126023	Selector switch, compl.
291003	Round ball DIN 319 - D25 x M6 black
381001	Square ring, 6 x 1.5 for piston
392004	Rubber foot D20 - H5, black
629004	Hydraulic oil in 100 ml bottle
629005	Hydraulic oil in 500 ml bottle

Accessories	
Item number	Description
126999	Steel press for 1 - 3 caps (not standard)
129990	Universal cap (not standard)
129992	Stainless steel clamp for 3 caps (not standard)
129993	Stainless steel clamp for 2 caps (not standard)
129994	Stainless steel clamp for 1 caps not standard)
129995	Universal cap clamp for 3 caps (not standard)
129996	Universal cap clamp for 2 caps not standard)
129997	Universal cap clamp for 1 cap not standard)

8.5 Repairs

Servicing or repairs to the unit must only be carried out by trained technicians. Only original spares are to be used. Responsibility for the product is voided if altered by unauthorized persons or if inappropriate components are installed.

9 Technical data

126998 hydraulic press WW-33 for 2 - 4 caps (SPECIAL DESIGN)

Working pressure:	up to 6 tonnes
Oil:	SHELL TELLUS 32 hydraulic oil
Piston:	Ø 95 mm (working surface)
Working range:	Width 152 mm (distance between supports) Height - min. 102 mm Height - max. 272 mm (distance from piston to plate)
Overall dimensions:	Width 200 mm Depth 158 mm Depth with lever 295 mm
Weight:	16 kg

126999 hydraulic press WW-33 for 1 - 3 caps

Working pressure:	up to 6 tonnes
Oil:	SHELL TELLUS 32 hydraulic oil
Piston:	Ø 95 mm (working surface)
Working range:	Width 152 mm (distance between supports) Height - min. 42 mm Height - max. 212 mm (distance from piston to plate)
Overall dimensions:	Width 200 mm Depth 158 mm Depth with lever 295 mm
Weight:	14.7 kg

Noise emission ≤ 70 dB(A)



We reserve the right to make technical changes.

10 EC CONFORMITY CERTIFICATE

in accordance with 2006/42/EG (machinery guidelines)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15 - 17 D-21031 Hamburg	Product description:	Hydraulic press for dental applications
Model:	WW-33 for 2 - 4 flasks (special design) WW-33 for 1 - 3 flasks	Item no.126998 Item no.126999	
Applicable standards:	DIN EN ISO 12100		

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européene. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los limites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 07.03.13

Company stamp:



Signature : _____
Wilfried Wassermann
(Managing Director)

Notes:





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