

### Instructions to Service Personnel:

Please make two extra copies of this service record. The original will be kept in the doctor's office, or in the clinic or hospital. The first copy will remain with the person who performs the service. Please send the second copy to MELAG, the manufacturer.

The Euroklav<sup>®</sup> 23/29-S serial no.: .....

Year when the model was made: .....

Reading on the total-cycle counter: .....

Of which, the number of successful cycles: .....

Name of the person performing the service: .....

Date of service: ..... Time of service: (started) ..... (finished) .....

Serviced by (company, depot, or specialized MELAG dealer):

.....  
.....  
.....

Name and address of doctor's office, clinic, or hospital:

.....  
(Stamp of the equipment user)

### The above-stated person has performed the service work according to the following service checklist:

The person performing the service will make a check in the box to show that he has performed the step of work  :

#### 1. Static check:

1.1 Check to make sure the autoclave has been set up and positioned properly to slope to the rear. Starting from a level position, the front feet of the autoclave must be screwed out **five (5) turns** for the Euroklav<sup>®</sup>23-S, and screwed out **three (3) turns** for the Euroklav<sup>®</sup>29-S. The autoclave must slope to the rear to ensure that the residual water and condensate will properly flow out toward the rear.

OK

Corrected

- 1.2 Check the sterilization chamber (pressure chamber), the chamber filter, the water storage tank, and the tray racks to make sure that they are clean and free of debris and drag-in rust. Important: The customer / user must clean the sterilization chamber and the water storage tank if they are dirty. **This cleaning is not part of the service.**
- They were clean       They had to be cleaned  
 They were cleaned
- 1.3 Check the door gasket (rubber seal) to make sure that it is not damaged. Clean if required with a mild commercial liquid cleaning agent (pH = 5 ... 8; the agent must NOT contain vinegar), or with spirits (alcohol).
- It was cleaned       I cleaned it  
 I exchanged it
- 1.4 Check the locking bolts and the screws at the bolts on the door lock for wear or defects. Lubricate with MELAG plain bearing grease, MELAG article no. 24355.
- Greased       Exchanged
- 1.5 Check the door hinge for correct play.
- Slight play (OK)       Exchanged because of excessive play
- 1.6 Check to make sure the retaining rings on the bolts of the door hinges are there.
- Rings were OK       I replaced the rings
- 1.7 Check and adjust the door contact. There must be about 3 mm clearance between the door lock and the door lever.
- OK       Corrected
- 1.8 Remove the cover plate over the tubular heating element in the sterilization chamber. Clean the cover plate. Clean the sterilization chamber and the tubular heating element. Replace the seal (gasket) on the cover plate (MELAG article no. 20090).
- Done

1.9 Check the 2 capillary-tube controllers to make sure they are properly seated. They are properly installed when their strain-relief elements (5 mm on the end) protrude (stick out) out of the guide tubes. **Important:** Both of the two capillary-tube controllers must stick out the same distance.

Done

1.10 Exchange the sterile filter (MELAG article no. 20160).

Done

1.11 Remove the strainer for the pressure-release filter (MELAG article no. 35110). Clean the strainer and exchange it if necessary.

Cleaned

Exchanged

1.12 Check the electrical cable connections to make sure they are secure. Especially check all the blade terminals (flat plugs) which conduct power:

Output from tubular heating element (A1) on the power circuit board

Power switch

Capillary-tube controller (the overheating protection for the tubular heating element)

Tighten the screw connections for all rectifier plugs

1.13 Check all hoses for damage, and for correct position. Make sure that all hose screw connections are tight. Tighten to finger tightness, then use an engineer's wrench to turn a maximum of one more half turn ( $\frac{1}{2}$ ).

OK

Tightened

### 2. Functional check

2.1 Check the performance of the pressure pump by measuring the time required until a pressure of 2 bar is reached. Carry out the test by using the diagnosis program: switch on A9 and A3 (located under the digital outputs). The maximum time required for reaching 2 bar should be:  $t_{\max} = 2 \text{ min} \dots 2 \text{ min } 30 \text{ sec}$ .

Measured time  
required to reach a  
pressure of 2 bar =  
..... min

Done

2.2 Start the Fast Program with objects loaded in the autoclave. You can stop the drying phase after 2 minutes to save time. Print out the test results and enclose the printout with this service report.

Done

2.2.1 Check the tightness of all connections under pressure during a trial run.

Done

2.2.2 Check to make sure that the drain hose for the one-way drain system is correctly installed. Carry out a trial run to make sure that the condensate is draining properly.

**Important:** The condensate must drain completely after each sub-atmospheric pulsing step (these are the air-removal steps), and at the end of the program.

Done

### 3 Reset the service meter

Done

The service was successfully performed:

It was not possible to finish the service because the following problems occurred:

.....  
.....  
.....

Other remarks:

.....  
.....  
.....

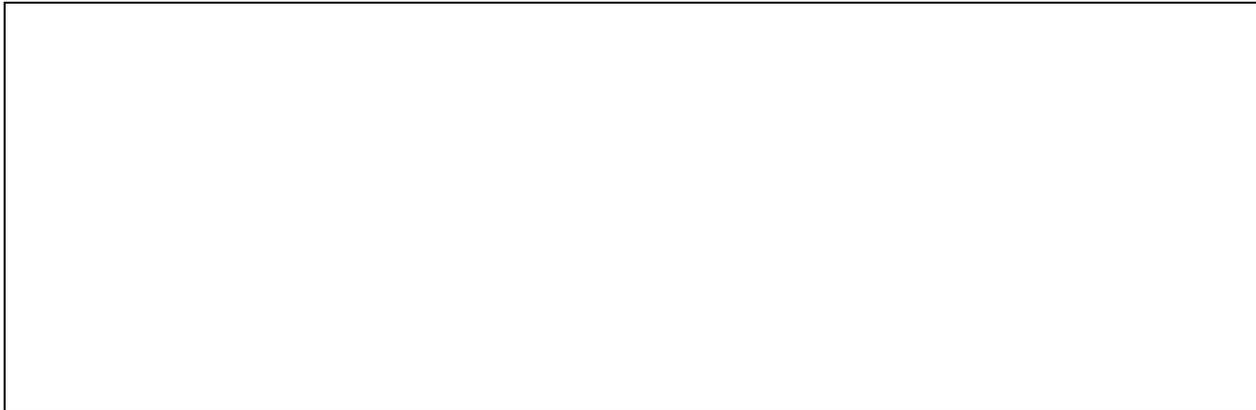
The service was conducted in accordance with the entries made above.

.....  
Stamp and signature from the doctor's office or clinic

.....  
Signature of the person performing the service

**Test-report printouts:**

Fast program:

A large, empty rectangular box with a thin black border, intended for pasting or printing test report data.

### **IMPORTANT: This page contains company information for the service technicians. Do not give it to the customer!**

The service meter must be checked and reset even when the autoclave is being put into operation for the first time. The service meter will be running even if the autoclave has never been used. This is because the meter will begin to run at the date of production which is stored in its memory. If the autoclave has been standing unused in its room of use, or in a storage room, for some weeks or months, this time will also be counted by the service meter. The "Two-year service interval" will then run out sooner than the actual time that the autoclave is being used (if only a small number of sterilization cycles has been run). The customer will then see the report "Please conduct service" earlier than actually necessary. For this reason: Always reset the service meter when you set the autoclave up for the first time, and when you service it later.

### **How to reset the service meter:**

**Follow the steps given below:**

1. Switch off the power to the autoclave.
2. Press the buttons **+** and **-** at the same time, and switch on the power while holding them down. The following will appear in the display:  
"MELAG Diagnosis analog inputs".
3. Press the button **+** again repeatedly, until the following appears in the display:  
"MELAG Diagnosis Maintenance Data".
4. Press the button "Program" once. The following will appear in the display:  
"Service: ....." "Run cycles....."
5. Press the button "Program" again. The following will appear in the display:  
" Maintenance Data Update?"
6. Press the button "Program" again to confirm and update the maintenance data.
7. Exit from the diagnosis program by pressing the START/STOP button twice (2 x).