

## LASERING A RETENTION PART M2/M3

The laser technique was developed to make a connection between attachments and removable partial denture made of identical or similar materials. Carefully observe the following procedure to retain (laser) the retention part in its correct position in the prosthesis.

1. A distinction must be made between the elements to be connected:
  - titanium retention parts (grade 4) for cast titanium constructions: **694 AL** for **M3** attachments, **RE 0065** for **M2** attachments,
  - PALLAX retention parts **691 D (M3)** and **RA 0061 (M2)** (Au-Ag-Pd) for whitish precious metal alloys,
  - NOPRAX retention parts **693 DNX (M3)** (Ni-Cr) for non-precious alloys.
2. Strictly observe the safety instructions from the laser device manufacturer prior to processing the attachment parts. The working method is identical for all parts, only the laser values must be determined for each specific alloy or combination of alloys. Always make a test case first to determine all values (intensity, diameter, and depth).
3. After finishing the abutment retainers, screw a spring pin into the retention part with the **RE H 5** laboratory key:
  - for **M2** the **RE 0065** or **RA 0061** retention part with **RE 0031** spring pin,
  - for **M3** the **694 AL**, **691 D** or **693 DNX** retention part with **694 C** spring pin, or
  - for **M3** the **694 AL**, **691 D** or **693 DNX** retention part with **724 C** spring pin,
 or the corresponding working dummy.
4. Place the male assembly in the female with:
  - the **RE 0096** space maintainer for **RE 0031**,
  - the **694 B** space maintainer for **694 C**.
5. Prepare the working model for duplication.
6. **Do not apply any relief wax around the retention part.**
7. Make a refractory model and wax up a sleeve up to the upper edge of the replica of the retention part to be lasered.
8. Cast in the corresponding alloy.
9. Carefully finish without removing too much material from the area where the retention part must be lasered.
10. Check if all parts are clean.
11. Place the working model with the construction in the laser device and check the correct values for the alloy or combination of alloys (see point 2) and for the use of Argon gas.
12. Initially connect **each retention part in 4 places** (clockwise: 12-6-3-9) to avoid tension and bending.
13. Finish completely surrounding the laser connection. Avoid excessive heat in the area of the plastic or ceramic parts.
14. In case of a gap, use **CEKA SOL T1** (titanium), **CEKA SOL OR** (ORAX) or **CEKA SOL PA** (PALLAX) as a filling material.
15. Finish the laser joints.
16. Check if the spring pins snap in correctly (see INFO 059).
17. Secure the spring pins with **CEKA BOND** (see INFO 069).