

Repair and Servicing to Removable Partial Dentures Retained by Ceka Attachments

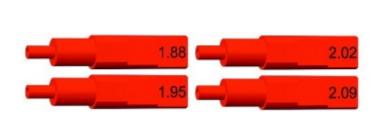
Determination of reline or rebase--Bilateral free end Prosthesis. Determine the need for a reline by placing fingers over the Ceka attachments and at the same time apply light pressure to the free-end saddle. If hinging is observed, a reline is necessary.

Alternative Technique: Place 23 gauge soft wax (approximately .5mm) on the tissue bearing side of the saddles. Place the 694B (M3) or RE0096 (M2) spacer over the male spring pin. Seat the removable partial denture. Apply finger pressure directly over the attachments. **Do NOT have the patient close and bite**. Remove the prosthesis and inspect the 23 gauge soft wax.

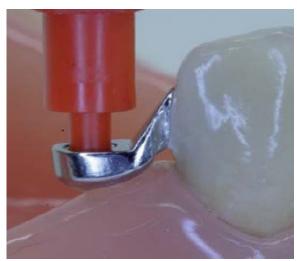
- o If there is evidence of the tissue contact with the soft wax, do not reline as the resorption is less than 0.5mm.
- o If there is no evidence of tissue contact with the soft wax, the resorption is greater than 0.5mm and a reline of the prosthesis should be completed.

Step One: Determining the correct size of Ceka Spring Pins

View the patients records, or check the actual spring pin in the prosthesis, to determine whether the case was fabricated using the M3 or M2 spring pin (*Ceka Spring Pin listing*).



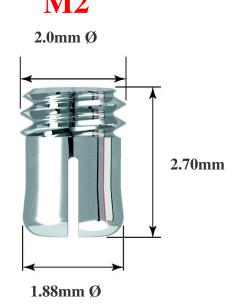
Ceka Sizer Kit



In the mouth

Use the Ceka Sizer to determine the correct male spring pin size/diameter that will provide maximum retention. Simply start with the 1.88 and insert each numbered sizer until the best size is determined.





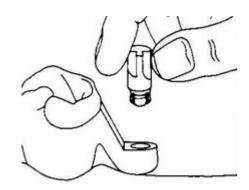
Removing/replacing a spring pin in the patients mouth:

- o ONLY USE THE "CROSS-HAIR" END OF THE A1 TOOL, OR USE THE REH5 TOOL
- Clean the spring pin with compressed air to allow for a perfect fit of the cross hairs of the tool between segments. This will prevent breaking, or torquing, of the segments when loosening or unthreading the pin.
- o Remove the spring pin by unthreading to the **LEFT**.

Replacing a removable spring pin with broken segments:

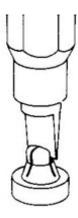
- Reduce the remaining parts of the segments to the same height by grinding.
- o Make a groove in the spring pin base with a saw-toothed burr
- Reduce the blade of a small screwdriver from hardened steel to the length and width of the groove.
 Unthread the remaining part of the spring pin strongly but carefully from the base ring or retention part by turning it to the LEFT.
- Check if the threads of the base ring, or retention part, were damaged **before** screwing in a new spring pin.
- o Secure the spring pin with Ceka Bond adhesive.

If the existing spring pin is not providing sufficient retention, it is quite possible the female attachment has wear, and an oversized spring pin is needed. The retention of the removable spring pin may be checked by threading into an impression piece (H14, RE H14) and seating it in the female.



In case of a **small** loss of retention, the head (bottom, or "cross hairs") of the spring pin may be slightly increased.

- Use only the activating blade of the A1 or A1L tool to increase retention on all Ceka spring pins.
- Press the activating blade of the A1 tool vertically, progressively and crosswise between the 4 segments of the spring pin (see picture).
- o Activate step-by-step and check if the spring pin has attained adequate retention
- Never make lateral or bending movements, as one or more spring pin segments might fracture



In case of larger losses of retention, use the <u>Ceka Sizer</u> to determine the appropriate spring pin for the existing female. Reasons for losses of retention are as follows:

- o Frequent activation of the spring pin will reduce the elasticity of the alloy
- o Divergent or non-parallel attachments will cause loss of retention and premature wear on the female
- o If retention is not achieved because the spring pin does not fully snap into the female, the retention zone of the spring pin must be lowered, e.g. by using a longer spring pin (RE0031L or 694CL).

Step Two: Impression Taking

When parts are listed in the following sections, we will be referring to the M3 series. The M2 series has the same product number, only with a "RE" prefix (*view Ceka components*).

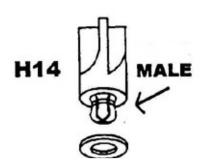


Create the male impression analogue by threading a spring pin, or (H1) working dummy pin, into the H14 using the A1 or REH5 tool. Using an incorrect tool (other than the A1 or H5) will spread the retention parts of the spring pin and not allow the male to seat in the female.

Standard Size Spring Pin

If the standard size spring pin provides adequate retention:

Thread either the 694C spring pin or H1 working dummy spring pin into the H14. The H1 has a built in space maintainer; if using the 694C spring pin, use the 694B space maintainer (shown).

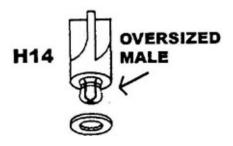


Oversized Spring Pin

If an oversized male spring pin is needed to provide adequate retention in the female:

Thread the appropriate oversized spring pin (195, 202, or 209) into the H14. When using an oversized spring pin, the 694B space maintainer must be used (shown).

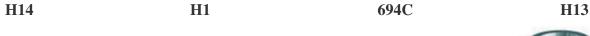






Place the male impression analogue (with spring pin and spacer, or H1) into the existing female in the mouth. Block out any undercuts beneath the Ceka female. Make sure the H14 is fully seated in the female. Take an impression. The H14 will be indexed in the impression (note the use of the spacer).

Step Three: Prepare the master model



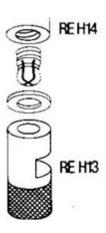




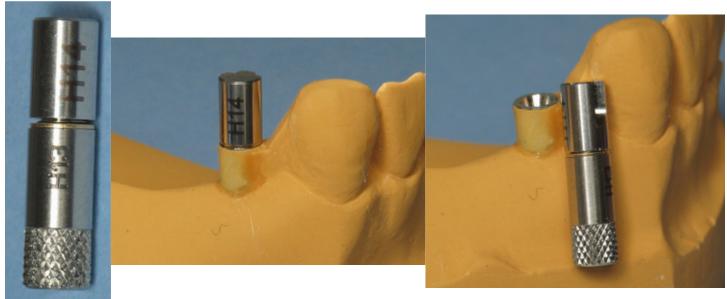


A. Technique for Oversized Spring Pins

Using either the <u>A1 or REH5 tools</u>, unthread the oversized (195, 202, or 209) spring pin from the H14. Thread the H1 working spring pin into the H14 (the H1 is a standard size spring pin, and thus will fit the H13 female analogue). Re-seat the H14 with the H1 dummy working spring pin in the impression.



B. Oversized and Standard Spring Pin cases



After re-seating the H14 analogue in the impression, snap the H13 female analogue over the standard size spring pin in the H14. If the 694C is being used instead of the H1, you must use the 694B space maintainer. Pour up the master model, separate from the impression. The H13 female analogue will be in the model, **exactly** where the females are in the mouth.

Step Four: Process the Retention Cap into the Prosthesis

The H1 (or the 694C and 694B) is unthreaded from the H14 in the impression. The H1 (or the 694C and 694B) is threaded into the *retention cap* of choice and is placed into the H13 on the master cast.



If a reline is being completed, process the reline over the retention cap to incorporate into the prosthesis.

If a repair is being completed, please view the <u>chairside procedure</u>.

Laboratory Procedure

Remove all impression material from the immediate area of the Ceka male spring pins with a small Bard Parker blade. Place the 694B space maintainers over the Ceka male spring pins and snap the Ceka H13 accessory over each male spring pin. The opening on the side of Ceka H13 acts as a check point for the exact location of the male spring pin in the Ceka H13 accessory and should be blocked out with soft wax to prevent penetration of the plaster into the segments of the male spring pins. Cast the working model.

For accurate relining, a reline jig or clamp is recommended. Mount the working model in the reline clamp using an occlusal plaster register or matrix. The teeth should be shallowly impressed (2mm to 3mm) in the plaster. The partial denture may now be removed to expose the tops of the Ceka H13 accessories which act as the Ceka females. These provide accurate horizontal and vertical location during processing. The impression material is now removed and sufficient acrylic resin is ground away from the base of the partial denture. The working model and substitute females now are painted with a separating medium. Replace the Ceka male spring pins with the correct Ceka dummy male spring pins--H1. Fill the metal sleeves in the framework surrounding the Ceka male spring pins with silicone rubber to prevent acrylic resin penetration.

The metal frame should be prevented from moving during processing by fixing the major connector to the working model with a small amount of stone. Place a thin film of vaseline over the acrylic resin parts and artificial teeth to prevent any new acrylic resin from sticking to places where it is not required. Place the partial denture in the occlusal incisal register and pour the acrylic resin into place, then process under pressure. When set, remove the partial denture from the working model, being careful not to damage or break the working model. Finish and polish the partial denture. Finally, replace the Ceka dummy male spring pins (H1) with either the original or new Ceka male spring pins. The male spring pins should be threaded into the retention part with Ceka Bond to prevent it from unthreading.

Reseating or Replacing of a Ceka AKS Retention Part in Acrylic Resin

Chairside Procedure

A Ceka male spring pin is threaded into an AKS retention part. The small 694B space maintainers coated with vaseline are positioned over the Ceka male spring pin. Snap the male spring pin into the Ceka female. Block out the area beneath Ceka female in the mouth. Remove sufficient acrylic resin from the partial denture to allow it to be accurately and fully seated underneath the Ceka retention part in the mouth without touching the Ceka attachment. It is always recommended that a small hole be cut on the lingual of the prosthesis as an escape vent for any excess self-curing resin.

Seat the Ceka attachment **with small space maintainers-**-694B--correctly in the partial denture in the patient's mouth and hold it in place with fingers while carefully self-curing the Ceka **AKS** retention part in the partial denture, using the brush liquid-powder technique. <u>Do not have the patient bite</u>, or come to full occlusion, as this can cause tissue compression in the posterior and thus attachment misalignment. After the self-cure resin is set, remove the partial denture and finish. Discard the spacer.





Laboratory Procedure (if necessary)

Snap the H13 female analogue over the Ceka male spring pin. To avoid stone flowing between the segments of the male spring pin, fill the opening in the Ceka H13 female analogue and the sleeve of the metal frame around the Ceka attachment with silicone rubber. Use the small space maintainer (694B) with Ceka resilient attachments. Block out the undercuts of the saddles and pour a working model. Remove the Ceka AKS retention component and male spring pin from the partial denture. The retention part may then be re-attached using self cure resin.

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