Ceka Solder Retention Technique

Technique for the Solder Retention Cap

Benefit:

- A strong solder connection to the cast metal frame is used when vertical space is limited, or the patient exhibits a very strong bite.

M3: 694AS

M2: RE0061

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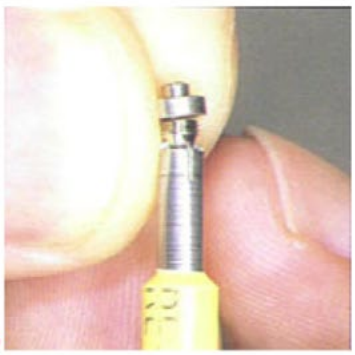

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Glaze porcelain and polish all metal (**FIG 1**). The REH5 Lab Key (**FIG 2**) is used to thread the original spring pin in to the solder cap (**FIG 3**). If spot welding, thread the non-retentive H1 dummy male in to the solder cap.

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Cover the inclined arm of the female with 0.5mm of wax, and place the metal space maintainer on the female (**FIG 4**). Block out all undercuts with wax. Cover the sides of the solder cap with a thin layer of wax (**FIG 5**). Do not cover any milled shoulders with block out wax, as an accurate fit of the lingual arm is important (**FIG 6**).


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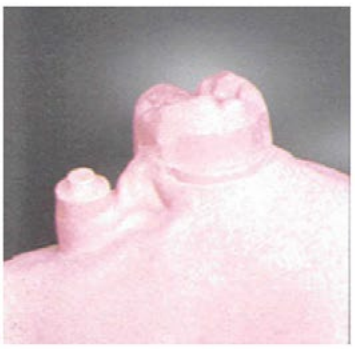
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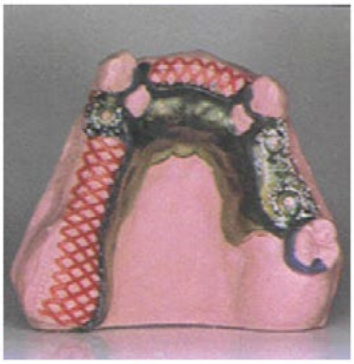
Stop the relief wax short of the attachment to provide a beading strip for the acrylic resin of the removable prosthesis. No relief wax is necessary on the tissue between the cuspid and molar (**FIG 7**). The accurate refractory model (**FIG 8 & 9**).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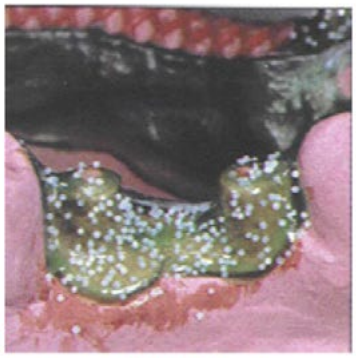
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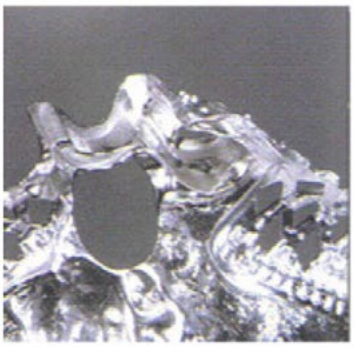
During wax up, the attachments are covered in wax (**FIG 10**). Leave an opening over the retention pieces (**FIG 11**) for solder to be applied later (**FIG 12**).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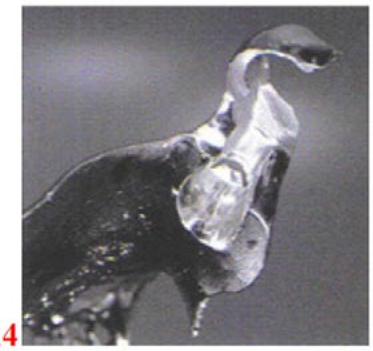
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Finish and polish the inside of the metal sleeve prior to soldering (**FIG 13**). The oxides created during soldering are easily removed from the highly polished surface (**FIG 14**). Grind the solder cap retention piece into a square shape with undercuts for good retention in burn out acrylic pattern resin (**FIG 15**).


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Use the metal space maintainer when assembling the attachment (**16**). The assembled attachment: the male must be firmly seated with no movement (**17**). Cut a slot in the cast metal frame to allow space for an adhesive pattern resin (**18**).


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H16 Soldering Tool

The cast metal frame accurately fits the abutment crown (**FIG 19**). Connect the solder cap retention piece to the cast metal frame with pattern resin (**FIG 20**). The (RE)**H16** soldering accessory (**FIG 21**).


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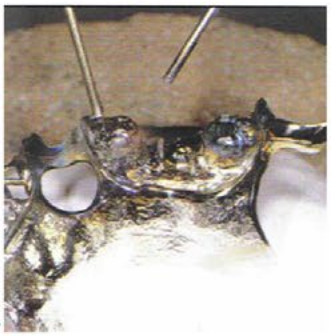
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Remove the frame from the model. Remove the male spring pin and spacer. Liquid Graphite, or anti flux, should be applied to the threads of the H16 soldering accessory. Thread the H16 in to the solder caps (**FIG 22**). Invest in soldering investment. Be sure to keep the areas to be soldered free of investment (**FIG 23**). The frame must be properly heated during soldering to allow proper flow of the solder (**FIG 24**).

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Ceka SOL is recommended, as it contains its own flux, flows well, and solders dissimilar metals well (**FIG 25**). If the flame is properly used, the solder will flow completely surrounding the retention pieces. Do not use any additional flux (sufficient quantity in Ceka SOL) (**FIG 26**). Frame and solder joints are cleaned by sandblasting with aluminum oxide (**FIG 27**).

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Clean the cast frame in an ultrasonic cleaner. Slightly heat the soldering accessory for easier removal (**FIG 28**). If the surface oxide is removed chemically or by electronic stripping, be sure to protect the attachment with wax. Use brushes for a final high shine (**FIG 29**). The solder must flow completely surrounding the retention piece (**FIG 30**).

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Place a drop of Ceka Bond on the threads of the male spring pin and thread fully into the solder retention piece (**FIG 31**). This will prevent gradual unthreading of the spring pin (**FIG 32**). The finished prosthesis (**FIG 33**).


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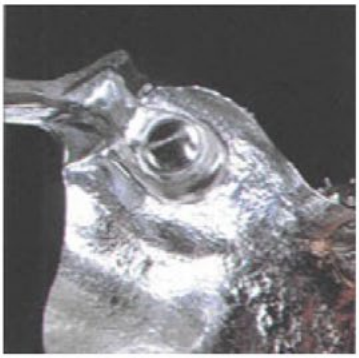
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Polish the cavity to a high shine with cup pattern brushes and polishing paste (**FIG 37**). The accurate fit of the retention piece (**FIG 38**) will guarantee a strong joint (**FIG 39**).


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Ceka Bond is an adhesive specifically designed to prevent the spring pin from gradually unthreading from the retention piece (**FIG 40**). Thread the spring pin fully in to the retention piece without using any pressure (**FIG 41**). The bonded connection is resistant to the heat of denture base resin polymerization (**FIG 42**).


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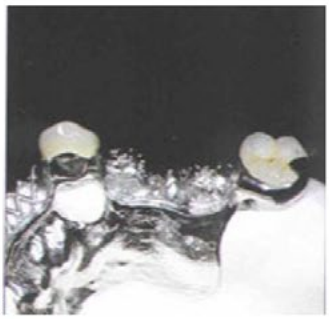
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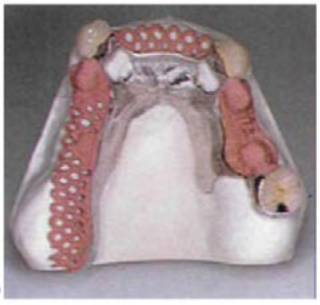
The cast frame must leave the embrasure open for good hygiene and esthetics (**FIG 43**). The metal frame must have a good fit (**FIG 44**). The cast frame should provide for good hygiene (**FIG 45**).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If the cast frame is opaqued and processed at approximately 400F degrees, it must be completed prior to bonding and fixing the spring pin (**FIG 46**). By reducing the female keeper, the "cleft" appearance of canines