CHAIRSIDE® DENTAL ATTACHMENT LIGHT CURE BONDING TECHNIQUE

DESCRIPTION: Light cure acrylic resin in pre-filled syringes for visible light polymerization of denture attachments.

COMPONENT ORDER NUMBERS:

- 9403 Light Cure Kit
- 9412 Light Cure Acrylic Resin Syringe (Clear Color)
- 9413 Light Cure Acrylic Resin Syringe (Tissue Color)
- 9414 Black Macro Syringe Tip (Bag of 20)
- 9415 Bottle of Resin Curing Primer
- 9416 Disposable Primer Brush (Bag of 20)
- 9519 Access Drill

INDICATIONS

The Light Cure Acrylic Resin is appropriate for use in chairside pickup of most dental attachments into an overdenture or partial denture, where autopolymerizing resin, (self-curing acrylic), may cause negative patient reactions or pose difficulties in replacing denture attachments.

CONTRAINDICATIONS

The Light Cure Acrylic Resin Syringe is not appropriate for use in a case where attachments are being processed into a new denture by the dental laboratory.

FEATURES

Chairside Light Cure Acrylic Resin:

- Clear and Tissue colored light cure acrylic resins prepackaged in handy, ready to use syringes.
- The denture can be placed over the intra-oral attachment with less chance of movement due to the unobstructed attachment recess.
- There is no rush to perform the important step of checking occlusion and proper seating of the patient’s appliance. When everything is correct, the denture remains in place while light cure acrylic resin is injected in and around the attachment through a small access hole.

VS.

Self-Curing Acrylic Resin:

- Time consuming mixing is necessary. Possible negative patient reaction to the unpleasant taste and burning sensation related to liquid monomer.
• Filling the denture attachment recessed with self-curing acrylic and then forcing it over the attachment can cause displacement of the attachment as well as "locking in" of the attachment.
• A time factor exists when determining proper seating of denture intra orally while the self-curing acrylic resin proceeds to set up.

**TECHNIQUE**

1. Use the Access Drill to make a small access hole from the facial side of the denture into the attachment concavity. This access hole is the correct size to accept the light cure acrylic resin syringe tip (Fig. 1).

2. Use the smaller diameter drill to make a tiny acrylic escape hole from the lingual side of the denture to the attachment concavity. This tiny vent hole directs a path for the light cure resin to escape and reduces the chance of voids on the far side of the attachment.

3. Place a new denture attachment into its intra-oral component.

4. **CHAIRSIDE LIGHT CURE ACRYLIC RESIN WILL NOT BOND TO DENTURE ACRYLIC WITHOUT THE USING THE RESIN CURING PRIMER.**

   Use the bottle of Resin Curing Primer bonding agent with a disposable brush to completely coat the inside of the denture attachment concavity and down the access hole.

   The light cure resin will bond to the existing denture acrylic only where the primer liquid has been applied.

   Allow 1 to 2 minutes of drying time before injecting the light cure acrylic resin (Fig. 2).

   **SHAKE BOTTLE BEFORE USE** due to separation of the liquid over time.

5. Place the denture intra-orally to check the occlusion and for proper seating of the appliance. Clearance for the attachment within the denture concavity can usually be determined visually through the access hole with the aid of a mouth mirror.

6. If any adjustments to the denture are made involving removal of acrylic from the attachment concavity or rinsing of the denture, it is necessary to re-apply the resin bonding primer.

7. Gently hold the denture in place and have patient close into (light) passive occlusion. Do NOT have the patient come into full occlusion that would cause any compression of tissue and therefore cantiing/rotation of the prosthesis. Compression of tissue will take the attachments out of alignment. Finger pressure over the attachment area is ideal.
8. Guide the Black Macro Tip on the Light Cure syringe into the access hole until it completely blocks the hole. Inject the clear colored acrylic resin through the access hole, around the attachment, and out through the tiny lingual vent hole.

Have the patient put their tongue against the lingual side of the denture and signal when they feel the light cure acrylic escaping, indicating the attachment concavity is full. Fill the remainder of the access hole as the syringe tip is being backed out (Fig. 3).

NOTE: The clear colored light cure acrylic resin is always used to pick up an attachment because the tissue colored resin will not conduct the visible light and polymerize beyond a distance of 2mm. Use the tissue color light cure resin to match the exterior portion of the access hole to the surrounding denture acrylic after the attachment has been cured into place.

9. Wet the tip of the light cure wand with the patient’s saliva.

Place the wand in contact with the bead of excess light cure acrylic resin. Cure for 2 minutes (Fig. 4).

10. Remove the denture. The denture attachment will be partially cured in place.

Cure from the tissue side of the denture for an additional 1 minute to complete the polymerization of the light cure acrylic (Fig. 5).

11. Remove any excess light cure acrylic on the denture that has spread beyond the attachment concavity. The acrylic will peel off easily wherever the bonding primer liquid has not been applied.

12. Use the Access Drill to remove the top 1mm of clear acrylic from the access hole on the facial side of the denture. Inject a small amount of tissue colored light cure acrylic resin to fill the end of the hole, and polymerize it for 1 minute.

13. Use a finishing bur to smooth out any excess acrylic over the access hole and the lingual vent hole. Re-check the fit of the denture.

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