

Repair of Partial Denture



Partial dentures are usually made with a plastic base or metal framework, which supports the replacement teeth. It is held in place in the mouth with clasps and rests that are carefully fitted around the natural teeth. Partial dentures can be lost for many, many years, but it's not unusual for them to require repairs during that time. The most common problems are crack or breaks, broken or chipped teeth, and broken clasps.

Repair procedure for a removable partial denture varies according to the damaged component.

Denture Base Repair

- If the broken segments are available and can be accurately re-positioned, the sections are held together and luted with sticky wax along the fracture line.



- Dental stone is poured against the tissue side of the denture base. When the stone sets, the denture is removed and the sticky wax is cleaned.
- The denture is separated along the fracture line.
- The fractured margins are dovetailed.

If the broken segments are lost or cannot be re-positioned, they are discarded. In such cases, the modelling plastic is added and contoured in the defective area. The impression is made without displacing soft tissues. The repair is done as a 'rebase' procedure.

MATERIALS USED FOR DENTURE REPAIR MATERIALS USED FOR DENTURE REPAIR

▶ Despite the favourable physical characteristics of the denture base resins, denture bases sometimes fracture.

▶ In most instances such fractures may be repaired using compatible resins.

▶ These materials usually available in powder: liquid type similar to those used for denture bases and are either heat activated or chemically activated.

▶ Now, light activated acrylic resins have been shown to be fast and effective denture repair materials.

Replacement of Denture Teeth

- An accurate opposing cast and a jaw relation record is necessary.
- The tooth of the same mould and shade is selected and set in the space produced by the missing tooth.
- Access should be gained by opening through the lingual surface. The labial or buccal denture base should be preserved.
- The ridge-lap area should be rebased to allow at least 2 mm of repair resin to bind the tooth to the base.

- The tooth is luted to the framework with sticky wax.
- If multiple teeth are to be replaced, a mounting cast is poured against the tissue-surface of the RPD. This cast is articulated with the opposing cast. Teeth to be replaced are positioned and finally the denture base is relieved.
- Gingival contours are waxed and the denture is flaked, packed and processed.

Adding Teeth to Denture following the Loss of Natural Teeth

Adding an Individual Tooth

- This procedure varies according to the design of the major connector.
- If there is a lingual plate, a retention loop for the added tooth can be directly soldered to the framework. Later the denture tooth is trimmed and placed over the retention loop.
- If there is no plate on the lingual side there a new retentive loop with a plate is cast and soldered to the existing framework.
- An internal finish line should be created for better adaptation of resin.

Adding Multiple Teeth

- The base was modified with modelling wax in the area of the missing tooth.
- Alginate over-impression is made over the partial denture.
- A cast is poured.
- An opposing cast with a centric occlusion record is articulated.
- Denture base is prepared with resin.

Denture Relines

New [dentures](#) will typically fit the mouth securely as they have been designed specifically for gums. As time goes on, gum tissues will change and the fit of the [denture](#) will become more loose and thus more prone to movement inside the mouth. Having the [denture](#) **professionally relined** will help keep the [denture](#) secure and functional.

What is Denture Reline?

Just like natural teeth, [dentures](#) need to be constantly cared for -- this means excellent habits at home and [regular dental visits](#). In addition, dentures need to be periodically adjusted for a proper fit to avoid causing discomfort or difficulty chewing. Every few years, dentists will usually recommend that dentures be relined, or resurfaced, to conform to the changing contours of the mouth.

Why Is Denture Relining Necessary?

The bones and tissues in the mouth change over time. In fact, once patient has a [tooth extraction](#), the bone that once held the tooth in place begins to shrink. Since dentures require a tight fit against your gum tissue, it's important to adjust the denture base to keep up with this shift.

Poorly fitting dentures can also contribute to the problem by wearing down the bone and soft tissues in the mouth more quickly. Relining dentures helps minimise this erosion, as well as compensate for natural oral changes. Finally, dentures aren't indestructible -- they need to be consistently maintained and repaired to keep them as effective (and attractive) as the day the patient got them.

How Your Dentist Keeps You Well Adjusted

Dentists begin by removing a layer of the existing denture surface. A putty-like material is filled in and inserted into your mouth to make an exact impression of the denture area. Once this impression has hardened, it is used to create a new surface or base for the existing denture teeth. This step is sometimes completed in the dental office, but more often is done in a lab to produce a longer-lasting surface.

There are two types of denture relines:

Hard Denture Reline -- The impression material is replaced with a hard pink acrylic that is perfectly formed to the contours of the mouth. This type of relining is recommended every two years and provides the most contact with gum tissue for maximum hold.

Denture Loving Care

It's a fact -- over time dentures become worn and don't fit as well, so it's important to reline them regularly. Denture adhesives, while a great way to help keep well-fitting dentures in place, should not be used in place of continual denture relining. See your dentist on a regular basis and make sure to communicate any changes in the way your dentures fit or feel. With proper denture care, your dentures can keep you smiling for years to come.

Soft Denture Reline

Some patients are unable to wear [ordinary dentures](#) because of tender gums or sore spots. [DDS Dentures + Implant Solutions](#) may recommend **relining the denture** with a material that stays pliable for one to two years before needing replacement. This material is much less likely to give the patient sore spots than the standard hard reline acrylic. Patients experiencing these problems may also consider a more permanent solution of implant retained [dentures](#).

For patients whose gums are too tender for hard relining, dentists may opt to reline the denture surface with a softer, more flexible material. Although easier on the gums, this type of relining may have to be replaced more often to maintain a proper fit.

Temporary Relines

If [dentures](#) have not been serviced in quite some time, a patient's gums may be red, swollen, or misshapen. This creates problems in taking impressions for a new hard or soft reline and may lead to a [denture](#) that would perpetuate the problem.

A **temporary**, or **palliative** (medicated) **reline material** may be recommended to allow the inflammation to subside. This reline makes the denture fit much more tightly, and is usually soft and pliable. After a few weeks, the gums return to a more normal state. The patient is then ready for his or her new denture.