

## Repair

### Definition:

This means the elimination or correction of all the defects had occurred in components of the partial denture.

### Types of fractures

1. Broken clasp arm
2. Loss or fracture of acrylic teeth:
  - a. anterior
  - b. posterior
3. Acrylic resin fracture
  - a. Midline fracture
  - b. Fracture denture into 2 or more parts
  - c. Fracture denture with section S missing.

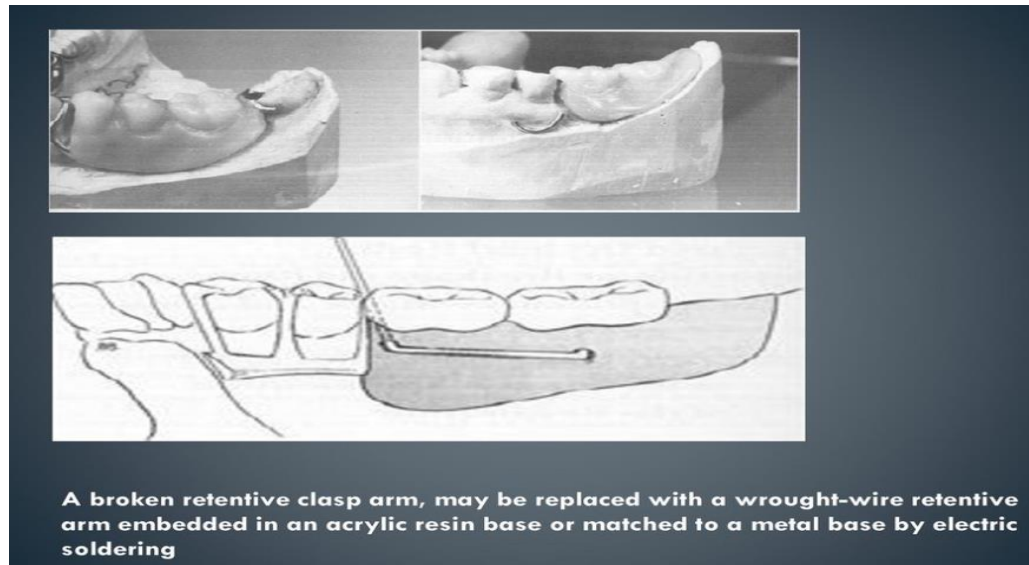


### Broken clasp arm: several reasons for broken clasp arms

1. A broken clasp arm occurred as a result of careless use of contouring pliers.
2. Breakage may result from repeated flexure into and out of sever an undercut.
3. Breakage may occur because of careless handling by the patient.

### Procedure repair of broken clasp arm

- a. Take a new impression to produce the patient cast, then survey the cast especially on clasp fracture, by carbon marker the height of the contour is shown by survey line to illustrate the location of the repair wire to the lab.
- b. Make clasp wire adapted to the designated line on the cast.
- c. Mix the self-acrylic resin and put it on the tag part of the clasp in the palatal or lingual side of the denture.
- d. Secure the denture to the cast by plaster or rubber band and cure it in a pressure container of warm water for 30 minutes at 20 psi by using an Ivomat device.
- e. Remove the denture from the cast, finishing and polishing.



### Loss or fracture of acrylic teeth

#### a. anterior teeth fracture

occasionally lack bonding between the denture base resin and tooth allowing the plastic tooth dislodged from the denture. this can occur because

- a. wax is not removed thoroughly from the teeth before the packing.
- b. Tin foil substitute placed on the ridge laps of the teeth is not removed before packing.



#### b. Posterior teeth fracture

If the missing teeth are posterior, we need to fix the denture with a cast on articulator to facilitate the correction of occlusion.

## Acrylic resin fracture

### a. Midline fracture

#### The procedure of midline fracture

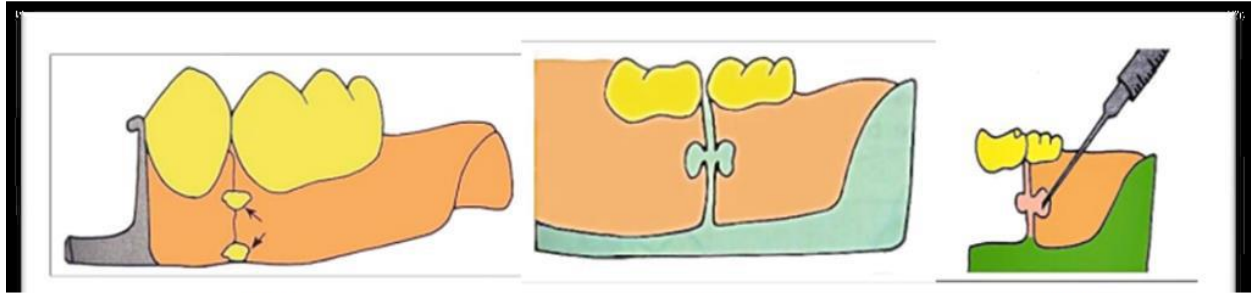
1. The broken edge is cleaned from debris and other interferences so the two parts will fit together well.
2. The two halves are held together using an old bar lured to the teeth and resin by sticky wax. No wax is placed over the fracture so that the tissue and palate side of the fracture can be mixed to see that they are in the correct position.
3. Tin foil is adapted to the basal surface of the denture before a plaster cast is poured inside the denture.
4. Plaster is vibrated gently onto the palate side to prevent air bubbles and then set on the balance of the mix to form the cast.
5. The cast is replaced, acrylic monomer resin is painted on the cut surface and a cold cure repair is placed on in the brake.
6. The area should be slightly overfilled to allow for finishing.



### b. Fracture denture into 2 or more parts

1. Examine the denture so that all parts are present.
2. Assemble the individual pieces carefully and lute them together with sticky wax.
3. Poured stone cast into the resembled denture.
4. After the cast has been set remove the denture and grooves dovetail into all pieces or we can use wire for reinforcement to strengthen the repair if desired.
5. Moisten the margin with monomer. Before painting the repair resin paint tin foil substitute on the cast and allow to dry.
6. Replace the denture on the cast and carefully put the auto-polymerization resin into each groove and dovetail.
7. Secure the denture to the cast by plaster or rubber band and cure it in a pressure container of warm water for 30 minutes at 20 psi.
8. Remove the denture from the cast, finishing and polishing.





**c. Fracture denture with section S missing.**

In this situation, the dentist should make the impression to make a cast especially when the flanges are broken and lost and auto-polymerization resin is then painted on the cast to replace the missing portion.



**THANK YOU**