

Metal framework try in

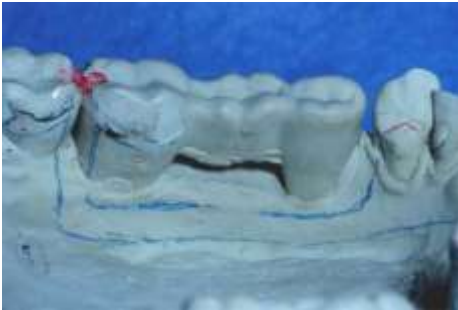
Partial Denture Framework Adjustment

75% of RPD frameworks don't fit perfectly.

- Active clasps cause orthodontic movement and should be adjusted to be passive. Incomplete seating might also cause discomfort, damage soft tissues and supporting bone**
- Adjust soon after fabrication, without denture base**

Preclinical Inspection

- Check accuracy of the framework as designed



The design as drawn and then executed in the metal framework.

- **Framework should fit master cast. If it does not, probably will not fit intraorally**
- **Framework should cause no abrasion on the cast**



Rest seats should be fully seated

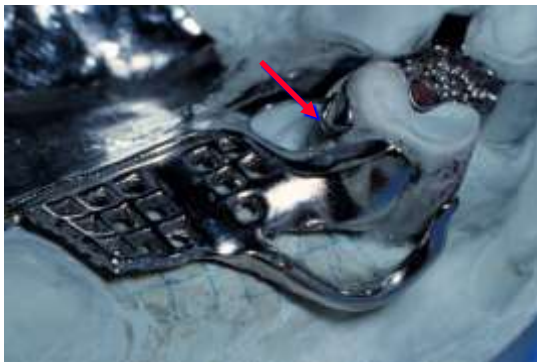


All retentive, reciprocal arms, proximal plates, superior portion of lingual plates and all maxillary major connectors should be contacting the casts (spaces will collect debris causing caries and gingival irritation).

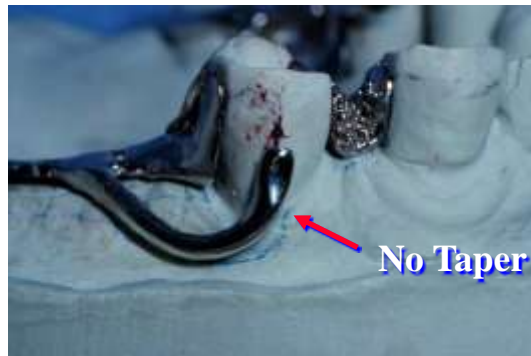


Major & minor connectors:

- . **Should have adequate distance from abutments (hygiene)**
- . **Proper proportions (rigidity, hygiene)**
- . **Adjust or have lab adjust or remake framework**
- . **Minor Connectors should have butt joint finish lines slightly undercut for acrylic resin and also of sufficient thickness.**
- . **1mm relief over saddles for acrylic**



- **Clasps have uniform taper**



Finish and Polish

- **Framework should be highly polished**
- **No pits, nodules, scratches or sharp edges (stress concentration and might injure mucosa).**



Framework Adjustment

Reduction can be undertaken with

- . Heatless stones
- . Diamond burs
- . E-Cutter burs.
- . Coarse stones

Shofu coral stones

Carborundum disks



Polishing can be undertaken with:

- . Carborundum points & wheels
- . Final polish - Shofu brown & green points

Use care!



Clinical Adjustment

- **Incomplete seating of framework is a common problem (usually binding on abutments)**
- **For adjustment use an indicating medium**
 - . **Aerosol Sprays (Occlude)**
 - . **Disclosing Wax**
 - . **Silicone**

Initial Assessment of framework fit:

- **‘How does the framework feel?’**
- **No pulling or wedging (Active engagement of abutment teeth)**
- **Overall comfort of the framework**
- **Determine if casting fits similarly on the cast and intraorally. If not, final impression is inaccurate and a new impression should be made**

Areas of abrasion on master cast may indicate areas of binding



Most common interferences that prevent complete seating:

- . Rigid portions of direct retainers
- . Interproximal portions of lingual plates
- . Interproximal minor connectors
- . Shoulder areas of embrasure clasps
- After adjustment is completed, a thin even layer of indicating medium is applied results in greyish hue from underlying metal. Complete seating with gliding sensation and no grating or snapping



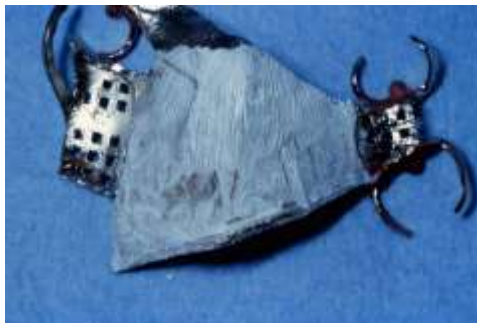
Soft Tissue Impingements

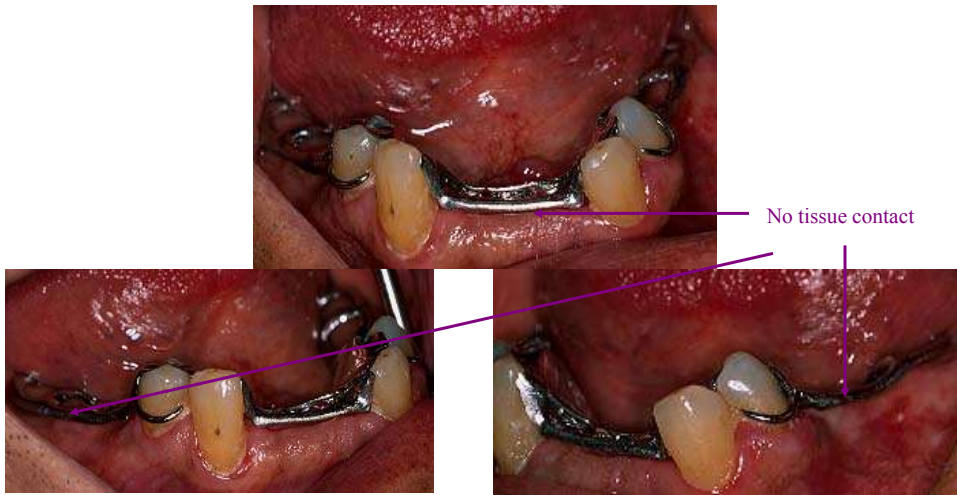
Detected using pressure-indicating paste

- . Apply a thin layer with streaks. Place with moderate pressure**



- . Areas of show-through should be relieved while remaining streaks indicate no contact**
- . Maxillary major connectors have broad even palatal contact**





The metal framework tried in the mouth to verify the fit. Notice that the underside of the framework in the areas where teeth are to be placed is not in contact with the tissue.

Occlusal Adjustments

RPDs are fabricated on unmounted casts. So, occlusal interferences usually present

- **Occlusal vertical dimension should be unchanged**
- **Centric and eccentric contacts should be identical with or without the framework**
- **With highly polished metal, articulating paper marks poorly. So, check opposing occlusal contacts or slightly roughen framework with air abrasive or rubber impregnated abrasive**

- **Adjust individually opposing frameworks, then adjust them together**
- **Eliminate interferences between the frameworks**



- **If occlusal rest thickness is ≤ 1.5 mm after adjustment, rests will be subject to fatigue and possible fracture**
- **May require additional tooth preparation and remake**
- **Last resort - occlusal reduction of opposing teeth**
- **Adjust minor interferences caused by retentive arms. Reduce opposing cusp - last resort**
- **With heavy contacts: Lower height of contour and remake**
- **Don't relieve clasps (alters flexibility and fracture resistance)**