

بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم

(البقرة آية ٣٢)

FRAMEWORK TRY-IN IN R.P.D

by



Ismail saleh
2020

FRAMEWORK TRY-IN

- The metal framework is tried in the patient's mouth *before* the jaw relation record.
- Unadjusted frameworks tend to place undesirable torquing forces on teeth.
 - I- Inspection of the framework on the cast:
 - II. Seating the metal framework intra-orally.

I- Inspection of the framework on the cast:

- careful examination of the stone cast surface. The master cast should be *checked for any abrasion* which *indicates Areas of' excessive contact* between the framework and stone.

The framework should be removed from the cast and evaluated for:

- *Proper polish* of the outer and inner surfaces of the framework.
- **The tissue surface of the casting** is inspected for nodules, roughness, and imperfections.
 - *Nodules should* be removed by *tapered stones* and smoothed with rubber discs.

The metal framework is inspected on the cast to ensure:

- Proper design and accurate components,
- The framework is adjusted until it smoothly comes on and off the master cast (*easy insertion and remove*).
- Accurate fit of the framework on the cast and the rests need to be completely seated with intimate contact.
- The presence of tissue stops should also be ensured in combined acrylic- metal bases.
- Proper thickness of the components .

II. Seating of the metal framework intra-orally:

- The polished framework should be placed in the mouth *without extreme force to prevent* damage to the teeth, periodontal tissues .
- First seat it by orienting the clasps on the abutment teeth, *then* press on the rest areas in the direction of the path of insertion.

- The following should be noticed while trying-in the framework:

1- Clicking when seated .

2- Tilting while seating .

3- Verifying Reciprocation .

4- Verifying Fit .

5- Inability to seat the framework in the planned position .

6- Deformed Clasp.

7- Occlusal interference from denture framework.

1- Clicking when seated:

usually results from:

- *Rigid part* of the frame is *forced into an undercut*.
- *End of reciprocal arm* is below an undercut.
- *Extra bulk of metal* on the minor connector.

Correction:

The tissue surface is coated with a *disclosing material* and seated in the mouth (P.I.P), *detected the cause and TTT*.

Materials that are used to detect interferences

include:

Pressure indicating paste

Chloroform and rouge.

Kerr's impression wax.



Mark and remove internal interferences until the framework is fully seated.

FFHR ffor.com Physiologic adjustment

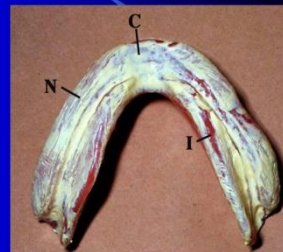


Rouge and chloroform is still the most effective means. Guide planes and minor connectors should be carefully evaluated.

Note where the rouge has been rubbed away from the distal guide plane (arrow). This area needs adjustment.

How to Read PIP?

- Streaks - no contact (N)
- No Paste - Impingement (I)
- Paste, no streaks - normal contact (C)



FFHR ffor.com Physiologic Adjustment

Physiologic Adjustment

Method

- ❖ Dissolve gold rouge with chloroform
- ❖ Apply this solution to the surfaces engaging the teeth of the RPD casting. The chloroform will quickly evaporate, leaving a thin layer of rouge on the casting
- ❖ The RPD casting is seated and pressure is placed on the extension area
- ❖ The rouge will be rubbed away from areas of the casting that are inappropriately binding to the dentition.
- ❖ These areas are relieved with a suitable burr and a high speed air rotor
- ❖ The procedure is repeated until the framework rotates freely around the axis of rotation



2- Tilting while seating:

results from:

- Retentive arm is more rigid in one side than the other side.
- One clasp is extended into a deeper undercut than the other side clasp.

Correction:

- The stronger or resisting clasp must be altered to have a more taper or more flexible clasp.
- The extended clasp into a deeper undercut must be shortened.

3- Verifying Reciprocation: results from:

- **Each reciprocal arm** should contact its abutment *just prior to, or at the same moment* as its associated retentive arm.
- it brace the tooth against the forces applied by the flexing retentive arm.
- **Unreciprocated forces** lead to **mobility in the abused abutment** and **periodontal breakdown**.

Correction:

Detection of interference using disclosing material and **grinding of this interference** using grinding diamond stone.

4- Verifying Fit:

Lack of passive placement may results from:

1. Inaccurate impression.
2. Presence of surface defects (such as nodules) on the contacting surface.
3. The clasp arm is active all the time.

Correction:

1. Removal of the cause.
2. If the reason is faulty impression, repeat the impression and construct a new metallic framework.
3. Surface defects should be removed after been indicated using disclosing material and removed using diamond stones.

5- Inability to seat the framework in the planned position:

Results from:

- Inaccuracy or error in the impression procedures.
 - Errors occurring in pouring the cast.
- Improper laboratory procedures during waxing and casting of the metal framework.

Correction:

In this case, another impression is made to obtain an accurate cast upon which ***a new framework is constructed.***

6- Deformed Clasp :

- A clasp under tension *may force the frame to assume* wrong or tilted position .
- The cast clasp or wrought wire clasp may have been *deformed during finishing and polishing* .
- This condition is *mostly seen when a wrought clasp* has been *improperly contoured* .

Correction:

Remake the deformed clasp or metal denture base .

7- Occlusal interference from denture framework:

- Any occlusal interference from occlusal rests or other parts of the denture framework must be eliminated before recording jaw relation.
- Much of these adjustments can be avoided by:
 - a- proper treatment plan.
 - b- proper mouth preparation.
 - c- proper partial denture design were followed.

I- Inspection of the framework on the cast

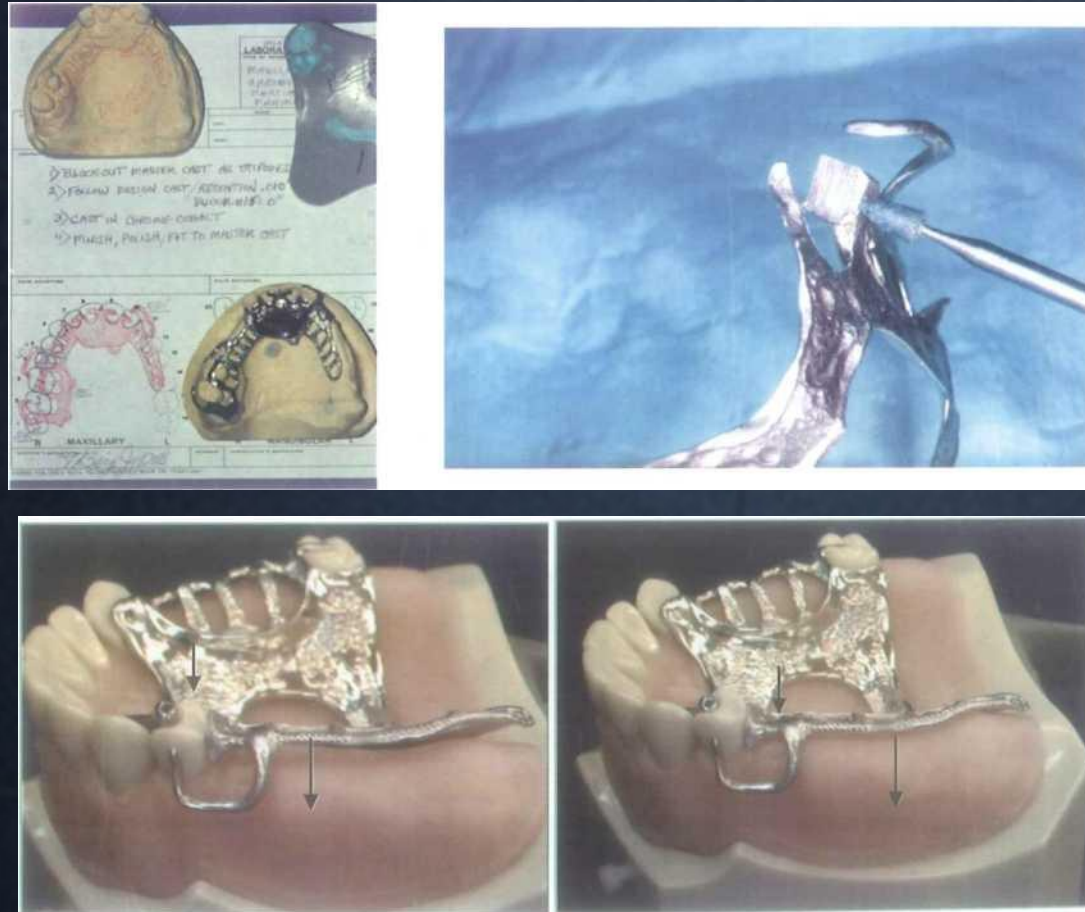


Fig. 3 : Initial contacts on the abutment teeth

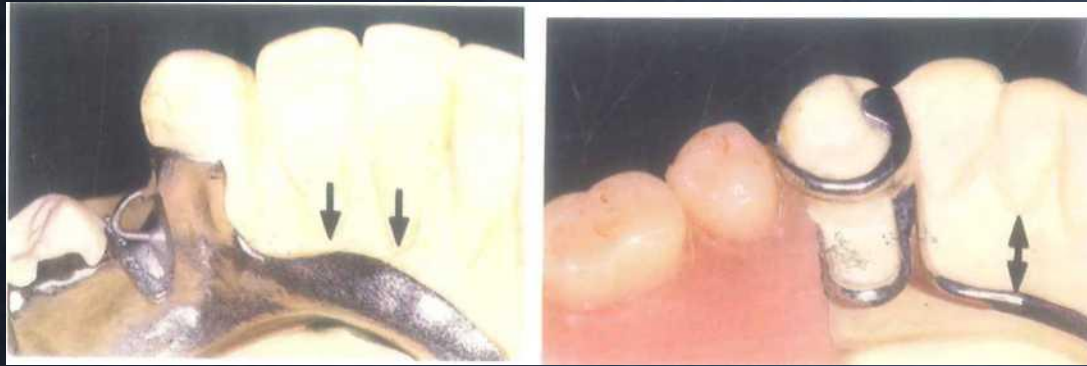
Fig. 4 : Continuously follow the same path guided by the proximal plates



Fig. 5 a and b: The stability of the casting should be checked under finger pressure. b, occlusal rest and proximal plate should be seated properly in their positions

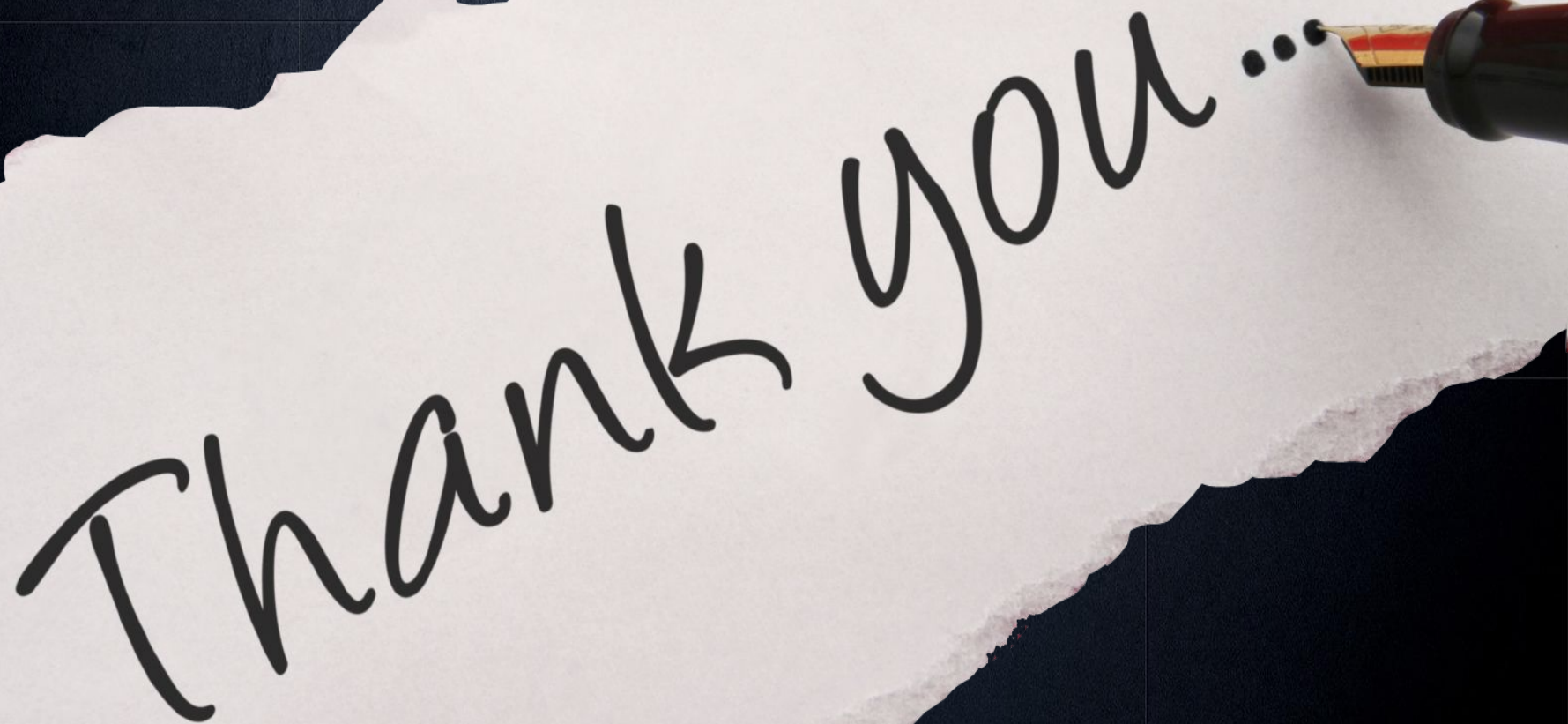


Fig. 6 and a b: Reciprocal arm should be above the survey line (a), while retentive arm is below it (b).



.Fig. 7 a and b: Inspection of the RPD Framework Casting
The Framework is adjusted until it smoothly comes on and seated off the master cast. The rests needs to be completely
.with intimate contact

Thank you...

A close-up photograph of a fountain pen with a red and gold nib writing the words "Thank you..." in a cursive script on a piece of white paper with torn edges. The paper is set against a dark, textured background. The pen is positioned at the end of the sentence, with the nib resting on the paper.

Physiologic Adjustment of Framework

The framework is tried in the mouth after being checked on the cast and the laboratory sheet. Check the correct and proper seating of the framework. It is recommended that the trial insertion of the metal framework should initially be under taken without the addition of any wax rims.

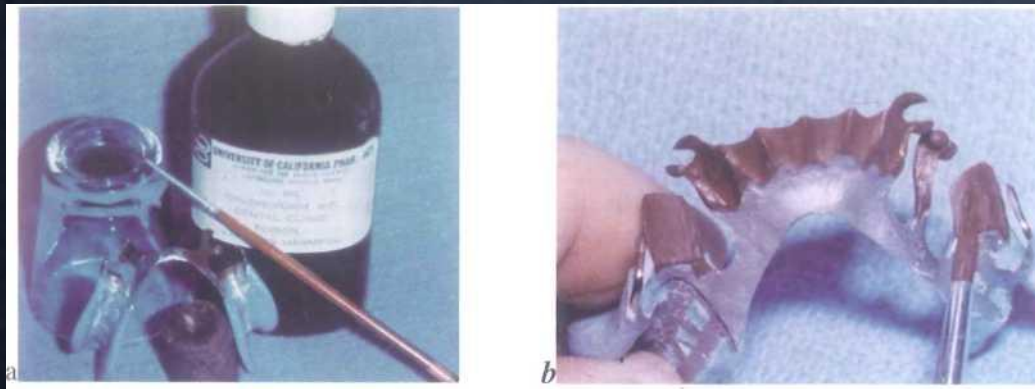


Fig. 8 a and b: Paint a thin coating of gold rouge with a brush on The .tooth-contacting areas of the framework. To determine the interference areas

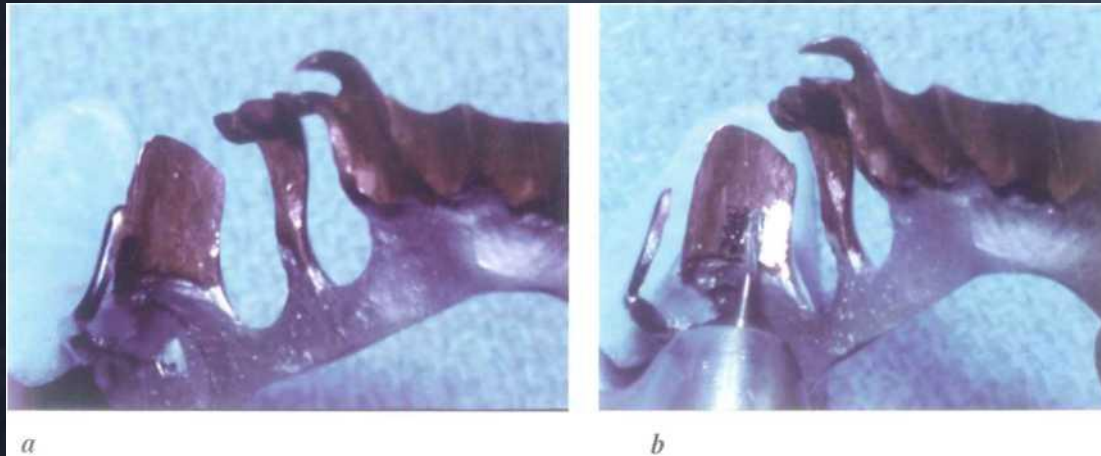


Fig. 9 a and b: Adjustments are made to the framework in the areas that are binding with carbide burs and high speed grinding stones



Fig. 10 a and b: Verification of seating of the metal frame work
Carefully fit & adjust the casting until excellent adaptation in the mouth is achieved

I- Inspection of the framework on the cast

the denture framework must be eliminated before recording jaw relation.

Much of these adjustments can be avoided if proper treatment plan, proper mouth preparation and proper partial denture design were followed. However, if these happened, the occlusal interference from the casting itself must be detected and eliminated until the prosthesis is fully seated in place passively.