The lack of fit of a removable partial denture has been reported as the most common problem in the treatment of patients with partial edentulism. The misfit could be a result of poor laboratory procedures, a distorted impression, or ridge remodeling after delivery. Evaluating the fit of a removable partial denture starts at the framework evaluation appointment. The evaluation consists of the fit on the definitive cast and the fit intraorally. Damage to the definitive cast by inserting and removing the framework must be avoided, and the components of the framework should fit well on the cast before it is placed intraorally. Clinicians usually use components, such as rests and lingual plates which have contacts with the teeth as references for the fit evaluation. Disclosing media, including disclosing paste (PIP; Keystone Inc) and aerosol-disclosing indicator (Occlude; Pascal Inc), could be used to evaluate the fit of the framework; however, the minor connector in the edentulous area is seldom evaluated clinically because it may not affect the seating of the framework and is difficult to visualize directly. Maximum support from the edentulous area can be obtained only when the denture base fits well over the tissue. The definitive partial denture is processed on the cast; therefore, the seating of the framework on the cast should be the same as it is intraorally. Any irregular or sharp projection on the tissue side of the framework may abrade the cast and interfere with complete seating intraorally. If the interference is not removed completely, the seating of the framework will be different between the cast and the mouth. Because of the finishing procedure after the casting of the framework, a space under the minor connector in the edentulous area of the cast may not indicate the misfit of the framework; however, the framework may rock on the cast or intraorally and this rocking may mislead the clinician.

This report presents a technique using a low viscosity impression material to evaluate the framework fit on the

Figure 1. A, Inject polyvinyl siloxane registration material onto cast. B, Place framework over registration material.
edentulous area. The thickness of the impression mate-
rial represents the discrepancy of the fit of the denture
base between the cast and intraoral tissue. If there is
a significant thickness of the impression material, the
clinician should reevaluate whether there is any inter-
ference between the framework and the teeth and
whether the framework should be remade. If this
discrepancy occurs on the distal extension area, a cor-
rrected cast impression procedure could be made at the
framework evaluation appointment or the denture
should be relined after delivery.

**PROCEDURE**

1. Paint a layer of lubricant (Vaseline; Chesebrough-
   Pond’s USA) on the distal extension area of the
definitive cast.
2. Inject a polyvinyl siloxane (PVS) occlusal registration
   material (Regisil PB; Dentsply Caulk) onto the
   lubricated area (Fig. 1A).
3. Place the framework onto the cast (Fig. 1B) imme-
   diately after step 2. Use the minor connectors, such
   as rests or indirect retainers, to evaluate the com-
   plete seating of the framework.
4. After the registration material polymerizes, remove
   the framework with the registration material. Trim
   excess material if necessary.
5. Inject a low viscosity PVS impression material
   (Aquasil Ultra XLV; Dentsply Caulk) on the tissue
   surface of the registration material and place the
   framework intraorally immediately. Ensure the rests
   fit on the rest seats of the teeth (Fig. 2A).
6. After the impression material polymerizes, remove
   the framework from the mouth.
7. Carefully examine the thickness of the impression
   material at different locations; this represents the
   space between the denture base and the tissue
   (Fig. 2B). If necessary, reexamine the interferences
   between the teeth and framework and repeat steps
   2 to 6.
8. If the thickness of impression material is satisfac-
tory, remove all the PVS materials from the frame-
work and proceed with the fabrication of the record
base and tooth arrangement.

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