tcs®

the beautiful, comfortable choice
for Removable Partials

For Happier Patients

Ask for tcs® by name

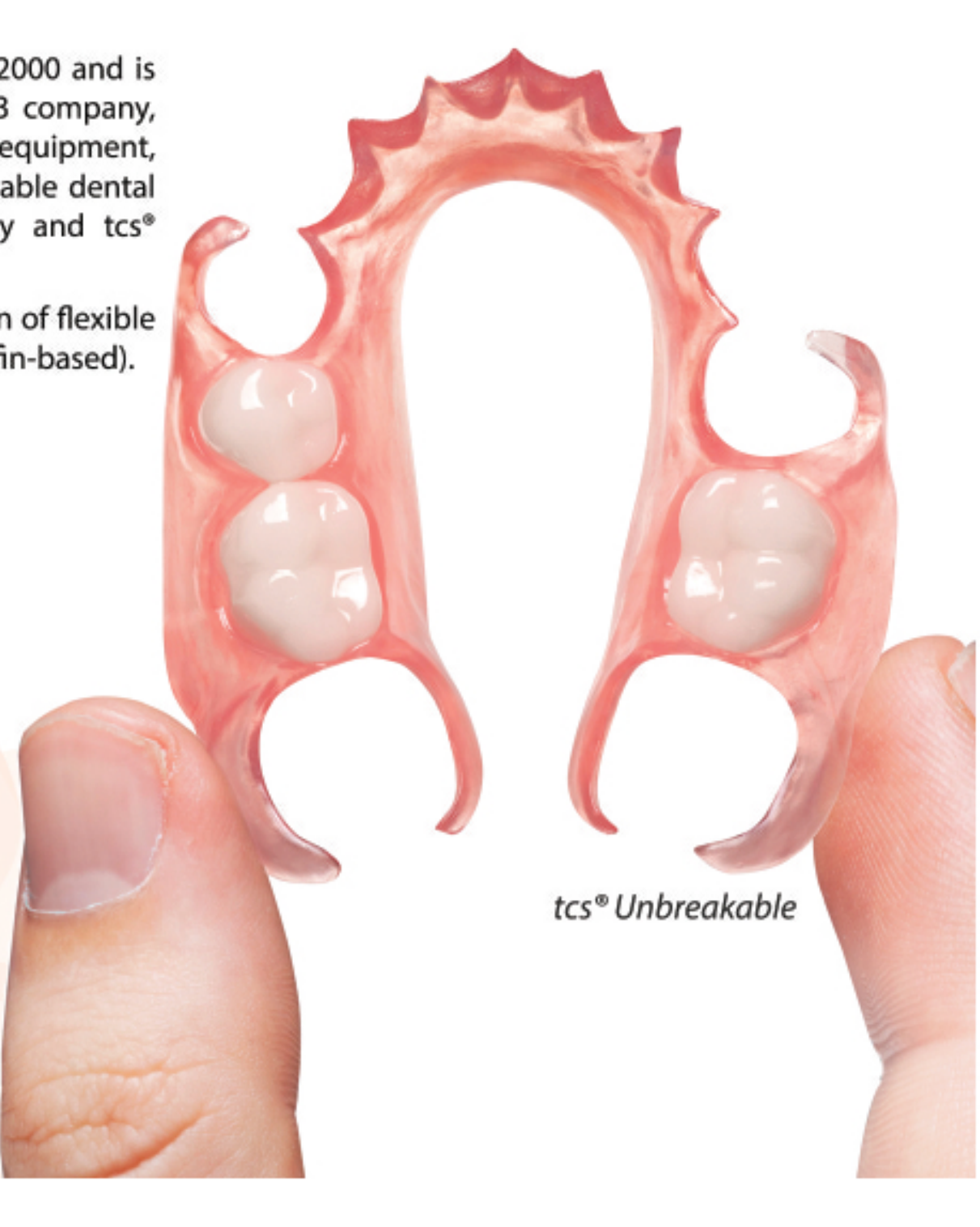
Natural Looking and Feeling Flexible Partials

About TCS

Thermoplastic Comfort Systems, Inc. (TCS, Inc.) was founded in 2000 and is based in Signal Hill, CA USA. We are a certified ISO 13485:2003 company, specializing in the manufacture and distribution of dental resins, equipment, accessories, and patient maintenance products related to removable dental appliances. Since its beginning, TCS rapidly gained popularity and tcs® appliances have become the removable flexible partials of choice.

TCS, Inc. manufactures two thermoplastic resins for the fabrication of flexible partials; tcs® Unbreakable (nylon-based) and iFlex by tcs® (polyolefin-based).

tcs® restorations adjust and flex with the natural contours of the mouth.



tcs® Unbreakable

Why Choose TCS?

Quality Your Can Trust: tcs® Unbreakable and iFlex by tcs® are manufactured in the USA from the highest quality materials and under a strict quality management system that meets ISO 13485:2003 requirements.

Lightweight and Comfortable: tcs® thermoplastics have properties that allow partials to be fabricated very thin without compromising durability, making them very comfortable for the patient.

Aesthetic: tcs® Unbreakable and iFlex by tcs® blend naturally with the surrounding tissue and gums. A well designed and fabricated tcs® restoration will be unnoticeable in the patient's mouth.

Biocompatible: tcs® Unbreakable and iFlex by tcs® partials are biocompatible, making them ideal for patients who are allergic to monomers found in acrylic dentures.

Younger patients appreciate the natural look of tcs® Partial Dentures.

Affordable: Patients searching for an aesthetic solution without the cost associated with crown/bridge or implants can benefit from this type of restoration without compromising aesthetics. Additionally, tcs® is very popular as a transitional appliance during the healing period for implants.

Flexible: tcs® partials offer the ideal degree of flexibility, and patients find the adjustment period much smoother when compared to conventional partial dentures.

Non-Invasive: Unlike permanent tooth replacement options, such as crown/bridge and implants, tcs® partials are non-invasive, making them ideal for patients with a low threshold for pain and/or the elderly. The unique characteristics of tcs® thermoplastics utilize tissue undercuts and portions of abutment teeth for retention.

Promotional Items Available at No Charge: We offer free tcs® patient education brochures full of helpful information for the patients, as well as posters, and an educational video for your waiting room.

Success: Millions of tcs® partial dentures have been prescribed worldwide, and this number is rapidly growing.

tcs® Unbreakable

tcs® Unbreakable is an extremely resilient high performing nylon used for the fabrication of removable partial dentures. It offers the ideal degree of flexibility, uncompromising aesthetics and guaranteed unbreakability.

- Lightweight & comfortable
- Aesthetic
- Durability
- Non-invasive treatment
- Ideal degree of flexibility
- Guaranteed unbreakable
- Repairable and relinable

Available in four translucent pink shades.

** FREE Promotional Material Available. See page 25*

Natural Looking and Feeling Flexible Partials

Warranty Against Breakage

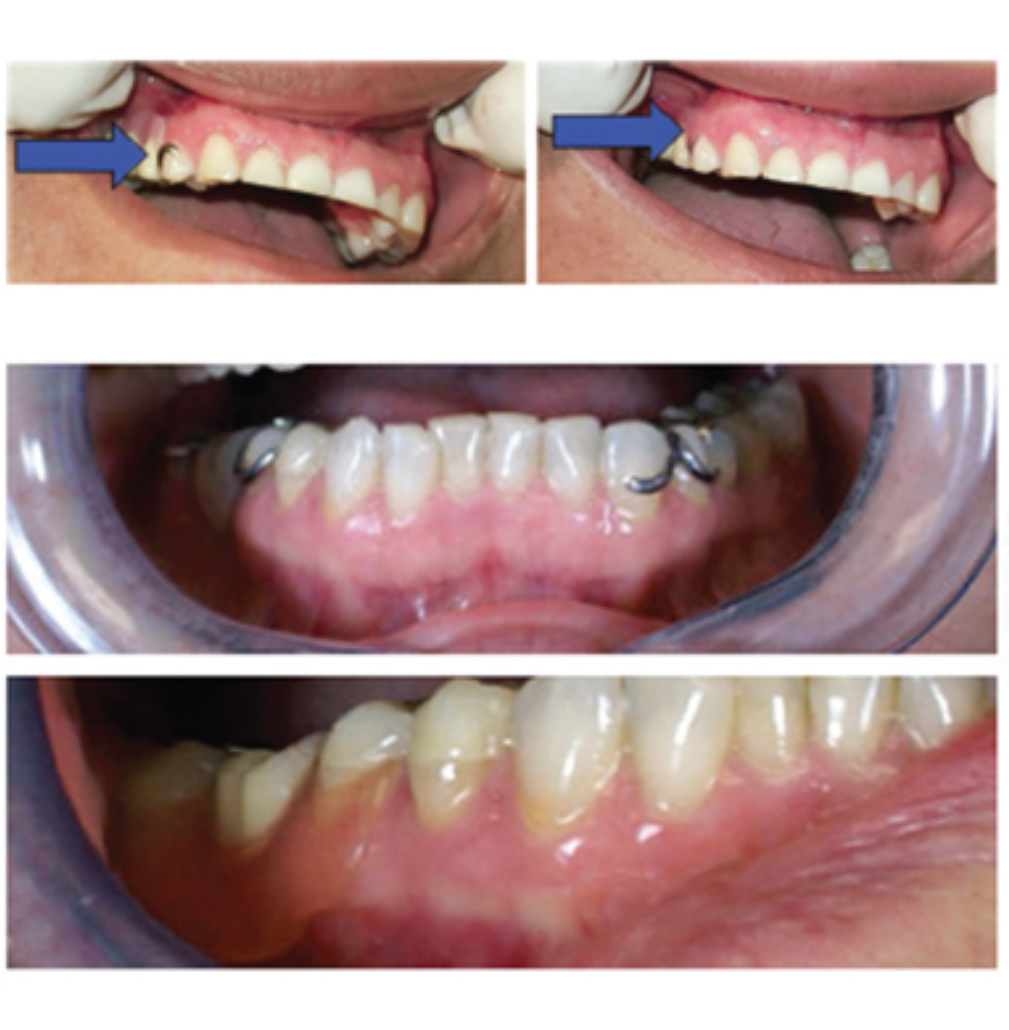
TCS, Inc. is proud to offer a product that has a lifetime warranty against breakage.

- Extensive testing and clinical history has validated that tcs® Unbreakable partials will not break under proper use.
- TCS, Inc. warrants tcs® Unbreakable against breakage or fracture due to defects in the material.
- The warranty does not apply to neglect and/or abuse of the restoration.
- The warranty does not apply to artificial teeth, nor the bond between the artificial teeth and the tcs® Unbreakable material.

tcs® Unbreakable

Before and Afters

tcs® Unbreakable blends naturally with the patient's gum tissue.

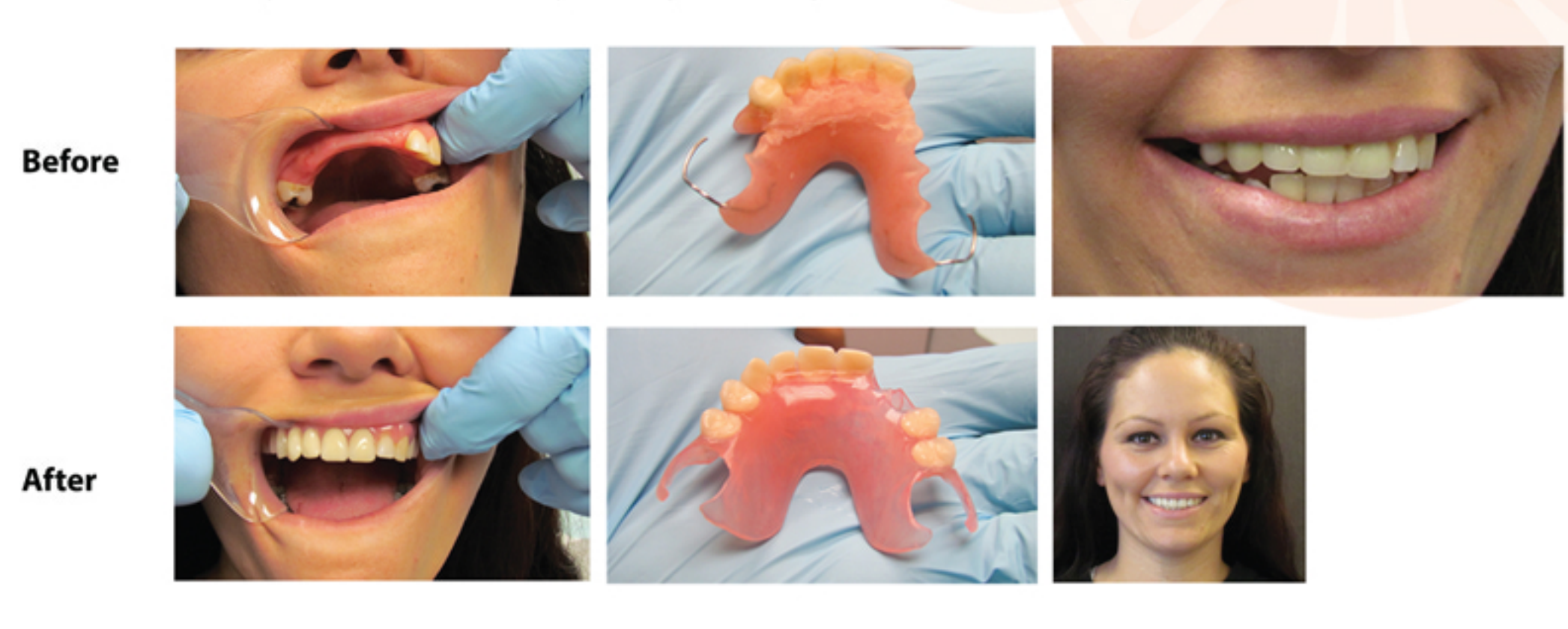


"My tcs® Unbreakable is so comfortable; I forget that I am even wearing it. And best of all, nobody can see it; it just blends in with my gums. I would definitely recommend tcs® to anybody that uses a removable partial."
~Judy, 61 years old

Before and Afters

Tiffany . . . a young, athletic woman in her early thirties from California lost most of her teeth in an automobile accident at the age of 12. Fortunately, Tiffany does not remember the accident, however, she does sadly remember the endless days in the hospital and the five months she attended school with most of her upper teeth missing.

When she finally received her partial denture, she refused to wear it because it felt so awkward. She says that she felt uncomfortable with or without it, it was a no-win situation. After many years of wearing an uncomfortable metal and acrylic partial denture that would constantly break at the most unfortunate moments, Tiffany was finally prescribed a tcs® Unbreakable. Tiffany is excited about finally wearing something she can count on, look great and feel even better.



When to Prescribe a tcs® Partial?

tcs® Unbreakable and iFlex by tcs® partials may be prescribed whenever a removable partial denture is being considered.

In some cases, tcs® Unbreakable or iFlex by tcs® in combination with metal is recommended:

- Need for a more rigid appliance due to poor tissue support or few remaining teeth.
- Free-end saddle with teeth missing from the 1st bicuspid.

Cast rest seats:

- If soft tissue is a concern, cast metal seats are also an option.

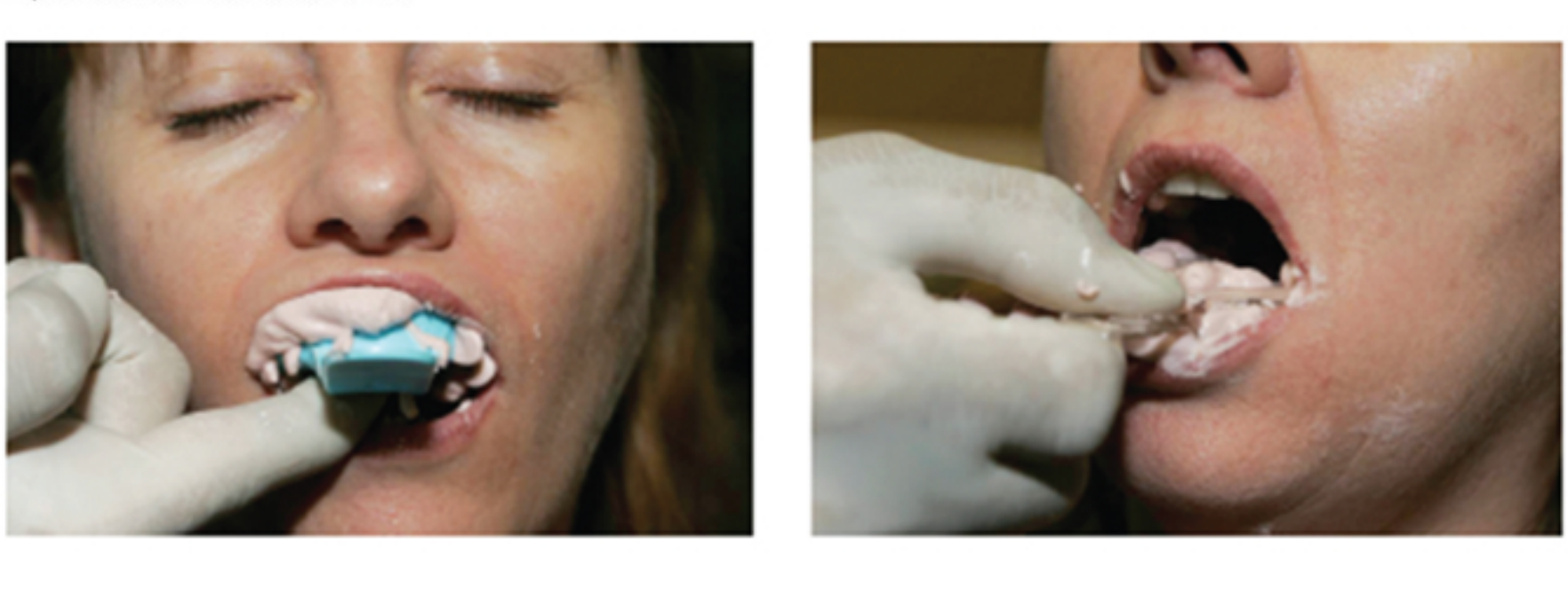
Contraindications:

- Quality of natural teeth is too poor to support tcs® restoration.
- Minimal vertical clearance, less than 3mm.
- If there is less than 4mm interproximal space in the posterior area.
- Immediate application, due to recession, please allow 8 to 10 weeks healing time prior to prescribing a tcs® restoration.

Impression Taking Techniques

One of the many benefits of tcs® partials is that little to no tooth preparation is needed. The laboratory only needs a good alginate impression (poured promptly), a counter model and the bite registration.

TCS recommends a lightweight alginate material for impression taking, however, irreversible hydrocolloid, polyvinyl siloxane and polyether impressions are also suitable.



- An accurate impression is the first step and is key to the success of a tcs® partial. If an alginate impression is taken, promptly pour it up using lab stone. Then take a counter-impression and a bite registration.
- Examine the impression. The impression should have all the anatomical details for a successful tcs® partial. Also check for voids and air bubbles.

Insertion Techniques

- Examine the partial carefully on and off the master model and check the path of insertion.
- Submerge the tcs® appliance in very hot tap water for approximately one minute.
- The Hot Water Treatment is very important as it allows for a smooth initial insertion and a good adaptation with your patient's natural tissue.
- When the partial cools to a tolerable temperature, gently insert it into the patient's mouth.

To ensure you are receiving a genuine tcs® appliance, be sure you receive your appliance in a tcs® branded plastic bag along with a tcs® Patient Care Pamphlet, a sample of tcs® Concentrated Dental Appliance Cleaner and a tcs® Coool Mint Wipe (single use). Additionally, tcs® should be indicated on the bill.

NOTE: Use hot tap water prior to insertion.

Adjustment Techniques

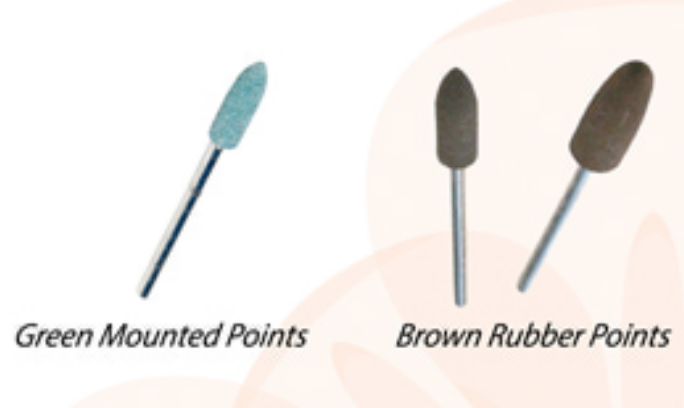
- If the patient feels pain when biting down (possible reasons):
  - Open bite: check the occlusion and reduce the occlusion accordingly
  - Overextended flange: reduce the flange accordingly

  Most of the time this will take care of the pain.
- If the patient senses discomfort due to tightness of the clasp, the clasp may be loosened slightly by submerging the part in hot water approximately 30 seconds, removing it and gently bending the clasp outward while holding it underneath running cold tap water. Following the same procedure but bending the clasp inward can also tighten the clasp.
- There are a variety of burs that are specifically designed for thermoplastic materials. See page 23 "Tools for Your Practice."

- Set your hand piece on a low speed (32,000 to 35,000 rpm) and use fast, light scraping back and forth movements to reduce area. Do not keep bur in one spot, be sure to keep it in constant motion. Do not use too much pressure as this may burn or distort the restoration.
- Do not use the tools that are normally used for conventional removable dentures and partials as they may not be effective on thermoplastics.
- Rubber wheels or points are ideal for making small adjustments and/or smoothing after adjustments have been made. Usually the brown rubber point will leave the case smooth and shiny and it will not be necessary to re-polish.
- If there are threads remaining, these can be removed with a sharp blade, we recommend the tcs® Carving Knife.

Tips:
The best tools for adjusting tcs® Unbreakable and iFlex by tcs® are the Green Mounted Points and the Brown Rubber Points.

Use quick, light pressure in a scraping motion for best results when adusting.



Adjusting tcs® appliances is easy with the proper tools and techniques.
See page 23 , "Tools for Your Practice" for recommended tools.

Preparation for Adding Teeth *Applies only to tcs® Unbreakable.*

The Laboratory will utilize either a welding technique (for small modifications) or an injection technique (for larger modifications and retentive additions).

- Be sure the partial is free of any pastes or adhesives before taking the impression.
- An alginate impression is taken with the partial in the mouth.
- Remove the impression from the mouth with the partial in the impression.
- Be sure the partial is fully seated in the impression material.
- Immediately pour the model with regular yellow stone.
- Forward to the laboratory with instructions.

When you receive the case from the laboratory, follow the Hot Water Treatment for re-insertion. See page 14.

"Quality is important to me and my patients. I make sure my lab uses TCS"
~ Dr. Brandi

Preparation for Reline *Applies only to tcs® Unbreakable.*

The Laboratory will register the position of the teeth with a plaster matrix and remove the base. A new base will be waxed up and reprocessed using the existing teeth.

In most cases where an overall reline is needed, the case is jumped into a new base.

- A rubber base impression is taken under the tcs® Unbreakable partial in a closed-mouth condition.
- The patient closes his/her mouth gently to ensure a correct occlusion as the rubber base is setting.
- Once the rubber base material has set, an alginate impression is taken and the impression is removed from the mouth with the partial and the rubber base in place.
- Carefully examine the partial to assure that it is positioned correctly in the alginate material.
- Immediately pour the model with regular yellow stone.
- DO NOT separate the partial from the stone model.
- Forward to the laboratory with instructions.

NOTE: When you receive the case from the laboratory, follow the Hot Water Treatment for re-insertion. See page 14.

Care for tcs® Partials

tcs® partials are very easy to care for.

In order to keep them looking and feeling like new, please have your patients follow these simple recommendations:

1. Continue to brush natural teeth and gums as directed.
2. Clean the restorations daily. Simply rinse restoration under warm running water in order to remove any food particles prior to soaking it in the denture cleaner.
3. With a very soft denture brush, brush restoration using water only. Rinse again.
4. Place restoration in tcs® Concentrated Dental Appliance Cleaner for at least 15 minutes per day.
5. It is recommended to keep restoration in water or tcs® Concentrated Dental Appliance Cleaner when not wearing it.
6. DO NOT use bleach, toothpaste or similar cleaning products as these may scratch or discolor the surface of the partial.

Please provide the patient with the Patient Care Pamphlet along with the tcs® Fresh samples.

tcs® Unbreakable
iFlex by tcs®
tcs® Coool Mint Wipe
tcs® Concentrated Dental Appliance Cleaner

FAQ's

Can I prescribe a full denture made out of tcs® Unbreakable or iFlex by tcs®?
No, tcs® Unbreakable and iFlex by tcs® were specifically formulated for removable partial dentures.

Is tcs® Unbreakable and/or iFlex by tcs® FDA cleared?
Yes.

Does tcs® Unbreakable and/or iFlex by tcs® have the CE Mark?
Yes.

Is tcs® Unbreakable really unbreakable?
tcs® Unbreakable has a lifetime guaranteed against breakage. Extensive testing and clincal history has validated that tcs® Unbreakable will not break under proper use of the restoration.

Is iFlex by tcs® also unbreakable?
iFlex by tcs® is clincally proven to be break resistant.

When should I prescribe a tcs® partial?
tcs® Unbreakable and iFlex by tcs® partials can be prescribed whenever a removable restoration is being considered. However, in some cases a tcs® should be combined with a metal framework for added stability. E.g.:

- Need for a more rigid appliance due to poor tissue support or few remaining teeth.
- Free-end saddle with teeth missing from the 1st bicuspid.

FAQ's

Are tcs® partials recommended for immediate cases?
No, due to recession, please allow 8 to 10 weeks healing time prior to prescribing a tcs® restoration.

What type of impression material should be used?
See page 12, "Impression Taking Techniques."

How long will a tcs® partial last?
tcs® Unbreakable is designed to last a lifetime. Should modifications be needed as time goes by due to natural changes in the patient's mouth, tcs® Unbreakable partials can usually be modified rather than replaced.
iFlex by tcs® is also designed to last a lifetime. However, should modifications be needed due to natural changes in the patient's mouth a new iFlex by tcs® will be required.

Do the abutment teeth need preparation?
No tooth preparation is necessary when prescribing tcs® partials. The unique characteristics utilize tissue undercuts and portions of abutment teeth for retention. However, tooth preparation may be necessary for rest seats when tcs® is used in combination with metal.

What about adding teeth and/or clasps? *Applies only to tcs® Unbreakable.*
tcs® Unbreakable: See page 17, "Preparation for Adding Teeth."
iFlex by tcs®: iFlex by tcs® cannot be repaired.

Can tcs® partials be relined? *Applies only to tcs® Unbreakable.*
tcs® Unbreakable: Yes, in most cases where an overall reline is needed, the case is jumped into a new base. This is a laboratory procedure. See page 18, "Preparation for a Reline."
iFlex by tcs®: No, iFlex by tcs® cannot be relined.