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**The Combination Case:
Maxillary Complete Denture
Mandibular Removable Partial Denture**



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This patient presented wearing a maxillary temporary immediate placement denture which has been worn for approximately six months.

The patient has a lower temporary all plastic removable partial denture.





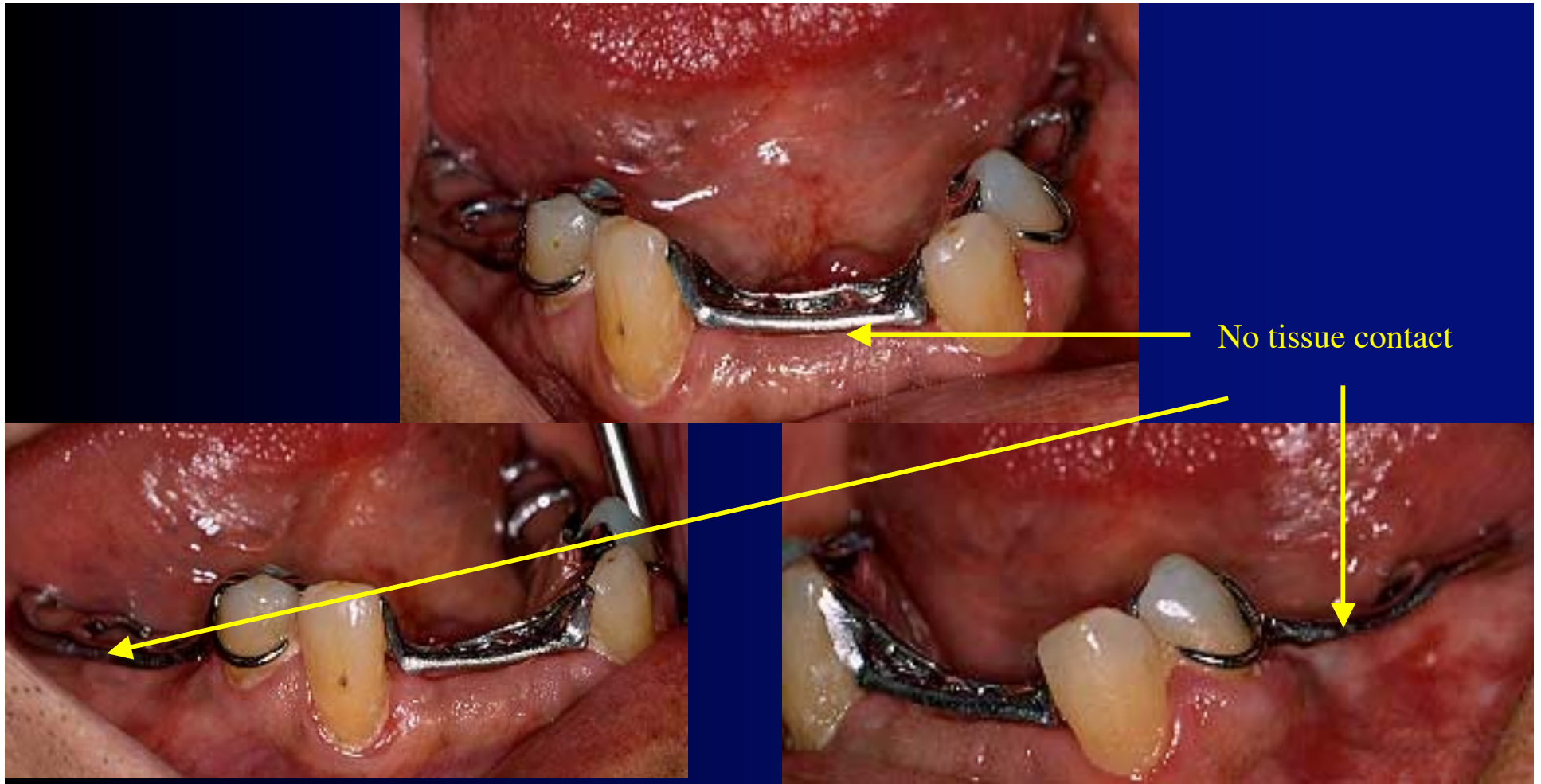
These are the “first generation” appliances in the mouth. Sufficient healing has occurred at this time and we will make the definitive maxillary complete denture and the mandibular removable partial denture.



For this patient, the first step in definitive appliances was to design and fabricate a framework for the lower removable partial denture. The tooth contours were evaluated and found to be adequate for the partial denture. Occlusal rests were prepared and a master cast secured. The framework was then fabricated, according to directions provided in a work authorization, at the dental laboratory.



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



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.

We have a maxillary master cast to go with the lower framework shown at the lower right. We will now make a record base and wax occlusal rim for the maxillary cast. The record base and wax occlusal rim will allow us to secure jaw relationship records from our patient.





Remember, the maxillary wax rim is simply an analog for the patient's teeth. Here the wax rim is shown along side the previous denture. The labial position and the length of the teeth on the previous denture can be guides for the fabrication of the wax occlusal rim. We will now try the wax rim in the patient and assess facial support, tooth display and occlusal vertical dimension. Adjustments will be made as necessary to the wax rim.



The wax rim has been placed in the patient's mouth. His relaxed lip posture and facial appearance let us know that the occlusal rim provides adequate lip and facial support. We also want to assess the vertical dimension of occlusion to ensure that we have adequate freeway space.





These views show the patient biting into the wax rim. The jaw is guided to a centered position for this registration. Note the guidelines on the wax rim.

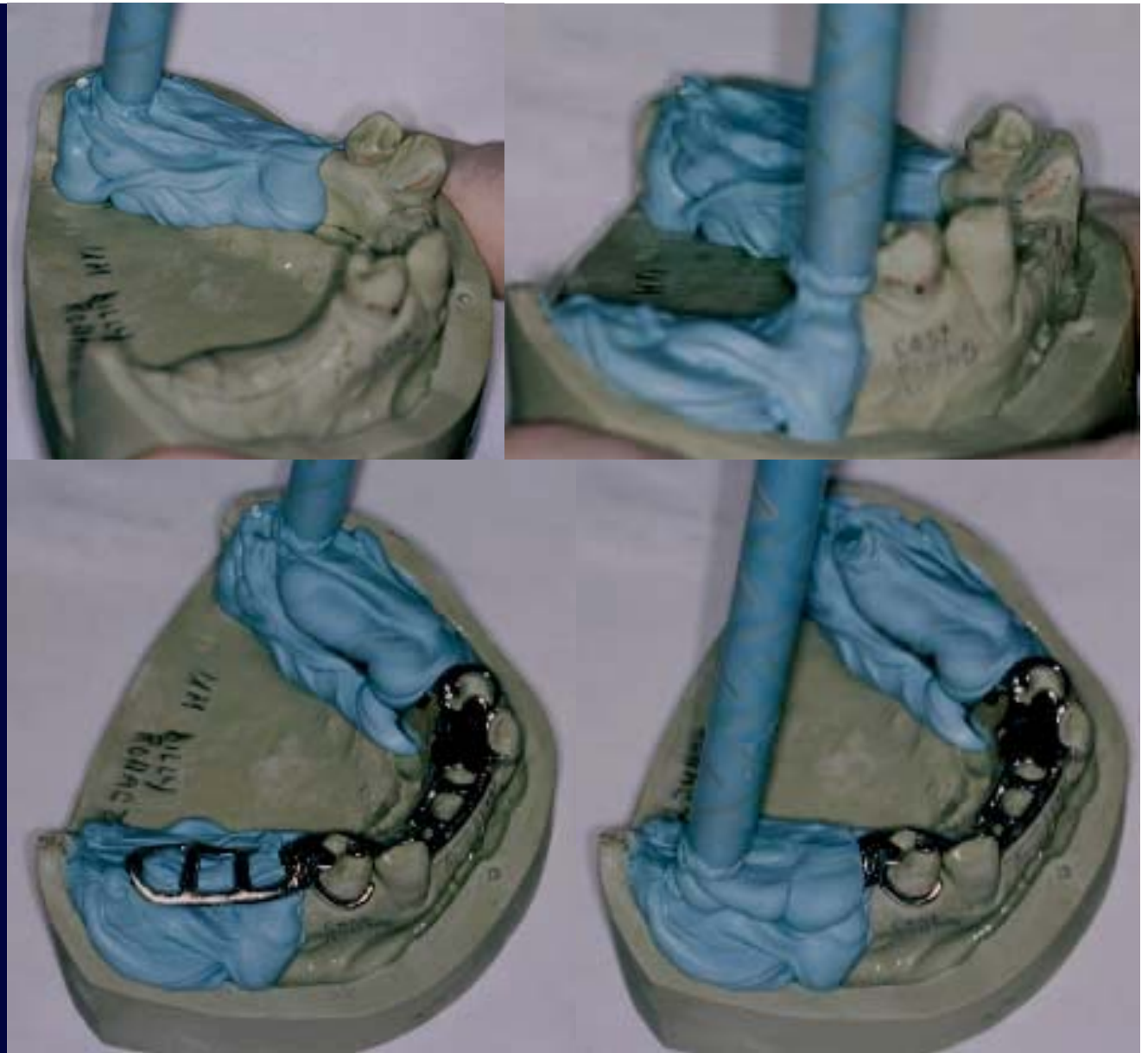
We have the patient smile as well. This gives us an idea of how active the upper lip is. Some patients don't show that much upper tooth due the muscular activity of the upper lip.





We need to make a temporary base on the partial denture framework. This will allow the occlusal registration to be taken. The temporary base will have an occlusal rim in the posterior area to compensate for the lack of teeth here.

These images show the stabilization of the partial denture framework prior to taking the jaw relationship records. Here blue-bite is used to create a temporary base and an occlusal rim for taking the jaw relationship records.





These images show the trimming of the PVS material to form the temporary base and occlusal rim. Grooves will be placed in the occlusal rim prior to securing the occlusal registration.

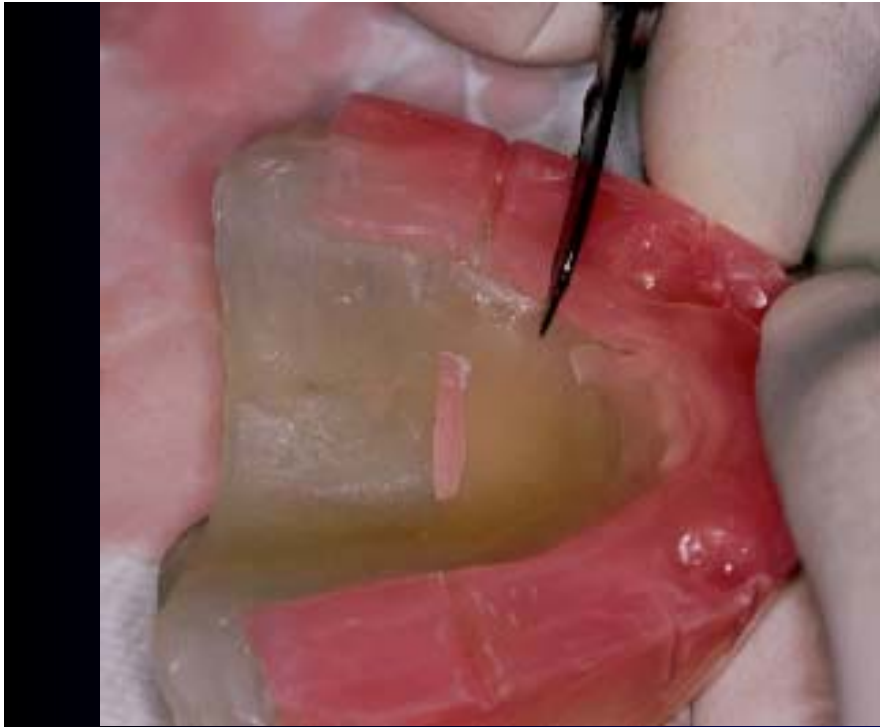




We now have a maxillary record base and wax occlusal rim. We also have a lower framework with a record base and occlusal rim in place. Let's take a facebow transfer and get an occlusal registration.

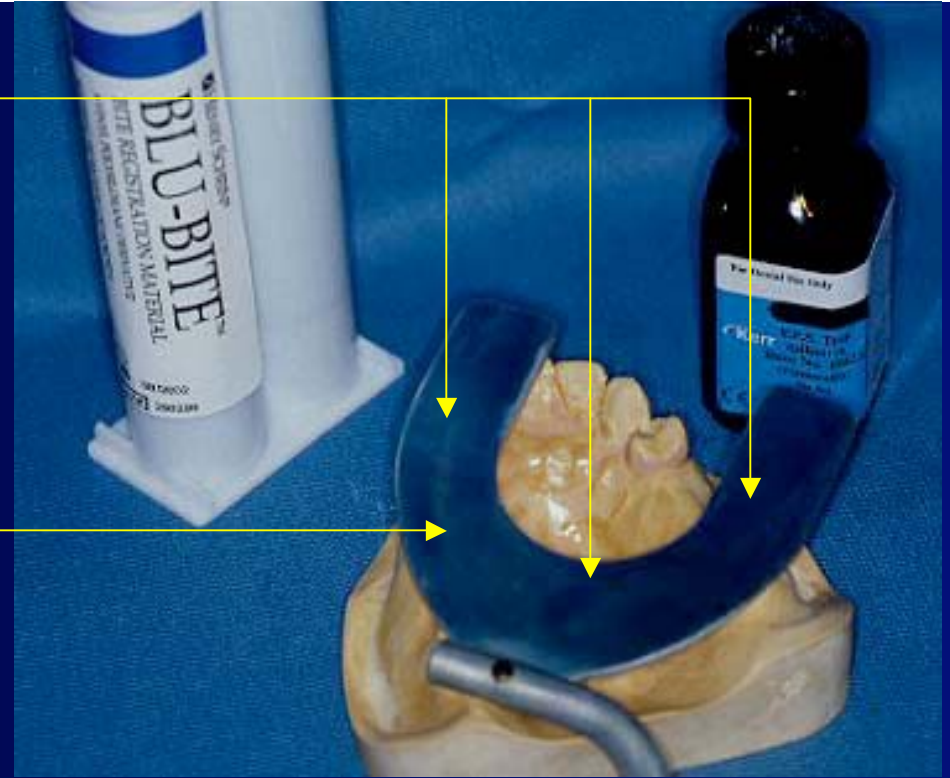
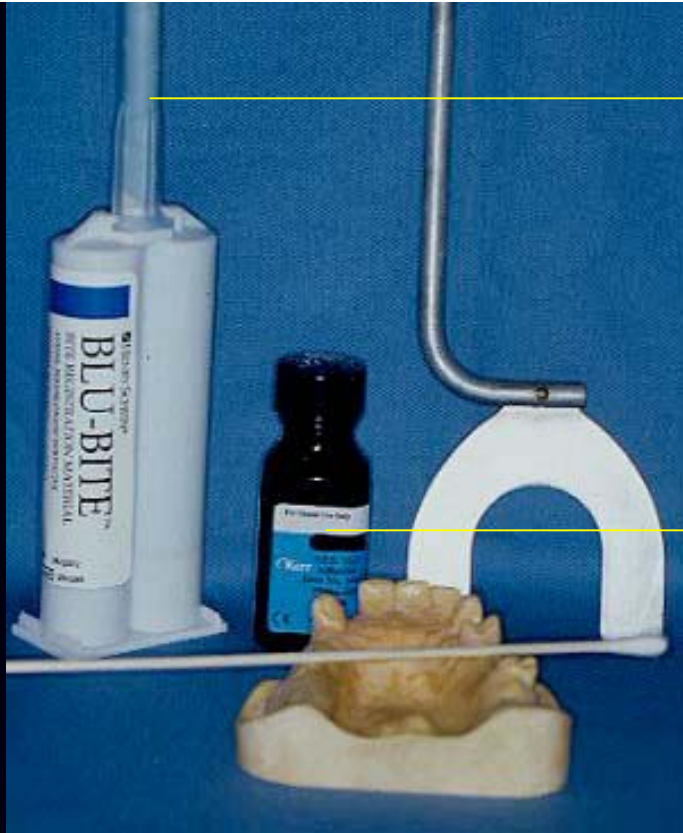
Remember, here is the maxillary record base and the lower framework in place prior to adding the temporary base. For taking the facebow transfer, we will place grooves on the maxillary occlusal rim and make a registration in wax or blu-bite on the bite fork. This index on the bite fork will help us place the maxillary record base in a secure and repeatable position relative on the bite fork. It need not be sealed on the bite fork with wax.





These images show the creation of an index on the bite fork for the maxillary record base and wax occlusal rim. Remember that you could use blu-bite on the bite fork instead of wax . All we need is an index for the maxillary occlusal rim.





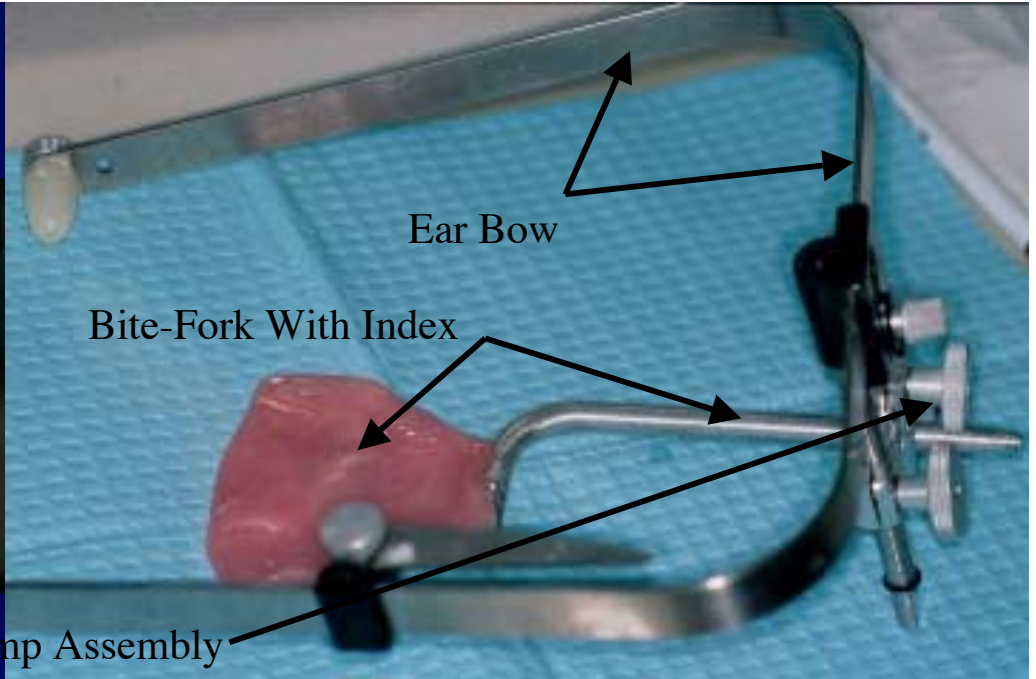
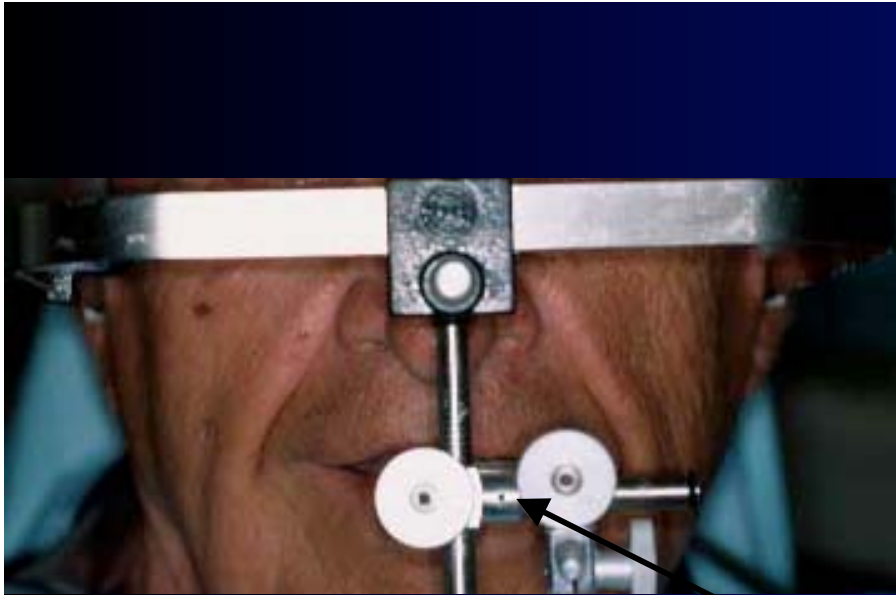
This example shows the use of the blu-bite for indexing a model to the bite fork. For a denture, simply “substitute” the maxillary record base and wax occlusal rim which has had some grooves placed in it.





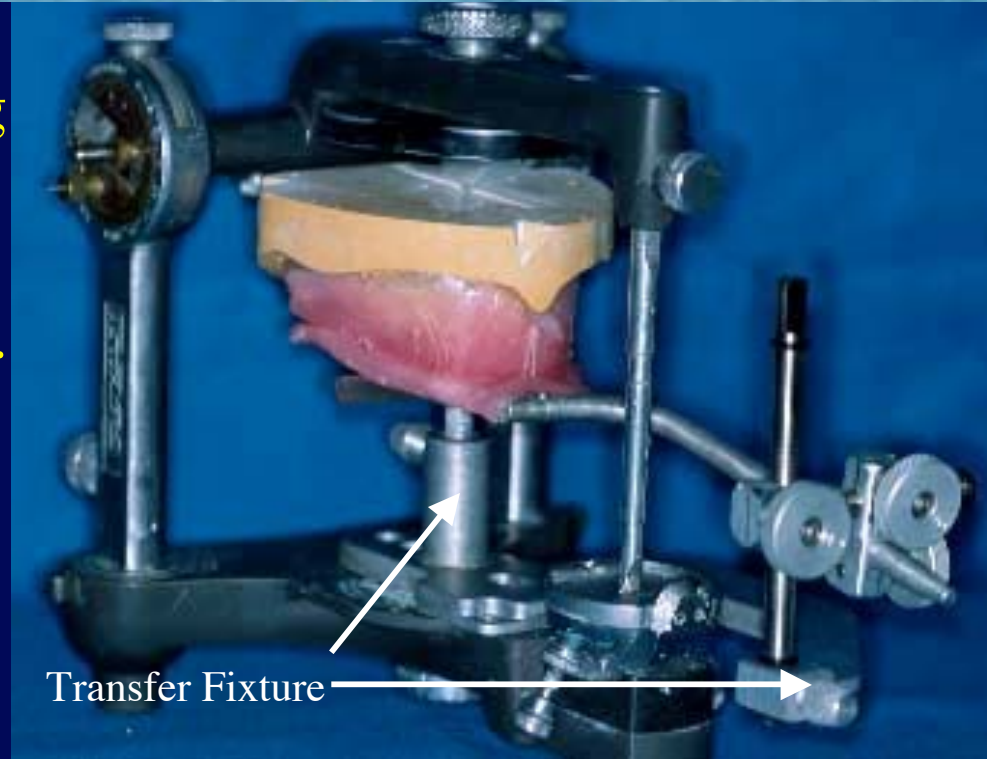
You can see here how the blu-bite could replace the wax on the bite fork for this purpose. We now take the face-bow assembly to the patient.





Clamp Assembly

Above we see the ear bow orienting the clamp assemble to the bite fork. Upper right we see the facebow assembly removed from the patient. Below right we see the clamp assembly on the transfer clamp to mount the upper cast to the articulator.



Transfer Fixture



The upper record base + wax rim is placed in the mouth with the framework and blu-bite occlusal rims. Additional blue bite is added to secure an occlusal registration record.



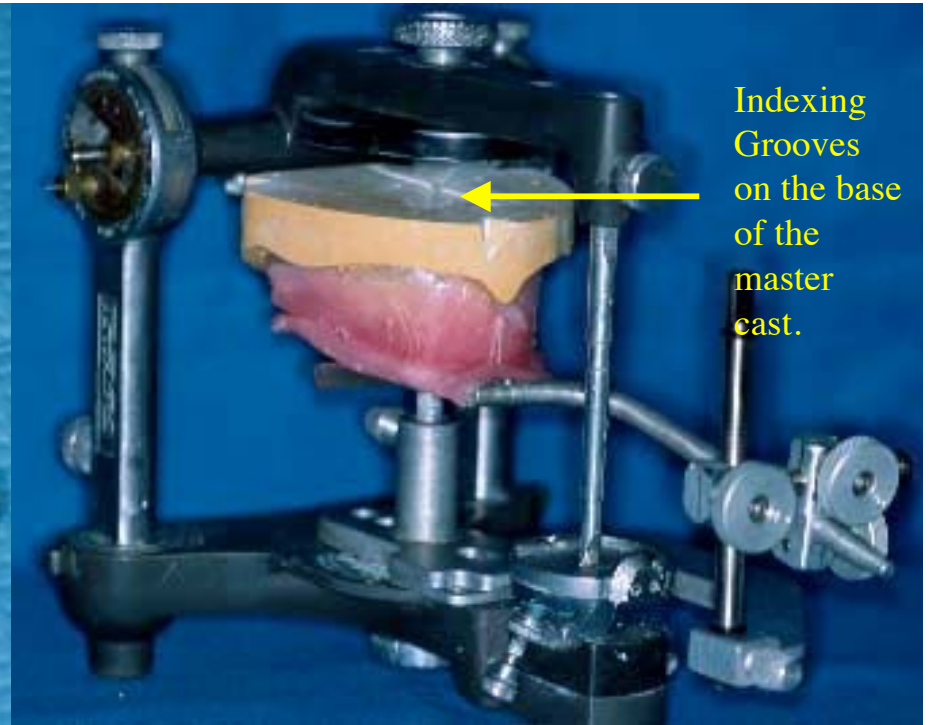


The patient is guided to a “centered” jaw position and closes in the registration material. As you can see, the small grooves placed in the wax rim register on the blue bite giving us an occlusal registration for mounting the casts.





We now have our occlusal registration and our facebow transfer. The clamp assembly may be removed from the spring bow and transferred to the mounting jig. This will allow us to mount the maxillary cast to the articulator.



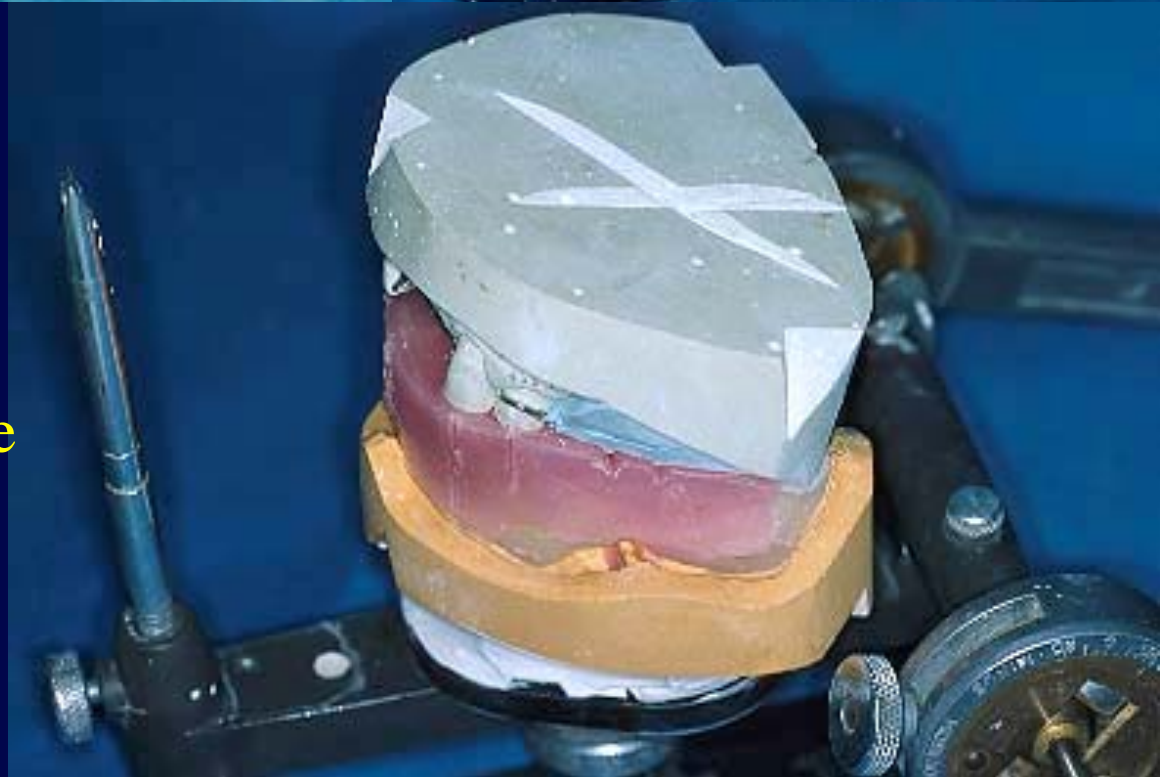
Indexing Grooves on the base of the master cast.

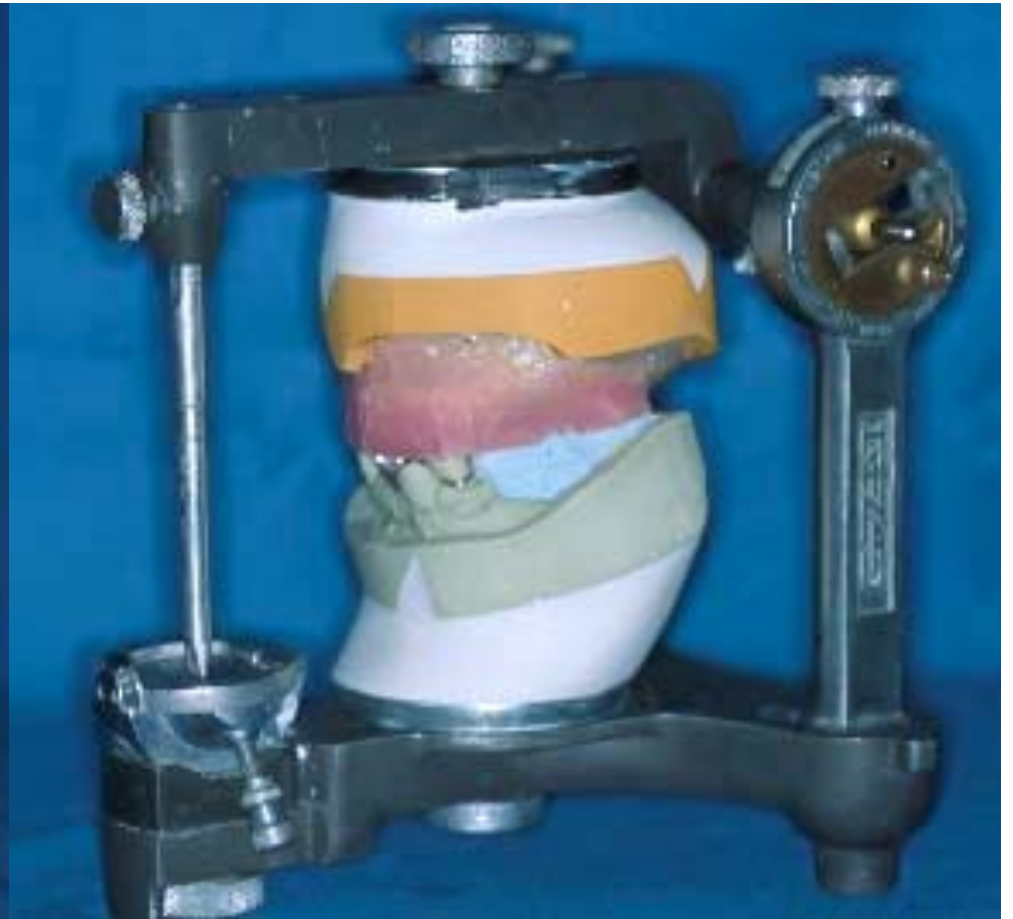
These images show the use of the clamp assembly and the mounting jig to attach the maxillary cast to the articulator. Note that the base of the maxillary cast is indexed prior to mounting.



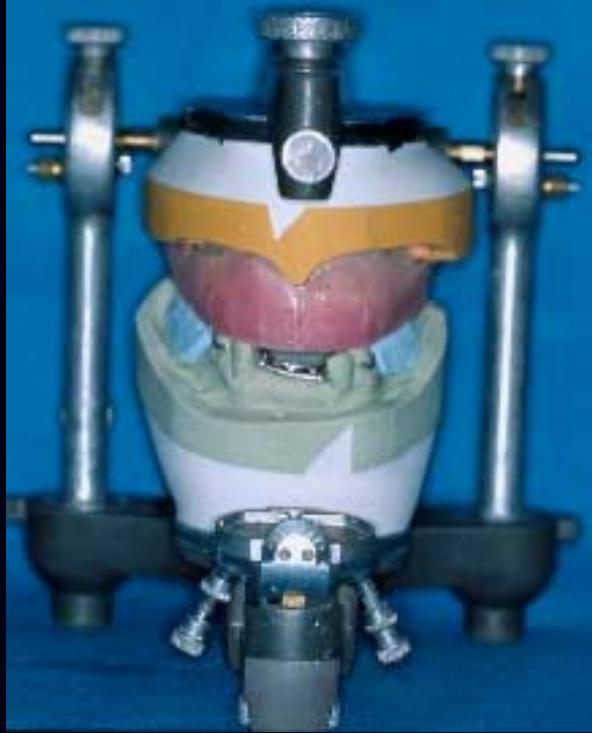


The lower RPD framework and the blu-bite occlusal rim are used to relate the lower master cast to the already mounted maxillary cast. Note the indexing grooves on the base of the lower cast as well.





The left image shows the mandibular cast when it has been initially attached to the mounting ring and the image at the right shows the casts



The patient's models mounted and the teeth we will be setting for the maxillary and mandibular appliances.

Zero Degree Teeth
For Lower Arch

10 Degree or Anatoline Teeth For
The Upper Arch

Mould No.

40° POSTERIOR

Euroline™ IPN 40° posteriors are German designed with a natural-looking “young” occlusal pattern, wide food table and long crown form. Using 30° incisal and condylar guidance settings, they can be arranged for maximum efficiency, aesthetics and integration in full, partial or combination cases.

730

X = 29.00
Y = 30.70
U = 9.90
L = 8.30



732

X = 32.00
Y = 33.60
U = 11.00
L = 9.20

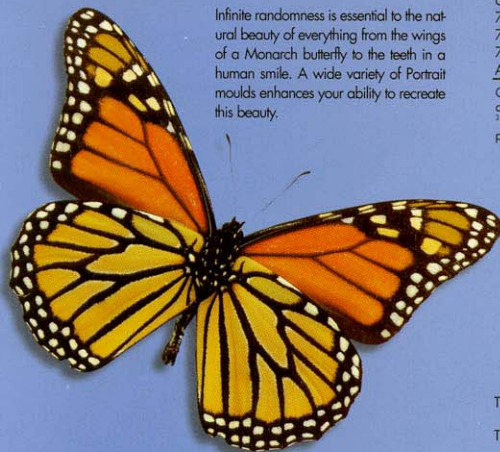


734

X = 33.50
Y = 35.50
U = 11.50
L = 9.60



Infinite randomness is essential to the natural beauty of everything from the wings of a Monarch butterfly to the teeth in a human smile. A wide variety of Portrait moulds enhances your ability to recreate this beauty.



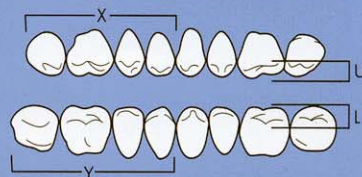
SUGGESTED ARTICULATIONS AND COMBINATIONS

Combine with Trubyte® Portrait IPN Posterior Moulds

Upper Mould No.	Articulation With Lower	0°	10° Anatoline®	20°	33°	40° Euroline
11G	R	632	332	33M	32L	732
11H	S	634	334,336 ¹	33M,35M ¹	34M	734
12E	N,M	632	332	29L,31M	32L	732
12G	G,R,V	634	334	33M	32M	734
13E	H	630	330	31M	32L	730
21C	C	630	330	29M,L	30L ²	730
21D	F	630	330	29L	30M	730
21J	I,K1,Rx	634	334,336	33M,35M	34M	734
21X	P	632	332	31M	32M	732
22C	C	630	330	29M	30M	730
22E	H	630	330	29L	30M	732
22G	O,P	634	334	31M,33M	32M	732
22H	P	634	334	31M,33M	32M	734
24F	F,G,H	632	332	31M	30M	732
25G	R	634	334	33M	32L	734
31F	J,O,S	634	334	31L ²	32L	734
32B	C	630	330	29M	30M	730
32E	H	632	332	31M	30M	732
32G	S	634	334,336 ¹	33M,35M ¹	32M	732
41J ³	I,K1,Rx	634	336	35M	32L,34M	734
42D	F	630	330	29M,L	30M	732
42F	H	632	332	31M	32L	732
42G	O,P	632	332	31M,33M	32M	732
43D	C	630	330	29M,L	30M	732
43F	N,M	630	330	31M	30M	730
45H	R,V	632	332,336 ¹	31M,35M ¹	32L	730
52C	C,D	630	330	29M	30M	734
54F	J,N	632	332	31M	32L	730
55D	E	632	332	31M	30M	732
55F	M	632	332	31M	32L	732
62D	F	630	330	29L	30L ²	732
62G	K1,R,Rx	630	334,336	33M,35M	32L	734
65G	J,O	634	334	33M	32L	734
74E	L	630	330	29M,L	30L ²	734
75E	N	630	330	29L	30M	734
75G	R,V	632	332	31M	32L	734
A84	N	632	332	31M	32L	734

Combinations are primarily for Portrait IPN Moulds. ¹ Indicated for upper denture combinations only. ² Mould available in Bioform® IPN® Posteriors. ³ Softening the canine cusps may yield the best aesthetic results for certain posteriors.

LEGEND FOR POSTERIOR DIMENSIONS



The average width of a 1x4 set of upper posteriors= X, The lower posteriors= Y

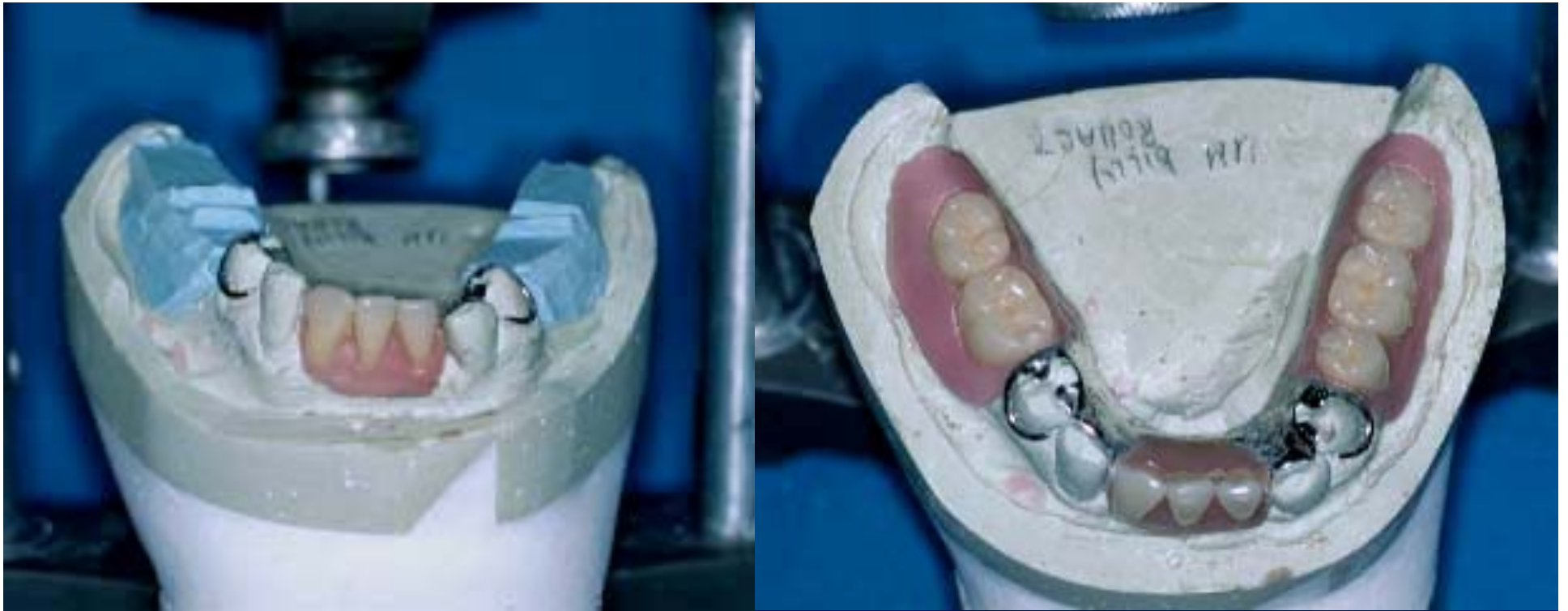
The average depth of the upper left first molar= U, The lower left first molar= L

As with the Classic mold booklet, you may use the chart provided to help select the lower anterior teeth as well as the posterior teeth.

Remember we use 0 degree teeth for the lower posterior teeth and 10 degree or Anatoline teeth for the upper posterior teeth



The maxillary anterior teeth have been set using the guidelines placed on the wax occlusal rim. The midline and the location of the cuspids was noted with lines on the wax occlusal rim.



The lower anterior teeth are set first. Note that only three incisors were set in this case due to the space available. Selecting a smaller tooth which would allow four teeth to fit would result in teeth that look too small. Once the anterior teeth have been set, we set the posterior teeth after removing the blue-bite temporary base.



Completed set up ready for the patient try-in.



The patient try-in appointment. Note midline of maxillary teeth and the general arrangement of the teeth. The close up shows a small space between #22 and #10. This was subsequently taken care of by adding a bonded composite to the incisal edge of the lower tooth #22 and shaping it to be compatible with #10.