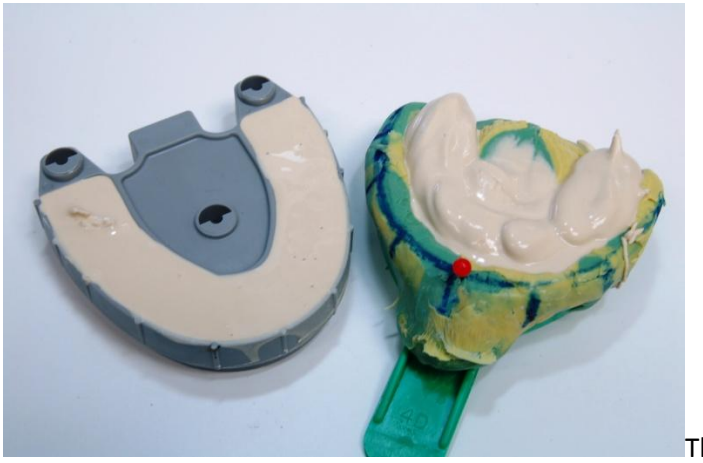
Full Arch Set up with Plug-in Stops

The following Monotrac full arch set up will demonstrate a maxillary full arch round house bridge impression without any natural occlusal support or stop. The case presents a separate pre poured opposing model and bite registrations. The set up will require three Monotrac Plug-in stops to create solid tripod vertical centric location and support.

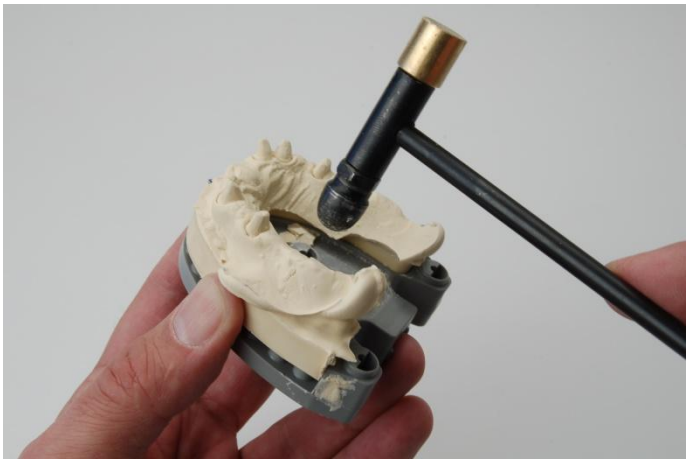
Shown are the Monotrac V2 full arch tray and full arch round house impression. A red map pin is placed at the midline to guide the forward and centered placement position of the tray relation to the impression. A Sharpie can also be used to make guide markings.

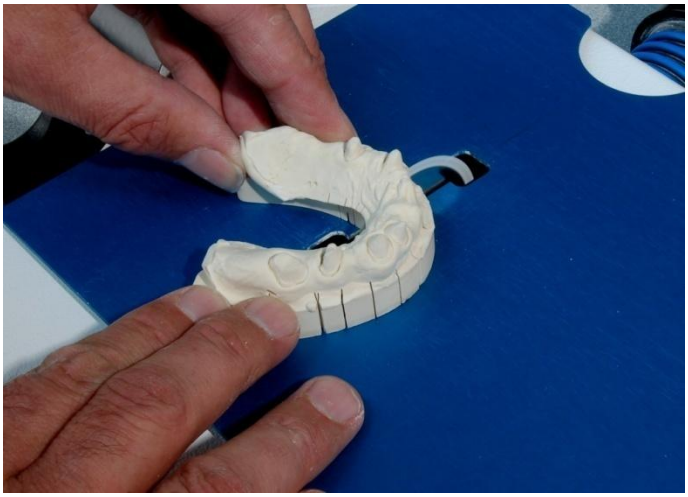


The V2 tray and impression are poured with die stone.

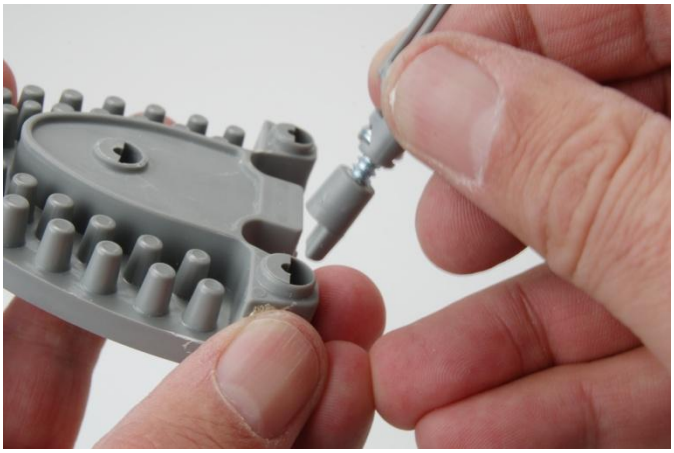

The base is inverted and aligned over the impression.

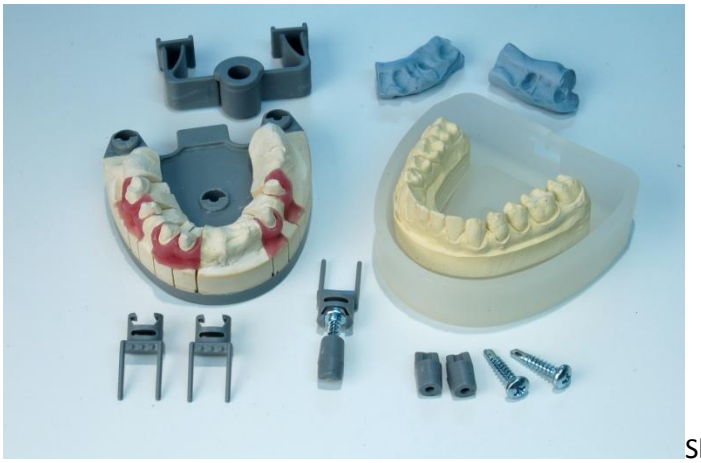

The impression is removed and the Tear-away wall is peeled away. This allows the model to be ejected from the tray and leaves a neat appearance and minimal finish work.

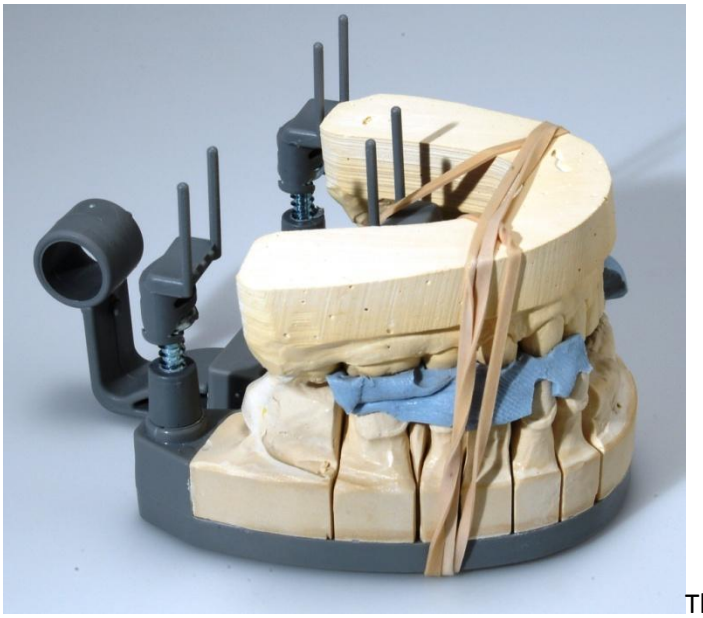

The palatal area of the tray is tapped forward and back in a circular motion to create an even ejection of the model from the tray. The model is then placed into a dehydrator to create a warm dry model before die section. Drying is necessary and important for the easy removal of dust debris and a precision seat of the dies back onto the tray.


The method of die section is optional to the technician. It is completed by hand saw, hand piece disk or the Monotrac die cutter shown here. The Die –Cutter requires a warm model for fast, easy removal of fine dust debris. Bottom cuts are made first for the bulk of the cut. Hand saw or disk cuts are then made from the top in the margin area to meet the bottom cut. Dust and debris are immediately air blasted for complete removal. Note it is also optional to create small snap breaks between dies for a solid model effect.

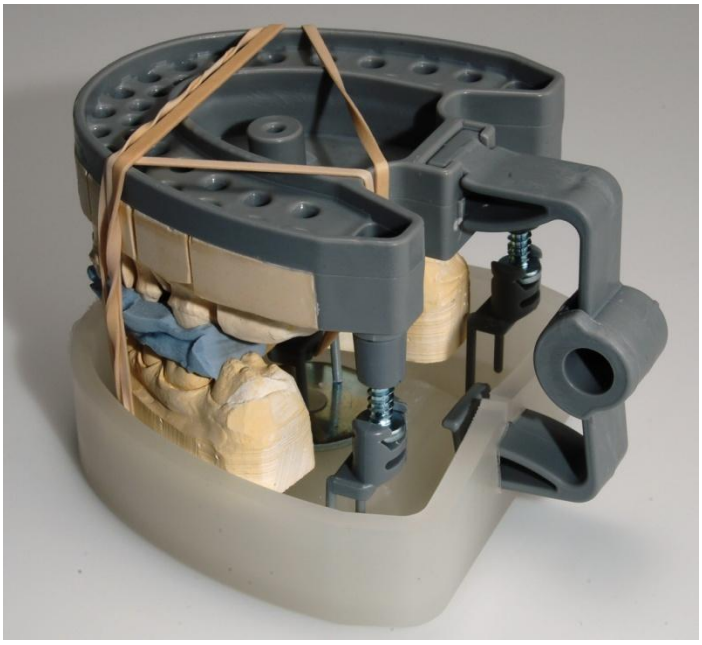

The blue table top can be flipped up to use the diamond disk lathe style for making buccal and lingual cuts or can be top cut with a hand saw to complete die section.


Where required, a vertical stop is needed in unsupported or free end locations. Monotrac patented Plug-in adjustable vertical stops are simply pressed into the stop pockets in the tray

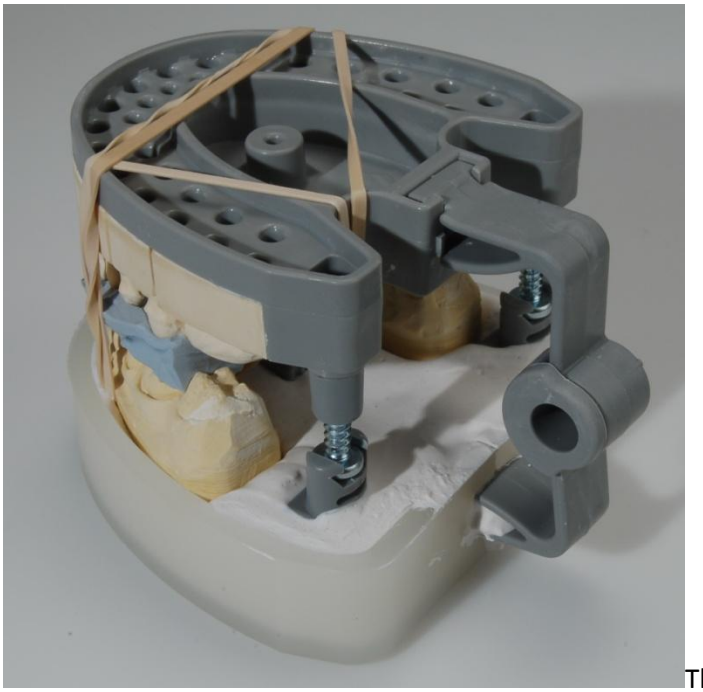

Shown are all the components required to finish this set up. From top left to right; flex arm hinge, trimmed bite registrations. Middle row from left; Monotrac V2 base with sectioned trimmed dies and removable G-mask soft tissue, silicone Pick-up cup with the opposing model shown inside. Bottom row from left; cast-in-place vertical stop heads, center is an example of full assembly of stop head attached to plug-in-stop body, next are two plug in stops and adjustable screws. Because this case has no natural occlusal stops it will be fully vertical supported by the three plug-in stops.

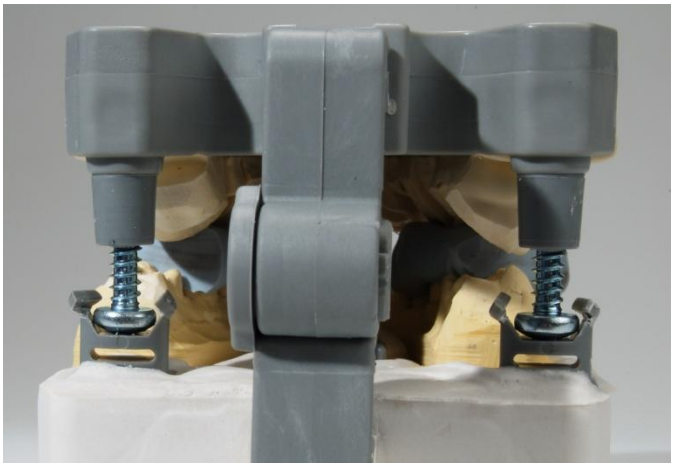


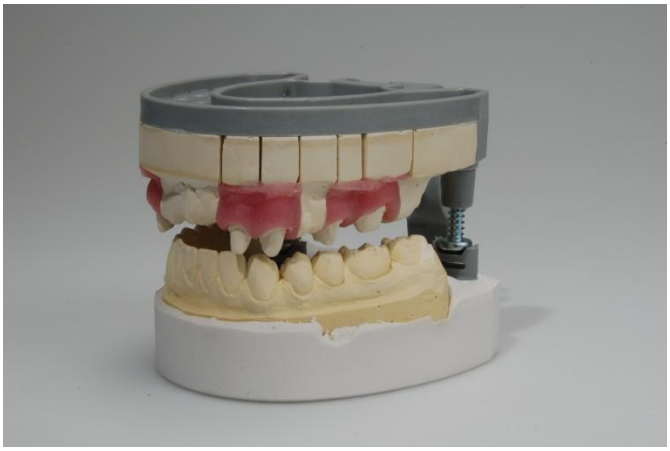
The opposing model is strapped down firmly into the trimmed bite registrations with rubber bands maintaining positive pressure into the bite registrations. Note that stone models expand beyond the impression of the bite registration restricting full passive seat into the bite registrations. The rubber bands force a more accurate full seat into the bite registrations.



The hinge, stops and Pic–up cup in place for trial fit and clearance. The opposing model and cast in place stop heads will be captured simultaneously into the pour.

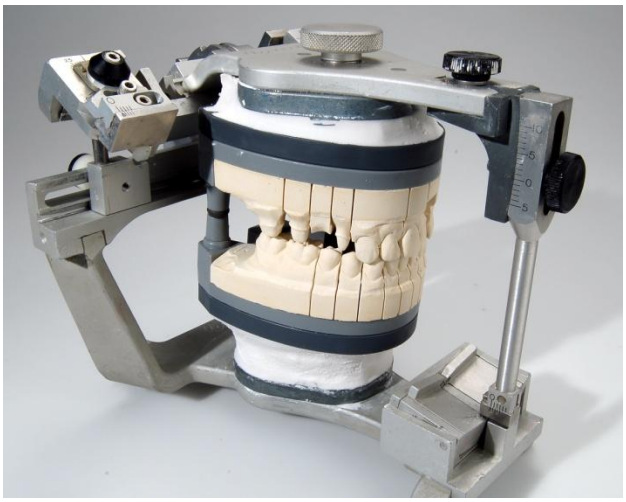

The pic-up cup is poured and model, stops and hinge are captured and settled into the wet stone


The pic-up cup is removed, rubber bands are cut, the stop head retainer tabs are broken away from the screw heads. Note that the cast-in-place stop heads have lateral ramps that simulate average value cuspid rise. Monotrac is the only disposable plastic articulator with solid vertical stop capability. Monotrac also offers a magnetic split cast adapter plate for attachment to semi or fully adjustable articulators. Because Monotrac has this solid vertical stop capability metal articulators are really no longer required.


The Finished Model with three plug-in vertical stops.


The magnetic split cast adapter components. From left; a magnetic ring is placed inside the index cavity of the back side of the opposing model. Center, A metal plate is attached to the inside screw boss of the Monotrac model tray. Right, the split cast adapter plate which magnetically attaches to Full Arch Monotrac base and plastered to the big articulator. All of these split cast components are reusable. For convenience and easy handling,

Monotrac bases can be transferred between articulators and used both ways on the same case. Simply remove the hinge and plug in stops then move to the big articulator.


Monotrac model bases with split cast plates on a Denar articulator.

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