

## A Quick and Easy Diagnostic Setup Technique

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Diagnostic setups can be made for any number of teeth or for entire arches. Once the teeth have been realigned, it is critical to be able to bring the diagnostic cast into a consistent occlusion.

The traditional method of fabricating a diagnostic setup is to saw through the root areas, separate the teeth by hand, and affix them in their new positions with wax. This article presents a simpler technique that shortens fabrication time and still produces a reliable setup, without the need for additional trimming.

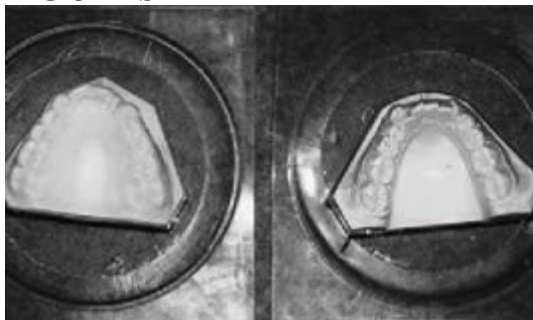
### Procedure

- 1. Pour and trim the upper and lower casts as usual.
- 2. Vacuum-form duplication stents over the casts (Fig. 1).
- 3. Fill the stents with orthodontic stone to the level of the gingival margins (Fig. 2). Remove any excess stone from the inner edges of the stents.
- 4. Once the stone has set, apply a layer of soap or tinfoil substitute.
- 5. Fill the stents to the top with orthodontic stone.
- 6. After setting, remove the new casts from the stents.
- 7. Number the teeth in each arch (Fig. 3).
- 8. Remove the dental arches from the bases, and break the individual teeth apart (Fig. 4).
- 9. Using a thin layer of wax, replace any teeth that are to remain in their original positions.
- 10. If any teeth need vertical repositioning, carve down the ridge accordingly. Position the remaining teeth according to the treatment plan. Add prosthetic teeth if necessary.

### Conclusion

Because no sawing is required, this technique greatly reduces the time it takes to make a diagnostic setup. If the repositioning involves only one arch, the heel of the diagnostic setup should still line up with that of the original opposing base, allowing reliable interdigitation (Fig. 5). □

### FIGURES



**Fig. 1** Stents vacuum-formed over upper and lower casts.



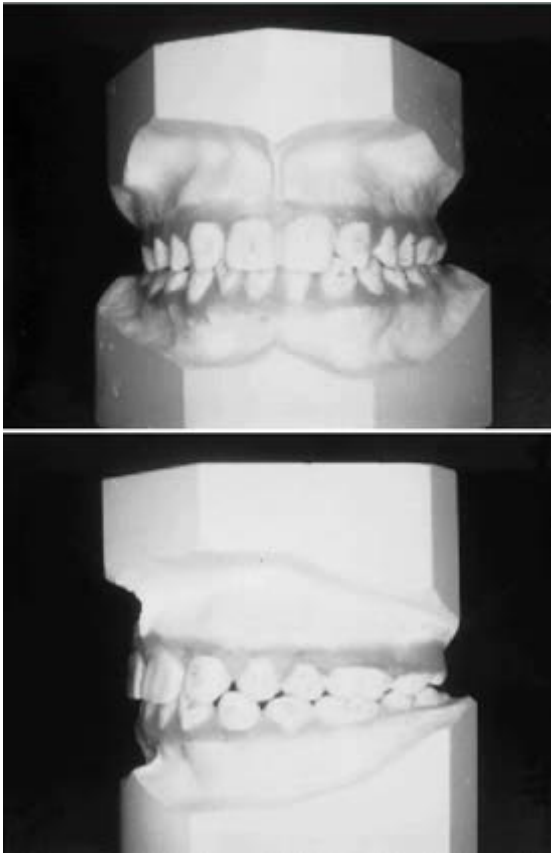
**Fig. 2** Orthodontic stone poured in stents to level of gingival margins.



**Fig. 3** Teeth numbered on completed setup cast.



**Fig. 4** Teeth broken off for repositioning.



**Fig. 5** Completed diagnostic setup in occlusion with original opposing base.