

## CHAIRSIDE INSERTION INSTRUCTIONS FOR THE MAPA™

1. When inserting the MAPA; look for comfort, accuracy and proper retention. Good impressions will have assured this.
2. Next, have the patient bite on the MAPA platforms. The object is land both mandibular cuspids bilaterally and simultaneously on the cuspid pads of the MAPA when the condyles are in place (centric relation). Chances are you will need to do some minor adjustments on the discluding elements to achieve this. It is very important the contacts are equal in pressure when the condyles are in CR. To make sure they are closing in centric relation, you may do a Dawson “Romancing the Mandible” technique or you may have the patient touch the soft palate with the tip of their tongue while “pretending” to bite on their second molars or most posterior teeth. Do not let them use their own casual bite because their muscles and jaw relationships are usually problematic at this time and may give you highly inaccurate information. Avoid the patient protruding or going laterally when you are trying to create the correct orthopedic relationship between the mandible and the rest of the head with the MAPA in place.
3. If the opposing cuspids (either) are below the height of the neighboring incisors, having the cuspids land on the discluding element is difficult. In such a case, the lab may make a second appliance with artificially heightened cuspids to function against the cuspid pads. The freeway space still should not be violated but it may be close. Anterior open bites may have tall cuspid discluding elements to achieve function. Discluding elements designs are based on function and not symmetry.
4. When centric relation has been captured with balanced cuspid contacts, then have the patient protrude on articulating paper while keeping the cuspids on the cuspid pads until incisors are end to end either visually in space or in direct contact. Adjust the MAPA until the protrusive paths are equal in pressure and are straight. You may have to guide the mandible with your hand to help insure the mandible is moving straight while adjusting. Once properly adjusted, they should protrude straight without your assistance. Make sure no posterior teeth touch when protruding while traveling edge to edge. Most patients will never go past edge to edge incisally so posterior contact after that may not be critical.
5. Finally, have the patient go “straight” left and right for their lateral movements from the CR position. Adjust to make the pathways smooth and level, or relative so. Again make certain no posterior teeth touch in these excursions.
6. In the event you have posterior teeth touching in protrusion or in lateral, you may adjust the teeth to free these contacts or increase the height of the cuspid pads on the MAPA. Increasing height can easily be done using TRIAD bonding

adhesive and its composite tray material, or something similar. Four millimeters is ideal for protrusive and lateral movements, but may be impossible in some cases.

7. When finished, polish the occluding surfaces of the pads only. You can also coat the pads with DuraFinish composite glaze. Use the “halogen only” cure product from Parkell. Stock No. S295. Polishing is optional but do smooth.

8. Instruct the patient on how the MAPA works. Then discuss when to wear and how to clean it. Denture cleaners work well. Tooth brushes can scratch. Give the patient a handout reviewing what you said. The patient handout has excellent information on sleep, posture, hydration, etc.

9. The patient should wear the MAPA out the door, so do not forget the case.

10. The MAPA should be worn full time for six weeks (give or take two), except to eat and clean. It becomes bedtime wear after the full time wear. Some cases may require full time wear for a longer time period. During this time, two therapies should be accomplished starting two weeks after delivery then, two or three weeks after that. Bedtime wear may be indefinite for many and usually starts after two therapy appointments are completed. Therapy usually includes equilibration to create a stable and functional dental relationship with the TMJ’s as muscles are being relaxed and returned to their normal working length. Other therapies, when needed, will be based on your training, equipment or on referral to a physical therapist, etc.

11. If the MAPA is used as a protector of dental work, then bedtime wear is all that is necessary. The MAPA is much more comfortable, works better and doesn’t wear out like so many other full arch protectors. The MAPA quickly becomes a “want to” rather than “have to” appliance to wear at bed time while protecting expensive dental work. Think of it as forcing normal on your patients while preventing trauma.

12. Work with a good physical or massage therapist to help educate the patient on proper work, sleep and daily postures as they relax (regain normal working length) neck and shoulder muscles. Eliminating the trigger points within these muscles is necessary. Beware of therapist who only do hot packs and exercises. The neck and shoulder muscles are over exercised already and trying to relax them when trigger points are present by doing strengthening exercises make them worse. The object is to take tight muscles and return them to their normal working length. Caution your patient s to never use dry heating pads. Moist heating pads are OK. A combination of 200 to 400mg of ibuprofen combined with 500 to 1000mg acetaminophen every 6 hours gives the best pain relief providing these medications can be taken by your patient. Caution your patient on long term use. Never use narcotics, Ultram or Tramadol as they inflame glial

cells surrounding nerves making the situation worse. Soma or Carisoprodol is a good muscle relaxer to use only at bedtime (no hang over like Flexaril). Do not use Soma for more than 30 days. Topical analgesics like Aspercreme applied to neck, shoulder, TMJ's and jaw muscles make a significant impact in some patients. Cold is usually a distracter only and should never be used for more than a few minutes. Cold spray and stretch, however, can help the dentist when stretching a tight muscle to regain its working length.

13. Make sure the patient has the "Helpful Hints for Wearing The MAPA" handout. Reviewing it with them (or have an assistant review it with them) will greatly benefit the patient. Be prepared to answer patient questions.

14. Use the website: [www.MAPAbiteguard.com](http://www.MAPAbiteguard.com) for more information. Personal contact with Dr. Crout can be addressed to: [drcrout@aol.com](mailto:drcrout@aol.com).

Post note: Patients with deep overbites with traumatic fremitus will not improve until the lower incisors are equilibrated slightly out of contact.