

# Express 4 Sleep

## INSTRUCTIONS FOR FITTING

**Semi-Custom appliance that effectively treats snoring and sleep apnea**

**Intended to be used as a temporary or trial device for a maximum of 30 days**



Figure 1. The Bite Guide Wheel      Figure 2. Side view of Bite Guide Stick

**A.** Find the proper Bite Guide Stick: Determining the correct maxillo-mandibular relationship is the essential first step to making the Express 4 Sleep appliance. The wheel has 9 premeasured break-away Bite Guide Sticks, numbered 1-9. Each one has a measurement code described in the table above. The **VERTICAL** dimension is 3, 4 or 5 mm. The **PROTRUSIVE** advancements of the mandible are 0 (edge to edge), +1.5 mm or +3.0 mm. When placed in patient's mouth, the numbers on the handle of the bite guide should be faced up.

**\*It is desirable that the patient's lips can remain comfortably closed with the appliance in their mouth.**

**B.** Manual muscle testing is recommended to determine the correct maxillo-mandibular relationship for the Express 4 Sleep. Use the deltoid muscle when possible but any healthy muscle may be challenged.

1. The user is asked to stand up straight with their lips together, teeth comfortably apart, and tongue in the roof of their mouth. Ask them to extend their arm straight out and resist your pushing it down for 1 to 3 seconds. Strong resistance to being pushed down defines neurologic facilitation. (figure 3)



LIPS UNSTRAINED, COMFORTABLY TOGETHER

2. Ask the user to stand with their lips together while clenching on their back teeth and repeat the test. Poor resistance defines neurologic inhibition.

3. Ask the patient to stand on a small pad of folded paper, approximately 1/4 inch tall. Ask them to stand with their lips together, teeth comfortably apart, and tongue in the roof of their mouth. In step 1, this was a position of facilitation, but now by introducing a postural imbalance, most people will test inhibited. Now you know the difference in resistance between inhibition and facilitation.

4. Snap off Bite Guide Stick #1 from the wheel. Insert it into the patient's mouth with numbers facing up, and ask them to bite into the grooves on both sides. When the patient is biting into a bite guide it should be directed straight out – not angled up or down. (figure 4) The Bite Guide Stick position is a more jaw forward position than the natural bite.

5. Find the correct **VERTICAL** dimension first using Bite Guide Sticks #1, #4, and #7. With these three bite guides the patient is in an edge to edge relationship (*no protrusion*). Choose the stick where the patient is most facilitated with their lips comfortably closed.

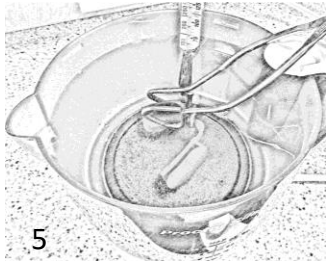
6. In order to find the correct **PROTRUSIVE** position, muscle test the next two sticks at the same vertical dimension that you found in step 5. Choose the stick where the patient is most facilitated with their lips comfortably closed.

### C. Directions for fitting:

Supplies:

- Pot for heating water, 6 inches deep preferred
- Timer, watch or a clock with a second hand
- Thermometer that reaches 212°F.
- Tongs or a spoon

1. Simmer water to 180-185°F Water simmers at 180°F. This is when tiny bubbles start to form at bottom of pot. Boiling water is too hot. Do not boil.

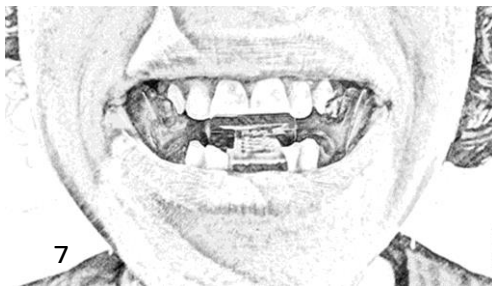


2. Use tongs or spoon to hold the mouthpiece in water for 90 to 120 seconds, allowing enough time for the inner layer to soften. (figure 5) Dunk in room temperature water for no longer than 2 seconds.

3. Place the softened Express 4 Sleep appliance in the patient's mouth over the mandibular teeth, with the lingual bar behind the mandibular anterior teeth/tissue. (figure 6) the position of the lingual bar is extremely important for the correct fit and comfort.

4. With finger pressure, push down vertically onto the mandibular teeth and then press lingually against the lower lingual flanges.

5. Ask the patient to bring their jaw a little forward and bite down, so their mandibular teeth are positioned in the groove on the bottom of the Bite Guide Stick. The Bite Guide Stick must remain straight as in figure 4. They must be instructed to bite all of the way down until their teeth firmly touch in the groove of the Bite Guide Stick. (figure 7)



**INSERT IN MOUTH PRESS IN ON SIDES**

6. Now ask the patient to close their lips and suck in with their lips and cheeks and push their tongue against the lingual flanges of the appliance to form the softened material and achieve a snug fit over the teeth on the inside and outside (buccal and lingual).

7. Use finger pressure bilaterally to push in the upper flanges. (figure 8)

8. After 60 seconds, remove the appliance from the patient's mouth and run it under cold water for 30 seconds.

9. Retry the Express 4 Sleep to confirm snug fit. 10. If the fit is not snug, repeat above steps.

### Summary:

- Immerse appliance in water (180-185°F) for 90 to 120 seconds
- Dunk in room temperature water for no more than 2 seconds
- Fit in patient's mouth and allow to set for 60 seconds
- Run under cold tap water for 30 seconds for final setting

