

# E-Z Flex II™

Air Cushioned *TMJ* Exerciser



## READ THIS FIRST

### Getting the E-Z Flex II Ready for Use

After the case is opened, attach the connector from the air tubing into the receptacle of the mouthpiece. You should feel the connector snap into place. Now you are ready to use the E-Z Flex II for both basic and advanced functions. The instructions for basic and advanced functions are enclosed.

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[www.tmjexercisetreatment.com](http://www.tmjexercisetreatment.com)

**TMD, LLC**  
**Therapeutic Mobilization Devices**  
12 Bond Street  
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(212) 588-0993

## **GETTING STARTED – READ THIS FIRST**

### **Warnings and Cautions**

1. A variety of serious conditions may cause jaw pain and/or decreased jaw opening. The use of E-Z Flex II is not a substitute for a careful medical/dental evaluation prior to its use. All individuals with symptoms of jaw pain, limited opening or other symptoms of jaw dysfunction should undergo a thorough evaluation by a qualified healthcare provider before using E-Z Flex II.
2. Individuals with dental problems, dental implants, crowns, bridges, loose teeth, gum and periodontal problems, complete dentures or removable dentures, should consult a dentist prior to using E-Z Flex II.
3. Individuals who have been treated with radiation therapy to the jaws, head and neck region must consult their physician and dentist prior to the use of E-Z Flex II.
4. If the user experiences unexpected pain at any time during the use of E-Z Flex II, its use should be stopped immediately and the treating doctor must be consulted.

### **Contraindications**

E-Z Flex II should not be used in individuals who have diagnosed or undiagnosed fractures of the upper jaw, lower jaw and facial bones. Individuals with the following conditions should not use E-Z Flex II: osteomyelitis of the upper/lower jaw, osteonecrosis of the upper/lower jaw, and other pathologic conditions of the jaw bone (cysts, tumors).

## Introduction

**E-Z Flex II** is an air cushioned TMJ Exerciser that is designed to restore range of motion and function to the jaw. There are numerous conditions in which **E-Z Flex II** is indicated:

1. Disorders of the Temporomandibular Joint (TMJ)
2. Jaw muscle disorders from muscle spasm, clenching, bruxism (grinding of teeth), muscle stress & strain
3. Rehabilitation of jaw mobility and function following jaw surgery: TMJ surgery arthroscopy, arthrotomy, TMJ arthrocentesis (joint irrigation), orthognathic surgery (correction of skeletal jaw disorders)
4. Rehabilitation of jaw mobility and function from trauma (following the healing phase)
5. Rehabilitation of jaw mobility and function following trismus from: Dental/facial infection, Dental injection
6. Maintenance of jaw mobility and function: during and after radiation therapy to the head and neck, certain intra-cranial (brain) surgeries

## How does E-Z Flex II work?

**E-Z Flex II** is a passive motion device designed to restore normal range of motion and function of the jaw. Passive motion occurs when joint mobilization is powered by a force other than one generated by the muscles that normally mobilize that specific joint. This concept of passive motion in joint rehabilitation is based on over 40 years of orthopedic research that has shown that motion is essential for the restoration of function in all joints. Orthopedists have been using passive motion devices to rehabilitate joints throughout the body and the principles of passive motion are directly applicable to mandibular function (*Israel H, Syrop S: The Important Role of Motion in the Rehabilitation of Patients with Mandibular Hypomobility: A Review of the Literature. J Craniomandib Practice 5(1):74-83, 1997*).

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## **What makes E-Z Flex II different from other jaw motion devices?**

**E-Z Flex II** is designed specifically for the temporomandibular joint and surrounding muscles. The unique use of flexible tubing and an air pump provides therapeutic passive motion to the temporomandibular joint that is gentle, safe and easy to use with total control by the user. **E-Z Flex II** is unique and offers great advantages over other exercise devices:

- ▶ Air cushioned force is safe, gentle and flexible
- ▶ Safety stops enable controlled progress toward improved jaw opening and function
- ▶ Modified syringe hand pump allows user to have hands in a relaxed natural position away from the mouth during use
- ▶ User can visually measure progress while using the device providing immediate feedback and control
- ▶ Sustained stretch can be achieved without pressing on hand pump
- ▶ Jaw muscle strengthening, with closure against gentle resistance can be performed by removing elastics.
- ▶ Unique system of elastics permits control of jaw muscle toning. The more elastics that are removed, creates greater resistance to jaw closure, permitting a controlled progression of toning the muscles of the jaw.

## **Care and Maintenance**

**E-Z Flex II** can be cleaned with warm water and soap.

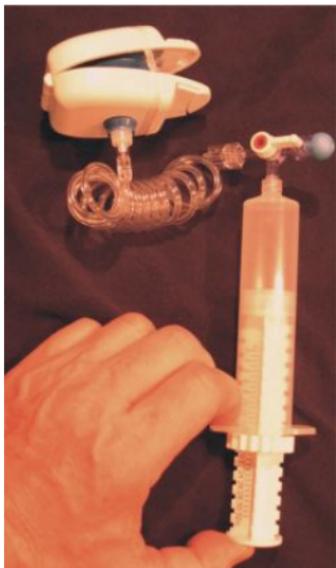
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## **BASIC INSTRUCTIONS FOR IMPROVING JAW MOBILITY**

1. Become familiar with the various components of the E-Z Flex II. The mouthpiece has cushioned platforms for the teeth and there are elastics to keep the jaw device in a closed mouth position.



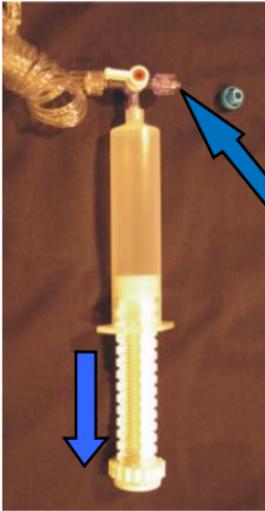
2. The syringe is used for pumping air into the mouthpiece, permitting the upper and lower parts of the mouthpiece to gently separate and provide passive jaw opening.



3. The 3 way stop-cock has a long lever. The direction that lever faces will block air from passing through that location.



4. To use the device first AIR must be drawn into the syringe.



Remove the blue stopper located in the 3 o'clock position. Turn the lever to the 9 o'clock position and pull the plunger on the syringe downward to allow air to fill the syringe.

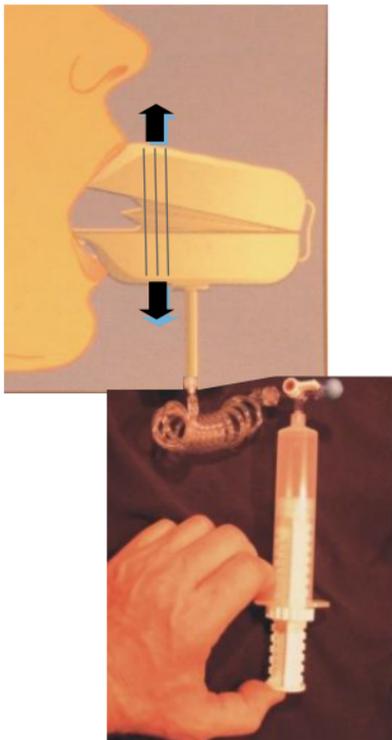
5. Turn the lever to the 3 o'clock position and place the blue stopper back into position



6. Place the E-Z Flex II mouthpiece in your mouth with the upper front teeth and lower front teeth resting on the cushions



7. Slowly apply pressure to the plunger of the syringe with your fingers to allow the AIR to be transferred to the mouthpiece. The upper and lower members of the mouthpiece will separate and your jaw will slowly and gently begin to open.



8. Gradually apply pressure to the plunger of the syringe until your mouth opens as widely as possible WITHOUT discomfort, pain or resistance. Hold the mouth open in this position for 5 seconds.
9. Release pressure on the plunger allowing the mouth to slowly close. Wait 5 seconds and then repeat the preceding instructions 6-8 (above). Continue this passive motion exercise for 5 minutes.
10. Perform this 5 minute passive motion exercise 3-4 times daily.
11. **HELPFUL HINT:** applying warm moist compresses to the right & left jaw for 5 minutes before and during passive motion exercise sessions is helpful in loosening tense jaw muscles. A head wrap with hot/cold packs during these exercises is very helpful. Ice packs can be inserted to replace the hot packs at the end of the session. Determine whether hot or cold compresses feel better. Both of these methods are interchangeable.

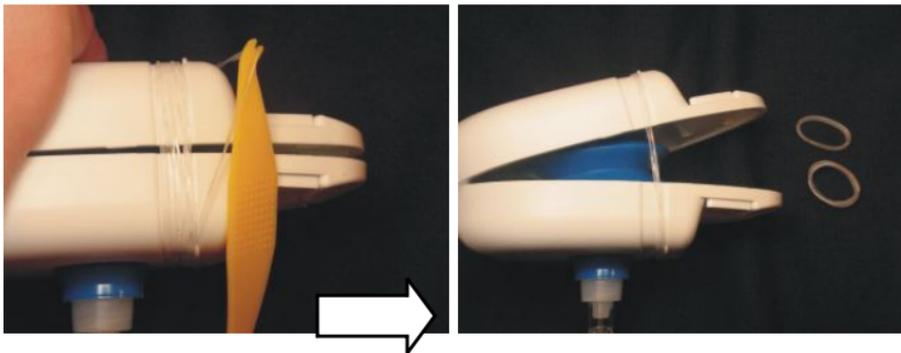
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## **BASIC INSTRUCTIONS FOR TONING JAW MUSCLES TO GRADUALLY INCREASE STRENGTH**

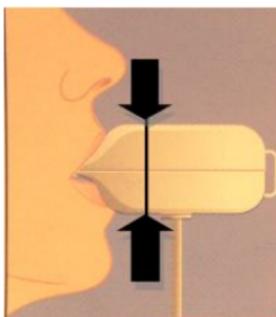
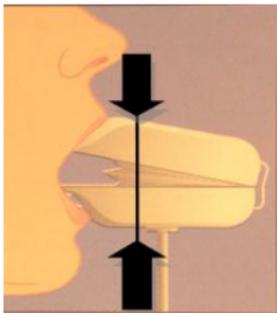
IMPORTANT: ONE HAS TO OBTAIN ACCEPTABLE JAW OPENING PRIOR TO ANY EFFORTS TO IMPROVE MUSCLE STRENGTH. FOLLOW YOUR DOCTOR'S RECOMMENDATIONS AS TO WHEN YOU ARE READY FOR STRENGTHENING JAW MUSCLES. WHEN TONING JAW MUSCLES TO IMPROVE STRENGTH, IF THERE IS ANY PAIN OR DISCOMFORT IMMEDIATELY STOP THE EXERCISE AND DISCUSS YOUR READINESS FOR JAW MUSCLE TONING WITH YOUR TREATING DOCTOR.

Removing elastics extends the bellows separating the upper and lower members of E-Z Flex II. This keeps the jaw in an open position and active closing of the jaw will tone jaw muscles increasing strength. The more elastics that are removed, the more resistance will be present from the bellows, providing more resistance to closing the jaw.

1. You will note that there are 5 elastics that are present on E-Z Flex II. Use the elastic remover to remove one or two of the elastics. You will note that the E-Z Flex II will open a small distance.



2. Close the jaw against the open E-Z Flex II and hold closed for 5 seconds. Relax the jaw for 5 seconds then repeat. Perform this exercise for 2 minutes. This exercise can be performed 3-4 times daily. Start with the lightest level of resistance by removing only 1 or 2 elastics initially.



3. After performing the muscle toning exercises for one week, an additional elastic can be removed to provide more resistance against jaw closure. Each week one more elastic can be removed as the jaw muscle toning exercises gradually progress on a weekly basis. Jaw muscle toning with this method can progress until there is only one elastic left on the E-Z Flex II (do not use the E-Z Flex II without at least one elastic).

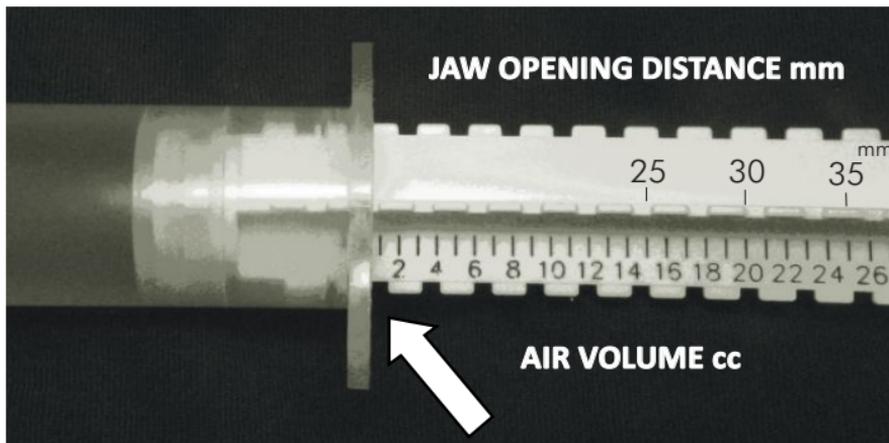


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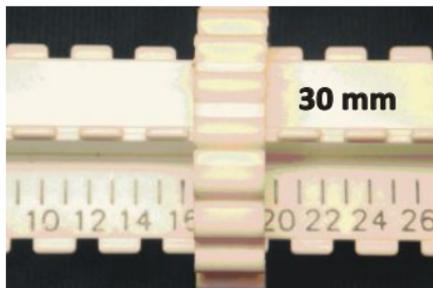
## ADVANCED FUNCTIONS OF E-Z FLEX II

### Monitoring Progress Toward Improved Jaw Opening DURING Use of E-Z Flex II

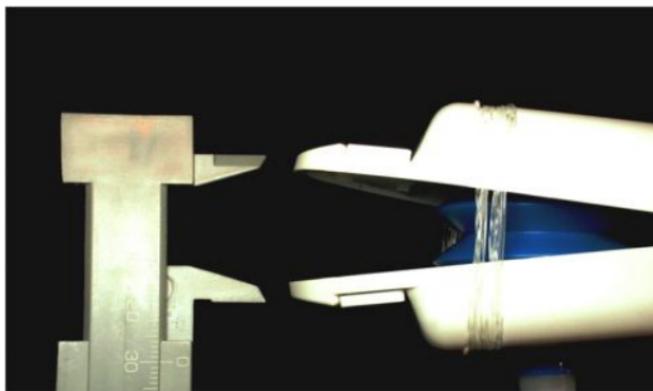
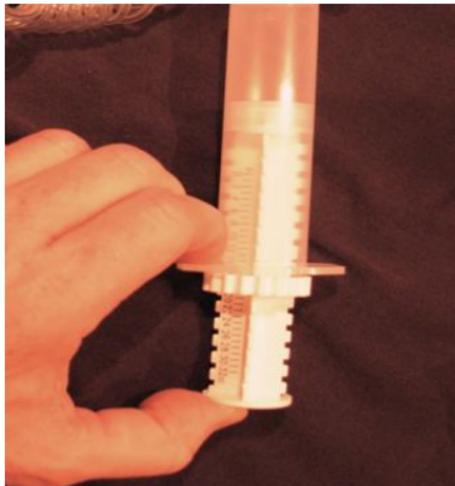
1. The plunger of the syringe has measurements for volume of air in cubic centimeters (cc - below) and the equivalent jaw opening distance in millimeters (mm above). Withdraw the plunger so that 0 cc of air volume lines up with the base of the barrel of the syringe (arrow).



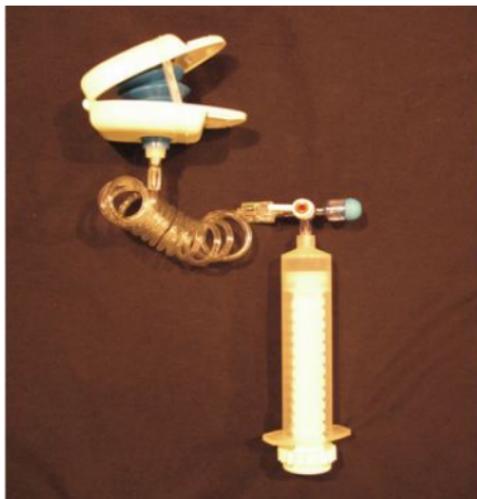
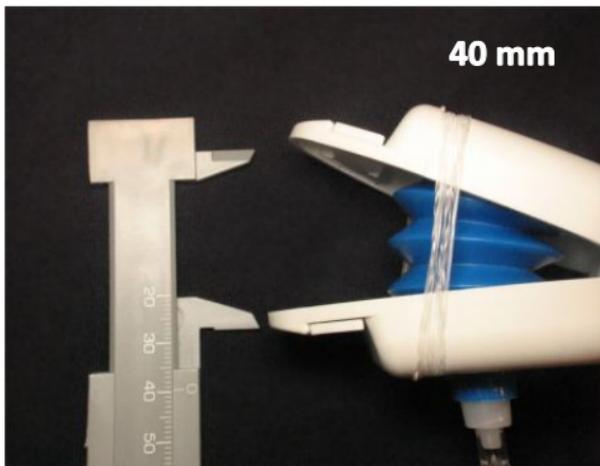
2. Rotate the safety stopper ring at the bottom of the plunger so that the number just to the right is the intended opening distance (and volume of air).



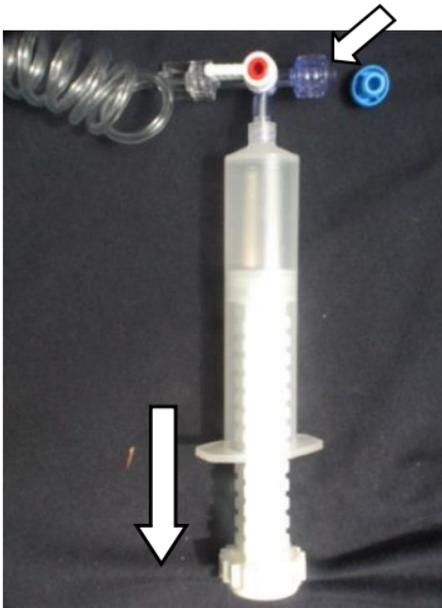
3. Depress plunger to the level of the safety stopper ring. The opening distance between the upper and lower members will closely approximate the scale on the plunger.



4. Gradual addition of greater volume of air permits the user to safely increase jaw opening distance.



Lever on 3-way stopcock can be placed in 9 o'clock position permitting a sustained opening.



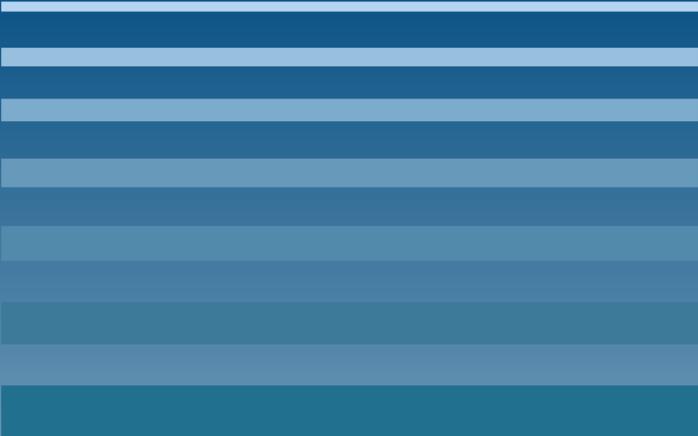
Removal of the blue stopper (with the lever in the 9 o'clock position) can permit drawing up of greater volume of air into syringe allowing greater opening distances if desired by the treating doctor.



Opening distances of greater than 50 mm can be achieved if recommended by the treating doctor. This is rarely necessary but possible.



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