

M.A.D.

MANDIBULAR  
ADVANCER  
DEVICE  
SERIES



Orthodontics and Implantology

# WHAT ARE ANTI-SNORING APPLIANCES?

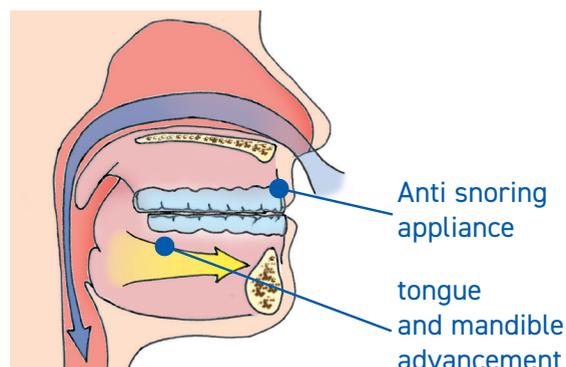
These intraoral nighttime appliances can treat snoring by acting directly on the cause by pushing the lower jaw forward. In fact, mandibular repositioning pushes tongue forward and keeps epiglottis separated from uvula, thus solving the vibration of the soft tissues of the palate to the passage of air which creates the snoring sound. MAD appliances are also used in the treatment of obstructive sleep apnea (OSA) as they can solve the obstruction of rear airway tissues thus restoring breathing capacity during sleep.

*The American Academy of Dental Sleep Medicine* reports that bi-maxillary appliances constructed in the laboratory are more effective and permit a further gradual progress of 4-5 mm since the first check bite registration.

There exist several MAD design appliances worldwide used to treat snoring and obstructive sleep apnea: we have decided to accomplish and improve the components which are used for the most widely known appliances, thus having better evidence of clinical and scientific efficacy

This is our proposal in compliance with the requirements of any clinical specialist:

- appliance efficiency**
- high safety standards**
- stability**
- patient comfort.**



# M.A.D. ANTI SNORING DEVICES

Leone anti-snoring devices are the result of interaction between our Development & Research Department, clinical and technical experts from the United States, who are at the forefront in treating sleep disorders.

## FORWARD!



**BIMAXILLARY  
DORSAL TYPE  
APPLIANCE**

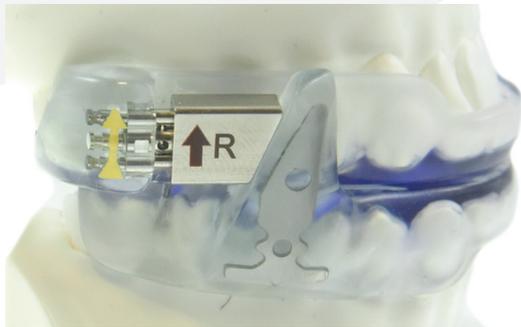
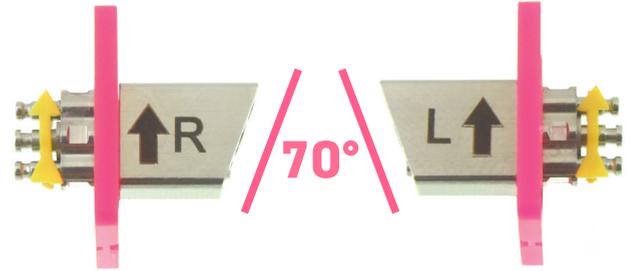
## TELESCOPIC ADVANCER



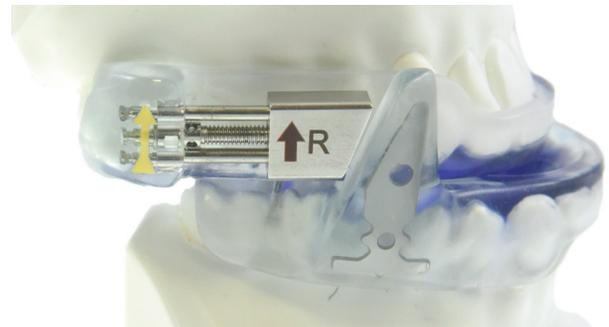
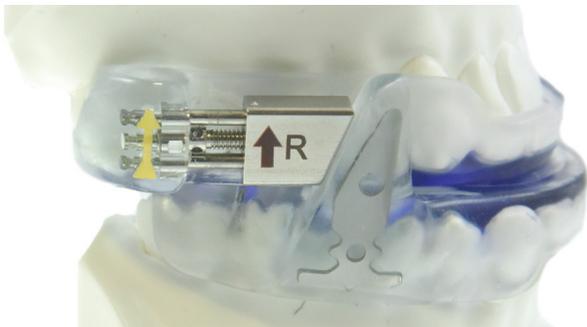
# FORWARD!

\*The first hardware kit specifically engineered for the Dorsal appliance.

The upper screws are specifically designed to get a thrust on the lower inclined plane of the unit: the protrusive anterior portion is a **metallic body perfectly angulated at 70°**, while the back portion ensures extensive retention capacity for the acrylic to avoid breakage.



The screw mechanism has an **in-built stop** that gives **perfect friction** and **stability** during the movement of lower jaw forward, as well as preventing the screw from coming apart once **7 mm** of maximum elongation is reached.



The lower wings, one right and one left, are **anatomically shaped** for **superior comfort** and perfect matching with the 70° angulated body of the upper screws. The clear material is fully compatible with any orthodontic acrylic resin, while the inner metallic frame **can be anatomically adapted and incorporated** into the resin of the lower splint, to ensure superior strength for the mandibular advancement in adult patients.



Each upper screw has an arrow clearly laser marked on metal front body, indicating a single **direction of activation** to get the forward movement. The screws, both left and right, are specific manufactured to get a

**single direction of activation on both sides** and minimize errors.

Each directional activation generates 0.1 mm advancement.



## FORWARD!

This time-saving Kit includes all the necessary components for a fast and more precise construction of the most widely used anti-snoring appliances.

code



**Kit includes 1 upper right screw and 1 upper left screw, 1 right lower wing and 1 left lower wing with inner steel frame.**  
**For the assembly of 1 anti-snoring appliance.**

**A5300-07**



**Kit includes 10 upper right screws and 10 upper left screws, 10 right lower wings and 10 left lower wings with inner steel frame.**  
**For the assembly of 10 anti-snoring appliances.**

**A5300-17**



**Lower wings with inner steel frame.**

*Pack of 1 right lower wing and 1 left lower wing with inner steel frame.*

**A5301-00**

**70° angulated screws.**

*Pack of 1 upper right screw and 1 upper left screw.*

**A5302-00**

# TELESCOPIC ADVANCER

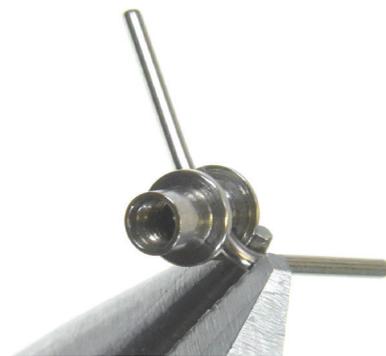
The plug and tube components are manufactured by using **biocompatible stainless steel with the highest strength** available providing durability to any biomechanical stress.

**Sturdy  
and adjustable**



The plug component features a special mushroom design that prevents the tube from disengaging once the patient is in mouth wide open position.

The housing components are designed to be embedded in the acrylic splint: featuring **a laser welded wire** throughout that can be easily bent to enhance the resin retention and avoid unwanted detachment. The outer part presents a main screw to accommodate the connection screws binding the ends of the hinges.



The **multi-purpose tool** can be used as screwdriver or a wrench to tighten the square head screws into the housing.

The plug has an inner advancer screw that can be activated by using the wrench in the direction indicated by the laser marked

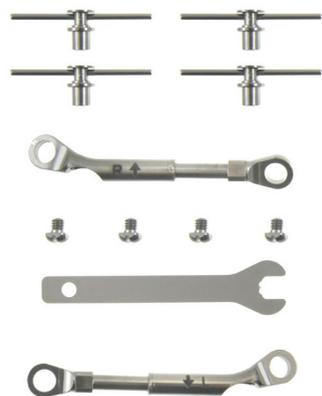
arrow: each  $\frac{1}{4}$  activation produces 0.1 mm advancement. **The maximum elongation is 7mm on both sides.**



## TELESCOPIC ADVANCER

The assortment includes all the components for an easier and more precise construction of the anti-snoring appliance with telescopic adjustable arms

code



*Kit includes 1 right telescopic arm and 1 left telescopic arm, 4 housings with steel wire for acrylic, 4 fixing screws for housing and 1 wrench for activation.*

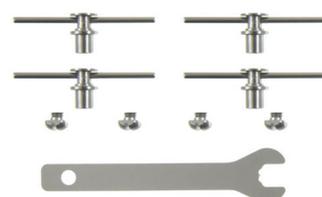
*For the assembly of 1 telescopic advancer.*

**A5100-07**



*Pack of 4 fixing screws for housing and 1 wrench for activation.*

**A5101-00**



*Pack of 4 housings with steel wire for acrylic, 4 fixing screws for housing and 1 wrench for activation.*

**A5101-01**



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