The key to efficient and safe expansion

Introducing the Snap Lock Expander
The Snap-Lock-Expander for efficient and safe expansion

Advantages

1. The Snap Lock Expander does not turn back unless the doctor or patient turns it back. After the activation of the spindle (Fig. 1), the flat spring snaps in (Fig 2).

2. The hole in the spindle is always in the right place for reactivation.

3. When the Snap Lock Expander is properly activated by 1/4 turn, both the patient and doctor will be able to feel the screw lock.

4. If overactivated the Snap Lock Expander can be turned back.

Technical data

<table>
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<th>Order-no.</th>
<th>expansion</th>
<th>dimensions</th>
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<td>A167-1439</td>
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<tr>
<td>A167-1639</td>
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Profile of the Expander

The spring pushes the eccentric spindle. This makes the spindle snap into an ideal position for reactivation and locks it.

Fig. 1: Activation in progress (Spring under tension)

Fig 2: Start and final position, ready for reactivation (Spring in locked position)
Faster is better

Track®
Thermoforming foils from Forestadent

New!

Easy and fast
The separating foil on Track® A cuts down on the number of processing steps and saves time.

30% less breakages
Track® A thermo-forming foils have more elasticity than other PETG thermoforming materials.
Fast processing due to integrated separating foil!
Track® A cuts down on several processing steps: the use of separating liquid or a separating foil and manual preparation is not required because Track® A has an integrated separating foil.

Superior thermobonding characteristics!
Better thermobonding when separately processed parts of an appliance are joint together i.e. snoring appliances, positioners and mouthguards. The improved performance during thermobonding reflects the use of superior materials in the manufacturing process of Track® E.

No drying or bond enhancing agent required!
Track® A and Track® B thermoforming foils do neither require drying (no blisters/bubbles) nor bond enhancing medium to bond to acrylic (Forestacryl).

30% less breakages!
Track® A thermoforming foils have more elasticity than other PETG thermoforming materials.

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**Track® thermoforming foils**

**Product** | **Application** | **Bonding to acrylic** | **Thickness** | **Quantity** | **Order No.**
--- | --- | --- | --- | --- | ---
**Track® A**
Hard (PETG) | invisible retainers, standard retainers, correction splints, applications like ESSIX A | yes | 0,8 mm | 100 pcs. | 408-0108
 | | | 1,0 mm | 100 pcs. | 408-0110
 | | | 1,5 mm | 50 pcs. | 408-0115

**Track® B**
Double layer (TPU/PET-G) | comfortable retainers with optional correction (if used with set-up) | yes (on hard side) | 2,0 mm | 30 pcs. | 408-0220

**Track® C**
Soft (PE) | transfer trays, etching trays, applications like ESSIX C | no | 0,5 mm | 100 pcs. | 408-0305
 | | | 0,6 mm | 100 pcs. | 408-0306
 | | | 1,0 mm | 100 pcs. | 408-0310

**Track® E**
Soft, rubbery (EVA) | positioners, bracket transfer trays, bracket guards | no | 1,5 mm | 50 pcs | 408-0515
 | positioners, can be used to duplicate study models | | 2,0 mm | 50 pcs | 408-0520
 | | | 3,0 mm | 30 pcs | 408-0530

**Track® bleach**
(EVA) | bleaching trays, applicating tray for flouride and medication | no | 1,0 mm | 100 pcs | 408-0610

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Infosheet Nr. 175/4.2006
Functional Mandibular Advancer (FMA)
for the correction of Class II malocclusions, non-dependent on patient compliance

New!
The Functional Mandibular Advancer (FMA) is a new-type fixed appliance, developed for the correction of Class II discrepancies, which is non-dependent on patient compliance. The essential elements of this Herbst-alternative comprise protrusive bars and inclined planes fixed to cast splints or prefabricated bands on the vestibular surfaces of the posterior teeth in the gingivobuccal fold.

Description and advantages of the Functional Mandibular Advancer (FMA)

The FMA is a rigid, fixed, protrusive appliance which incorporates the basic concept of functional orthodontics due to the mechanical principle of the inclined planes. Its essential elements are protrusive bars and inclined planes, which are fixed bilaterally to the vestibular surfaces of the posterior teeth in the gingivobuccal fold and therefore affect neither swallowing nor speech. The protrusive bars of the FMA are placed at an angle of approx. 60 degrees to the horizontal plane thereby actively guiding the mandible anteriorly during jaw closure. The FMA enhances active patient involvement, thereby also enhancing anterior posturing of the mandible and myofunctional training of the muscles. This promotes fast and comfortable adjustment to the desired mandibular position.

In cases of partial jaw closure, the appliance also provides guidance. Unlike the Herbst appliance, with its telescopic mechanism, adjustment in the therapeutic position as well as all functional movements are almost frictionless.

In comparison to traditional removable functional orthodontic appliances the FMA is fixed, therefore its efficiency is completely independent from patient compliance. Reactivation along the sagittal plane can be carried out by relocating the protrusive bars into threaded inserts positioned further toward the anterior. Thus, step-by-step adjustment allows for gradual habitation, in particular with adult patients.

The FMA appliance has been proven clinically for many years, which is documented in numerous studies. An extensive literature list is available on the website of the University Hospital of Aachen, Germany (http://www.ukaachen.de). Search term: “Kinzheimer”.

*acc. to PD Dr. G Kinzheimer and Dr. J. Ostheimer in cooperation with Dr. B. Ludwig
Easy assembly of the appliance
As the individual components are standardized, manufacturing and laboratory fabrication of the appliance are not only straightforward, but can also be customised according to the diagnosis. This provides for fixation to cobalt chrome splints or crowns as well as prefabricated bands. The length of the protrusive bars can be adjusted in the laboratory depending on the specific case (dimensions of the gingivobuccal fold, opening angle of the mouth). Detailed laboratory instructions are enclosed.

Cases
The following cases show the clinical application of the new FMA for correcting Class II malocclusions.

Sections of the FMA can be fitted to the vestibular aspects of thermoformed splints to act as retentive units or anti-snoring devices.

As it is positioned buccally, the FMA appliance complements lingual treatment perfectly.
Advantages of the FMA at a glance

- Non-dependent on patient compliance, thus faster correction of the intermaxillary jaw relationship during growth
- Patient-friendly through gradual habitation by using the functional principle of the inclined planes
- Skeletal correction yet only minor dentoalveolar side-effects
- Corrects the intermaxillary jaw relationship and adjusts the anterior dental arch simultaneously, thus curtailing the total treatment time significantly
- Skeletal bite correction even after reaching maximum growth (adult treatment)
- Correction of mandibular swinging
- Disc repositioning/TMJ-therapy
- Only minor tilting of the mandibular incisors as the appliance is located in the posterior area of the dental arch (= force application more distal than with other Class II appliances)
- Intra-oral reactivation through repositioning of the protrusive bars
- Preparation of the appliance in the laboratory: custom shortening of the protrusive bars
- Fixed on cast splints or prefabricated bands
- Rigid dimensions due to lack of moving parts
- FMA treatment can be combined with lingual treatment or splint therapy

Order description

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<td></td>
<td>- Laboratory instructions</td>
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</table>
Easy-Fit® Jumper

A Class II appliance used in conjunction with any bracket prescription and/or archwires.

*Invented by Dr. Michael Williams, Gulfport, Mississippi. US patent no. 5,919,042 and 6,241,517. Mexican Patent no.1999527 and 224167 and other international patents.
The Easy-Fit® Jumper is a fixed appliance, developed for the correction of Class II discrepancies in combination with a standard bracket/archwire appliance. A unique design, stepless protrusive movement capabilities and no shims increase ease and safety of Class II treatment. This Class II alternative offers numerous advantages compared to standard Class II appliances.

Similar to the well-known mandibular protrusion hinge by Prof. Dr. Herbst, the Easy-Fit® Jumper is attached in the maxilla within the molar area and in the mandibular within the premolar area. However, it is not attached to bands or splints as the rigid version but directly to the bracket/archwire appliance via pivots.

Easily fitted to your brackets and archwire

The key benefit of the Easy-Fit® Jumper is that it can be fixed directly to the bracket/archwire appliance via 4 special pivots. The pivots include a rectangular tube which slides onto a rectangular arch wire before being adjusted and crimped. The pivot is used to feed the archwire from teeth 5 to 7 in the maxilla and from teeth 3 to 5 in the mandible. The pivot is inserted to replace the standard housing nut.

Most Class II appliances require elaborate lab work and at least 3 chairside patient sessions: impression, band fit, cementation of appliance, removal and bracket bonding after correcting the bite. Now it can all be completed in one session!

The dorso-distal fin type extension positions the moving parts of the Easy-Fit® Jumper into a horizontal position, parallel to the occlusal plane. This guides the forces in a favourable direction onto the rectangular archwire or bracket combination.

Easy intraoral readjustment

Most of the various Class II appliances either need hinges in different lengths or the length needs adapting via shims. To adapt those appliances within the treatment process, the appliances need to be removed and the length adapted. The Easy-Fit® Jumper allows easy and safe intraoral adjustment and reactivation!

A thread within the guidance tube allows for stepless reactivation of the appliance. A key supplied with the product is simply placed into the holes in the tube and turned, thus allowing for the further advancement of the tube. Disengagement and removal of the appliance in order to add shims are no longer necessary. Due to the shimless design of the Easy-Fit® Jumper, the risk of accidental aspiration of loose parts is eliminated. Clinicians can complete all adjustments chairside. Furthermore, the unique threaded design allows for activation by both right and left handed clinicians without repositioning the patient.

Treatment effects of the Easy-Fit® Jumper

- Stimulating growth of the mandible
- Reducing growth of the maxillary
- Distalisation of the teeth in the maxillary (headgear effect)
- Mesialisation of the teeth in the mandible
- Proclination and intrusion of the lower incisors
- Modification of the face profile
- Modification of the activity of the musculus masseteres
The easy fitting procedure

Clinical cases

Case 1: Class II, deep bite (girl, 13 years).

Case 2: Class II, retrognath profile (girl, 14 years).

Clinical photos: Dr. Björn Ludwig, Germany and Dr. Michael Williams, USA.
Advantages of the Easy-Fit® Jumper*

- Only one chairside session needed to insert the device
- No shims – no removal of the appliance
- No elaborate lab work
- Stepless advancement
- Class II correction with simultaneous bracket treatment
- Non-dependent on patient compliance
- Ideally suited for both right and left handed clinicians
- Asymmetrical advancement - accurate to within 1/8 mm per side
- No need to stock different sizes of shim

Technical data

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* Invented by Dr. Michael Williams, Gulfport, Mississippi. US patent no. 5,919,042 and 6,241,517. Mexican Patent no.1999527 and 224167 and other international patents.

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* Invented by Dr. Michael Williams, Gulfport, Mississippi. US patent no. 5,919,042 and 6,241,517. Mexican Patent no.1999527 and 224167 and other international patents.
Bite jumping screw*

for the modified Twin Block appliance

New!

No more acrylic work needed for progressive advancement of the twin block appliance during treatment

No dismantling of the screw, no spacers needed

Easy and safe chairside adjustment by just activating the screw

Patient friendly progressive advancement improves compliance

*acc. to Dr. Marc Geserick, Germany

www.forestadent.com
Bite jumping screw*

Progressive Overjet Reduction for the modified Twin Block appliance

The Twin Block appliance by Dr. William Clark is one of the most popular functional appliances for Class II, division 1 malocclusion treatment.

Standard Twin Block appliances however can only be reactivated by a time consuming procedure.

This modification allows a progressive advancement of the bite, providing a greater orthopedic effect with less incisor tilting in Class II, division 1 cases. Progressive advancement of the mandible helps to reduce tension in the cranio-mandibular muscles, therefore improving patient comfort and compliance.

Easy and safe chairside reactivation of as much as 6 mm can be achieved by incorporating this solid stainless steel screw into the appliance. Chairside reactivations provide minimal inconvenience to staff and patient. This modified Twin Block has great advantages for patients with severe overjets or limited ability to advance their mandible for the construction bite.

Art.No. 199-2622  pack of 2 screws  CE 0297

*acc. to Dr. Marc Geserick, Germany
Information No. 170/9.2005
Take advantage of memory technology

Memory Screws for intelligent expansion

Simply unique
Activation of expansion screws totally controlled by clinician

Faster Treatment
Faster expansion with fewer re-activations

Intelligent forces
Memory screws use intelligent springs to supply continuous and constant forces

Increased comfort
Physiologically correct and continuous forces increase patient comfort
Memory Expansion Screws

**Mid line expansion screw**
Memory mid line expansion screw for mandibular and maxillary expansion, second generation.
Spring extension: 0,8 mm / Spring force: 500g
Total expansion: 5 mm

**Memory 3D Bertoni expansion screw**
Ideal for simultaneous mid line expansion and protrusion in the maxilla.
Spring extension: 0,8 mm / Spring force: 500g
Total expansion: 3 mm

**Sander® II**
Memory expansion screw for bite jumping appliance*
The memory Sander II helps to achieve expansion 3 times faster than the conventional model.
Spring extension: 0,8 mm / Spring force: 500g
Total expansion: 5 mm

**Sander® II mandibular memory expander**
Sander II mandibular memory expander with space maintainer and jig for the design of the sloping planes.
Spring extension: 0,8 mm / Spring force: 500g
Total expansion: 5 mm

**Memory palatal split screw type N**
Memory palatal split screw for faster and more comfortable expansion by using memory technology.
Spring extension: 1 mm / Spring force: 800 g
Total expansion: 10 mm

**Memory palatal split screw type S**
More comfortable rapid palatal expansion due to the RPE screw being placed closer to the palate.
Spring extension: 1 mm / Spring force: 500 g
Total expansion: 8 mm

**Memory protrusion screw**
Memory protrusion screw for individual/single tooth movement.
Spring extension: 0,7 mm / Spring force: 90g
Total expansion: 2,5 mm

* Prof. Dr. F. O. Sander

Information: 16/4/2004